

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: 2025-08-22

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		1643
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	110.3
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.9
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	5.61
				277V	20.52
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.994
				277V	0.922
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3045±175	3009
			4 steps	3045±100	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.8
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		70
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		90
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		26.5%
Backlight, Uplight and Glare (BUG) Ratings (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019 IES TM-15-11	N/A		B0-U4-G2
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		0.058
(Goniophotometer – Section 4.2)			Non-Worst Case		0.124
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.9
(Goniophotometer – Section 4.2)			Non-Worst Case		14.8

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-07	V1-24B @15W3000K	-	250728008-S1
2	Goniophotometer Test	2025-08-07	V1-24B @15W3000K	-	250728008-S1
3	THD and PF Test	2025-08-07	V1-24B @15W3000K	-	250728008-S1

Remark (If any):

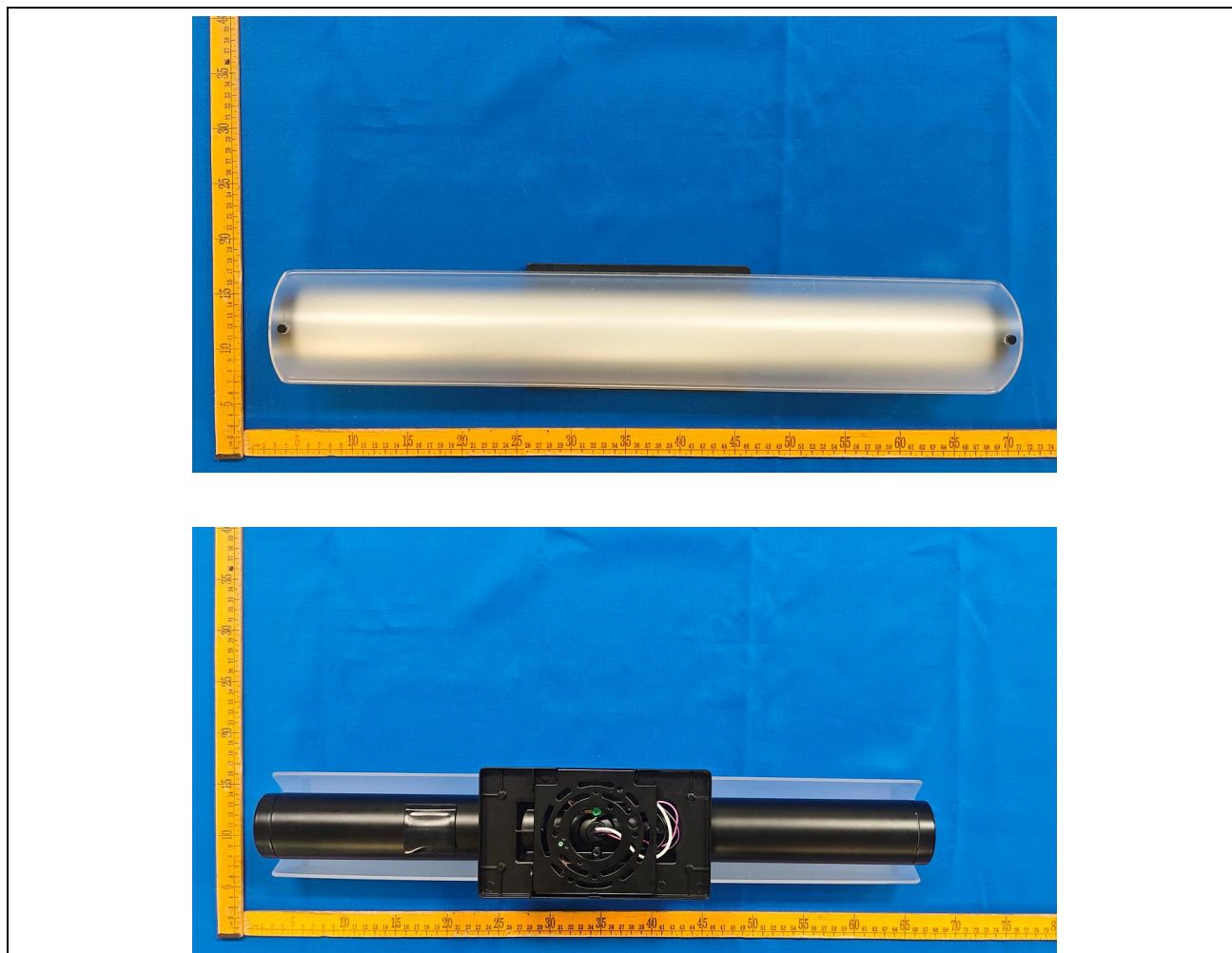
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-24B @15W3000K, 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.	V1-24B @15W3000K	Sample ID	250728008-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

