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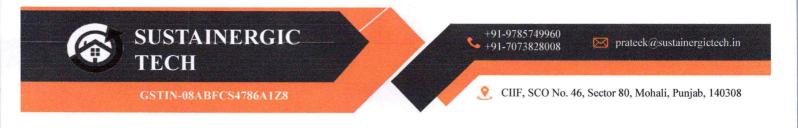
Sciif, SCO No. 46, Sector 80, Mohali, Punjab, 140308

# **ENERGY AUDIT CERTIFICATE** 30<sup>th</sup> MARCH 2024

This is to certify and congratulate **St. Xavier's College Jaipur,** as it has successfully undergone Energy Audit between December 2023 and March 2024. The compliance of the institution with respective regulations, policies and standards were found satisfactory.



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# Soth MARCH 2024

St. Xavier's College Jaipur

Nevta-Mahapura Road, Near Nevta Dam, Tehsil Sanganer, Jaipur – 302029, Rajasthan, India

St. Xavier's College Jaipur



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#### Acknowledgement

Sustainergic Tech Pvt. Ltd. is thankful to St. Xavier's College Jaipur for providing us an opportunity to conduct an Energy Audit of their office, we are grateful to St. Xavier's College Jaipur, other officers and staff for showing keen interest in the study and for the help and co-operation extended to EFS team during the study.

We do hope that you will find the recommendations given in this report useful in helping you save energy. While we have made every attempt to adhere to high quality standards, in both data collection and analysis, as well as in presentation through the report, we would welcome any suggestions from your side as to how we can improve further.

Please email at: prateek@sustainergictech.in

Dr. Prateek Srivastava, MD, Sustainergic Tech Pvt. Ltd.

Sustainergic Tech authorized representative for this audit is Mr. Vikrant Pal.



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St. Xavier's College Jaipur

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# 1.0 Introduction

The working details of assignment are as follows:

Project	Comprehensive Energy Audit
Client	St. Xavier's College Jaipur
College	St. Xavier's College Jaipur
Contact	Prof. Fr. Xavier Savarimuthu, SJ
Site	Nevta-Mahapura Road, Near Nevta Dam, Tehsil Sanganer, Jaipur - 302029 Rajasthan, India
Consultant	Engineering College Services
Duration	December 2023 – March 2024
Project Scope	Examination of detail energy audit in the utility and process to assess the loss in the
	system.
Report	This document gives recommendations, details of findings and the way forward
Consultants involved	Mr. Deepak Bajpai (EA-19771) Dr. Prateek Srivastava, Mr. Vikrant Pal Mr. Avinish Kumar Singh
Notes	- The critical points are marked in red
	- The assumptions are marked in blue
	- The suggestions / alternatives in the audit report are based on the present operating
	conditions of equipment/systems and to the best of our knowledge.
	- Investment figures are estimated values and recommended to obtain cost from





## 1.1 Summary of Energy Conservation Measures

Table 1. Summary of Energy Conservation Measures

S.	Energy Conservation Measure	Annual Elect		Investment	Payback
No		kWh	Rs. Lakhs	Rs. Lakhs	Month
	Payback 0-12 mo	nths			
1	Install occupancy sensor in Classroom & Auditorium				
2	During audit we can found that the college used 2 & 3-star AC which consume more power as compare to 5-star AC's. It is recommended to replace all 5-star ACs with 5 Star inverter AC's.				
	Payback 12-24 mg	onths			
	Conventional ceiling fan replacement with BLDC fan				
3	It is recommended to replace the ceiling fan with BLDC fan	19200 1.7 3.0		3.0	21.2
	Total	19200	1.70	3	21.2



#### 2.0 College description and energy sources

#### 2.1 About St. Xavier's College

The Jaipur Xavier Educational Association (J.X.E.A.) established in 1950, as a registered charitable society managed by the Jesuits, has been pursuing the legacy of St. Francis Xavier of promoting human fulfilment by means of training and education in India. Following the motto of the founder of the Society of Jesus, St. Ignatius of Loyola, the college has been working for "The Greater Glory of God" (*Ad Majorem Dei Gloriam*).

In 2006, Xavier Vocational Institute (X.V.I.) was set up in Jaipur to give vocational training to the weaker sections of the society. In 2010, J.X.E.A. in collaboration with Xavier Alumni/ae and well-wishers of Jaipur under the leadership of Rev. Fr. Varkey Perekkatt, SJ, established St. Xavier's College Jaipur. Since then, the college has grown manifold, serving the educational needs, not only of the people of Jaipur but also of the nation. Over the last 10 years we have grown from a sapling to a huge oak, as every year the college has reached new milestones. In 2014, the college was declared a Christian Minority Jesuit Institution and in the same year, the status of college was elevated to the Postgraduate the level with the initiation of two courses, namely, Masters in English Literature and Human Resource Management. In the year 2017, the college was granted Permanent Affiliation for B.A. Honours in Economics and English Literature from the University of Rajasthan. The following year was a testament to our success as the student strength crossed over 2000, and the number of undergraduate courses rose to six - B.A.(Honours)- English, Economics, Political Science; BBA, BCA and B.Com. and the number of postgraduate programmes turned to 5 - M.A.(English), M.A.(Economics), M.Sc. (IT), M.Com.(EAFM, ABST) and M.H.R.M. Another achievement followed in 2019 when the college got recognition under section 2(f) and 12(B) of UGC Act 1956. In addition to this, in the same year, all the undergraduate departments along with M.A. English Literature got permanent affiliation from the University of Rajasthan, Jaipur (Rajasthan). After a magnificent decade, right in the heart of the city, the college shifted to the new campus at Nevta, Jaipur in the session 2021-22 to provide bigger and better infrastructural and academic possibilities to the students. In 2022- 23, Professional Programmes - MBA and MCA have been introduced by the college through its New Technical Institution - Xavier Institute of Management and Informatics (XIMI) in the same Campus. The Department of English and Business Administration have also been approved as Research Centres for PhD Programme.

#### **College Inspiration**

The education offered at St. Xavier's College Jaipur aspires to reach the lofty ideals of St. Ignatius that are encapsulated in the *Magis,* meaning "better than the best". Every activity of the College is in line with the definite stand taken by the Society of Jesus with regard to this ideal in the field of education, all over the world. This stand is inspired and moulded by a document on Jesuit education prepared in 1986, on the occasion of the 400th anniversary of Ratio Studiorum (Plan of studies drawn up by the Jesuits when they entered into the field of education), by the International Commission on the Apostolate of Jesuit Education (ICAJE) and presented to the whole Society by the then General Fr. Peter Hans Kolvenbach, SJ.

The document confers on Jesuit education the following characteristics:



*Person Oriented:* by paying individual attention to each student and making teaching and learning student-centered.

Integral Formation and Development: by paying special attention to intellectual, effective, imaginative, aesthetic, creative, critical, communicative, physical, cultural, moral, and spiritual aspects of the individual.

*Faith in God and Religious Experience:* by promoting well-formed and strongly-held beliefs in one's faith, tradition and deepening one's relationship with God.

*Value-based Leadership:* by ensuring a consistent focus on personal integrity and ethical behaviour in all professions, and the appropriate balance between justice and fairness.

*Commitment to Excellence:* by practically applying well-learned lessons and skills to achieve new ideas, better solutions and vital answers.

Relevant to the Times: by adapting to the concrete situations, politically, socially, and culturally.

*Service that Promotes Justice:* by using learning and leadership in open- handed and generous ways to ensure freedom of inquiry, the pursuit of truth, and care for others.

Participative: by encouraging interaction among the pupil, parents, and teachers.

#### Aim

Like other Jesuit educational institutions, St. Xavier's College Jaipur aims to train young men and women who would contribute to the society as creative leaders and responsible citizens, committed to the service of the people. Every effort is made to see that the students become intellectually equipped, morally upright, socially committed, and spiritually awakened to God's uniting presence in the whole world. The Christian doctrine of love and service well paraphrased by Christ in 'love thy neighbour as thyself' provides the bedrock of education that is offered here, and illuminates and directs all our activities and projects.



#### The Meaning of the College Emblem

The motto on the college crest: Competence, Character and Compassion encodes the core values sought by the college, and challenges every student who passes through the portals of St. Xavier's College Jaipur is expected to imbibe the high ideals of the college: acquiring personal integrity and excellence in everything.

The burning lamp represents Lord Jesus Christ who said, "I am the light of the world" (John 8:12), and the Wisdom of God. True education leads one from the darkness of ignorance to the light of genuine knowledge and enlightenment.

The open book symbolizes the time tested, quality educational tradition of the Jesuits and their commitment to carry it forward. The inscription "IHS," placed above the open book is taken from the official seal of the Society of Jesus, used by the founder St. Ignatius of Loyola. These are the first three letters of the Latinized Greek word HISOVS, meaning 'Jesus'. The cross shown above the letter 'H' reminds the world that Jesus Christ died on the Cross for the salvation of mankind.

The peacock is the national bird of India. It symbolizes beauty, grace, and pride in the nation, its natural resources and cultural diversity. It inspires a sense of mysticism encouraging us to aim for higher values.

#### 2.2 Energy Sources and Cost

Electricity & Fuel (Diesel) are major energy sources of the College. Electricity is supplied at 11 kV. There are one 1000KVA, 11/0.40 kV LT distribution transformers to cater electricity demand to cater electricity demand. Capacity of DG set is 500 KVA.

