LM-79-19 Test Report

For

LEDVANCE LLC

181 BALLARDVALE STREET, SUITE 203 WILMINGTON, MA 01887

HAZARDOUS FLOODLIGHT

Model Name(s):
HAZFLOODP/100HUVD850/GR

Representative (Tested) Model:
HAZFLOODP/100HUVD850/GR

Model Difference: N/A

Prepared by:

Alan Wang

Engineer: Alan Wang
Date: 2025-07-25

Reviewed by:

Vincent Yuan

Technical Lead: Vincent Yuan
Issue Date: 2025-09-05
Revised Date: N/A

Note: 1. The results contained in this report pertain only to the tested samples.

2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd

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.

Client Information:

Applicant Name:	LEDVANCE LLC
Brand Name:	LEDVANCE
Applicant Address:	181 BALLARDVALE STREET, SUITE 203 WILMINGTON, MA 01887
Manufacturer Name:	LEDVANCE LLC
Manufacturer Address:	181 BALLARDVALE STREET, SUITE 203 WILMINGTON, MA 01887

Product Information:

Model Number:	HAZFLOODP/100HUVD850/GR
Product Type:	HAZARDOUS FLOODLIGHT
Rating Input:	277-480Vac, 50/60Hz, 100W
Declared CCT:	5000K
Declared Light Output:	15000 lm
LED Manufacturer:	Bridgelux, Inc.
LED Model:	BXEN-50E-21L-3C-00-00-0
LED Quantity:	544 pcs
LED Driver Manufacturer:	Shenzhen Fahold Electronics Co.,LTd.
LED Driver Model:	FD-100V-054B

Test Information:

Standard Lamp:	Total Spectral Radiant Flux Standard Lamp, trace to NIST. 1. D908S for Gonio 2. D215S for Integrating Sphere
Date of Receipt Samples:	2025-07-14
Quantity of Receipt Samples:	1 pc
Sample Number:	250714014-S1
Test Representation:	N/A

Laboratory Information:

Test Laboratory:	Dongguan New Testing Centre Co., Ltd
Laboratory Address:	3F, No. 1 the 1st North Industry Road, Songshan Lake Science & Technology Park, Dongguan, Guangdong, China
Laboratory Contact Name:	Neil Zhong
Laboratory Contact E-mail:	Neil_zhong@ntc-cert.com

Report Information:

Test Report Form:	LM-79_TRF_V1.5
Issued Date of Test Report:	2025-09-05
Revised Date of Test Report:	N/A
Test Report No.:	NTCLR25070191
Remark *(If applicable)*:	N/A

Test Specification:	
Date of Test	2025-07-19
Test Item	1. Total Luminous Flux 2. Luminous Distribution Intensity 3. Luminous Efficacy 4. Correlated Color Temperature 5. Color Rendering Index 6. Chromaticity Coordinate 7. Fidelity Index 8. Gamut Index 9. Local Chroma Shift 10. THD and PF
Reference Standard	ANSI/IES LM-79:2019 Optical and Electrical Measurements of Solid-State Lighting Products – Chromaticity Uniformity Measurements ANSI C78.377-2017 Specifications for the Chromaticity of Solid State Lighting Products CIE 13.3-1995 Method of Measuring and Specifying Color Rendering Properties of Light Sources CIE 15-2018 Technical Report Colorimetry ANSI IES TM-30-18 IES Method for Evaluating Light Source Color Rendition IES TM-15-11 Luminaire Classification System for Outdoor Luminaires Addendum A for IES TM-15-11 Backlight, Uplight, and Glare (BUG) Ratings ANSI C82.77-10:2020 Harmonic Emission Limits – Related Power Quality Requirements for Lighting Equipment – Solid State

Test Methods:

1. Photometric and Electrical Measurements – Light Distribution Method:

Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at 25 °C ± 1°C, measured at a point not more than 1 m from the sample and at the same height as the sample. The sample was operated at required Voltage and Frequency. It was stabilized before measurement was made. Luminous Flux, Luminaire Efficacy and Zonal Lumen were calculated from the software taken at 1° vertical intervals and 15° horizonal intervals.

2. Photometric and Electrical Measurements – Integrating Sphere Method:

Photometric parameters were measured using an integrating sphere, as spectroradiometer and software. The ambient temperature condition inside the sphere was measured at 25 °C± 1°C. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at require Voltage and Frequency. It was stabilized before measurement was made. Chromaticity Coordinates, Correlated Color Temperature and Color Rendering Index were calculated from the spectral radiant flux measurements taken at least 1 nm intervals over the rage of 380 to 780 nm.

