

Photometric Test Report

Relevant Standards

- ☒ ANSI/IES LM-79-2019
- ☒ ANSI C82.77-2017

Prepared For

RAB Lighting Inc.

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Issue Date: 2025-08-20

Revised Date: N/A

1.0 Test Summary

Wall mount Luminaire					
Requirement Category		Test Method	Requirements		Test Value
Luminaire Output (lm) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		921
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	107.1
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		8.6
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002	N/A	120V	6.95
		ANSI C82-77-10:2020		277V	40.76
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002	N/A	120V	0.987
		ANSI C82-77-10:2020		277V	0.814
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	2725±145	2764
			4 steps	2725±83	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.4
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		63
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		91
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		96
IES Rcs,h1 (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-4%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		26.9%
Backlight, Uplight and Glare (BUG) Ratings (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019 IES TM-15-11	N/A		B0-U3-G1
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		277.0
(Goniophotometer – Section 4.2)			Non-Worst Case		120.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.038
(Goniophotometer – Section 4.2)			Non-Worst Case		0.070
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		8.6
(Goniophotometer – Section 4.2)			Non-Worst Case		8.3

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-06	V1-18 @8W2700K	-	250728005-S1
2	Goniophotometer Test	2025-08-06	V1-18 @8W2700K	-	250728005-S1
3	THD and PF Test	2025-08-06	V1-18 @8W2700K	-	250728005-S1

Remark (If any):

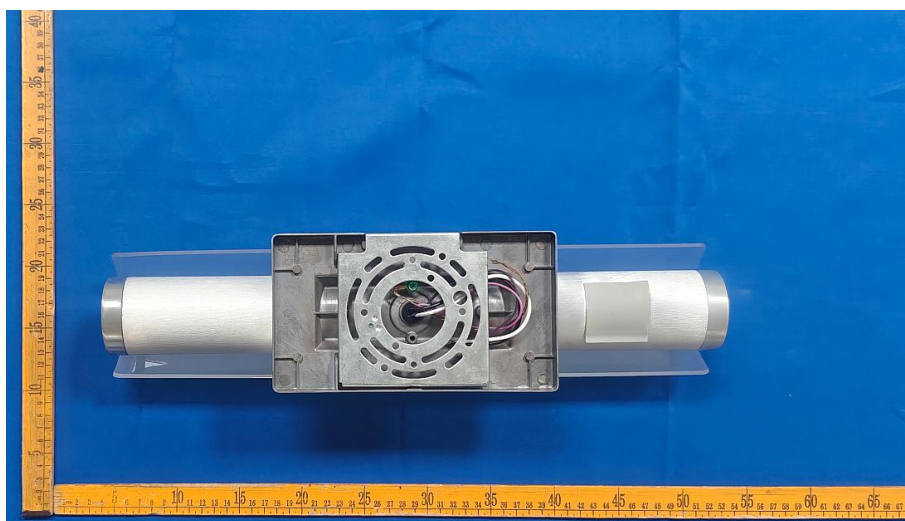
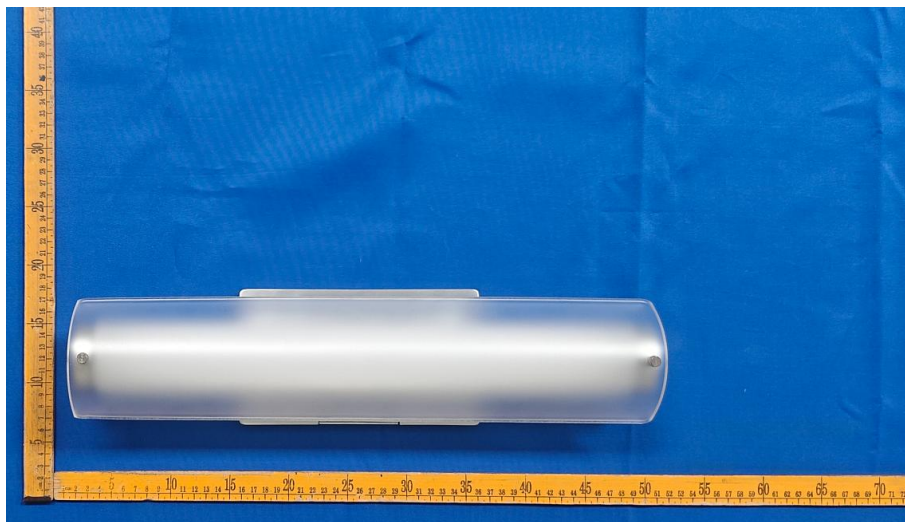
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-18 @8W2700K, color tunable from 2700K, 3000K, 3500K, 4000K and 5000K.

Electrical Specification: 120-277Vac, 50/60Hz

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	V1-18 @8W2700K	Sample ID	250728005-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