The energy cost from various sources of energy is given below:

Table 2.E	Energy (	cost com	ponent of	energy	sources
-----------	----------	----------	-----------	--------	---------

Source of energy	Unit	Cost
Electricity (Grid)	Rs. /kWh	8.50



#### 2.3 Electricity

The energy demand of the College is fulfilled by the electricity from Grid. The annual energy consumption from electricity grid sources is as follows:

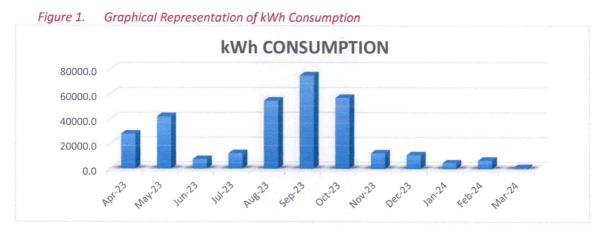
Table 3. Month wise electrical energy consumption 2023-24

	DETAILS OF ELECTRICITY CONSUMPTION FOR THE 2023-2024								
MONTH	kwh consumption	KVAH CONSUMPTION	FIXED CHARGE	ENERGY CHARGES (INR)	PF	CONTRACT DEMAND (KVA)	MDI (KVA)	NET AMOUNT PAYABLE (INR)	
Apr-23	27831.0	32780.9	81000	246304	0.849	400	300	363063	
May-23	42043.0	46405.1	92262	372080	0.906	400	341.6	585913	
Jun-23	7397.0	8005.4	81000	65053	0.924	400	300	248773	
Jul-23	12170.0	14470.9	81000	107705	0.841	400	300	243000	
Aug-23	54477.0	59343.1	130734	482121	0.918	400	484	828063	
Sep-23	74764.0	80047.1	133380	661661	0.934	400	494	1085745	
Oct-23	56846.0	62126.8	172962	503091	0.915	400	641	1178752	
Nov-23	12272.5	14575.4	81000	108611	0.842	400	300	234679	
Dec-23	10876.0	14124.7	81000	96252	0.770	400	300	221300	
Jan-24	4298.0	5808.1	81000	38037	0.740	400	300	151287	
Feb-24	6523.0	8449.5	81000	57728	0.772	400	300	175184	
Mar-24	779.0	1018.3	81000	6894	0.765	400	300	113420	
Avg	25856.4	28929.6	98111.5	228794.7	0.848	400	363	452432	
Max	74764.0	80047.1	172962.0	661661.0	0.934	400.0	640.6	1178752	
Min	779.0	1018.3	81000.0	6894.0	0.740	400.0	300.0	113420	

St. Xavier College Jaipur

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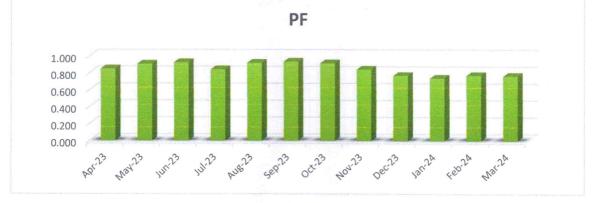






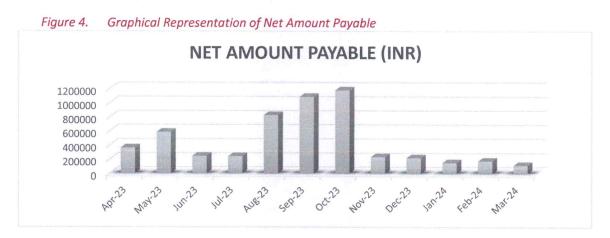






St. Xavier College Jaipur

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#### 2.4 Solar Generation

#### Details of renewable energy generation projects on organization's property for organization's

The college, situated in Jaipur, has successfully implemented a sustainable initiative with a 300-kW solar rooftop power plant. Operating hits maximum capacity, the campus optimally utilizes clean solar energy, emphasizing environmental responsibility and minimizing carbon footprints. In comparison to traditional methods, where 01unit of electricity production consumes 0.69-0.89 kg of coal and emits 02kg of CO<sub>2</sub>, this solar facility significantly reduces pollution. With a total of 560 panels, the college's commitment to eco-friendly practices extends to Operations and Maintenance (O & M) services, ensuring the ongoing efficiency and longevity of this green energy solution.

#### 3.0 Energy Conservation Measures

#### 3.1 Replace BLDC fans with ceiling fans

#### Background

During energy audit we found that the college uses 60 kW ceiling fans.

#### **Findings**

We found that the ceiling fan which is of 60 kW consume more power.

#### Recommendations

It is recommended to replace the plant ceiling fan with BLDC fan immediately and plan to replace the 100 fans with BLDC fan in first phase.

#### **Benefits**

We can replace the existing ceiling fans with the energy efficient BLDC fans. Savings should be taken as when the fan is needed to be changed as when they get faulty. Saving calculation given below.



#### Table 4. Saving by Ceiling fan replacement with BLDC fan

Parameter	Unit	Value
Average power consumption of the ceiling fan at present	Watt	60
Average power consumption of energy efficient star rated (BLDC) fans	Watt	28
Equivalent Power saving per fan	Watt	32
Numbers of fans to be replaced	Nos	100
Working Hours Per annum	Hr	6000
Overall electric Power Cost	Rs/kWh	8.85
Annual Energy Saving	kWh	19200
Monetary saving	Rs/Year	169920
Investment	Rs	300000
Payback	Month	21

# 4.0 Observation and analysis

## 4.1 Electricity supply and Network

Electricity & Fuel (Diesel) are major energy sources of the College. Electricity is supplied at 11 kV. There are one 1000KVA, 11/0.40 kV LT distribution transformers to cater electricity demand to cater electricity demand. Capacity of DG set is 500 KVA.



#### 4.1.1 Energy bill Analysis

Table 5. Electricity bill Analysis 2023-24

	DETAILS OF ELECTRICITY CONSUMPTION FOR THE 2023-2024								
MONTH	kWh CONSUMPTION	KVAH CONSUMPTION	FIXED CHARGE	ENERGY CHARGES (INR)	PF	CONTRACT DEMAND (KVA)	MDI (KVA)	NET AMOUNT PAYABLE (INR)	
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Jul-23	12170.0	14470.9	81000	107705	0.841	400	300	243000	
Aug-23	54477.0	59343.1	130734	482121	0.918	400	484	828063	
Sep-23	74764.0	80047.1	133380	661661	0.934	400	494	1085745	
Oct-23	56846.0	62126.8	172962	503091	0.915	400	641	1178752	
Nov-23	12272.5	14575.4	81000	108611	0.842	400	300	234679	
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Mar-24	779.0	1018.3	81000	6894	0.765	400	300	113420	
Avg	25856.4	28929.6	98111.5	228794.7	0.848	400	363	452432	
Max	74764.0	80047.1	172962.0	661661.0	0.934	400.0	640.6	1178752	
Min	779.0	1018.3	81000.0	6894.0	0.740	400.0	300.0	113420	

#### **Observation:**

The maximum Energy consumption in Sep- 23 was 74764.0 kWh and minimum Energy consumption was 779 kWh in Mar-24.





#### 4.2 List of Electrical Equipment's

#### Table 6. List of Electrical Equipment's

	List of Electrical Equipment's							
S NO.	Equipment's	UOM	Qty					
1	Computers	Nos	366					
2	Projectors LCD	Nos	58					
3	Online UPS	Nos	8					
4	Ceiling Fans	Nos	640					

#### 4.3 Air conditioners

The College has installed AC for College. The analysis was done to identify the measures that could be undertaken to reduce the energy consumption. The following parameter has studied in each unit.

- Air flow rate
- Air flow cross section area
- Return dry bulb temperature
- Return wet bulb temperature
- Power consumption
- Supply dry bulb temperature
- Supply wet bulb temperature

All AC with two/tree star rating (BEE) are installed in college.

## Table 7. Performance Analysis of AC

Parameters	Units	ST. XAVIER'S COLLEGE JAIPUR						
Location		Room No-40	Room No-41	Waiting Area	Waiting Area	Server Room		
Design Capacity	TR	1.5	1.5	1.5	1.5	1.5		
Total Area	m²	0.085	0.085	0.085	0.085	0.085		
Measured avg. Velocity	m/s	2.01	1.9	1.9	1.98	2.12		
Calculated Flow	m³/hr	615.1	581.4	581.4	605.9	648.7		
Supply Air Dry Bulb Temp.	°C	25	23	26	26	24		
Supply Air Wet Bulb Temp.	°C	17	17	17	18	19		
Enthalpy supply air	KCal/Kg	11.4	11.4	11.4	12.1	12.9		
Return Air Dry Bulb Temp.	°C	27	27	29	28	29		
Return Air Wet Bulb Temp.	°C	24	24	24	24	25		
Enthalpy return air	KCal/Kg	17.22	17.3	17.22	17.21	18.19		
Density of Air	kg/m <sup>3</sup>	1.225	1.225	1.225	1.225	1.225		
Calculated Capacity	TR	1.46	1.39	1.38	1.25	1.40		
Power Consumption	kW	2.1	2	2.1	2	2.3		
kW/TR		1.441	1.434	1.522	1.595	1.648		
EER		8.329	8.366	7.887	7.525	7.280		

Parameters	Units		ST. XA	VIER'S COLLEGE	JAIPUR	
СОР		2.439	2.450	2.309	2.204	2.132

Observation: AC performance found is satisfactory.

Table 8. Performance Analysis of AC

Parameters	Units		ST.	XAVIER'S	COLLEGE JAIPUR	
Location		Room No-11	Chapal	Chapal	Hostel Room-1	Hostel Room-1
Design Capacity	TR	1.5	1.5	1.5	1.5	1.5
Total Area	m²	0.085	0.085	0.085	0.085	0.085
Measured avg. Velocity	m/s	2.12	2.21	2.35	2.12	2.09
Calculated Flow	m³/hr	648.7	676.3	719.1	648.7	639.5
Supply Air Dry Bulb Temp.	°C	23	24	26	26	25
Supply Air Wet Bulb Temp.	°C	17	18	18	17	19
Enthalpy supply air	KCal/Kg	11.4	12.1	12.1	11.4	13.7
Return Air Dry Bulb Temp.	°C	28	27	29	29	29
Return Air Wet Bulb Temp.	°C	24	24	24	24	26
Enthalpy return air	KCal/Kg	17.21	17.3	17.2	17.2	19.22
Density of Air	kg/m <sup>3</sup>	1.225	1.225	1.225	1.225	1.225
Calculated Capacity	TR	1.53	1.42	1.49	1.52	1.44
Power Consumption	kW	2.2	2.2	2.3	2.2	2.23
kW/TR		1.441	1.547	1.548	1.443	1.554
EER		8.328	7.755	7.751	8.314	7.723
COP		2.439	2.271	2.270	2.434	2.262

Observation: AC performance found is satisfactory.

Table 9. Performance Analysis of AC

Parameters	Units	a the second second	ST. XA	VIER'S COLLEGE	AIPUR	
Location		Hostel Room- 2	Hostel Room- 2	Hostel Room- 3	Hostel Room- 3	Warden Room
Design Capacity	TR	1.5	1.5	1.5	1.5	1.5
Total Area	m <sup>2</sup>	0.085	0.085	0.085	0.085	0.085
Measured avg. Velocity	m/s	2	1.9	2.2	2.7	2.1
Calculated Flow	m³/hr	612.0	581.4	673.2	826.2	642.6
Supply Air Dry Bulb Temp.	°C	26	23	28	24	27
Supply Air Wet Bulb Temp.	°C	18	17	19	19	18
Enthalpy supply air	KCal/K g	12.1	11.4	12.9	12.9	12.1
Return Air Dry Bulb Temp.	°C	29	27	30	29	29
Return Air Wet Bulb Temp.	°C	24	24	25	25	24
Enthalpy return air	KCal/K g	17.21	17.3	18.18	18.19	17.21
Density of Air	kg/m <sup>3</sup>	1.225	1.225	1.225	1.225	1.225
Calculated Capacity	TR	1.27	1.39	1.45	1.77	1.33
Power Consumption	kW	2.1	2.2	2.25	2.98	2.23
kW/TR		1.658	1.578	1.548	1.683	1.673
EER		7.239	7.605	7.752	7.130	7.172
COP		2.120	2.227	2.270	2.088	2.100

Observation: AC performance found is satisfactory.