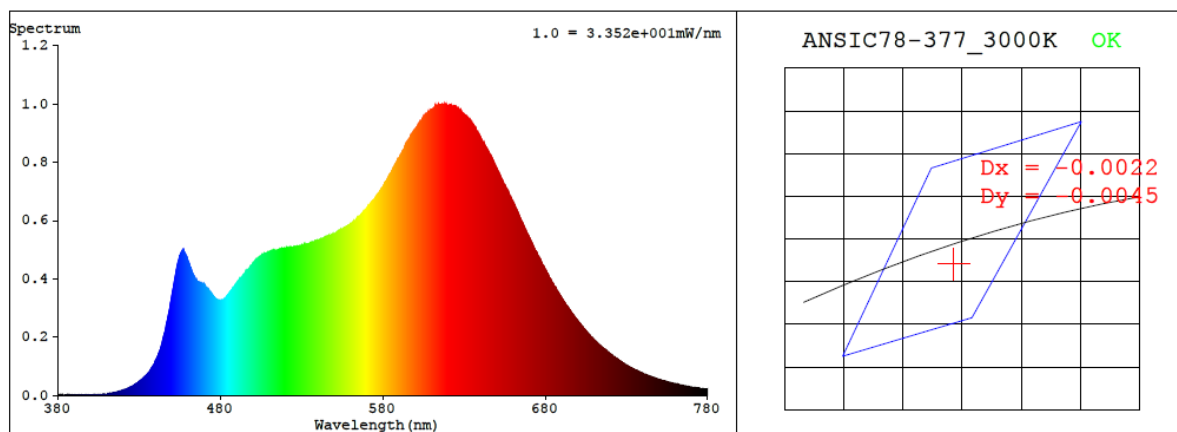
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\pm 1^{\circ}\text{C}$.</p> <p>The sample measurements 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	0.124	14.8	0.994
277.0	60	0.058	14.9	0.922

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3009	92.8	70	-0.0015	2.1	90	96	-4%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4341$ $y = 0.3994$ / $u' = 0.2508$ $v' = 0.5191$ ($duv = -1.50e-03$)

CCT= 3009K Prcp WL: $L_d = 583.3nm$ Purity=50.2%

Peak WL: $L_p = 618nm$ FWHM: $= 157.1nm$ Ratio: $R = 25.3\%$ $G = 70.9\%$ $B = 3.8\%$

Render Index: $R_a = 92.8$ $AvgR = 91.3$ $TM30:R_f = 91$ $R_g = 98$

EEL: 0.12886 A+

R1 =98 R2 =96 R3 =92 R4 =96 R5 =97 R6 =90 R7 =89

R8 =84 R9 =70 R10=90 R11=96 R12=83 R13=97 R14=96 R15=94

4.1 Integrating Sphere Test

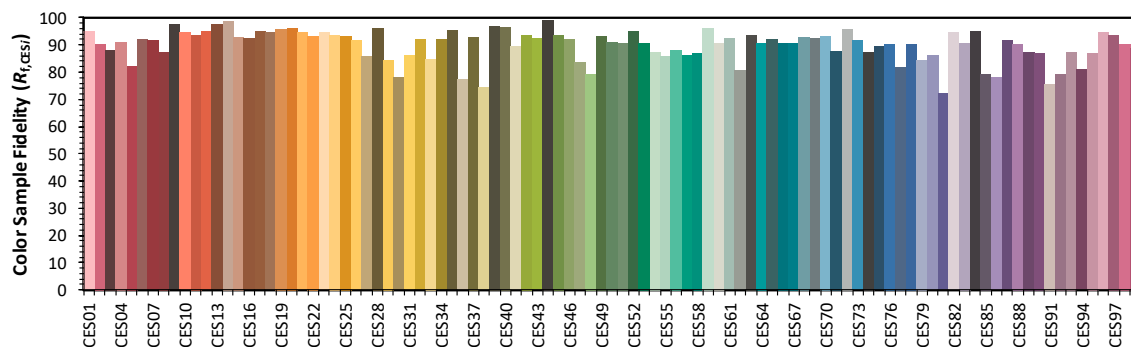
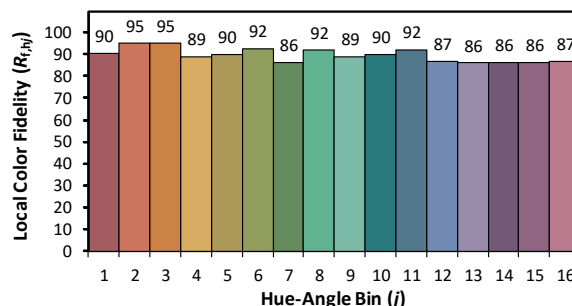
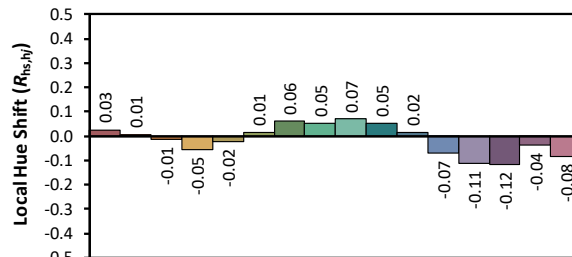
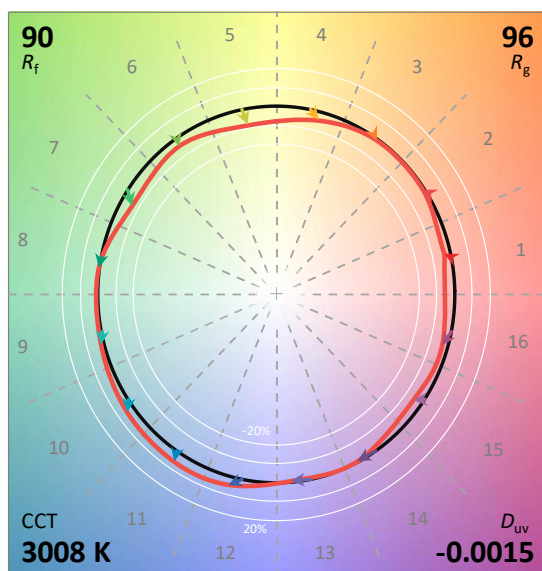
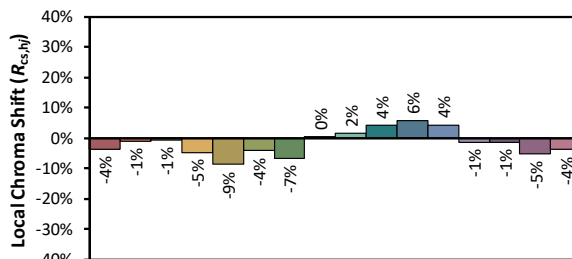
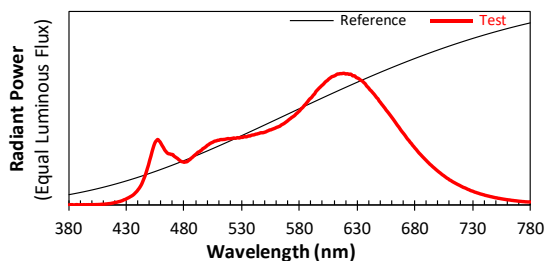
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/22