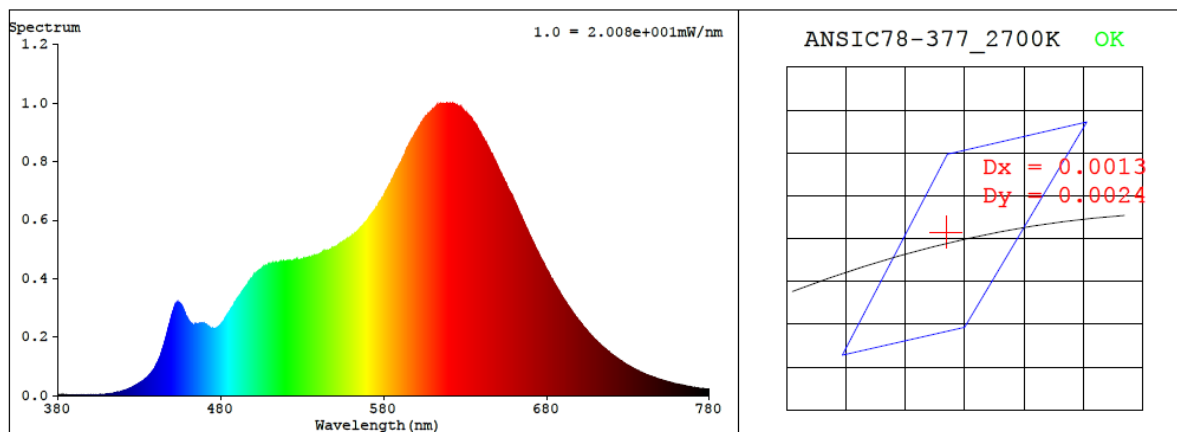
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ±0.2 percent under load.</p> <p>The sample was measured using 4π geometry and operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780nm.</p>

Test Result

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
120.0	60	0.070	8.3	0.987
277.0	60	0.038	8.6	0.814

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
2764	93.4	63	0.0008	1.8	91	96	-4%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4560$ $y = 0.4117$ / $u' = 0.2595$ $v' = 0.5272$ ($duv=7.61e-04$)

CCT= 2764K Prcp WL: $L_d=583.6nm$ Purity=60.4%

Peak WL: $L_p=619nm$ FWHM: $=125.9nm$ Ratio:R=26.8% G=70.0% B=3.2%

Render Index: $R_a = 93.4$ AvgR = 91.5 TM30:Rf=91 Rg=96

EEL: 0.12417 A+

R1 =99 R2 =97 R3 =93 R4 =97 R5 =98 R6 =91 R7 =90

R8 =82 R9 =63 R10=93 R11=94 R12=88 R13=99 R14=97 R15=92

4.1 Integrating Sphere Test

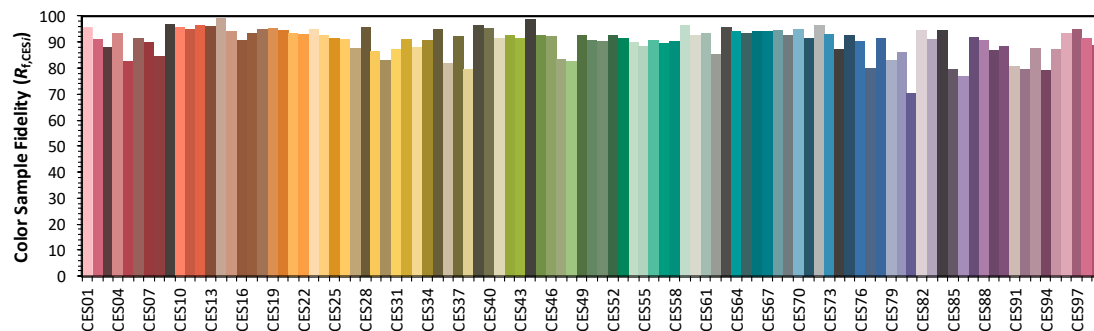
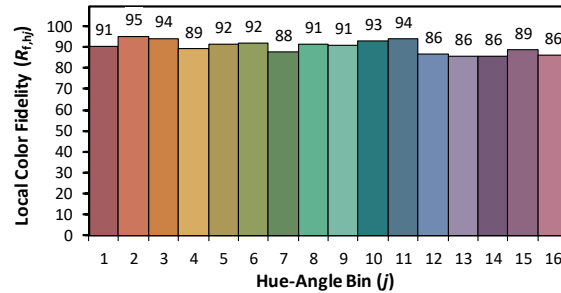
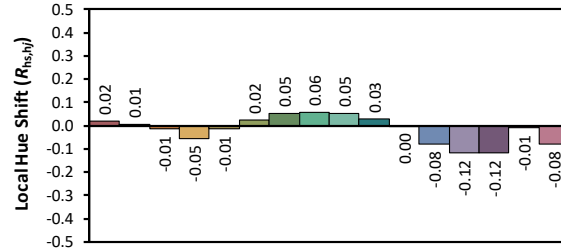
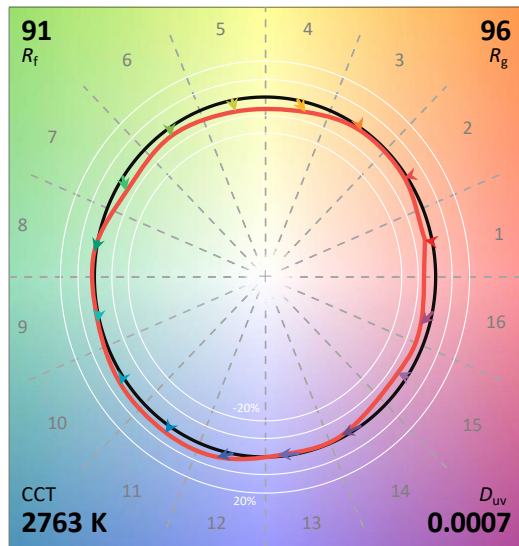
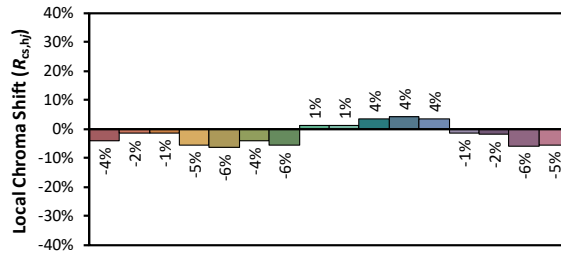
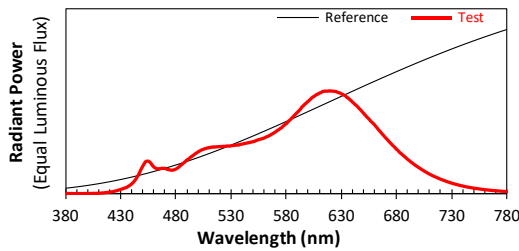
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/20