3. THD and PF Measurements:

The sample was tested according to the ANSI C82.77, the sample was operated at requirement Voltage and Frequency, and was stabilized before measurement. The Total Harmonic Distortion was calculated from the Digital Power Meter.

Integrating Sphere Test Results:

Test Condition:

Test Ambient (°C)	Test Humidity (%)	Orientation	Stabilization Time (minute)	Test Time (minute)
25.0	41.4	Face Down	90	10

Electrical Data:

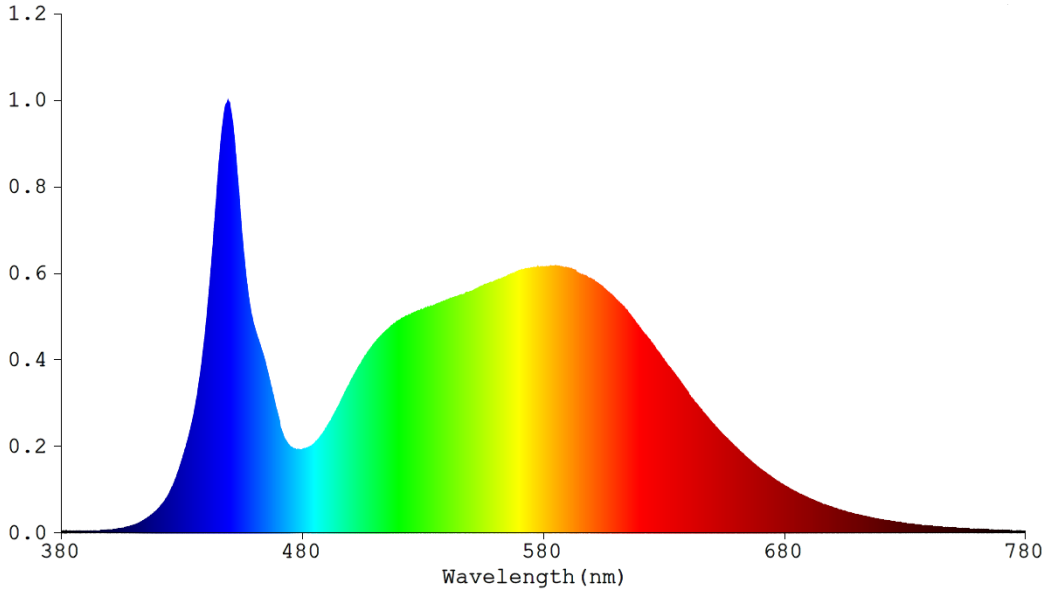
Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor
277.0	60	0.3672	100.13	0.9843

Color Data:

Parameter		Result
CCT(K)	7 steps: 5029±283	4893
	4 steps: 5029±220	
Ra		80.0
R_f		81
R_g		96
$R_{cs,\ h1}$		-14%
Chromaticity, (x, y)		(0.3489, 0.3607)
Chromaticity, (u', v')		(0.2105, 0.4896)
Duv		0.0030
SDCM		2.7

Specify Color Rendering			
R1	77	R9	-7
R2	85	R10	65
R3	91	R11	79
R4	80	R12	55
R5	78	R13	79
R6	79	R14	95
R7	86	R15	71
R8	63	-	-

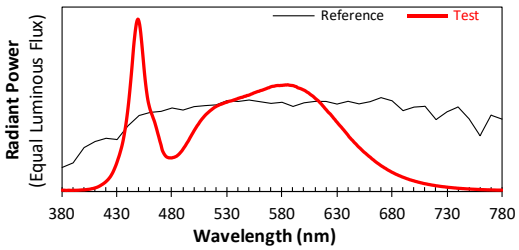
Spectrum Diagram:

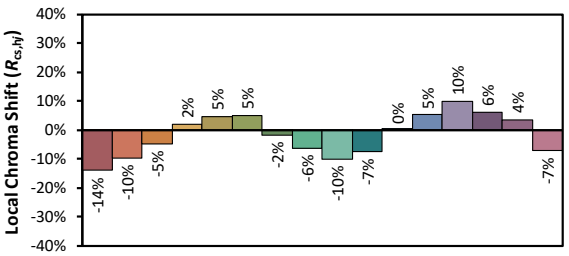


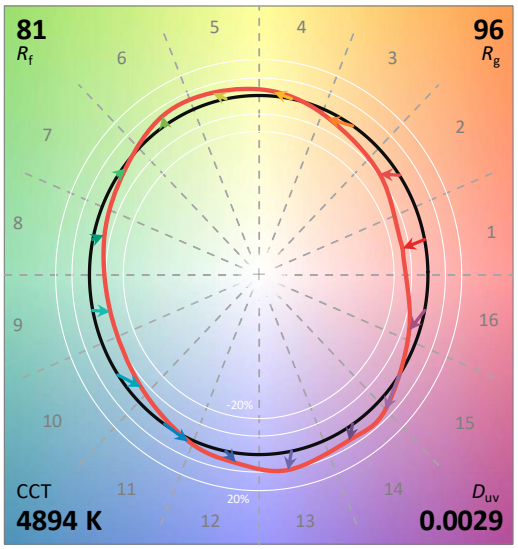
IES TM-30-18 Color Rendition Result:

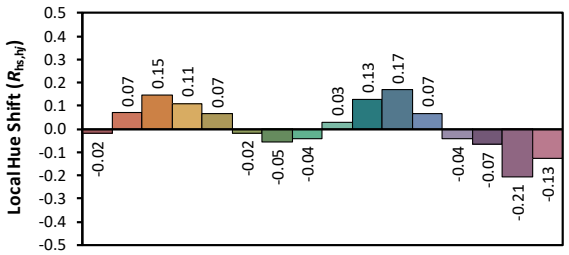
ANSI/IES TM-30-18 Color Rendition Report

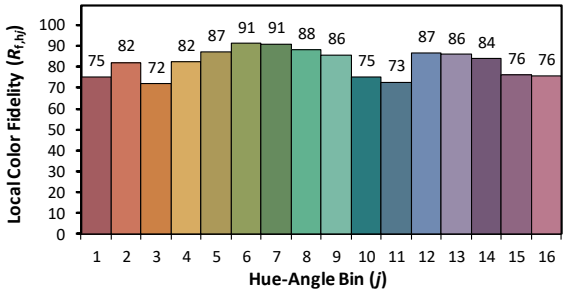
Source:	1 CIE F1	**Manufacturer:**	LEDVANCE LLC
Date:	2025/7/25	**Model:**	HAZFLOODP/100HUVD850/GR

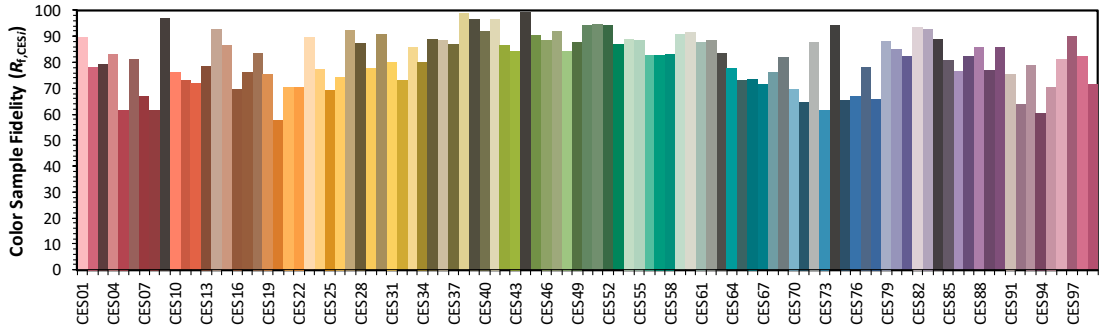












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3488
y	0.3605
u'	0.2105
v'	0.4895

CIE 13.3-1995 (CRI)

R_a	80
R_9	-7

Spectrum Data:

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	4.60E-06	447	9.52E-04	514	4.64E-04	581	6.16E-04	648	2.67E-04	715	3.62E-05
381	4.70E-06	448	9.87E-04	515	4.69E-04	582	6.16E-04	649	2.60E-04	716	3.48E-05
382	4.70E-06	449	1.00E-03	516	4.74E-04	583	6.17E-04	650	2.54E-04	717	3.38E-05
383	3.90E-06	450	9.84E-04	517	4.79E-04	584	6.17E-04	651	2.49E-04	718	3.29E-05
384	3.50E-06	451	9.47E-04	518	4.84E-04	585	6.18E-04	652	2.42E-04	719	3.18E-05
385	4.00E-06	452	8.88E-04	519	4.88E-04	586	6.17E-04	653	2.36E-04	720	3.04E-05
386	4.40E-06	453	8.21E-04	520	4.92E-04	587	6.15E-04	654	2.29E-04	721	2.99E-05
387	4.20E-06	454	7.50E-04	521	4.96E-04	588	6.15E-04	655	2.24E-04	722	2.88E-05
388	3.70E-06	455	6.80E-04	522	4.98E-04	589	6.14E-04	656	2.19E-04	723	2.79E-05
389	3.90E-06	456	6.21E-04	523	5.01E-04	590	6.13E-04	657	2.13E-04	724	2.69E-05
390	3.60E-06	457	5.71E-04	524	5.04E-04	591	6.11E-04	658	2.08E-04	725	2.61E-05
391	4.40E-06	458	5.29E-04	525	5.06E-04	592	6.08E-04	659	2.02E-04	726	2.53E-05
392	4.10E-06	459	5.00E-04	526	5.09E-04	593	6.07E-04	660	1.98E-04	727	2.46E-05
393	4.20E-06	460	4.75E-04	527	5.11E-04	594	6.02E-04	661	1.92E-04	728	2.41E-05
394	4.40E-06	461	4.56E-04	528	5.14E-04	595	5.99E-04	662	1.86E-04	729	2.29E-05
395	4.70E-06	462	4.40E-04	529	5.16E-04	596	5.97E-04	663	1.81E-04	730	2.25E-05
396	5.30E-06	463	4.21E-04	530	5.17E-04	597	5.95E-04	664	1.76E-04	731	2.14E-05
397	5.70E-06	464	4.04E-04	531	5.20E-04	598	5.93E-04	665	1.71E-04	732	2.08E-05
398	6.20E-06	465	3.82E-04	532	5.22E-04	599	5.90E-04	666	1.66E-04	733	2.02E-05
399	6.60E-06	466	3.60E-04	533	5.24E-04	600	5.87E-04	667	1.61E-04	734	1.97E-05
400	6.50E-06	467	3.36E-04	534	5.25E-04	601	5.83E-04	668	1.57E-04	735	1.89E-05
401	7.50E-06	468	3.13E-04	535	5.27E-04	602	5.79E-04	669	1.52E-04	736	1.83E-05
402	8.20E-06	469	2.88E-04	536	5.30E-04	603	5.75E-04	670	1.47E-04	737	1.77E-05
403	9.00E-06	470	2.67E-04	537	5.31E-04	604	5.71E-04	671	1.43E-04	738	1.74E-05
404	9.70E-06	471	2.40E-04	538	5.34E-04	605	5.66E-04	672	1.40E-04	739	1.63E-05
405	1.05E-05	472	2.25E-04	539	5.36E-04	606	5.61E-04	673	1.35E-04	740	1.61E-05
406	1.17E-05	473	2.13E-04	540	5.39E-04	607	5.56E-04	674	1.32E-04	741	1.54E-05
407	1.35E-05	474	2.05E-04	541	5.41E-04	608	5.52E-04	675	1.27E-04	742	1.51E-05
408	1.43E-05	475	1.99E-04	542	5.43E-04	609	5.46E-04	676	1.23E-04	743	1.47E-05
409	1.61E-05	476	1.96E-04	543	5.45E-04	610	5.40E-04	677	1.20E-04	744	1.40E-05
410	1.81E-05	477	1.93E-04	544	5.45E-04	611	5.35E-04	678	1.16E-04	745	1.38E-05
411	2.00E-05	478	1.93E-04	545	5.49E-04	612	5.29E-04	679	1.13E-04	746	1.32E-05
412	2.23E-05	479	1.93E-04	546	5.51E-04	613	5.24E-04	680	1.09E-04	747	1.28E-05