Model: V1-24B @15W3000K



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

x 0.4342
 y 0.3993
 u' 0.2508
 v' 0.5191

CIE 13.3-1995
(CRI)

R_a 93
 R_g 70

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	1.10E-06	447	2.49E-04	514	4.97E-04	581	7.26E-04	648	8.05E-04	715	1.66E-04
381	1.90E-06	448	2.77E-04	515	4.98E-04	582	7.34E-04	649	7.90E-04	716	1.61E-04
382	2.00E-06	449	3.05E-04	516	5.00E-04	583	7.43E-04	650	7.80E-04	717	1.56E-04
383	2.20E-06	450	3.39E-04	517	5.02E-04	584	7.54E-04	651	7.67E-04	718	1.52E-04
384	3.00E-07	451	3.69E-04	518	5.04E-04	585	7.63E-04	652	7.57E-04	719	1.48E-04
385	1.10E-06	452	4.03E-04	519	5.02E-04	586	7.74E-04	653	7.45E-04	720	1.43E-04
386	2.20E-06	453	4.33E-04	520	5.03E-04	587	7.84E-04	654	7.34E-04	721	1.38E-04
387	2.70E-06	454	4.60E-04	521	5.05E-04	588	7.96E-04	655	7.21E-04	722	1.34E-04
388	1.20E-06	455	4.79E-04	522	5.06E-04	589	8.06E-04	656	7.11E-04	723	1.31E-04
389	1.40E-06	456	4.89E-04	523	5.09E-04	590	8.13E-04	657	7.00E-04	724	1.27E-04
390	1.20E-06	457	4.97E-04	524	5.06E-04	591	8.23E-04	658	6.88E-04	725	1.23E-04
391	1.70E-06	458	4.88E-04	525	5.07E-04	592	8.35E-04	659	6.77E-04	726	1.18E-04
392	1.20E-06	459	4.78E-04	526	5.11E-04	593	8.43E-04	660	6.65E-04	727	1.16E-04
393	2.40E-06	460	4.63E-04	527	5.09E-04	594	8.59E-04	661	6.53E-04	728	1.11E-04
394	1.40E-06	461	4.48E-04	528	5.09E-04	595	8.69E-04	662	6.41E-04	729	1.07E-04
395	2.00E-06	462	4.34E-04	529	5.13E-04	596	8.78E-04	663	6.28E-04	730	1.05E-04
396	1.90E-06	463	4.18E-04	530	5.13E-04	597	8.87E-04	664	6.16E-04	731	1.01E-04
397	2.20E-06	464	4.07E-04	531	5.14E-04	598	8.95E-04	665	6.03E-04	732	9.74E-05
398	1.90E-06	465	3.97E-04	532	5.19E-04	599	9.04E-04	666	5.92E-04	733	9.50E-05
399	2.20E-06	466	3.90E-04	533	5.18E-04	600	9.12E-04	667	5.79E-04	734	9.18E-05
400	2.50E-06	467	3.88E-04	534	5.18E-04	601	9.20E-04	668	5.66E-04	735	8.93E-05
401	2.40E-06	468	3.86E-04	535	5.21E-04	602	9.31E-04	669	5.55E-04	736	8.62E-05
402	2.40E-06	469	3.82E-04	536	5.25E-04	603	9.39E-04	670	5.44E-04	737	8.32E-05
403	2.70E-06	470	3.83E-04	537	5.23E-04	604	9.44E-04	671	5.33E-04	738	8.12E-05
404	3.20E-06	471	3.72E-04	538	5.28E-04	605	9.53E-04	672	5.21E-04	739	7.86E-05
405	3.10E-06	472	3.66E-04	539	5.31E-04	606	9.60E-04	673	5.08E-04	740	7.64E-05
406	3.80E-06	473	3.59E-04	540	5.32E-04	607	9.67E-04	674	4.97E-04	741	7.30E-05
407	3.90E-06	474	3.54E-04	541	5.34E-04	608	9.73E-04	675	4.87E-04	742	7.14E-05
408	5.10E-06	475	3.46E-04	542	5.38E-04	609	9.76E-04	676	4.75E-04	743	6.90E-05
409	5.50E-06	476	3.39E-04	543	5.38E-04	610	9.79E-04	677	4.66E-04	744	6.73E-05
410	5.40E-06	477	3.32E-04	544	5.41E-04	611	9.83E-04	678	4.53E-04	745	6.46E-05
411	6.40E-06	478	3.29E-04	545	5.44E-04	612	9.90E-04	679	4.44E-04	746	6.30E-05
412	7.50E-06	479	3.27E-04	546	5.47E-04	613	9.94E-04	680	4.32E-04	747	6.10E-05