Parameters	Units		S	T. XAVIER'S	COLLEGE JAIPUR	
Location		Room No-	Server	Studi	Computer Staff	Audi Control
Location		10	Room	0	Room	Room
Design Capacity	TR	1.5	1.5	1.5	1.5	1.5
Total Area	m <sup>2</sup>	0.085	0.085	0.085	0.085	0.085
Measured avg. Velocity	m/s	2.1	2.65	2.23	2.25	1.9
Calculated Flow	m³/hr	642.6	810.9	682.4	688.5	581.4
Supply Air Dry Bulb Temp.	°C	24	27	25	28	23
Supply Air Wet Bulb Temp.	°C	16	21	17	19	17
Enthalpy supply air	KCal/K g	10.7	14.5	11.4	12.9	11.4
Return Air Dry Bulb Temp.	°C	29	29	29	30	27
Return Air Wet Bulb Temp.	°C	23	26	24	25	24
Enthalpy return air	KCal/K g	16.25	19.22	17.2	18.18	17.3
Density of Air	kg/m <sup>3</sup>	1.225	1.225	1.225	1.225	1.225
Calculated Capacity	TR	1.46	1.55	1.61	1.49	1.39
Power Consumption	kW	2.42	2.35	2.32	2.33	2.35
kW/TR		1.663	1.516	1.440	1.567	1.685
EER	<b>.</b>	7.216	7.917	8.336	7.656	7.120
COP		2.113	2.318	2.441	2.242	2.085

#### Table 10. Performance Analysis of AC

Observation: AC performance found is satisfactory.

#### 4.4 VRV Units

## Performance analysis of VRV outdoor units of college

The College has installed 14 nos VRV Outdoor units which provide for comfort condition of the college. The

performance analysis of the VRV ODU was carried out.

#### Table 11. Performance Analysis of VRV

Parameters	Units		an an an that an an a	ST. XA	VIER'S COLLE	GE JAIPUR		
Location		First Floor	Second Floor	Second Floor	Second Floor	Fourth Floor	Ground Floor	Ground Floor
Total Area	m <sup>2</sup>	0.384	0.384	0.384	0.384	0.384	0.384	0.384
Measured avg. Velocity	m/s	12.8	12.9	12.89	13.8	14.3	12.5	12.2
Calculated Flow	m³/hr	17694.7	17833.0	17819.1	19077.1	19768.3	17280.0	16865.3
Supply Air Dry Bulb Temp.	°C	35	35	35	35	35	35	35
Supply Air Wet Bulb Temp.	°C	22	22	22	22	22	22	22
Enthalpy supply air	KCal/ Kg	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Return Air Dry Bulb Temp.	°C	40	40	40	40	40	40	40
Return Air Wet Bulb Temp.	°C	24	24	24	24	24	24	24
Enthalpy return air	KCal/ Kg	17.88	17.88	17.88	17.88	17.88	17.88	17.88
Density of Air	kg/m <sup>3</sup>	1.225	1.225	1.225	1.225	1.225	1.225	1.225

Parameters	Units			ST. XA	VIER'S COLLEG	GE JAIPUR		
Calculated Capacity	TR	13.62	13.73	13.71	14.68	15.22	13.30	12.98
Power Consumption	kW	13.4	13.2	12.75	13.7	15.1	12.76	11.89
kW/TR		0.984	0.962	0.930	0.933	0.992	0.959	0.916
EER		12.196	12.478	12.908	12.861	12.092	12.508	13.101
СОР	_	3.571	3.654	3.780	3.766	3.541	3.663	3.836

• VRV performance found satisfactory

Table 12. Performance Analysis of VRV

Parameters	Units			ST	XAVIER'S C	OLLEGE JAIPUR		
Location		Office VRV	Office VRV	Auditori um	Auditori um	Auditorium Balcony	Auditorium Balcony	XIMI Area
Total Area	m <sup>2</sup>	0.384	0.384	0.384	0.384	0.384	0.384	0.384
Measured avg. Velocity	m/s	12.8	12.6	12	12.2	10	11.4	12.2
Calculated Flow	m³/hr	17694.7	17418.2	16588.8	16865.3	13824.0	15759.4	16865. 3
Supply Air Dry Bulb Temp.	°C	35	35	35	35	35	35	35
Supply Air Wet Bulb Temp.	°C	22	22	22	22	22	22	22
Enthalpy supply air	KCal/ Kg	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Return Air Dry Bulb Temp.	°C	40	40	40	40	40	40	40
Return Air Wet Bulb Temp.	°C	24	24	24	24	24	24	24
Enthalpy return air	KCal/ Kg	17.88	17.88	17.88	17.88	17.88	17.88	17.88
Density of Air	kg/m ³	1.225	1.225	1.225	1.225	1.225	1.225	1.225
Calculated Capacity	TR	13.62	13.41	12.77	12.98	10.64	12.13	12.98
Power Consumption	kW	12.62	12.68	12.01	11.8	9.76	11.3	11.8
kW/TR		0.927	0.946	0.941	0.909	0.917	0.932	0.909
EER		12.950	12.687	12.757	13.201	13.082	12.881	13.201
COP		3.792	3.715	3.736	3.866	3.831	3.772	3.866

• VRV performance found satisfactory

#### 4.5 Water Pumps

## Table 13. Performance Analysis of RO Water Pump

	RO Water Pump	)S		
Description	Unit	Pump -1	Pump -2	Pump -3
	Design			
Make		Grundfos	Grundfos	Grundfos
Capacity	m³/hr	17	17	17
Head	М	40	40	40
Power	kW	4	4	4
	<b>Operating Parame</b>	eter		
Suction head	m	2	2	2
Discharge head	m	33	32	33

	RO Water Pump	S		
Description	Unit	Pump -1	Pump -2	Pump -3
Total Head	m	31	30	31
Flow rate	m³/hr	14.1	13.2	14.2
Power Consumption	kW	2.10	2.00	2.10
Combined efficiency	%	55%	52%	55%
Pump Efficiency (ŋ Motor=88.5%)	%	62%	59%	63%

Pump performance found is satisfactory.

## Table 14. Performance Analysis of Fire Water Pump

	Fire Water Pumps		
Description	Unit	Hydrant Pump	Sprinkler Pump
	Design		
Make		Wilo	Wilo
Capacity	m³/hr	137	10.8
Head	М	70	70
Power	kW	45	11
	<b>Operating Paramete</b>	er	
Suction head	m	1	1
Discharge head	m	56	69
Total Head	m	55	68
Flow rate	m³/hr	132.4	15
Power Consumption	kW	37.00	5.00
Combined efficiency	%	52%	54%
Pump Efficiency (ŋ Motor=92.5%)	%	56%	60%

Pump performance found is satisfactory.

## 5.1 AHU (Air Handling Unit)

The College is air conditioned with Air Handling Units (AHU) for college air conditioning using chilled water generated and supplied from chillers.

The analysis was done to identify the measures that could be undertaken to reduce the energy consumption in AHU and also to enhance the possibilities for better controls in space and to avoid wastages by maintaining required conditions. The following parameter has studied in each unit.

- Air flow rate
- Filter face velocity
- Return temperature
- Fan power consumption
- Ambient conditions
- Supply/Return conditions at AHU



19

Description	Units	Value	Value	Value
Location		AHU No 1	AHU No 2	AHU No 3
Design CFM		5500	5500	5500
Design Power		3.7	3.7	3.7
Air velocity	m/s	2.68	2.60	2.66
Area	m <sup>2</sup>	0.96	0.96	0.96
Air flow rate	m³/sec	2.58	2.51	2.56
	m <sup>3</sup> /min	155.01	150.38	153.85
2	m³/hr	9300.67	9023.04	9231.26
	cfm	5474.17	5310.76	5433.32
Ambient air				
DBT	°C	21.00	25.00	31.00
WBT	°C	16.00	19.00	20.00
RH	%	60.00	57.00	36.00
Enthalpy	kCal/kg	10.68	12.88	13.63
Density of air	kg/m <sup>3</sup>	1.20	1.18	1.16
Supply air				-
DBT	°C	17.00	18.00	22.00
WBT	°C	13.00	13.00	17.00
RH	%	64.00	57.00	61.00
Enthalpy	kCal/kg	8.73	8.73	11.39
Cooling load on AHU	TR	7.18	14.63	7.92
Motor input power	kW	3.20	3.30	3.00
Motor efficiency	%	0.89	0.89	0.91
kW/TR		0.45	0.23	0.38

#### Table 15. Performance Analysis of AHU

AHU performance found satisfactory

#### 5.2 Lighting system

The College has already implemented energy efficient measures in lighting area. Illumination measured during audit at different places. Recommended value of illumination given as per National Building Code of India, 2005 clause 4.1.3, 4.1.3.2, 4.3.2 and 4.3.2.1

#### Table 16. Details of LED's installed in college

Name of Item	Quantity
Corridor round Led light 18W	235
Square Light 40 W	57
Tube light 20 W	866
Total	1158

#### Table 17. Details of measured lux in college

S.NO.	Location	Measured LUX Level	Recommended Lux
		Ground Floor	
1	Conference Room	265	200-500
2	College Office	210	200-500
3	Room No. 41	231	200-500



S.NO.	Location	Measured LUX Level	Recommended Lux
4	Room No. 40	223	200-500
5	Room No. 37	205	200-500
6	Computer Lab 3	210	200-500
7	Library	231	200-500
8	Staff Room 1	208	200-500
9	Staff Room 2	205	200-500
	1st Floo	or	
10	Room No. 113	265	200-500
11	Room No. 112	229	200-500
12	Room No. 111	240	200-500
13	Room No. 110	246	200-500
14	Room No. 107	251	200-500
15	Room No. 106	228	200-500
16	Room No. 105	226	200-500
17	Room No. 104	245	200-500
18	Room No. 117	235	200-500
19	Room No. 116	234	200-500
20	Phsics Lab	244	200-500
21	Room No. 115	266	200-500
22	Room No. 122	240	200-500
23	Room No. 123	258	200-500
24	Studio	320	200-500
25	Room No. 125	260	200-500
26	Room No. 128	245	200-500
27	Room No. 129	263	200-500
28	Room No. 130	261	200-500
29	Room No. 131	270	200-500
30	Room No. 113	270	200-500
		2nd Floor	
31	Room No. 219	272	200-500
32	Room No. 221	276	200-500
33	Room No. 222	279	200-500
34	Room No. 223	272	200-500
35	Room No. 224	296	200-500
36	Room No. 227	298	200-500
37	Room No. 228	288	200-500
38	Room No. 229	293	200-500
39	Room No. 217	288	200-500
40	Room No. 218	286	200-500
41	Room No. 215	289	200-500
42	Room No. 216	279	200-500
43	Room No. 201	289	200-500
44	Room No. 202	295	200-500
45	Room No. 204	268	200-500
46	Room No. 205	270	200-500



S.NO.	Location	Measured LUX Level	Recommended Lux
47	Room No. 206	272	200-500
48	Room No. 207	275	200-500
49	Room No. 211	274	200-500
50	Room No. 210	272	200-500
51	Room No. 212	276	200-500
		3rd Floor	
52	Room No. 324	310	200-500
53	Room No. 326	310	200-500
54	Room No. 327	299	200-500
55	Room No. 328	283	200-500
56	Room No. 329	310	200-500
57	Room No. 332	295	200-500
58	Room No. 333	310	200-500
59	Room No. 334	296	200-500
60	Auditorium	285	200-500
61	Room No. 312	266	200-500
62	Room No. 313	276	200-500
63	Room No. 314	296	200-500
64	Room No. 315	292	200-500
65	Room No. 320	286	200-500
66	Room No. 321	269	200-500
67	Room No. 323	305	200-500
		4th Floor	
68	Room No. 432	285	200-500
69	Room No. 433	276	200-500
70	Room No. 427	268	200-500
71	Room No. 426	288	200-500
72	Room No. 425	290	200-500
73	Room No. 424	292	200-500
74	Room No. 421	286	200-500

Observation: Illumination found satisfactory as per standard.