Model: V1-18 @8W2700K



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4560
 y 0.4117
 u' 0.2596
 v' 0.5272

CIE 13.3-1995
(CRI)

R_a 93
 R_g 64

4.1 Integrating Sphere Test

Spectral Distribution over Visible Wavelength											
WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)
380	3.70E-06	447	2.11E-04	514	4.55E-04	581	6.93E-04	648	8.07E-04	715	1.65E-04
381	2.70E-06	448	2.34E-04	515	4.53E-04	582	7.04E-04	649	7.95E-04	716	1.60E-04
382	2.90E-06	449	2.55E-04	516	4.56E-04	583	7.14E-04	650	7.83E-04	717	1.55E-04
383	2.40E-06	450	2.74E-04	517	4.56E-04	584	7.23E-04	651	7.70E-04	718	1.51E-04
384	1.70E-06	451	2.91E-04	518	4.57E-04	585	7.37E-04	652	7.59E-04	719	1.46E-04
385	2.90E-06	452	3.08E-04	519	4.57E-04	586	7.45E-04	653	7.46E-04	720	1.41E-04
386	1.70E-06	453	3.15E-04	520	4.59E-04	587	7.58E-04	654	7.36E-04	721	1.37E-04
387	1.00E-06	454	3.17E-04	521	4.58E-04	588	7.70E-04	655	7.26E-04	722	1.33E-04
388	1.70E-06	455	3.16E-04	522	4.59E-04	589	7.80E-04	656	7.12E-04	723	1.29E-04
389	1.80E-06	456	3.08E-04	523	4.61E-04	590	7.91E-04	657	7.01E-04	724	1.26E-04
390	1.50E-06	457	2.97E-04	524	4.60E-04	591	8.01E-04	658	6.91E-04	725	1.21E-04
391	1.50E-06	458	2.82E-04	525	4.62E-04	592	8.13E-04	659	6.81E-04	726	1.17E-04
392	1.70E-06	459	2.69E-04	526	4.63E-04	593	8.24E-04	660	6.70E-04	727	1.14E-04
393	1.90E-06	460	2.58E-04	527	4.65E-04	594	8.42E-04	661	6.57E-04	728	1.10E-04
394	1.80E-06	461	2.51E-04	528	4.63E-04	595	8.50E-04	662	6.45E-04	729	1.06E-04
395	1.50E-06	462	2.46E-04	529	4.64E-04	596	8.62E-04	663	6.30E-04	730	1.04E-04
396	2.20E-06	463	2.42E-04	530	4.66E-04	597	8.72E-04	664	6.18E-04	731	9.98E-05
397	2.10E-06	464	2.43E-04	531	4.68E-04	598	8.80E-04	665	6.06E-04	732	9.70E-05
398	2.20E-06	465	2.43E-04	532	4.68E-04	599	8.91E-04	666	5.93E-04	733	9.39E-05
399	2.30E-06	466	2.45E-04	533	4.71E-04	600	8.99E-04	667	5.80E-04	734	9.08E-05
400	2.70E-06	467	2.47E-04	534	4.72E-04	601	9.10E-04	668	5.69E-04	735	8.84E-05
401	2.10E-06	468	2.47E-04	535	4.72E-04	602	9.20E-04	669	5.56E-04	736	8.55E-05
402	2.90E-06	469	2.47E-04	536	4.76E-04	603	9.30E-04	670	5.44E-04	737	8.28E-05
403	3.00E-06	470	2.47E-04	537	4.73E-04	604	9.39E-04	671	5.34E-04	738	8.00E-05
404	3.20E-06	471	2.42E-04	538	4.79E-04	605	9.45E-04	672	5.22E-04	739	7.73E-05
405	3.60E-06	472	2.36E-04	539	4.81E-04	606	9.53E-04	673	5.10E-04	740	7.54E-05
406	4.20E-06	473	2.35E-04	540	4.82E-04	607	9.60E-04	674	4.98E-04	741	7.23E-05
407	3.60E-06	474	2.31E-04	541	4.85E-04	608	9.65E-04	675	4.87E-04	742	7.05E-05
408	4.40E-06	475	2.31E-04	542	4.88E-04	609	9.71E-04	676	4.76E-04	743	6.82E-05
409	4.60E-06	476	2.28E-04	543	4.89E-04	610	9.78E-04	677	4.64E-04	744	6.54E-05
410	5.50E-06	477	2.29E-04	544	4.92E-04	611	9.81E-04	678	4.56E-04	745	6.39E-05
411	5.80E-06	478	2.33E-04	545	4.95E-04	612	9.87E-04	679	4.43E-04	746	6.21E-05
412	6.70E-06	479	2.37E-04	546	4.96E-04	613	9.93E-04	680	4.32E-04	747	6.03E-05
413	7.80E-06	480	2.41E-04	547	4.99E-04	614	9.94E-04	681	4.23E-04	748	5.84E-05
414	8.30E-06	481	2.48E-04	548	5.02E-04	615	9.98E-04	682	4.11E-04	749	5.63E-05
415	9.80E-06	482	2.55E-04	549	5.04E-04	616	9.96E-04	683	3.99E-04	750	5.45E-05
416	1.08E-05	483	2.65E-04	550	5.07E-04	617	9.97E-04	684	3.92E-04	751	5.30E-05
417	1.24E-05	484	2.76E-04	551	5.09E-04	618	9.97E-04	685	3.82E-04	752	5.13E-05
418	1.31E-05	485	2.83E-04	552	5.14E-04	619	1.00E-03	686	3.72E-04	753	5.00E-05
419	1.49E-05	486	2.92E-04	553	5.18E-04	620	9.97E-04	687	3.64E-04	754	4.84E-05
420	1.64E-05	487	3.02E-04	554	5.22E-04	621	9.98E-04	688	3.54E-04	755	4.66E-05
421	1.82E-05	488	3.09E-04	555	5.26E-04	622	9.96E-04	689	3.44E-04	756	4.53E-05
422	1.98E-05	489	3.21E-04	556	5.29E-04	623	9.96E-04	690	3.35E-04	757	4.37E-05
423	2.19E-05	490	3.29E-04	557	5.32E-04	624	9.95E-04	691	3.26E-04	758	4.19E-05
424	2.45E-05	491	3.36E-04	558	5.34E-04	625	9.93E-04	692	3.18E-04	759	4.08E-05
425	2.67E-05	492	3.44E-04	559	5.38E-04	626	9.88E-04	693	3.09E-04	760	3.93E-05
426	2.98E-05	493	3.54E-04	560	5.43E-04	627	9.83E-04	694	3.01E-04	761	3.84E-05
427	3.26E-05	494	3.62E-04	561	5.48E-04	628	9.81E-04	695	2.93E-04	762	3.75E-05
428	3.62E-05	495	3.69E-04	562	5.53E-04	629	9.77E-04	696	2.85E-04	763	3.61E-05
429	3.91E-05	496	3.77E-04	563	5.57E-04	630	9.69E-04	697	2.77E-04	764	3.48E-05
430	4.30E-05	497	3.86E-04	564	5.62E-04	631	9.67E-04	698	2.69E-04	765	3.38E-05
431	4.67E-05	498	3.93E-04	565	5.67E-04	632	9.60E-04	699	2.63E-04	766	3.26E-05
432	4.99E-05	499	4.00E-04	566	5.74E-04	633	9.55E-04	700	2.55E-04	767	3.16E-05
433	5.46E-05	500	4.07E-04	567	5.80E-04	634	9.48E-04	701	2.49E-04	768	3.06E-05
434	5.82E-05	501	4.13E-04	568	5.86E-04	635	9.35E-04	702	2.41E-04	769	2.97E-05
435	6.21E-05	502	4.19E-04	569	5.93E-04	636	9.31E-04	703	2.34E-04	770	2.88E-05
436	6.90E-05	503	4.25E-04	570	6.00E-04	637	9.20E-04	704	2.28E-04	771	2.81E-05
437	7.44E-05	504	4.30E-04	571	6.08E-04	638	9.11E-04	705	2.21E-04	772	2.67E-05
438	8.24E-05	505	4.32E-04	572	6.16E-04	639	9.02E-04	706	2.14E-04	773	2.67E-05
439	8.99E-05	506	4.38E-04	573	6.22E-04	640	8.91E-04	707	2.08E-04	774	2.49E-05
440	9.93E-05	507	4.39E-04	574	6.30E-04	641	8.81E-04	708	2.03E-04	775	2.46E-05
441	1.10E-04	508	4.44E-04	575	6.37E-04	642	8.70E-04	709	1.96E-04	776	2.40E-05
442	1.22E-04	509	4.45E-04	576	6.44E-04	643	8.62E-04	710	1.90E-04	777	2.31E-05
443	1.36E-04	510	4.49E-04	577	6.56E-04	644	8.52E-04	711	1.85E-04	778	2.21E-05
444	1.52E-04	511	4.49E-04	578	6.65E-04	645	8.42E-04	712	1.79E-04	779	2.21E-05
445	1.70E-04	512	4.53E-04	579	6.74E-04	646	8.28E-04	713	1.74E-04	780	2.21E-05
446	1.89E-04	513	4.52E-04	580	6.81E-04	647	8.19E-04	714	1.69E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18 @8W2700K	Sample ID	250728005-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	25.0	Humidity (%RH)	41.9

Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using a type C goniophotometer and software.</p> <p>The ambient temperature shall be maintained at $25 \pm 1^\circ\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.</p> <p>The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1.0° vertical intervals and 15° horizontal intervals.</p>

Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	277.0	60	0.038	8.6	0.814
NON-WORST CASE	120.0	60	0.070	8.3	0.987

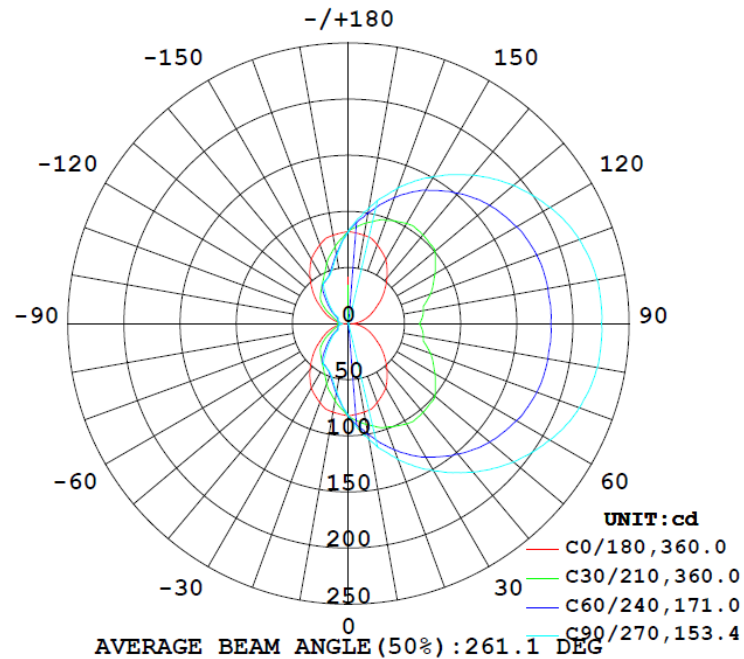
Test Result

Flux (lm)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)	Zonal Lumen Requirement	BUG
	C0-180	C90-270	C0-180	C90-270		(0° - 60°)	
921	93.4	157.0	180.0	96.7	107.1	26.9%	B0-U3-G1