413	8.10E-06	480	3.24E-04	547	5.48E-04	614	9.94E-04	681	4.23E-04	748	5.88E-05
414	9.60E-06	481	3.27E-04	548	5.48E-04	615	9.97E-04	682	4.12E-04	749	5.68E-05
415	1.02E-05	482	3.27E-04	549	5.50E-04	616	9.97E-04	683	4.01E-04	750	5.48E-05
416	1.12E-05	483	3.33E-04	550	5.53E-04	617	9.97E-04	684	3.91E-04	751	5.39E-05
417	1.29E-05	484	3.40E-04	551	5.56E-04	618	9.99E-04	685	3.82E-04	752	5.13E-05
418	1.48E-05	485	3.46E-04	552	5.61E-04	619	9.98E-04	686	3.72E-04	753	5.03E-05
419	1.65E-05	486	3.55E-04	553	5.64E-04	620	9.94E-04	687	3.63E-04	754	4.86E-05
420	1.88E-05	487	3.61E-04	554	5.69E-04	621	9.96E-04	688	3.54E-04	755	4.70E-05
421	1.99E-05	488	3.70E-04	555	5.70E-04	622	9.95E-04	689	3.45E-04	756	4.55E-05
422	2.22E-05	489	3.78E-04	556	5.74E-04	623	9.91E-04	690	3.36E-04	757	4.39E-05
423	2.47E-05	490	3.85E-04	557	5.77E-04	624	9.93E-04	691	3.27E-04	758	4.27E-05
424	2.65E-05	491	3.93E-04	558	5.80E-04	625	9.89E-04	692	3.19E-04	759	4.11E-05
425	2.94E-05	492	4.01E-04	559	5.84E-04	626	9.80E-04	693	3.10E-04	760	4.01E-05
426	3.21E-05	493	4.04E-04	560	5.89E-04	627	9.80E-04	694	3.03E-04	761	3.87E-05
427	3.62E-05	494	4.11E-04	561	5.92E-04	628	9.79E-04	695	2.94E-04	762	3.80E-05
428	4.03E-05	495	4.16E-04	562	5.95E-04	629	9.68E-04	696	2.86E-04	763	3.65E-05
429	4.27E-05	496	4.27E-04	563	5.99E-04	630	9.64E-04	697	2.79E-04	764	3.50E-05
430	4.80E-05	497	4.31E-04	564	6.06E-04	631	9.60E-04	698	2.71E-04	765	3.42E-05
431	5.22E-05	498	4.37E-04	565	6.11E-04	632	9.54E-04	699	2.63E-04	766	3.29E-05
432	5.65E-05	499	4.44E-04	566	6.16E-04	633	9.47E-04	700	2.56E-04	767	3.19E-05
433	6.18E-05	500	4.53E-04	567	6.21E-04	634	9.43E-04	701	2.49E-04	768	3.11E-05
434	6.66E-05	501	4.57E-04	568	6.28E-04	635	9.35E-04	702	2.43E-04	769	2.99E-05
435	7.19E-05	502	4.65E-04	569	6.34E-04	636	9.27E-04	703	2.35E-04	770	2.89E-05
436	7.85E-05	503	4.70E-04	570	6.42E-04	637	9.19E-04	704	2.28E-04	771	2.78E-05
437	8.69E-05	504	4.74E-04	571	6.49E-04	638	9.05E-04	705	2.23E-04	772	2.72E-05
438	9.59E-05	505	4.78E-04	572	6.55E-04	639	8.96E-04	706	2.16E-04	773	2.60E-05
439	1.05E-04	506	4.83E-04	573	6.63E-04	640	8.87E-04	707	2.09E-04	774	2.56E-05
440	1.17E-04	507	4.85E-04	574	6.69E-04	641	8.74E-04	708	2.03E-04	775	2.48E-05
441	1.28E-04	508	4.87E-04	575	6.74E-04	642	8.67E-04	709	1.98E-04	776	2.38E-05
442	1.42E-04	509	4.91E-04	576	6.82E-04	643	8.57E-04	710	1.90E-04	777	2.37E-05
443	1.58E-04	510	4.91E-04	577	6.91E-04	644	8.47E-04	711	1.87E-04	778	2.29E-05
444	1.78E-04	511	4.95E-04	578	6.98E-04	645	8.36E-04	712	1.81E-04	779	2.30E-05
445	2.00E-04	512	4.97E-04	579	7.07E-04	646	8.25E-04	713	1.75E-04	780	2.31E-05
446	2.22E-04	513	4.96E-04	580	7.14E-04	647	8.13E-04	714	1.71E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-24B @15W3000K	Sample ID	250728008-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.9	Humidity (%RH)	42.6