# 5.0 Thermography

It is the science of acquisition and analysis of thermal information by using non-contact thermal imaging devices. Advantages of Thermography:

It is non-contact- uses remote sensing. Keeps the user out of danger. Thermal pattern can be visualized for analysis. It is real time. Early detect problems in electrical and mechanical systems. Avoid measure breakdown & production loss.

The purpose of an infrared inspection is to survey a number of pieces of electrical & mechanical equipment as selected by you, the customer, with the objective of locating potential problem and determining their priority considering the high cost if electrical system & mechanical equipment fails, Infrared Thermography means substantial saving and since Thermography scansare performed while your equipment is in operation there is no lost production or machine downtime.

Following is the table for assessing the severity of electrical fault temperature and recommendation as per Bureau of Indian Standards guidelines for Infrared inspection of electrical installations (ICS 19.100).

FAULT CATEGORY	TEMPERATURE RISE	RECOMMENDATION
1	> 50°C	Immediate actionrequired
2	25 - 50 °C	Action required
3	10 - 25°C	Satisfactory

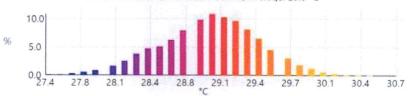


File: Ground Floor Library		<b>Date:</b> 04-03-2024	<b>Time:</b> 11:40:34
		807 W - 305	
		- ¥0 - 255	- intitution in the
		- 250 - 285	
		-28.0 -27.5 -27.5	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.4	0.95	20.0		
Hot spot 1	30.7	0.95	20.0	-	

Minimum: 27.4 °C Maximum: 30.7 °C Average: 29.0 °C





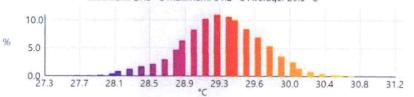
File: GF UPS Library		<b>Date:</b> 04-03-2024	<b>Time:</b> 11:41:38
	a and a part of	312 °C	
		- 30.5	
A State of the second		-30.0	
A ANALY		- 29.5	
的复数动物		29.0	
and the second		-265	
		-28.0	
	的现在分词作	273 °C	
Picture parameters:			1
Emissivity:	0.95		
Refl. temp. [°C]:	20.0		

## Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.3	0.95	20.0	-	
Hot spot 1	31.2	0.95	20.0	-	

Histogram:

#### Minimum: 27.3 °C Maximum: 31.2 °C Average: 29.3 °C





<b>File:</b> GF Extra		<b>Date:</b> 04-03-2024	<b>Time:</b> 11:42:42
COMPLETE DE	18142400	326 °C	
		-32.0	
		-310	
		- 300	
		-290	are Sharessant and a
		-280	TT //
States		27.3 °C	
Picture parameters:			
Emissivity:	0.95		

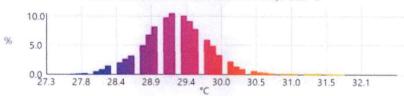
#### Picture markings:

Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.3	0.95	20.0	-	
Hot spot 1	32.6	0.95	20.0	-	

20.0

Minimum: 27.3 °C Maximum: 32.6 °C Average: 29.3 °C





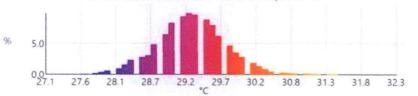
File: GF Display Operator	<b>Date:</b> 04-03-2024	<b>Time:</b> 11:43:58
	12.1 YC - 12.0	
	-310	
CST	-300	
图8-4575 月 小湖	-290	
的时间,这个人的问题。 第13章 "我们的问题"	- 28.0	
Picture parameters:	27.1 12	

Emissivity:	0.95
Refl. temp. [°C]:	20.0

# Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.1	0.95	20.0	-	
Hot spot 1	32.3	0.95	20.0	-	

Minimum: 27.1 °C Maximum: 32.3 °C Average: 29.3 °C





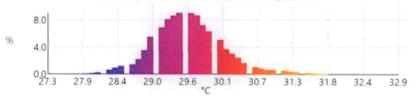
File: GF Display Operator	<b>Date:</b> 04-03-2024	<b>Time</b> 11:45:05	
England March	229°C	-	
	-20		
	- 310		
	-30.0		
	-290		
	- 28.0		
	27.3 °C		

Emissivity:	0.95
Refl. temp. [°C]:	20.0

## Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	27.3	0.95	20.0	-
Hot spot 1	32.9	0.95	20.0	-

Minimum: 27.3 °C Maximum: 32.9 °C Average: 29.6 °C



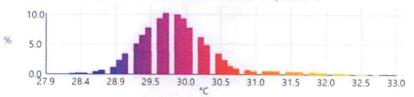


File: Ground Floor Panel		<b>Date:</b> 04-03-2024	<b>Time:</b> 11:46:00
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Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

## Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.9	0.95	20.0	-	
Hot spot 1	33.0	0.95	20.0	-	

Minimum: 27.9 °C Maximum: 33.0 °C Average: 29.8 °C





ile: ower Library HVAC VRV Panel	<b>Date:</b> 04-03-2024	<b>Time</b> 12:00:39
	761	
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cture parameters:		

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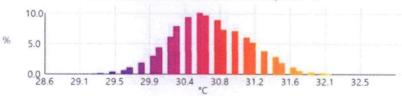
 Refl. temp. [°C]:
 20.0

## Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	28.6	0.95	20.0	-
Hot spot 1	32.9	0.95	20.0	-

Histogram:

#### Minimum: 28.6 °C Maximum: 32.9 °C Average: 30.6 °C





File: Ground (SP) Room Confere	ence	<b>Date:</b> 04-03-2024	<b>Time:</b> 12:01:41
		37.0 °C	
		- 36.5	
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		- 35.5	There are a second
	1223	350	
		-340	CITE CITE CALL
		-335	
		-330	
		129°C	
Picture parameters:			
Emissivity:	0.95		

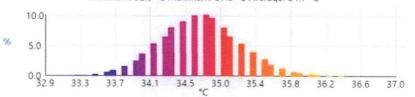
#### Picture markings:

Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	32.9	0.95	20.0	-	
Hot spot 1	37.0	0.95	20.0	-	

20.0

Minimum: 32.9 °C Maximum: 37.0 °C Average: 34.7 °C



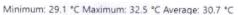


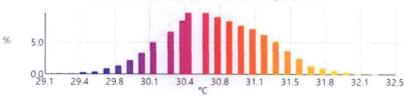
<b>Date:</b> 04-03-2024	<b>Time</b> 12:02:23
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-305	
- 30.0	- And I have a second second
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29.1 Y	
	-320 -315 -310 -303 -300 -295

Emissivity:	0.95
Refl. temp. [°C]:	20.0

## Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	29.1	0.95	20.0	-	
Hot spot 1	32.5	0.95	20.0	-	







<b>File:</b> GF Computer Lab		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:03:18
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		- 295	
		-290	
		-26.5	
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		77	
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missivity:	0.95		
Emissivity:	0.95		

## Picture markings:

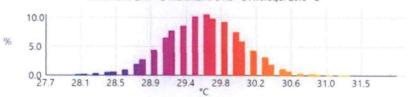
Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.7	0.95	20.0	-	
Hot spot 1	31.9	0.95	20.0	-	

20.0

Histogram:

# Minimum: 27.7 °C Maximum: 31.9 °C Average: 29.6 °C



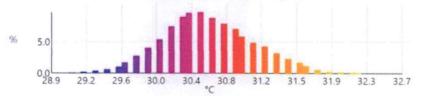


File: GF Staff		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:03:49
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たる。このの言語		-29.5	
		289 °C	
Picture parameters:			
Emissivity:	0.95		
Refl. temp. [°C]:	20.0		

## Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	28.9	0.95	20.0	-
Hot spot 1	32.7	0.95	20.0	-

Minimum: 28.9 °C Maximum: 32.7 °C Average: 30.6 °C





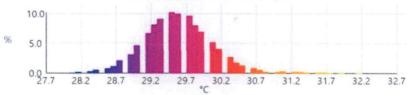
File: HVAC VRV Panel Display	<b>Date:</b> 04-03-2024	<b>Time:</b> 12:04:59
Constant Press and a series	327 - 320	
The Astronomy	-318	
	-300	
	- 28.0	
Picture parameters:	27.7 %	

Emissivity:	0.95
Refl. temp. [°C]:	20.0

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	27.7	0.95	20.0	-
Hot spot 1	32.7	0.95	20.0	-

Minimum: 27.7 °C Maximum: 32.7 °C Average: 29.6 °C





File: HVAC VRV Panel Display	<b>Date:</b> 04-03-2024	<b>Time:</b> 12:05:31
	3287	
	- 12.0	
and the second of the second of the	- 31.5	
10年,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,19月1日,	- 31.0	
	-30.5	
	-305	
	-295	
· 1995年,大学大学校中国家中国委会议。	-29.0	
State Barries Barries	-28.5	
And the second sec	28.3 °C	
Picture parameters:		

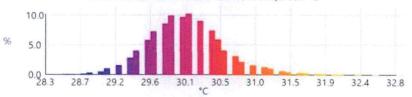
Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	28.3	0.95	20.0	-	
Hot spot 1	32.8	0.95	20.0	-	

Histogram:

#### Minimum: 28.3 °C Maximum: 32.8 °C Average: 30.1 °C





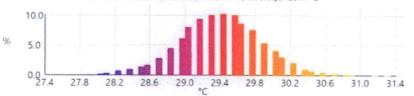
File: HVAC VRV Panel		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:06:29
		314Y - 310 - 305 - 300 - 295 - 290 - 285 - 280 - 275 - 275	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.4	0.95	20.0	-	
Hot spot 1	31.4	0.95	20.0	-	

Histogram:

#### Minimum: 27.4 °C Maximum: 31.4 °C Average: 29.4 °C





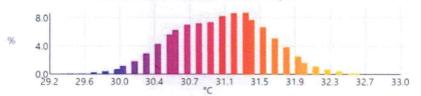
File: Main Panel Display	<b>Date:</b> 04-03-2024	<b>Time:</b> 12:28:18	
	33.0 °C		
	-325		
	-315		
	-30.5		
	-265		
Picture parameters:	292 %		

Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	29.2	0.95	20.0	-	
Hot spot 1	33.0	0.95	20.0	-	

Minimum: 29.2 °C Maximum: 33.0 °C Average: 31.1 °C



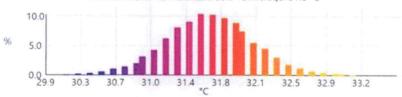


File: Bus Bar 4 <sup>th</sup> Floor		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:29:52
		7365	
		-32.5 -32.0	
		-315	
		-30.5 -30.0 29.9 °C	e
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	29.9	0.95	20.0	-	
Hot spot 1	33.6	0.95	20.0	-	

Minimum: 29.9 °C Maximum: 33.6 °C Average: 31.6 °C





File: Bas Bar 2 <sup>nd</sup> Floor	<b>Date:</b> 04-03-2024	<b>Time:</b> 12:30:48
	75.E	
13, 28, 194	-32.0	
	-310	
Start Start Sh	-10.0	
Contraction of the second	29.0	
1-1-1-1-21	-28.0	
	2225	
Picture parameters:		
Emissivity:	0.95	

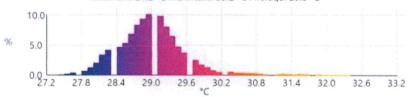
#### Picture markings:

Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	27.2	0.95	20.0	-
Hot spot 1	33.2	0.95	20.0	-

20.0

Minimum: 27.2 °C Maximum: 33.2 °C Average: 29.0 °C





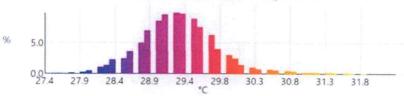
<b>ile:</b> as Bar 1 <sup>st</sup> Floor	<b>Date:</b> 04-03-2024	<b>Time</b> 12:30:57
	22.XX	
	- 32.0	
NO PARA DA	-310	
二式一方式中国地域的公式也可以	-30.5	
	151/ aon	
	-29.5	-
	-290	
New Products in the Province of the	- 28.5	
	- 28.0	
the second states of the second	- 215	
icture parameters:	27.4°C	

Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.4	0.95	20.0	-	
Hot spot 1	32.2	0.95	20.0	-	

Minimum: 27.4 °C Maximum: 32.2 °C Average: 29.3 °C





31.7 C - 310 - 305 - 306 - 305 - 306 - 295 - 260 - 255 - 260 - 275 - 275 - 272 C	<b>Time:</b> 12:31:04		<b>Date:</b> 04-03-2024	nd Floor	File: Bas Bar Ground Flo
-303 295 290 285 280 285 280 275					
295 290 285 280 285 285 285 285 285 285 285 285 285 285					
-285 -260 -275		9-	10 (AR)		
2ad 275			32.24 E		
		I E	a fat a		
icture parameters:			LILL I	neters:	icture parameters

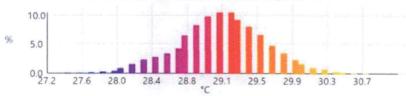
 Emissivity:
 0.95

 Refl. temp. [°C]:
 20.0

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	27.2	0.95	20.0	-
Hot spot 1	31.1	0.95	20.0	-

Minimum: 27.2 °C Maximum: 31.1 °C Average: 29.1 °C





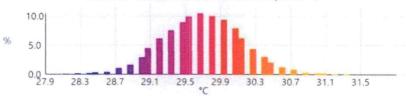
File: Bas Bar AC	<b>Date:</b> 04-03-2024	<b>Time:</b> 12:31:12
	319°C -315 -310 -305 -300 -295 -290 -255 -290 -255 -290	
Picture parameters:	27.9 °C	

Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.9	0.95	20.0	-	
Hot spot 1	31.9	0.95	20.0	-	

Minimum: 27.9 °C Maximum: 31.9 °C Average: 29.7 °C





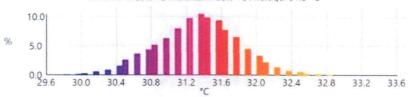
File: B.B 3 <sup>rd</sup> Floor		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:41:06	
		35 °C -335 -330 -325 -320 -315 -310 -305 -300 -95 °C		
Picture parameters:				
Emissivity: Refl. temp. [°C]:	0.95 20.0			

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	29.6	0.95	20.0	-
Hot spot 1	33.6	0.95	20.0	-

Histogram:

Minimum: 29.6 °C Maximum: 33.6 °C Average: 31.3 °C





File: Bus Bar Canteen Side		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:41:17
Mar and	3.49.8 A.S	32.5 °C	
6932020		- 32.0	
		-310	
B. 20140		- 300	
		-290	
的主义的变化	er state	- 28.0	
and the second		7/3·C	
Picture parameters:			
Emissivity:	0.95		

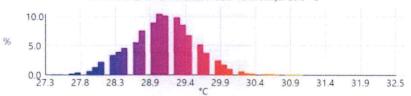
Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.3	0.95	20.0	-	
Hot spot 1	32.5	0.95	20.0	-	

Histogram:

#### Minimum: 27.3 °C Maximum: 32.5 °C Average: 29.0 °C





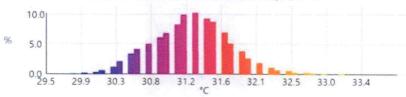
File: RIFT	<b>Date:</b> 04-03-2024	<b>Time</b> : 12:41:31
Wallan an Sankerson	7.3.5 %	
	- 335	
	-33.0	
Contraction of the second	32.5	
	-320	H AL
AND DECLARATE	31.5	1 20
	-31.0	A R
See . Bertherstein	-30.5	
	30.0	
12. 开始的复数考虑的	295 °C	
icture parameters:		

Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	29.5	0.95	20.0	-
Hot spot 1	33.8	0.95	20.0	-

Minimum: 29.5 °C Maximum: 33.8 °C Average: 31.3 °C

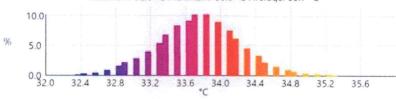


File: UPS (G.F)		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:41:48
		360 °C - 355 - 350 - 345 - 340 - 335 - 330 - 330 - 325 - 320 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	32.0	0.95	20.0	-	
Hot spot 1	36.0	0.95	20.0	-	

Minimum: 32.0 °C Maximum: 36.0 °C Average: 33.7 °C





File: Light Auditorium	-	<b>Date:</b> 04-03-2024	<b>Time:</b> 12:42:01
		36.7 °C - 36.5	
		- 360	
		- 355	
		- 35.0	
A A LA STRACT		-345	
		- 34.0	
		-33.5	
		330 %	
Picture parameters:			
Emissivity:	0.95		

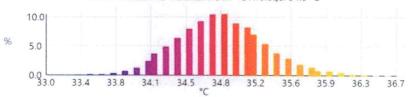
#### Picture markings:

Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	33.0	0.95	20.0	-	
Hot spot 1	36.7	0.95	20.0	-	

20.0

Minimum: 33.0 °C Maximum: 36.7 °C Average: 34.8 °C



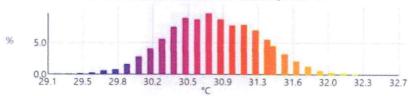


File: AC Auditorium		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:42:35
	14,5%.1	12.7 °C	
State 12		- 32.0	
		31.5	
		- 310	
		30.5	
		-30.0	
		-295	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	29.1	0.95	20.0	-	
Hot spot 1	32.7	0.95	20.0	-	

Minimum: 29.1 °C Maximum: 32.7 °C Average: 30.8 °C





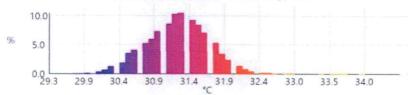
File: Fire Motor	<b>Date:</b> 04-03-2024	<b>Time</b> 12:42:51
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	345 °C - 340	
Contraction of the second	-330	
a fatter a fatter	- 32.0	
	310	
	-350	e pe
Picture parameters:	2337	

Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	29.3	0.95	20.0	-
Hot spot 1	34.5	0.95	20.0	-

Minimum: 29.3 °C Maximum: 34.5 °C Average: 31.2 °C



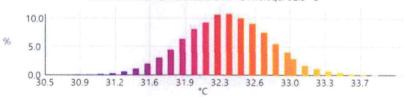


File: Motor of Water		<b>Date:</b> 04-03-2024	<b>Time</b> : 12:43:08
	34	-340	
1 Standard	Ser .	-33.5	
		- 33.0	
		-325	
	Part Cart in	- 320	
	A. S. Market	-31.5	
	A ALCONT	-310	
的人的现在分词	30	305	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	30.5	0.95	20.0	-	
Hot spot 1	34.1	0.95	20.0	-	

Minimum: 30.5 °C Maximum: 34.1 °C Average: 32.3 °C





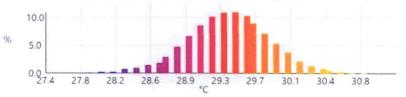
File: Gate No-2 Ground Poll	<b>Date:</b> 04-03-2024	<b>Time:</b> 12:43:22
	312 °C	
Perception The	- 30.5	
	30.0	
	-295	
	- 29.6	
	-285	
Contraction of the second	- 280	
	-275 274 °C	Stand Line of the second
Picture parameters:		
Emissivity: Refl. temp. [°C]:	0.95 20.0	

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Measure point 1	29.6	0.95	20.0	CenterSpot
Cold spot 1	27.4	0.95	20.0	-
Hot spot 1	31.2	0.95	20.0	-

### Histogram:

Minimum: 27.4 °C Maximum: 31.2 °C Average: 29.4 °C





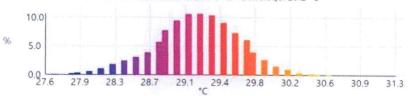
<b>File:</b> Light Bank		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:43:32
		313 °C	
Participation and the		- 30.5	
		300	
Carlos Contra		-295	
		-290	
		- 28.5	
		-28.0	
の行為なられた時後にない	5 Sec. 6	276 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.6	0.95	20.0	-	
Hot spot 1	31.3	0.95	20.0	-	

Histogram:

#### Minimum: 27.6 °C Maximum: 31.3 °C Average: 29.2 °C



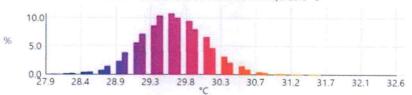


File: BVS Bar		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:44:33
		328 °C - 325 - 320	
		- 31.5	
Sel all		- 305 - 300 - 293	
		-290 -285	
Picture parameters:		279 °C	8 9 9
Emissivity:	0.95		
Refl. temp. [°C]:	20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	27.9	0.95	20.0	-
Hot spot 1	32.6	0.95	20.0	-

Minimum: 27.9 °C Maximum: 32.6 °C Average: 29.6 °C





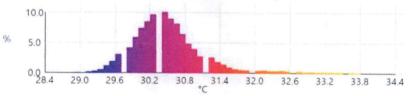
File: BVS Bar		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:45:12
		344 °C - 340 - 330 - 320 - 310 - 300 - 290 284 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	28.4	0.95	20.0	-	
Hot spot 1	34.4	0.95	20.0	-	