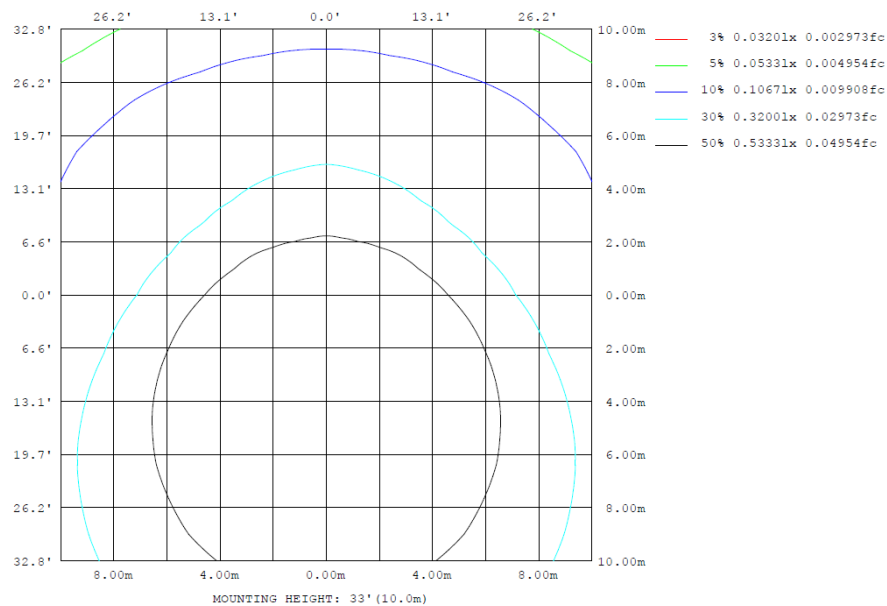
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

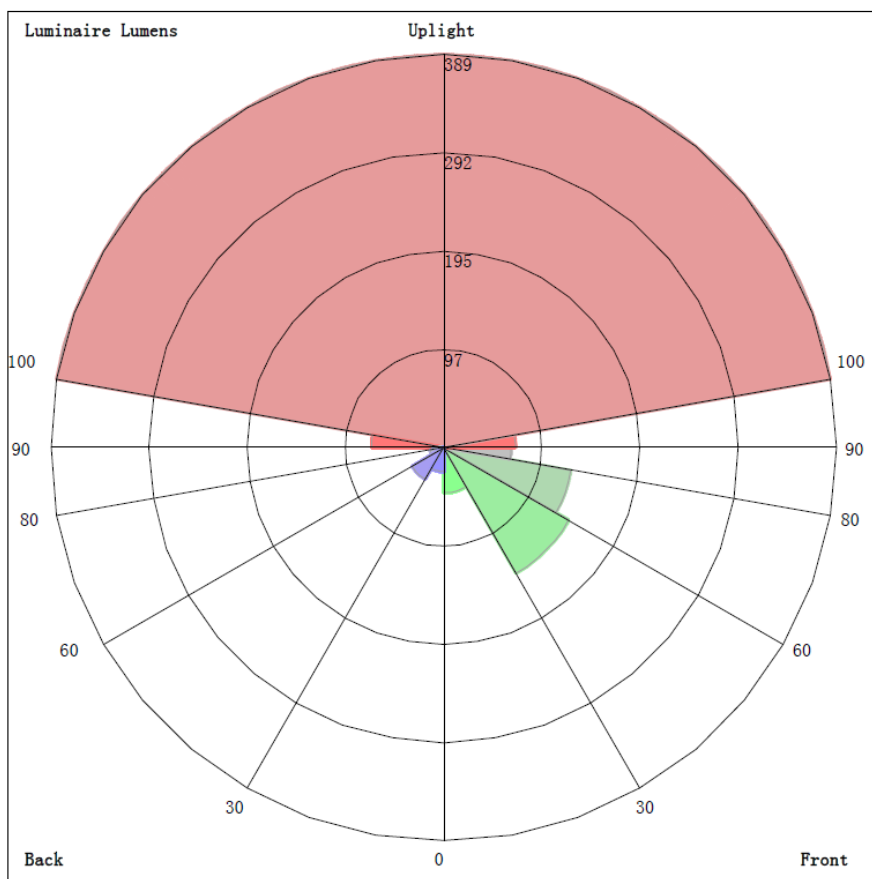
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	80.01	95.44	104.4	95.44	80.01	65.50	61.68	65.50	0- 10	7.778	7.778	0.84, 0.84
20	74.78	110.5	128.6	110.5	74.78	51.63	47.29	51.63	10- 20	22.97	30.75	3.34, 3.34
30	66.54	121.2	151.4	121.2	66.54	42.77	43.39	42.77	20- 30	37.64	68.39	7.42, 7.42
40	53.37	129.4	172.7	129.4	53.37	39.13	30.54	39.13	30- 40	51.20	119.6	13, 13
50	40.51	134.4	191.8	134.4	40.51	26.23	19.49	26.23	40- 50	61.08	180.7	19.6, 19.6
60	27.93	135.0	207.3	135.0	27.93	16.24	10.67	16.24	50- 60	67.08	247.8	26.9, 26.9
70	19.04	132.9	219.0	132.9	19.04	10.57	9.827	10.57	60- 70	70.10	317.8	34.5, 34.5
80	10.55	128.4	225.0	128.4	10.55	9.795	8.253	9.795	70- 80	71.33	389.2	42.2, 42.2
90	2.456	125.3	225.4	125.3	2.456	9.244	8.286	9.244	80- 90	71.44	460.6	50, 50
100	10.55	128.4	225.0	128.4	10.55	9.795	8.253	9.795	90-100	71.44	532.1	57.8, 57.8
110	19.04	132.9	219.0	132.9	19.04	10.57	9.827	10.57	100-110	71.33	603.4	65.5, 65.5
120	27.93	135.0	207.3	135.0	27.93	16.24	10.67	16.24	110-120	70.10	673.5	73.1, 73.1
130	40.51	134.4	191.8	134.4	40.51	26.23	19.49	26.23	120-130	67.08	740.6	80.4, 80.4
140	53.37	129.4	172.7	129.4	53.37	39.13	30.54	39.13	130-140	61.08	801.6	87, 87
150	66.54	121.2	151.4	121.2	66.54	42.77	43.39	42.77	140-150	51.20	852.8	92.6, 92.6
160	74.78	110.5	128.6	110.5	74.78	51.63	47.29	51.63	150-160	37.64	890.5	96.7, 96.7
170	80.01	95.44	104.4	95.44	80.01	65.50	61.68	65.50	160-170	22.97	913.5	99.2, 99.2
180	82.22	82.22	82.22	82.22	82.22	82.22	82.22	82.22	170-180	7.778	921.2	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	7.78	0-10	7.78	0.85%
10-20	22.97	0-20	30.75	3.37%
20-30	37.64	0-30	68.39	7.49%
30-40	51.20	0-40	119.59	13.09%
40-50	61.08	0-50	180.67	19.78%
50-60	67.08	0-60	247.75	27.12%
60-70	70.10	0-70	317.85	34.80%
70-80	71.33	0-80	389.18	42.61%
80-90	71.44	0-90	460.62	50.43%
90-100	71.44	0-100	532.06	58.25%
100-110	71.33	0-110	603.39	66.06%
110-120	70.10	0-120	673.49	73.73%
120-130	67.08	0-130	740.57	81.07%
130-140	61.08	0-140	801.65	87.76%
140-150	51.20	0-150	852.85	93.36%
150-160	37.64	0-160	890.49	97.49%
160-170	22.97	0-170	913.46	100.00%
170-180	7.78	0-180	921.24	100.85%