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	0.058	14.9	0.922
NON-WORST CASE	120.0	60	0.124	14.8	0.994

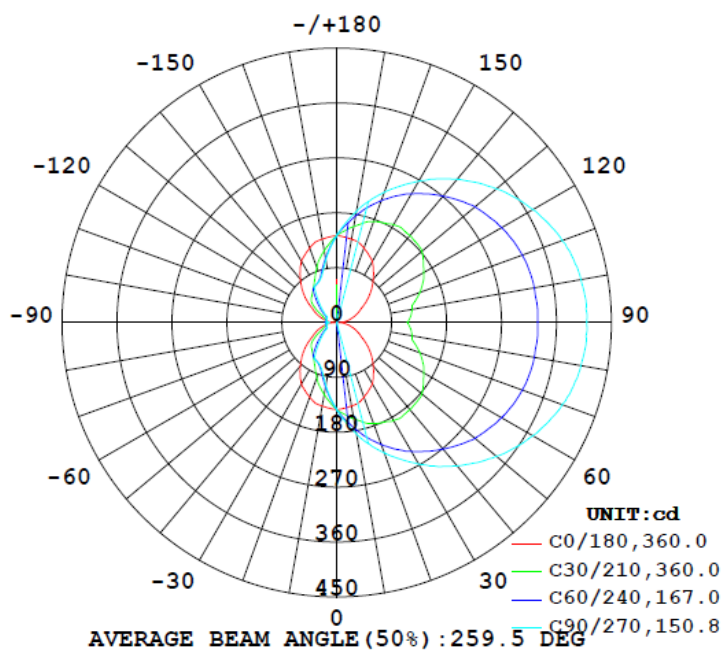
Test Result

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°)	
1643	86.1	154.7	180.0	97.5	110.3	26.5%	B0-U4-G2

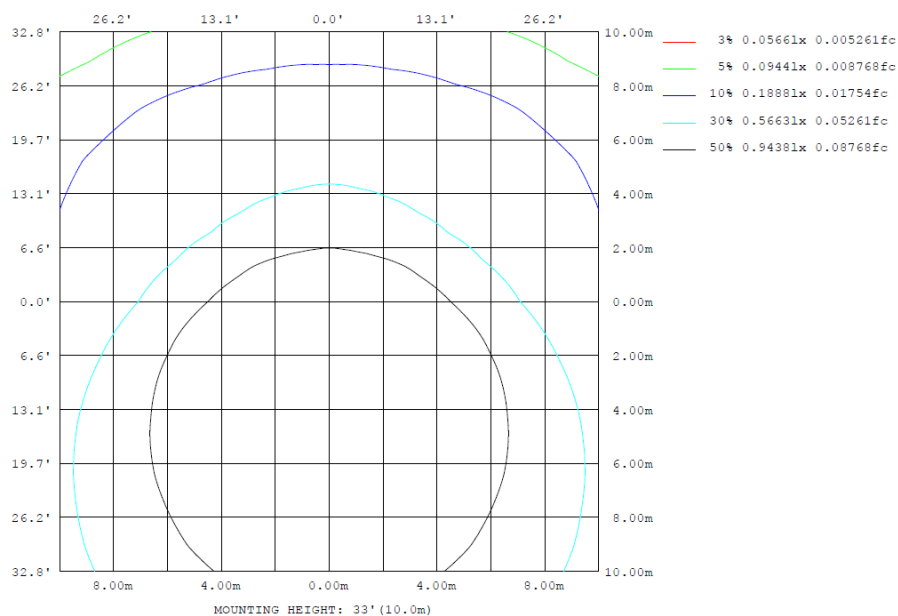
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