#### Histogram:

#### Minimum: 28.4 °C Maximum: 34.4 °C Average: 30.5 °C





File: BVS Bar	<b>Date:</b> 04-03-2024	<b>Time:</b> 12:45:33
No Marine and	33.4 °C 13.0	
	- 320	
	-310	
	-30.6	G G
	-250	
Picture parameters:	28.2 YC	
Emissivity:	0.95	

#### Picture markings:

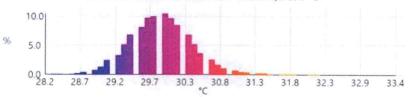
Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	28.2	0.95	20.0	-	
Hot spot 1	33.4	0.95	20.0	-	

20.0

Histogram:

#### Minimum: 28.2 °C Maximum: 33.4 °C Average: 29.9 °C



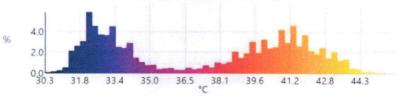


File: AC DB Box		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:46:57
		45.9 %	
AV	AN	-455	
		-40.0	
		- 375 •	
		-350	
	A VAHSA	30.3 YC	
Picture parameters:	:		
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	30.3	0.95	20.0	-	
Hot spot 1	45.9	0.95	20.0	-	

Minimum: 30.3 °C Maximum: 45.9 °C Average: 37.3 °C



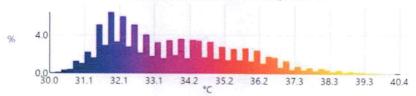


File: AC DB Box		<b>Date:</b> 04-03-2024	<b>Time:</b> 12:47:11
		40.4 °C - 40.0 - 37.5 - 35.0 - 32.5	
Picture parameters:		30.0 °C	
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	30.0	0.95	20.0	-	
Hot spot 1	40.4	0.95	20.0	-	

Minimum: 30.0 °C Maximum: 40.4 °C Average: 33.7 °C



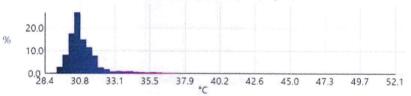


File: First Floor Panel Display		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:01:54
- 63	<ul> <li>Contraction</li> </ul>	521 Y	
		- 50.0	
		-47.5	
		-45.0	
		-42.5	
		-40.0	
		- 37.5	
		350	
		- 32.5	
		- 30.0	
		28.4 °C	
Picture parameters:			
Emissivity:	0.95		
Refl. temp. [°C]:	20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	28.4	0.95	20.0	-	
Hot spot 1	52.1	0.95	20.0	-	

Minimum: 28.4 °C Maximum: 52.1 °C Average: 31.0 °C



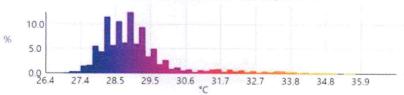


<b>File:</b> First Floor Panel Displ	ay	<b>Date:</b> 04-03-2024	<b>Time:</b> 13:05:40
		- 35.0 - 32.5 - 30.0 - 27.5	
Picture parameters:		26415	
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	26.4	0.95	20.0	-	
Hot spot 1	37.0	0.95	20.0	-	

Minimum: 26.4 °C Maximum: 37.0 °C Average: 29.1 °C





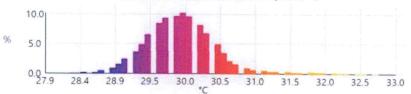
File: First Floor Panel Main		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:06:43
	et . 1836	330 %	
19 August		- 12.0	- Sectors
的。这些是是		- 315	
的行政的职人		- 300	2155
C. M. C. S.		-290	
		280 279 T	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.9	0.95	20.0	-	······
Hot spot 1	33.0	0.95	20.0	-	

Histogram:

#### Minimum: 27.9 °C Maximum: 33.0 °C Average: 29.9 °C





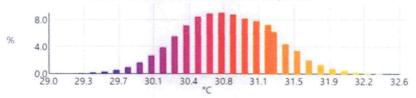
File: First Floor Left Side		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:07:26
		325	
		-31.5	dimmi,
		-30.5	
Picture parameters:		290 °C 290	99.JJ-JJ
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Measure point 1	30.5	0.95	20.0	CenterSpot
Cold spot 1	29.0	0.95	20.0	-
Hot spot 1	32.6	0.95	20.0	-

#### Histogram:

Minimum: 29.0 °C Maximum: 32.6 °C Average: 30.8 °C



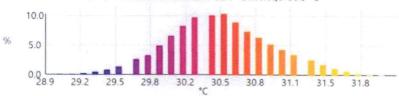


	<b>Date:</b> 04-03-2024	<b>Tir</b> 13:08
	-320	
	- 31.5	A AMAGENTINAN
	- 310	
	- 30.5	
	- 300	United and the second
		The Argentine
And the second	Services Statements	
0.95		
		- 315 - 310 - 305 - 300 - 235 - 390 - 390

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	28.9	0.95	20.0	-
Hot spot 1	32.1	0.95	20.0	-

Minimum: 28.9 °C Maximum: 32.1 °C Average: 30.5 °C



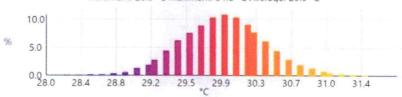


File: First Floor Panel Right Sic	de	<b>Date:</b> 04-03-2024	<b>Time:</b> 13:08:25
		31.8°C -31.5 -31.0 -30.5	MWWWWW
		-300 -29.5 -29.0 -28.5 -28.0 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	28.0	0.95	20.0	-	
Hot spot 1	31.8	0.95	20.0	-	

Minimum: 28.0 °C Maximum: 31.8 °C Average: 29.9 °C



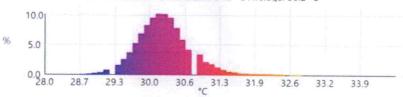


File: First Floor Panel Coridoor		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:08:41
128.965.85	1. A. A.	34.5 °C	
		-310	1/h
		-320	
		- 310	
A. C. Start		- 29.0	the second s
Picture parameters:		28.0 °C	
	0.05		
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	28.0	0.95	20.0	-	
Hot spot 1	34.5	0.95	20.0	-	

Minimum: 28.0 °C Maximum: 34.5 °C Average: 30.2 °C



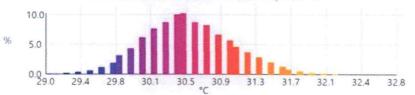


File: 2 <sup>nd</sup> Cable Alley	0	<b>Date:</b> 04-03-2024	<b>Time</b> 13:09:07
	22.8 °C	123	
N. Contract	A CONTRACT OF A CONTRACT	320	
		31.0	3-56
		30.5	
	ALCONTRACTOR DE	29.5	
	290 °C	80	A FUTU
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	29.0	0.95	20.0	-	
Hot spot 1	32.8	0.95	20.0	-	

Minimum: 29.0 °C Maximum: 32.8 °C Average: 30.5 °C



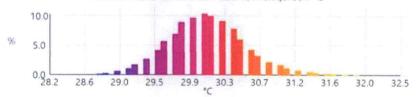


File: 2 <sup>nd</sup> Cable Alley		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:09:10	
1.32.35		32.5 °C - 32.0		
No. Contractor		-915		
にたてを設定		- 310		
1.13名43164		- 30.0		
Constanting and		295		
	C MARKARY	-29.0		
		- 28.5		
Picture parameters:		282 Y		
Emissivity: Refl. temp. [°C]:	0.95 20.0			

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	28.2	0.95	20.0	-
Hot spot 1	32.5	0.95	20.0	-

Minimum: 28.2 °C Maximum: 32.5 °C Average: 30.1 °C



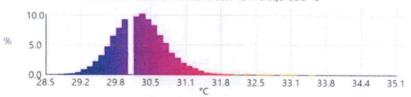


File: 2 <sup>nd</sup> Cable Alley		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:09:19
		13.1 °C 15.0	
		- 340	
		- 33.0	
Contraction of the	Carl Harry	- 320	
A CARLES		310	
Service and the	CEES &	- 30.0	
		-29.0	
N. C. P. TAY	Constants	785°C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	28.5	0.95	20.0	-	
Hot spot 1	35.1	0.95	20.0	-	

Minimum: 28.5 °C Maximum: 35.1 °C Average: 30.3 °C



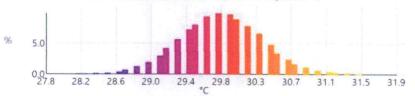


F <b>ile:</b> 2 <sup>nd</sup> Floor Display		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:22:05
	31.9 °C		3
S. Harris and		31.5	
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	A STAND	-31.0	
Maria Balanta	Constant of the	- 30.5	
		-30.0	
		- 29.5	
	and the second second second	290	
		-28.5	
		-28.0	
14.2.11.96年度为1250年代的14.2.1	TA'C		
Picture parameters:			
Emissivity:	0.95		
Refl. temp. [°C]:	20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	27.8	0.95	20.0	-	
Hot spot 1	31.9	0.95	20.0	-	

Minimum: 27.8 °C Maximum: 31.9 °C Average: 29.8 °C





File: <sup>2nd</sup> Floor Main Panel	<b>Date:</b> 04-03-2024	<b>Time</b> 13:22:28
A CONTRACT	341 °C 340	
	- 330	CEDADOS
	32.0	
Section of	-310	
	300	
28.234.22	-290	
	28.4 °C	
icture parameters:		
missivity:	0.95	

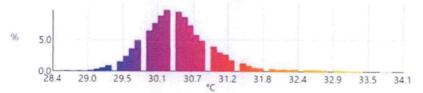
#### Picture markings:

Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	28.4	0.95	20.0	-	
Hot spot 1	34.1	0.95	20.0	-	

20.0

Minimum: 28.4 °C Maximum: 34.1 °C Average: 30.4 °C



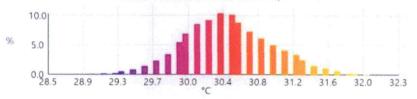


File: 2 <sup>nd</sup> Floor Left MCB		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:22:42
		32.3 °C - 32.0 - 31.5 - 31.0 - 30.5 - 30.0 - 29.5 - 29.0 - 29.5 - 29.0	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	28.5	0.95	20.0		
Hot spot 1	32.3	0.95	20.0	-	

Minimum: 28.5 °C Maximum: 32.3 °C Average: 30.5 °C





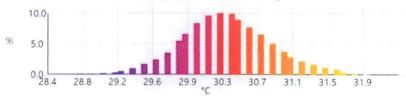
File: 2 <sup>nd</sup> Floor Middle MCB		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:22:54
	and the second of	322 70	1
	6. 1. 3/21	- 315	
		- 31.0	all all months the
		- 30.5	
	all all all	30.0	
		-29.5	S B V L L L L L L L L L L L L
		- 29.0	
		28.4 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	28.4	0.95	20.0	-	
Hot spot 1	32.2	0.95	20.0	-	

Histogram:

Minimum: 28.4 °C Maximum: 32.2 °C Average: 30.4 °C





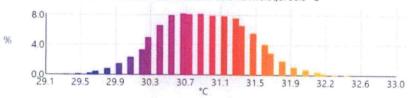
1

File: 2 <sup>nd</sup> Floor Right MCB		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:23:13
		330 T - 330 - 325 - 320 - 315 - 310	
		- 305 - 300 - 295 29.1 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	29.1	0.95	20.0	-	
Hot spot 1	33.0	0.95	20.0	-	

Minimum: 29.1 °C Maximum: 33.0 °C Average: 30.9 °C





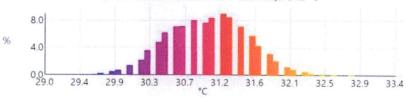
File: 2 <sup>nd</sup> Floor Cable Alley		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:23:38
Contraction of the		334 %	
Barry Barry		- 330	NIN /
1246 12 2 2 2		- 20	
		315	
Star Star		-31.0	
		- 30.5	
Sector Prost.		-300	
		-29.5	
	AN THE A	290 °C	
Picture parameters:			
Emissivity:	0.95		
Refl. temp. [°C]:	20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	29.0	0.95	20.0		
Hot spot 1	33.4	0.95	20.0	-	

Histogram:

#### Minimum: 29.0 °C Maximum: 33.4 °C Average: 31.0 °C



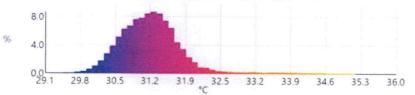


File:		Date:	Time:
2 <sup>nd</sup> Floor Cable Alley		04-03-2024	13:23:48
	CARACTOR OF	37.036	
S. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	18.22	-353	
File Card		-340	
A Carbon Street		- 330	
12 Mar Buch		- 320	
A CONTRACTOR		310	
		- 30.0	
The Contraction		718	
Picture parameters:			
Emissivity:	0.95		
Refl. temp. [°C]:	20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	29.1	0.95	20.0	-	
Hot spot 1	36.0	0.95	20.0	-	

Minimum: 29.1 °C Maximum: 36.0 °C Average: 31.2 °C





File: 2 <sup>nd</sup> Floor Cable Alley		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:23:57
		7.6H	N N I
		- 320	
		- 310	
	R. C	- 300	
Picture parameters:			
Emissivity:	0.95		

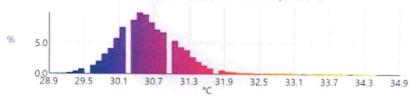
### Refl. temp. [°C]:

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Hot spot 1	34.9	0.95	20.0		
Hot spot 2	34.9	0.95	20.0	-	

20.0

Minimum: 28.9 °C Maximum: 34.9 °C Average: 30.6 °C





File: 3 <sup>rd</sup> Floor Display Panel		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:38:51
		35.0 °C	
		-34.5	
保留的 经公共	A Start	- 33.0	
		-32.5	
		- 32.0	
STATE OF THE ASS		-31.5	THE ALL
	1.264个方面	-310	
		30.5 °C	
Picture parameters:			
Emissivity:	0.95		

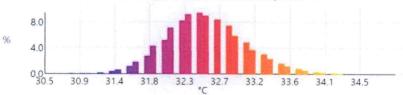
#### Picture markings:

Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	30.5	0.95	20.0		
Hot spot 1	35.0	0.95	20.0	-	

20.0

Minimum: 30.5 °C Maximum: 35.0 °C Average: 32.5 °C



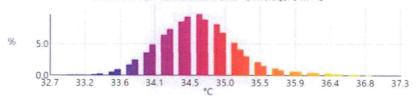


File: 3 <sup>rd</sup> Floor panel		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:39:06
		37.3 °C - 37.0 - 36.5	SIR
		-360 -355 -350 -345	
		- 34.6 - 31.5 - 33.0 32.7 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	32.7	0.95	20.0	-
Hot spot 1	37.3	0.95	20.0	-

Minimum: 32.7 °C Maximum: 37.3 °C Average: 34.7 °C



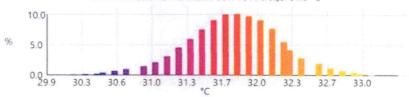


File: 3 <sup>rd</sup> Floor MCB L1		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:39:20
		-320 -325 -320 -315 -310 -305 -300 299 Y	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	29.9	0.95	20.0	-
Hot spot 1	33.4	0.95	20.0	-

Minimum: 29.9 °C Maximum: 33.4 °C Average: 31.8 °C





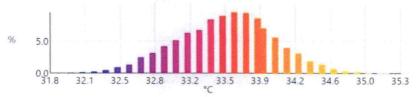
File: 3 <sup>rd</sup> Floor MCB R2		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:39:37
		35.3 °C - 350 - 345 - 340 - 335 - 310 - 325 - 320 316 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Measure point 1	33.9	0.95	20.0	CenterSpot
Cold spot 1	31.8	0.95	20.0	-
Hot spot 1	35.3	0.95	20.0	-

### Histogram:

Minimum: 31.8 °C Maximum: 35.3 °C Average: 33.6 °C





File: 3 <sup>rd</sup> Floor M-3 MCB	<b>Date:</b> 04-03-2024	<b>Time:</b> 13:39:49
	36.5 °C 36.5 36.0	m 11
	- 355	
	- 350 - 345	The Party of the P
	-340	
	-315	
and the second second	- 330 328 °C	
Picture parameters:		

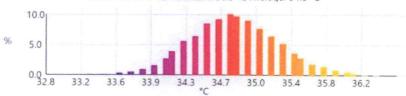
Emissivity:	0.95
Refl. temp. [°C]:	20.0

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	32.8	0.95	20.0	-	
Hot spot 1	36.5	0.95	20.0	-	

Histogram:

#### Minimum: 32.8 °C Maximum: 36.5 °C Average: 34.8 °C





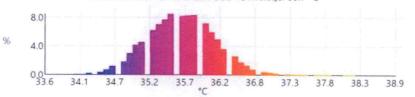
File: 3 <sup>rd</sup> Floor Cable Alley	<b>Date:</b> 04-03-2024	<b>Time:</b> 13:39:58
- Tank	38.9 10	*
C. S. W. Control	-380	TYY
1.5. 本本的合金	-370	
	- 360	
	- 350	
	33.6 ℃	
Picture parameters:	335 C	
Emissivity:	0.95	

Refl. temp. [°C]:	20.0

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	33.6	0.95	20.0	-	
Hot spot 1	38.9	0.95	20.0	-	

Minimum: 33.6 °C Maximum: 38.9 °C Average: 35.7 °C





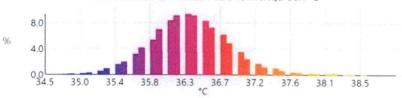
File: 3 <sup>rd</sup> Floor Cable Alley		<b>Date:</b> 04-03-2024	<b>Time:</b> 13:40:07
		- 380 - 380 - 375 - 370 - 365 - 355 - 350	
Picture parameters: Emissivity: Refl. temp. [°C]:	0.95	345 Y	

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	34.5	0.95	20.0	-	
Hot spot 1	39.0	0.95	20.0	-	

Histogram:

Minimum: 34.5 °C Maximum: 39.0 °C Average: 36.4 °C





File: <sup>3rd</sup> Floor Cable Alley	<b>Date:</b> 04-03-2024	<b>Time</b> 13:40:22
	34670	
	345	
	-33	
	310	
	-325	
	320	
	-315	
	- 310	
and the second	-305	
And the state of t	- 300	
icture parameters:		
missivity:	0.95	

#### Picture markings:

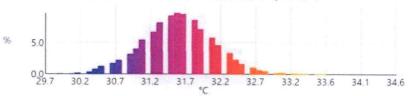
Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	29.7	0.95	20.0	-
Hot spot 1	34.6	0.95	20.0	-

20.0

Histogram:

#### Minimum: 29.7 °C Maximum: 34.6 °C Average: 31.6 °C





File: 4 <sup>th</sup> Floor Display Panel	<b>Date:</b> 04-03-2024	<b>Time:</b> 14:22:34
	38.0 °C	
	-375	
and the second second	-370	
	- 36.5	
2.51 St. 199	- 360	
Sheet Broads and a state of	355	
	-350	
作品。· 计有关公式、通知。	345	
	34.4 °C	
Picture parameters:		

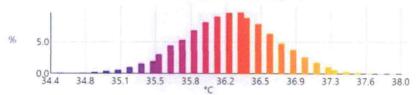
 Emissivity:
 0.95

 Refl. temp. [°C]:
 20.0

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	34.4	0.95	20.0	-	
Hot spot 1	38.0	0.95	20.0	-	

Minimum: 34.4 °C Maximum: 38.0 °C Average: 36.2 °C





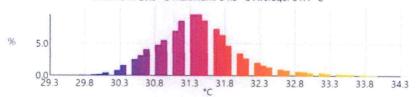
	04-03-2024	<b>Time:</b> 14:22:53
	943 °C -340	19 19
HST CS1	-115	
	-33.0	
	- 125	
Carling and the state of the second	-32.0	
調査により起これ。アレイに	-315	
a the second second	-310	
	-30.5	
民族、大学生、安美人在思	-30.0	
a the same water to be a set	-295 293 °C	
icture parameters:		

Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	29.3	0.95	20.0	-	
Hot spot 1	34.3	0.95	20.0	-	

Minimum: 29.3 °C Maximum: 34.3 °C Average: 31.4 °C



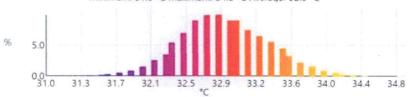


File: 4 <sup>th</sup> Floor L-1 MCB		<b>Date:</b> 04-03-2024	<b>Time:</b> 14:23:10
		34.5 °C - 34.5 - 34.5 - 34.0 - 33.5 - 33.0 - 32.5 - 32.0 - 31.5 - 31.0 - 31.0 - 31.0 - 31.0 - 31.0	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	31.0	0.95	20.0	-	
Hot spot 1	34.8	0.95	20.0	-	

Minimum: 31.0 °C Maximum: 34.8 °C Average: 32.9 °C





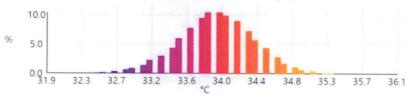
File: 4 <sup>th</sup> Floor L-2 MCB	<b>Date:</b> 04-03-2024	<b>Time:</b> 14:23:21
Market Barry	36.1 °C 36.0	
	-35.5	
	-350	
	-345	
and the second state of the second second	-340 -340	
	- 33.5	
	-330	
	-325	
The Production of the	- 120	
Picture parameters:		

Emissivity:	0.95
Refl. temp. [°C]:	20.0

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	31.9	0.95	20.0	-	
Hot spot 1	36.1	0.95	20.0	-	