4.2 Goniophotometer Test

LCS/BUG

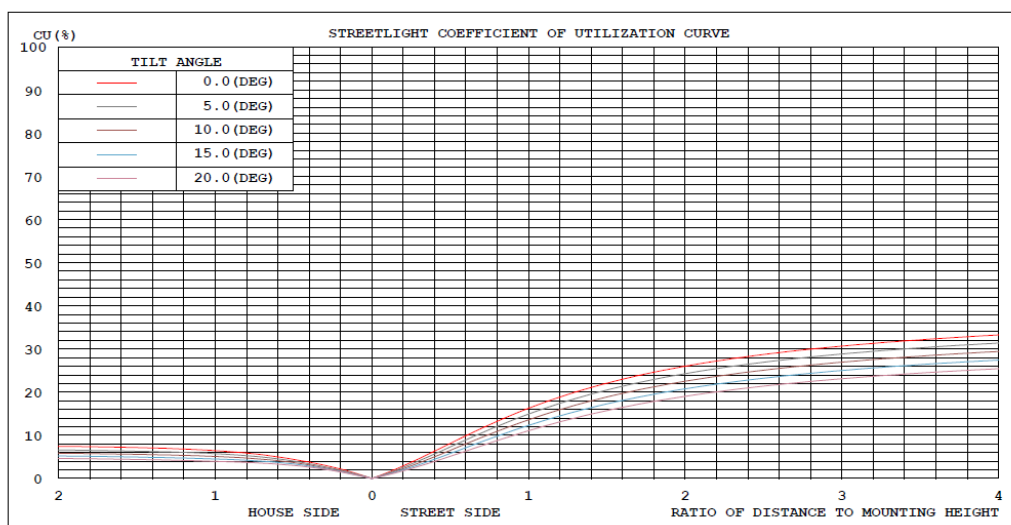


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

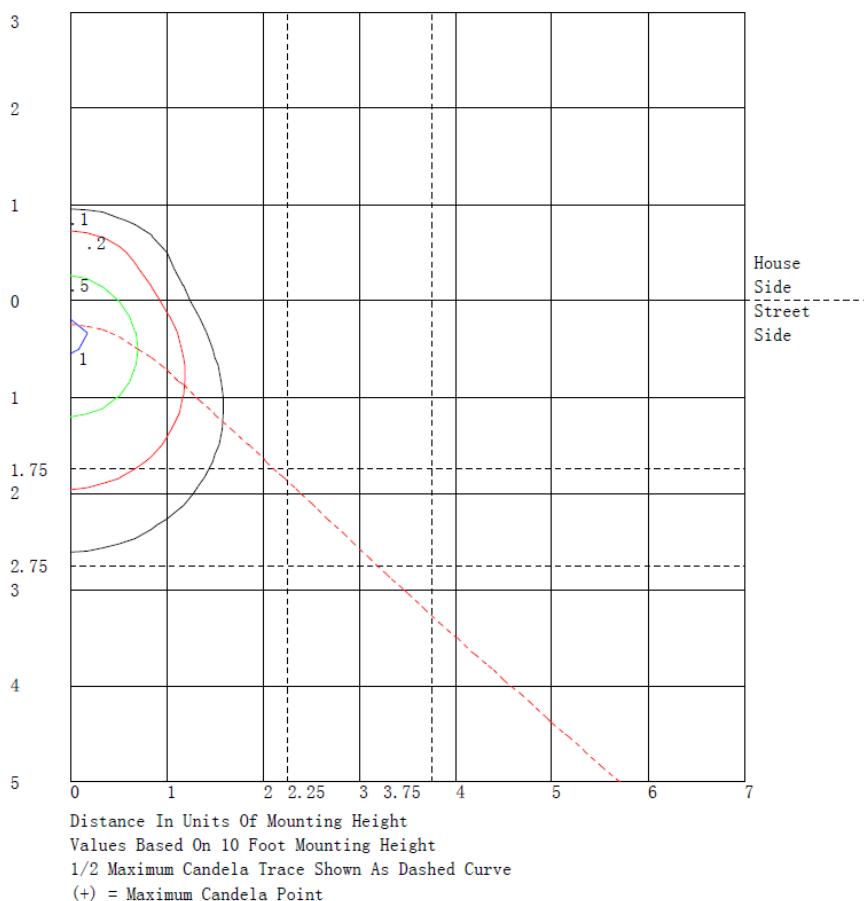
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	44.7	N.A.	4.9
FM - Front-Medium (30-60)	143.5	N.A.	15.6
FH - Front-High (60-80)	128.3	N.A.	13.9
FVH - Front-Very High (80-90)	66.7	N.A.	7.2
BL - Back-Low (0-30)	23.7	N.A.	2.6
BM - Back-Medium (30-60)	35.8	N.A.	3.9
BH - Back-High (60-80)	13.1	N.A.	1.4
BVH - Back-Very High (80-90)	4.7	N.A.	0.5
UL - Uplight-Low (90-100)	71.4	N.A.	7.8
UH - Uplight-High (100-180)	389.2	N.A.	42.3
Total	921.1	N.A.	100.0
BUG Rating	B0-U3-G1		

4.2 Goniophotometer Test

Coefficients of Utilization



Isolines



4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
5	81.1	84.2	86.8	89.2	91.3	92.9	93.7	92.9	91.3	89.2	86.8	84.2	81.1	78.4	76.0	74.3	72.8	71.9	71.8
10	80.0	85.7	91.2	95.4	100	103	104	103	100	95.4	91.2	85.7	80.0	74.5	69.5	65.5	63.0	61.7	61.7
15	78.9	87.5	95.0	103	110	114	116	114	110	103	95.0	87.5	78.9	70.7	63.4	58.2	55.0	53.1	53.0
20	74.8	86.1	98.0	110	120	125	129	125	120	110	98.0	86.1	74.8	64.2	57.1	51.6	48.4	47.1	47.3
25	70.7	84.8	101	117	129	136	140	136	129	117	101	84.8	70.7	58.5	50.3	46.1	44.8	44.3	44.7
30	66.5	83.8	103	121	137	147	151	147	137	121	103	83.8	66.5	52.8	45.2	42.8	42.8	43.1	43.4
35	60.0	79.9	104	126	145	157	162	157	145	126	104	79.9	60.0	46.9	41.6	40.9	40.6	38.4	37.9
40	53.4	75.3	103	129	152	167	173	167	152	129	103	75.3	53.4	41.6	38.2	39.1	34.1	31.0	30.5
45	46.8	70.9	102	132	158	176	182	176	158	132	102	70.9	46.8	36.6	35.5	32.8	27.3	24.9	24.3
50	40.5	64.3	100	134	164	184	192	184	164	134	100	64.3	40.5	32.8	32.3	26.2	22.0	19.9	19.5
55	34.2	56.6	94.6	136	169	191	200	191	169	136	94.6	56.6	34.2	29.4	27.3	20.8	17.4	15.5	15.3
60	27.9	48.6	88.9	135	173	198	207	198	173	135	88.9	48.6	27.9	26.2	21.6	16.2	12.7	11.0	10.7
65	23.5	42.8	83.4	134	176	203	214	203	176	134	83.4	42.8	23.5	21.8	16.7	12.4	10.6	10.3	10.2
70	19.0	37.2	77.9	133	179	208	219	208	179	133	77.9	37.2	19.0	17.0	13.5	10.6	10.2	9.85	9.83