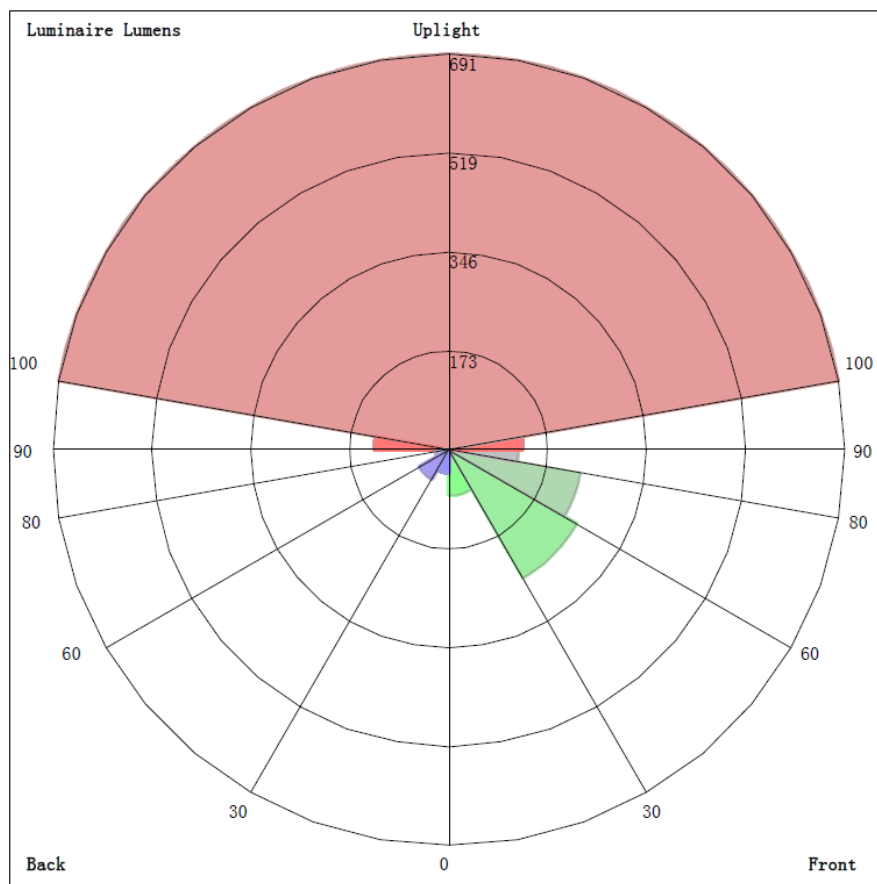
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total	lum, lamp
10	139.1	169.8	185.0	169.8	139.1	112.5	104.3	112.5	0- 10	13.54	13.54	0.82, 0.82
20	130.2	198.1	227.4	198.1	130.2	86.08	77.29	86.08	10- 20	40.08	53.61	3.26, 3.26
30	116.6	217.1	267.9	217.1	116.6	69.96	70.96	69.96	20- 30	65.68	119.3	7.26, 7.26
40	93.27	232.6	307.1	232.6	93.27	64.40	47.69	64.40	30- 40	89.71	209.0	12.7, 12.7
50	69.82	242.1	341.3	242.1	69.82	42.27	29.41	42.27	40- 50	107.7	316.7	19.3, 19.3
60	46.26	245.5	370.8	245.5	46.26	26.32	18.37	26.32	50- 60	119.4	436.1	26.5, 26.5
70	31.10	243.5	392.9	243.5	31.10	18.85	17.67	18.85	60- 70	126.1	562.2	34.2, 34.2
80	16.69	236.6	406.1	236.6	16.69	18.52	17.53	18.52	70- 80	129.2	691.4	42.1, 42.1
90	3.032	231.3	409.4	231.3	3.032	19.31	17.90	19.31	80- 90	130.3	821.7	50.5, 50.5
100	16.69	236.6	406.1	236.6	16.69	18.52	17.53	18.52	90-100	130.3	952.0	57.9, 57.9
110	31.10	243.5	392.9	243.5	31.10	18.85	17.67	18.85	100-110	129.2	1081	65.8, 65.8
120	46.26	245.5	370.8	245.5	46.26	26.32	18.37	26.32	110-120	126.1	1207	73.5, 73.5
130	69.82	242.1	341.3	242.1	69.82	42.27	29.41	42.27	120-130	119.4	1327	80.7, 80.7
140	93.27	232.6	307.1	232.6	93.27	64.40	47.69	64.40	130-140	107.7	1434	87.3, 87.3
150	116.6	217.1	267.9	217.1	116.6	69.96	70.96	69.96	140-150	89.71	1524	92.7, 92.7
160	130.2	198.1	227.4	198.1	130.2	86.08	77.29	86.08	150-160	65.68	1590	96.7, 96.7
170	139.1	169.8	185.0	169.8	139.1	112.5	104.3	112.5	160-170	40.08	1630	99.2, 99.2
180	143.1	143.1	143.1	143.1	143.1	143.1	143.1	143.1	170-180	13.54	1643	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)	Total (lm)	Percent
0-10	13.54	0.83%
10-20	40.08	3.29%
20-30	65.68	7.32%
30-40	89.71	12.82%
40-50	107.72	19.43%
50-60	119.35	26.75%
60-70	126.13	34.49%
70-80	129.23	42.42%
80-90	130.30	50.42%
90-100	130.30	58.41%
100-110	129.23	66.34%
110-120	126.13	74.08%
120-130	119.35	81.40%
130-140	107.72	88.01%
140-150	89.71	93.51%
150-160	65.68	97.54%
160-170	40.08	100.00%
170-180	13.54	100.83%