413	2.52E-05	480	1.93E-04	547	5.52E-04	614	5.17E-04	681	1.06E-04	748	1.23E-05
414	2.85E-05	481	1.95E-04	548	5.56E-04	615	5.11E-04	682	1.03E-04	749	1.21E-05
415	3.22E-05	482	1.96E-04	549	5.56E-04	616	5.04E-04	683	9.93E-05	750	1.18E-05
416	3.63E-05	483	1.99E-04	550	5.58E-04	617	4.96E-04	684	9.63E-05	751	1.14E-05
417	4.01E-05	484	2.02E-04	551	5.61E-04	618	4.89E-04	685	9.38E-05	752	1.09E-05
418	4.47E-05	485	2.07E-04	552	5.64E-04	619	4.81E-04	686	9.05E-05	753	1.06E-05
419	4.96E-05	486	2.13E-04	553	5.66E-04	620	4.74E-04	687	8.81E-05	754	1.04E-05
420	5.52E-05	487	2.20E-04	554	5.70E-04	621	4.66E-04	688	8.54E-05	755	1.00E-05
421	6.13E-05	488	2.27E-04	555	5.72E-04	622	4.59E-04	689	8.24E-05	756	9.80E-06
422	6.80E-05	489	2.35E-04	556	5.74E-04	623	4.53E-04	690	8.01E-05	757	9.40E-06
423	7.59E-05	490	2.44E-04	557	5.77E-04	624	4.47E-04	691	7.78E-05	758	9.10E-06
424	8.43E-05	491	2.54E-04	558	5.79E-04	625	4.39E-04	692	7.54E-05	759	8.90E-06
425	9.51E-05	492	2.63E-04	559	5.80E-04	626	4.31E-04	693	7.28E-05	760	8.50E-06
426	1.06E-04	493	2.74E-04	560	5.83E-04	627	4.23E-04	694	7.06E-05	761	8.30E-06
427	1.20E-04	494	2.84E-04	561	5.85E-04	628	4.16E-04	695	6.86E-05	762	7.90E-06
428	1.35E-04	495	2.94E-04	562	5.87E-04	629	4.07E-04	696	6.57E-05	763	7.90E-06
429	1.51E-04	496	3.06E-04	563	5.89E-04	630	4.00E-04	697	6.43E-05	764	7.50E-06
430	1.69E-04	497	3.17E-04	564	5.92E-04	631	3.92E-04	698	6.21E-05	765	7.40E-06
431	1.88E-04	498	3.29E-04	565	5.94E-04	632	3.85E-04	699	6.04E-05	766	7.00E-06
432	2.07E-04	499	3.39E-04	566	5.96E-04	633	3.78E-04	700	5.87E-05	767	6.80E-06
433	2.29E-04	500	3.51E-04	567	6.00E-04	634	3.71E-04	701	5.64E-05	768	6.90E-06
434	2.52E-04	501	3.61E-04	568	6.01E-04	635	3.63E-04	702	5.49E-05	769	6.40E-06
435	2.79E-04	502	3.71E-04	569	6.04E-04	636	3.56E-04	703	5.32E-05	770	6.40E-06
436	3.10E-04	503	3.81E-04	570	6.07E-04	637	3.48E-04	704	5.12E-05	771	6.00E-06
437	3.48E-04	504	3.90E-04	571	6.09E-04	638	3.40E-04	705	4.99E-05	772	5.90E-06
438	3.87E-04	505	4.00E-04	572	6.09E-04	639	3.32E-04	706	4.80E-05	773	5.80E-06
439	4.33E-04	506	4.09E-04	573	6.10E-04	640	3.24E-04	707	4.68E-05	774	5.60E-06
440	4.86E-04	507	4.17E-04	574	6.12E-04	641	3.15E-04	708	4.50E-05	775	5.30E-06
441	5.46E-04	508	4.25E-04	575	6.13E-04	642	3.08E-04	709	4.34E-05	776	5.20E-06
442	6.12E-04	509	4.33E-04	576	6.14E-04	643	3.01E-04	710	4.23E-05	777	5.20E-06
443	6.82E-04	510	4.40E-04	577	6.14E-04	644	2.95E-04	711	4.12E-05	778	5.20E-06
444	7.57E-04	511	4.46E-04	578	6.13E-04	645	2.87E-04	712	3.99E-05	779	5.30E-06
445	8.36E-04	512	4.52E-04	579	6.15E-04	646	2.80E-04	713	3.84E-05	780	5.30E-06
446	8.99E-04	513	4.58E-04	580	6.14E-04	647	2.75E-04	714	3.75E-05	N/A	N/A