75	14.6	31.2	71.0	131	180	211	223	211	180	131	71.0	31.2	14.6	12.1	10.9	10.1	9.79	9.54	9.73
80	10.5	30.1	67.8	128	180	213	225	213	180	128	67.8	30.1	10.5	10.7	9.85	9.79	8.84	8.70	8.25
85	6.50	29.4	66.1	128	181	215	226	215	181	128	66.1	29.4	6.50	9.64	9.77	9.52	8.40	7.62	7.32
90	2.46	28.4	63.2	125	180	214	225	214	180	125	63.2	28.4	2.46	8.65	9.70	9.24	8.52	7.62	8.29
95	6.50	29.4	66.1	128	181	215	226	215	181	128	66.1	29.4	6.50	9.64	9.77	9.52	8.40	7.62	7.32
100	10.5	30.1	67.8	128	180	213	225	213	180	128	67.8	30.1	10.5	10.7	9.85	9.79	8.84	8.70	8.25
105	14.6	31.2	71.0	131	180	211	223	211	180	131	71.0	31.2	14.6	12.1	10.9	10.1	9.79	9.54	9.73
110	19.0	37.2	77.9	133	179	208	219	208	179	133	77.9	37.2	19.0	17.0	13.5	10.6	10.2	9.85	9.83
115	23.5	42.8	83.4	134	176	203	214	203	176	134	83.4	42.8	23.5	21.8	16.7	12.4	10.6	10.3	10.2
120	27.9	48.6	88.9	135	173	198	207	198	173	135	88.9	48.6	27.9	26.2	21.6	16.2	12.7	11.0	10.7
125	34.2	56.6	94.6	136	169	191	200	191	169	136	94.6	56.6	34.2	29.4	27.3	20.8	17.4	15.5	15.3
130	40.5	64.3	100	134	164	184	192	184	164	134	100	64.3	40.5	32.8	32.3	26.2	22.0	19.9	19.5
135	46.8	70.9	102	132	158	176	182	176	158	132	102	70.9	46.8	36.6	35.5	32.8	27.3	24.9	24.3
140	53.4	75.3	103	129	152	167	173	167	152	129	103	75.3	53.4	41.6	38.2	39.1	34.1	31.0	30.5
145	60.0	79.9	104	126	145	157	162	157	145	126	104	79.9	60.0	46.9	41.6	40.9	40.6	38.4	37.9
150	66.5	83.8	103	121	137	147	151	147	137	121	103	83.8	66.5	52.8	45.2	42.8	42.8	43.1	43.4
155	70.7	84.8	101	117	129	136	140	136	129	117	101	84.8	70.7	58.5	50.3	46.1	44.8	44.3	44.7
160	74.8	86.1	98.0	110	120	125	129	125	120	110	98.0	86.1	74.8	64.2	57.1	51.6	48.4	47.1	47.3
165	78.9	87.5	95.0	103	110	114	116	114	110	103	95.0	87.5	78.9	70.7	63.4	58.2	55.0	53.1	53.0
170	80.0	85.7	91.2	95.4	100	103	104	103	100	95.4	91.2	85.7	80.0	74.5	69.5	65.5	63.0	61.7	61.7
175	81.1	84.2	86.8	89.2	91.3	92.9	93.7	92.9	91.3	89.2	86.8	84.2	81.1	78.4	76.0	74.3	72.8	71.9	71.8
180	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2