4.2 Goniophotometer Test

LCS/BUG

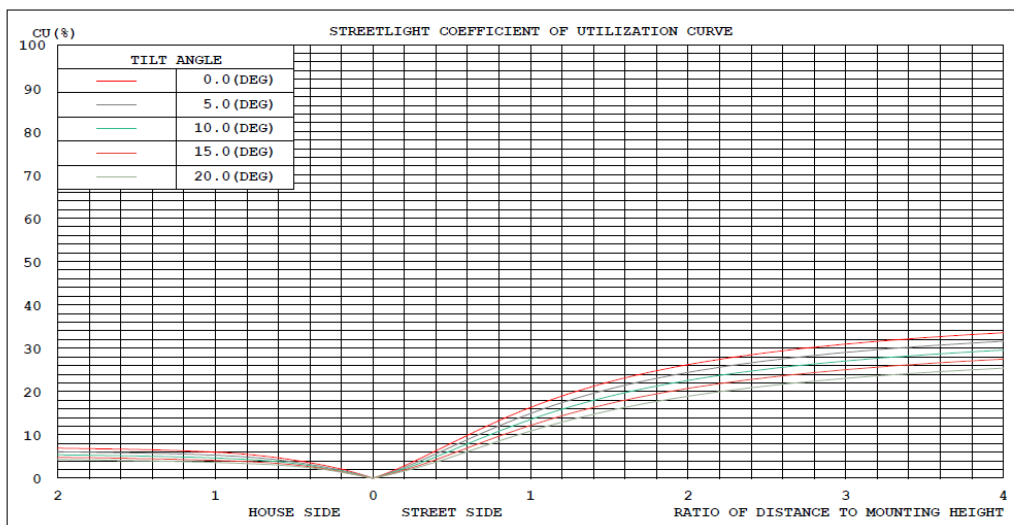


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

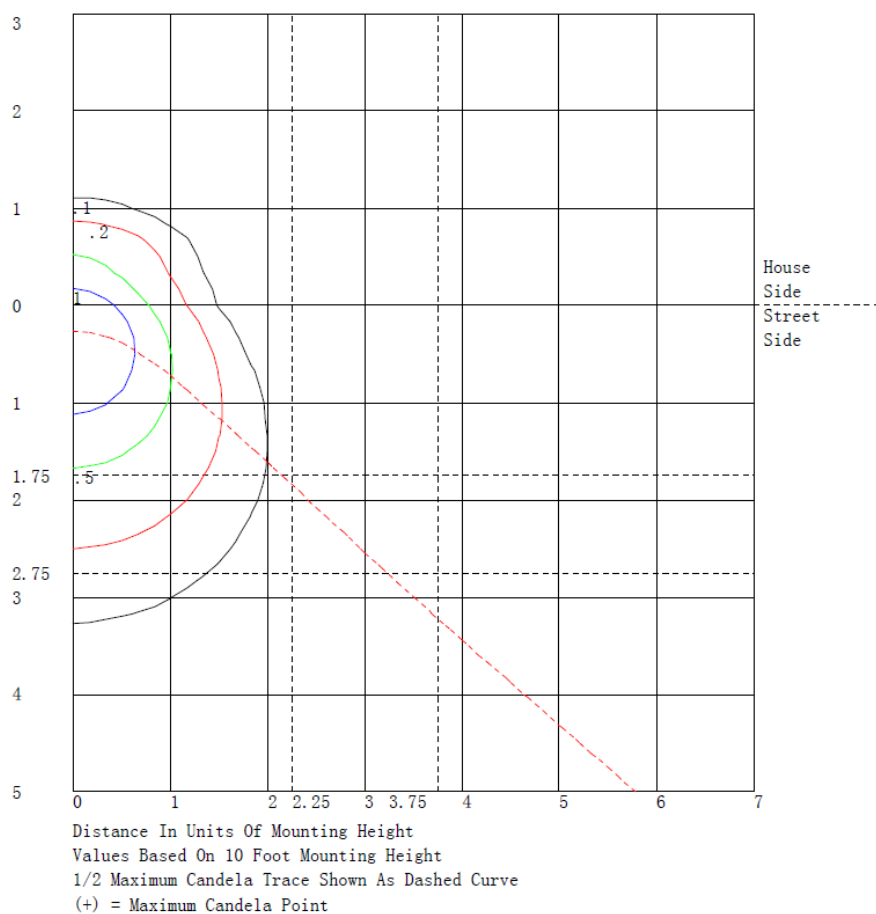
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	79.4	N.A.	4.8
FM - Front-Medium (30-60)	258.0	N.A.	15.7
FH - Front-High (60-80)	232.9	N.A.	14.2
FVH - Front-Very High (80-90)	121.2	N.A.	7.4
BL - Back-Low (0-30)	39.9	N.A.	2.4
BM - Back-Medium (30-60)	58.7	N.A.	3.6
BH - Back-High (60-80)	22.5	N.A.	1.4
BVH - Back-Very High (80-90)	9.1	N.A.	0.6
UL - Uplight-Low (90-100)	130.3	N.A.	7.9
UH - Uplight-High (100-180)	691.4	N.A.	42.1
Total	1643.4	N.A.	100.0
BUG Rating	B0-U4-G2		