Minimum: 31.9 °C Maximum: 36.1 °C Average: 33.9 °C





File: 4 <sup>⊤H</sup> Floor L-3 MCB	<b>Date:</b> 04-03-2024	<b>Time:</b> 14:23:33
	36.1 °C	M )
	-35.5	
	-345	THE R. L. LAW ST.
	-340	
	-330	
	223 C	
Picture parameters:		

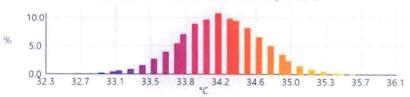
Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	32.3	0.95	20.0	-	
Hot spot 1	36.1	0.95	20.0	-	

Histogram:

### Minimum: 32.3 °C Maximum: 36.1 °C Average: 34.2 °C





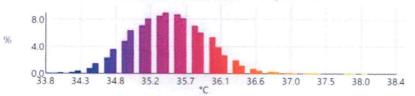
File: 4 <sup>th</sup> Floor Cable Alley	<b>Date:</b> 04-03-2024	<b>Time:</b> 14:23:47
LA GALLER STATE	38.4 °C	
1.2. · · · · · · · · · · · · · · · · · ·	- 38.0	
a har a second sec	- 37.5	
and the second second second	- 37.0	
	- 36.5	
A COLORADO TO A COLORADO T	- 36.0	
A CONTRACTOR OF THE STATE OF THE STATE	- 35.5	
	- 35.0	A DECISION OF THE OWNER
	- 34.5	
	-340 338 °C	
Picture parameters:		

Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	-
Cold spot 1	33.8	0.95	20.0	-	
Hot spot 1	38.4	0.95	20.0	-	

Minimum: 33.8 °C Maximum: 38.4 °C Average: 35.5 °C



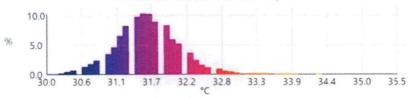


File: 4 <sup>th</sup> Floor Cable Alley		<b>Date:</b> 04-03-2024	<b>Time:</b> 14:23:55
		35.5 °C - 350	
Sall Co		- 340	
Carles and		- 310 OLE-	
		-320	
		-310 30.0 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	30.0	0.95	20.0	-
Hot spot 1	35.5	0.95	20.0	-

Minimum: 30.0 °C Maximum: 35.5 °C Average: 31.6 °C





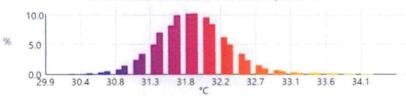
File: 4 <sup>th</sup> Floor Cable Alley	<b>Date:</b> 04-03-2024	<b>Time:</b> 14:24:01
· TTT CERTIFICATION	345 245	
	-340	
	-33.5	
	- 33.0	
The state of the	- 32.5	
and the second start	-32.0	
	-31.5	
	- 31.0	
	-30.5	
and the second second second second	- 300 29.9 °C	
Picture parameters:		

Emissivity:	0.95
Refl. temp. [°C]:	20.0

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	29.9	0.95	20.0	-
Hot spot 1	34.5	0.95	20.0	-

Minimum: 29.9 °C Maximum: 34.5 °C Average: 31.9 °C



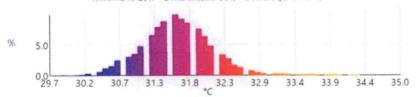


File: Lift P.S 4 <sup>th</sup> Floor		<b>Date:</b> 04-03-2024	<b>Time:</b> 14:25:01
		35.0 °C	
the Alexander	Alter A	-34.0	
		- 33.0	
DO BENC	· 法:	- 32.0	
		310	
感觉这些。	爱 带	- 300	
		29.7 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	29.7	0.95	20.0	-
Hot spot 1	35.0	0.95	20.0	-

Minimum: 29.7 °C Maximum: 35.0 °C Average: 31.6 °C



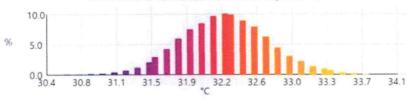


File: Lift P.S 4 <sup>th</sup> Floor		<b>Date:</b> 04-03-2024	<b>Time:</b> 14:25:32
		-315 -310	1000
		- 32.5 - 32.0 - 31.5	
		- 310 - 30.5 - 30.4 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	30.4	0.95	20.0	-
Hot spot 1	34.1	0.95	20.0	-

Minimum: 30.4 °C Maximum: 34.1 °C Average: 32.3 °C



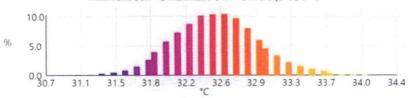


File: Lift P.S 4 <sup>th</sup> Floor		<b>Date:</b> 04-03-2024	<b>Time:</b> 14:25:41
		344 °C	
A SAME		-315	
		- 330	
113、金元子 35		- 32.5	
· 教育的新闻的		- 32.0	
0.200 <b>4</b> 500		- 31.5	
and the second		- 31.0 30.7 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	30.7	0.95	20.0	-
Hot spot 1	34.4	0.95	20.0	-

Minimum: 30.7 °C Maximum: 34.4 °C Average: 32.5 °C



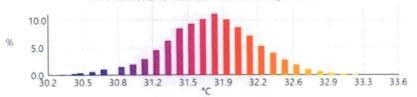


File: 4 <sup>th</sup> Floor Cable Alley		<b>Date:</b> 04-03-2024	 <b>Time:</b> 14:25:52
	Asses	27 845	
		- 33.0	
		- 32.5	
		- 32.0	
P. C. C. C. C. C.		- 31.5	
	Conce Parts	- 31.0	
		+ 30.5	
	alay ka Ar	30.2 %	
Picture parameters:			
Emissivity:	0.95		
Refl. temp. [°C]:	20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks	
Cold spot 1	30.2	0.95	20.0	-	
Hot spot 1	33.6	0.95	20.0	-	

Minimum: 30.2 °C Maximum: 33.6 °C Average: 31.7 °C



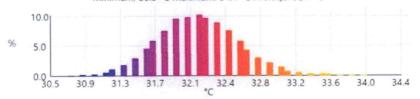


File: 4 <sup>th</sup> Floor Cable Alley		<b>Date:</b> 04-03-2024	<b>Time:</b> 14:25:58
		344 "C	
alter in		-340	
	- And Ant	- 335	
		-325	
		320	
		-315	
		-310	
Const Contract	No an	305	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	30.5	0.95	20.0	
Hot spot 1	34.4	0.95	20.0	-

Minimum: 30.5 °C Maximum: 34.4 °C Average: 32.1 °C





File: LT Room College RSEB	-4) -	<b>Date:</b> 04-03-2024	<b>Time:</b> 14:49:30
		453 7 254	
Aleren Ale		-45.0	WARALLIAN AND AND AND AND AND AND AND AND AND A
		-42.5	
Company of the		-410	TANK A TAY
		-375	in the second se
		- 35.0	
		-32.5	THE TRUE
		30.7 °C	
Picture parameters:			
Emissivity:	0.95		

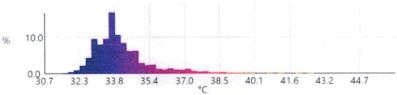
#### Picture markings:

Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	30.7	0.95	20.0	-
Hot spot 1	46.3	0.95	20.0	-

20.0







File: LT Room College DG-1	<b>Date:</b> 04-03-2024	<b>Time:</b> 14:51:43
	37.0	
and the second	- 36.0	A GRAMMAN
-129/1625 (A	-340	Hand There
State of the second	-300	1) Ar
NO ELSO	283 °C	
Picture parameters:		
Emissivity:	0.95	

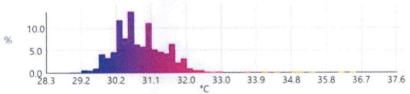
#### Picture markings:

Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	28.3	0.95	20.0	-
Hot spot 1	37.6	0.95	20.0	-

20.0

Minimum: 28.3 °C Maximum: 37.6 °C Average: 30.8 °C



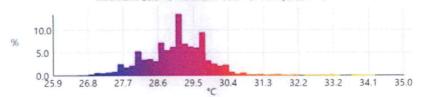


File: LT Room College DG-1		<b>Date:</b> 04-03-2024	<b>Time:</b> 14:51:57
		15.0 °C - 34.0 - 33.0 - 32.0 - 32.0 - 31.0 - 30.0 - 25.0 - 28.0 - 27.0 - 85.0 - 25.9 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	25.9	0.95	20.0	-
Hot spot 1	35.0	0.95	20.0	

Minimum: 25.9 °C Maximum: 35.0 °C Average: 29.1 °C



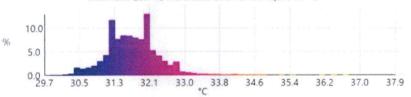


File: LT Room College Bus Co	upler	<b>Date:</b> 04-03-2024	<b>Time:</b> 14:52:16
		37.9 °C - 37.0 - 36.0 - 35.0 - 34.0 - 31.0 - 32.0 - 31.0 - 30.0 29.7 °C	
Picture parameters:			
Emissivity: Refl. temp. [°C]:	0.95 20.0		

#### Picture markings:

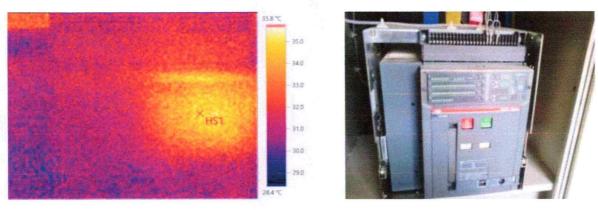
Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	29.7	0.95	20.0	-
Hot spot 1	37.9	0.95	20.0	-

Minimum: 29.7 °C Maximum: 37.9 °C Average: 31.8 °C





File:	Date:	Time:
LT Room College Bus Coupler	04-03-2024	14:52:51



#### Picture parameters:

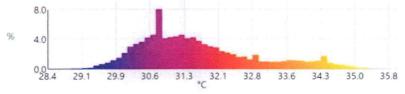
Emissivity:	0.95
Refl. temp. [°C]:	20.0

#### Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	28.4	0.95	20.0	-
Hot spot 1	35.8	0.95	20.0	-

#### Histogram:

Minimum: 28.4 °C Maximum: 35.8 °C Average: 31.6 °C



DEPPAK Energy Auditor (EA-19771)

St. Xavier's College Jaipur

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Principal St. Xavier's College Jaipur Nevta-Mahapura Road, Jaipur

File: LT Room College RSEB	<b>Date:</b> 04-03-2024	<b>Time:</b> 14:49:54
	40.7 °C	
	-400	
instanting the second	39.0	
CALL AND A SHORE A	38.0	
	36.0	
	- 15.0	
	- 34.0	
The second second	- 33.0	
	- 32.0	
	HT 310	Harris
	30.7 °C	
Picture parameters:		
Emissivity:	0.95	

#### Picture markings:

Refl. temp. [°C]:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Cold spot 1	30.7	0.95	20.0	-
Hot spot 1	40.7	0.95	20.0	-

20.0

Minimum: 30.7 °C Maximum: 40.7 °C Average: 34.9 °C