Table--2

UNIT: cd

C (DEG)	285	300	315	330	345														
0	82.2	82.2	82.2	82.2	82.2														
5	71.9	72.8	74.3	76.0	78.4														
10	61.7	63.0	65.5	69.5	74.5														
15	53.1	55.0	58.2	63.4	70.7														
20	47.1	48.4	51.6	57.1	64.2														
25	44.3	44.8	46.1	50.3	58.5														
30	43.1	42.8	42.8	45.2	52.8														
35	38.4	40.6	40.9	41.6	46.9														
40	31.0	34.1	39.1	38.2	41.6														
45	24.9	27.3	32.8	35.5	36.6														
50	19.9	22.0	26.2	32.3	32.8														
55	15.5	17.4	20.8	27.3	29.4														
60	11.0	12.7	16.2	21.6	26.2														
65	10.3	10.6	12.4	16.7	21.8														
70	9.85	10.2	10.6	13.5	17.0														
75	9.54	9.79	10.1	10.9	12.1														
80	8.70	8.84	9.79	9.85	10.7														
85	7.62	8.40	9.52	9.77	9.64														
90	7.62	8.52	9.24	9.70	8.65														
95	7.62	8.40	9.52	9.77	9.64														
100	8.70	8.84	9.79	9.85	10.7														
105	9.54	9.79	10.1	10.9	12.1														
110	9.85	10.2	10.6	13.5	17.0														
115	10.3	10.6	12.4	16.7	21.8														
120	11.0	12.7	16.2	21.6	26.2														
125	15.5	17.4	20.8	27.3	29.4														
130	19.9	22.0	26.2	32.3	32.8														
135	24.9	27.3	32.8	35.5	36.6														
140	31.0	34.1	39.1	38.2	41.6														
145	38.4	40.6	40.9	41.6	46.9														
150	43.1	42.8	42.8	45.2	52.8														
155	44.3	44.8	46.1	50.3	58.5														
160	47.1	48.4	51.6	57.1	64.2														
165	53.1	55.0	58.2	63.4	70.7														
170	61.7	63.0	65.5	69.5	74.5														
175	71.9	72.8	74.3	76.0	78.4														
180	82.2	82.2	82.2	82.2	82.2														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18 @8W2700K	Sample ID	250728005-S1
Temperature (°C)	25.4	Humidity (%RH)	41.0

Test Method
<p>The samples were tested according to the and Ansi C82.77: 2002 and ANSI C82.77-10:2020</p> <p>The total harmonic distortion shall be measured to the 40th order.</p> <p>The ambient temperature shall be maintained at $25 \pm 1^{\circ}\text{C}$. The sample measurements were made using a digital power meter and power supply. The sample was operated at rated voltage and was stabilized before measurement. The total harmonic distortion was calculated.</p>

Test Results

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	iTHD(%)
120.0	60	0.070	8.3	0.987	6.95
277.0	60	0.038	8.6	0.814	40.76

5.0 Equipment List:

Equipment ID	Equipment Name	Last Cal.	Due Cal.
NTC-F01-001	Goniophotometer System	2024-11-07	2025-11-06
NTC-F01-006	2.0 meter Integrating Sphere	2024-11-07	2025-11-06
NTC-F01-012	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-013	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-031	Digital Power Meter	2025-08-04	2026-08-03
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

*****End of Report*****