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
y (DEG)	0	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143
5	141	146	151	156	160	162	164	162	160	156	151	146	141	136	131	128	125	124	124
10	139	150	160	170	178	183	185	183	178	170	160	150	139	129	120	113	107	105	104
15	137	153	169	184	196	203	206	203	196	184	169	153	137	122	109	98.2	91.5	88.3	88.1
20	130	152	176	198	213	223	227	223	213	198	176	152	130	111	96.1	86.1	79.6	77.2	77.3
25	123	151	181	208	229	242	247	242	229	208	181	151	123	100	84.2	75.9	73.2	72.2	72.6
30	117	150	186	217	244	261	268	261	244	217	186	150	117	89.8	74.6	70.0	70.2	70.5	71.0
35	105	145	187	226	258	279	288	279	258	226	187	145	105	78.7	67.7	66.7	67.2	62.6	61.1
40	93.3	138	186	233	271	297	307	297	271	233	186	138	93.3	68.8	62.7	64.4	55.5	49.4	47.7
45	81.6	132	185	238	283	314	325	314	283	238	185	132	81.6	60.3	58.8	53.9	43.5	38.8	37.2
50	69.8	120	182	242	295	329	341	329	295	242	182	120	69.8	53.7	54.8	42.3	34.4	30.6	29.4
55	58.0	106	173	245	304	344	357	344	304	245	173	106	58.0	47.9	45.6	33.0	27.2	24.2	23.6
60	46.3	91.3	165	246	312	356	371	356	312	246	165	91.3	46.3	42.6	34.9	26.3	21.3	19.0	18.4
65	38.7	80.1	156	245	318	366	383	366	318	245	156	80.1	38.7	35.4	26.7	21.1	18.7	18.0	17.8
70	31.1	68.4	145	244	324	375	393	375	324	244	145	68.4	31.1	27.4	22.0	18.8	18.7	18.0	17.7
75	23.5	56.0	132	240	327	382	401	382	327	240	132	56.0	23.5	19.2	18.0	18.6	18.7	18.0	17.6
80	16.7	52.8	125	237	328	386	406	386	328	237	125	52.8	16.7	17.4	16.9	18.5	18.1	17.7	17.5
85	9.86	50.2	121	235	330	389	410	389	330	235	121	50.2	9.86	16.5	17.4	18.9	18.4	16.1	15.1
90	3.03	47.2	116	231	329	389	409	389	329	231	116	47.2	3.03	15.6	17.8	19.3	19.4	15.8	17.9
95	9.86	50.2	121	235	330	389	410	389	330	235	121	50.2	9.86	16.5	17.4	18.9	18.4	16.1	15.1
100	16.7	52.8	125	237	328	386	406	386	328	237	125	52.8	16.7	17.4	16.9	18.5	18.1	17.7	17.5
105	23.5	56.0	132	240	327	382	401	382	327	240	132	56.0	23.5	19.2	18.0	18.6	18.7	18.0	17.6
110	31.1	68.4	145	244	324	375	393	375	324	244	145	68.4	31.1	27.4	22.0	18.8	18.7	18.0	17.7
115	38.7	80.1	156	245	318	366	383	366	318	245	156	80.1	38.7	35.4	26.7	21.1	18.7	18.0	17.8
120	46.3	91.3	165	246	312	356	371	356	312	246	165	91.3	46.3	42.6	34.9	26.3	21.3	19.0	18.4
125	58.0	106	173	245	304	344	357	344	304	245	173	106	58.0	47.9	45.6	33.0	27.2	24.2	23.6
130	69.8	120	182	242	295	329	341	329	295	242	182	120	69.8	53.7	54.8	42.3	34.4	30.6	29.4
135	81.6	132	185	238	283	314	325	314	283	238	185	132	81.6	60.3	58.8	53.9	43.5	38.8	37.2
140	93.3	138	186	233	271	297	307	297	271	233	186	138	93.3	68.8	62.7	64.4	55.5	49.4	47.7
145	105	145	187	226	258	279	288	279	258	226	187	145	105	78.7	67.7	66.7	67.2	62.6	61.1
150	117	150	186	217	244	261	268	261	244	217	186	150	117	89.8	74.6	70.0	70.2	70.5	71.0
155	123	151	181	208	229	242	247	242	229	208	181	151	123	100	84.2	75.9	73.2	72.2	72.6
160	130	152	176	198	213	223	227	223	213	198	176	152	130	111	96.1	86.1	79.6	77.2	77.3
165	137	153	169	184	196	203	206	203	196	184	169	153	137	122	109	98.2	91.5	88.3	88.1
170	139	150	160	170	178	183	185	183	178	170	160	150	139	129	120	113	107	105	104
175	141	146	151	156	160	162	164	162	160	156	141	146	141	136	131	128	125	124	124
180	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143

Table--2

UNIT: cd

C (DEG)	285	300	315	330	345														
y (DEG)	0	143	143	143	143														
5	124	125	128	131	136														
10	105	107	113	120	129														
15	88.3	91.5	98.2	109	122														
20	77.2	79.6	86.1	96.1	111														
25	72.2	73.2	75.9	84.2	100														
30	70.5	70.2	70.0	74.6	89.8														
35	62.6	67.2	66.7	67.7	78.7														
40	49.4	55.5	64.4	62.7	68.8														
45	38.8	43.5	53.9	58.8	60.3														
50	30.6	34.4	42.3	54.8	53.7														
55	24.2	27.2	33.0	45.6	47.9														
60	19.0	21.3	26.3	34.9	42.6														
65	18.0	18.7	21.1	26.7	35.4														
70	18.0	18.7	18.8	22.0	27.4														
75	18.0	18.7	18.6	18.0	19.2														
80	17.7	18.1	18.5	16.9	17.4														
85	16.1	18.4	18.9	17.4	16.5														
90	15.8	19.4	19.3	17.8	15.6														
95	16.1	18.4	18.9	17.4	16.5														
100	17.7	18.1	18.5	16.9	17.4														
105	18.0	18.7	18.6	18.0	19.2														
110	18.0	18.7	18.8	22.0	27.4														
115	18.0	18.7	21.1	26.7	35.4														
120	19.0	21.3	26.3	34.9	42.6														
125	24.2	27.2	33.0	45.6	47.9														
130	30.6	34.4	42.3	54.8	53.7														
135	38.8	43.5	53.9	58.8	60.3														
140	49.4	55.5	64.4	62.7	68.8														
145	62.6	67.2	66.7	67.7	78.7														
150	70.5	70.2	70.0	74.6	89.8														
155	72.2	73.2	75.9	84.2	100														
160	77.2	79.6	86.1	96.1	111														
165	88.3	91.5	98.2	109	122														
170	105	107	113	120	129														
175	124	125	128	131	136														
180	143	143	143	143	143														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24B @15W3000K	Sample ID	250728008-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	0.124	14.8	0.994	5.61
277.0	60	0.058	14.9	0.922	20.52

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*****