Goniophotometer Test Results:

Test Condition:

Test Ambient (°C)	Test Humidity (%)	Orientation	Stabilization Time (minute)	Test Time (minute)
25.0	40.4	Face Down	90	25

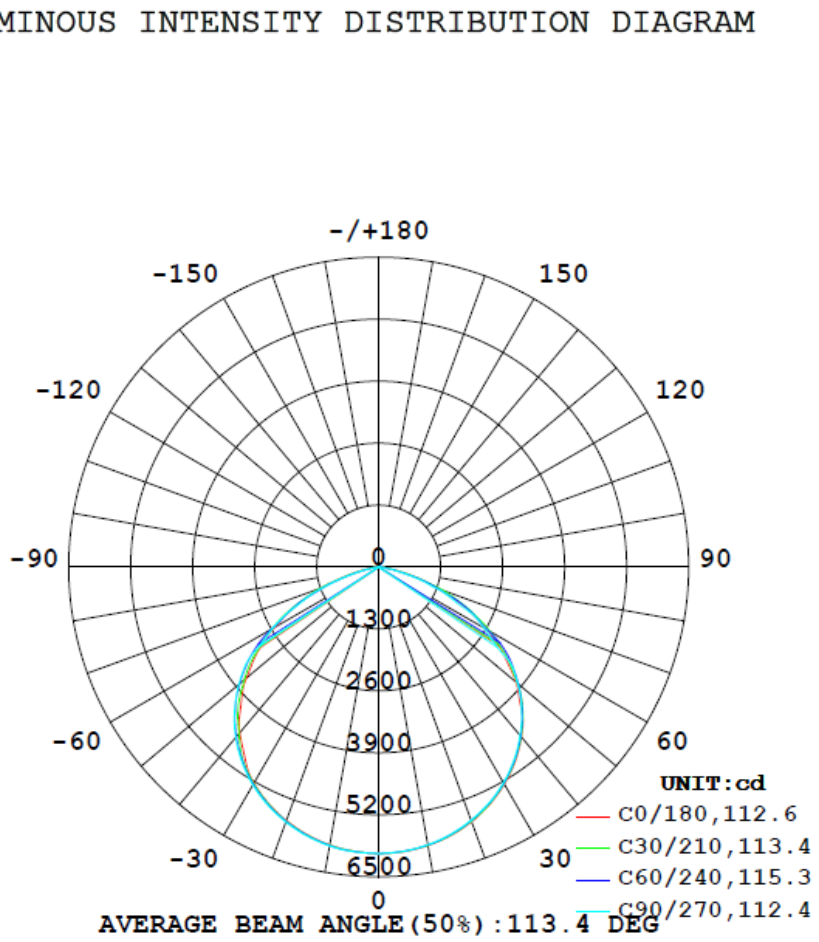
Electrical Data:

Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor
277.0	60	0.3672	100.13	0.9843

Goniophotometer Data:

Parameter	Results	
Total Luminous (lm)	16732.7	
Luminous Efficacy (lm/W)	167.11	
Zonal Lumens Distribution (0-90°)	99.9%	
Beam Angle (50%) (°)	Horizontal	Vertical
	112.5	113.4
Field Angle (10%) (°)		
	153.2	150.4
NEAM Type	7H x 7V	

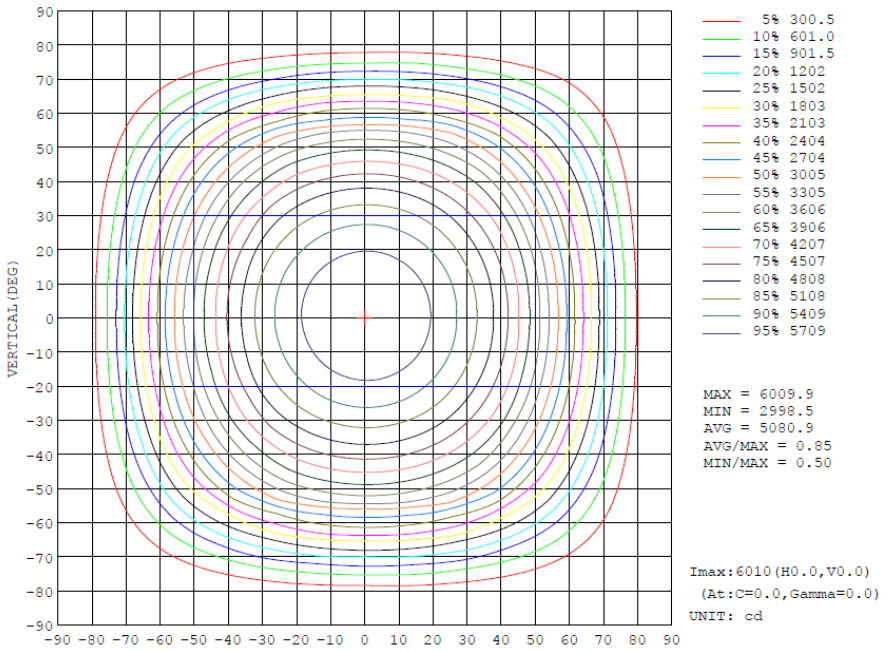
Luminous Intensity Distribution Diagram:



Zonal Flux Diagram:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	5932	5925	5916	5911	5921	5932	5943	5941	0- 10	569.7	569.7	3.4,3.4
20	5688	5669	5655	5647	5662	5679	5695	5700	10- 20	1644	2214	13.2,13.2
30	5265	5245	5228	5214	5234	5251	5280	5281	20- 30	2529	4743	28.3,28.3
40	4657	4639	4609	4597	4539	4638	4670	4677	30- 40	3104	7847	46.9,46.9
50	3763	3829	3807	3716	3630	3750	3832	3859	40- 50	3257	11104	66.4,66.4
60	2624	2752	2552	2647	2516	2628	2565	2738	50- 60	2879	13982	83.6,83.6
70	1348	1380	1202	1299	1258	1255	1167	1343	60- 70	1935	15917	95.1,95.1
80	274.5	258.0	196.6	217.9	232.9	177.7	131.9	224.6	70- 80	735.8	16653	99.5,99.5
90	4.815	3.790	4.595	2.593	0.8810	0.8622	0.7890	0.8241	80- 90	62.63	16716	99.9,99.9
100	0.6877	0.6888	0.6972	0.7323	1.605	1.602	1.511	1.535	90-100	1.039	16717	99.9,99.9
110	1.027	1.037	1.085	1.127	2.060	2.058	2.007	1.996	100-110	1.435	16718	99.9,99.9
120	1.664	1.559	1.650	1.720	2.639	2.612	2.577	2.516	110-120	1.767	16720	99.9,99.9
130	2.577	2.402	2.405	2.552	3.729	3.777	3.798	3.522	120-130	2.302	16722	99.9,99.9
140	3.291	3.227	3.262	3.309	4.623	4.960	4.895	4.723	130-140	2.766	16725	100,100
150	3.875	3.860	3.865	3.848	5.753	6.147	6.213	6.109	140-150	2.823	16728	100,100
160	4.827	4.598	4.298	4.692	6.933	7.088	6.851	6.931	150-160	2.489	16730	100,100
170	5.482	5.360	4.884	5.288	6.994	7.065	6.632	6.585	160-170	1.685	16732	100,100
180	5.612	5.612	5.612	5.612	5.879	5.879	5.879	5.879	170-180	0.5785	16733	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Isocandela Diagram:



Luminous Distribution Intensity Data:

Table--1 UNIT: cd

γ (DEG) \ C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010
5	5993	5993	5989	5986	5984	5984	5983	5980	5979	5978	5977	5983	5986	5985	5986	5988	5991	5994	5996
10	5932	5929	5928	5925	5922	5919	5916	5913	5911	5911	5909	5913	5921	5923	5927	5932	5935	5938	5943
15	5832	5828	5824	5819	5815	5812	5807	5801	5801	5800	5799	5802	5812	5816	5821	5824	5830	5834	5841
20	5688	5682	5677	5669	5662	5660	5655	5649	5646	5647	5647	5653	5662	5669	5674	5679	5682	5687	5695
25	5498	5494	5488	5476	5473	5469	5467	5457	5454	5449	5454	5461	5473	5477	5482	5486	5495	5503	5511
30	5265	5259	5250	5245	5241	5233	5228	5219	5216	5214	5217	5220	5234	5243	5247	5251	5262	5271	5280
35	4987	4981	4969	4965	4959	4949	4943	4935	4931	4931	4929	4904	4896	4922	4961	4972	4981	4990	5000
40	4657	4653	4645	4639	4629	4621	4609	4602	4599	4597	4539	4528	4539	4547	4565	4638	4647	4659	4670
45	4234	4260	4271	4259	4252	4243	4231	4224	4217	4182	4145	4096	4090	4115	4173	4209	4261	4271	4280
50	3763	3763	3797	3829	3823	3817	3807	3796	3785	3716	3659	3642	3630	3656	3683	3750	3813	3819	3832
55	3209	3212	3278	3338	3342	3307	3184	3279	3282	3201	3141	3107	3111	3117	3145	3204	3288	3311	3297
60	2624	2638	2698	2752	2623	2568	2552	2542	2536	2647	2582	2538	2516	2541	2577	2628	2583	2555	2565
65	1977	2029	2073	2011	2033	1952	1848	1914	1942	1916	1962	1910	1899	1920	1954	1917	1918	1886	1850
70	1348	1379	1432	1380	1316	1297	1202	1262	1250	1299	1332	1267	1258	1263	1299	1255	1206	1182	1167
75	751	782	773	727	699	664	649	634	660	668	688	690	667	676	656	601	570	568	551
80	275	298	278	258	228	213	197	203	209	218	230	236	233	228	205	178	158	144	132
85	48.5	44.7	47.0	36.2	32.5	28.4	26.3	27.8	30.9	30.7	32.8	33.9	34.1	28.4	28.0	24.2	23.0	22.3	21.8
90	4.82	5.37	2.46	3.79	4.44	4.71	4.59	4.46	3.93	2.59	2.52	1.65	0.88	0.88	0.88	0.86	0.83	0.80	0.79
95	0.51	0.50	0.50	0.50	0.49	0.49	0.49	0.50	0.52	0.53	0.54	0.55	1.23	1.23	1.23	1.22	1.18	1.15	1.13
100	0.69	0.68	0.68	0.69	0.69	0.69	0.70	0.71	0.72	0.73	0.73	0.74	1.60	1.60	1.61	1.60	1.57	1.53	1.51
105	0.86	0.85	0.85	0.87	0.88	0.88	0.89	0.91	0.92	0.93	0.92	0.91	1.92	1.90	1.90	1.90	1.88	1.84	1.82
110	1.03	1.03	1.00	1.04	1.05	1.06	1.08	1.10	1.13	1.13	1.12	1.11	2.06	2.04	2.04	2.06	2.03	2.00	2.01
115	1.29	1.28	1.23	1.27	1.31	1.32	1.34	1.36	1.40	1.39	1.37	1.35	2.21	2.22	2.23	2.26	2.24	2.22	2.23
120	1.66	1.59	1.56	1.56	1.59	1.63	1.65	1.69	1.72	1.72	1.71	1.71	2.64	2.61	2.58	2.61	2.56	2.55	2.58
125	2.12	2.06	1.96	1.97	2.00	1.98	2.01	2.02	2.05	2.10	2.11	2.14	3.17	3.15	3.10	3.19	3.14	3.16	3.16
130	2.58	2.53	2.44	2.40	2.51	2.37	2.40	2.43	2.50	2.55	2.60	2.61	3.73	3.73	3.74	3.78	3.82	3.84	3.80
135	2.97	2.96	2.94	2.84	2.96	2.91	2.91	2.96	2.95	2.97	3.04	3.07	4.27	4.27	4.32	4.39	4.40	4.43	4.42
140	3.29	3.33	3.30	3.23	3.24	3.32	3.26	3.27	3.27	3.31	3.25	3.35	4.62	4.68	4.75	4.96	4.96	4.95	4.90
145	3.58	3.69	3.62	3.55	3.66	3.69	3.59	3.62	3.64	3.60	3.51	3.60	5.28	5.27	5.34	5.58	5.72	5.74	5.64
150	3.87	4.00	3.96	3.86	3.90	3.91	3.86	3.91	3.88	3.85	3.73	3.76	5.75	5.78	5.86	6.15	6.25	6.34	6.21
155	4.31	4.50	4.50	4.27	4.25	4.26	4.14	4.27	4.28	4.27	4.31	4.17	6.34	6.31	6.57	6.62	6.69	6.75	6.64
160	4.83	4.95	4.92	4.60	4.52	4.50	4.30	4.63	4.66	4.69	4.71	4.65	6.93	6.89	6.93	7.09	7.09	7.07	6.85
165	5.14	5.29	5.24	5.03	4.76	4.66	4.53	4.85	5.00	5.07	5.00	4.97	7.02	7.01	7.08	7.17	7.28	7.17	6.93
170	5.48	5.58	5.56	5.36	5.06	5.00	4.88	5.13	5.29	5.29	5.25	5.29	6.99	7.00	7.03	7.07	7.09	6.98	6.63
175	6.11	6.09	6.01	5.73	5.43	5.31	5.13	5.28	5.46	5.58	5.66	5.77	6.88	6.86	6.86	6.88	6.81	6.70	6.44
180	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.88	5.88	5.88	5.88	5.88	5.88	5.88

Table--2 UNIT: cd

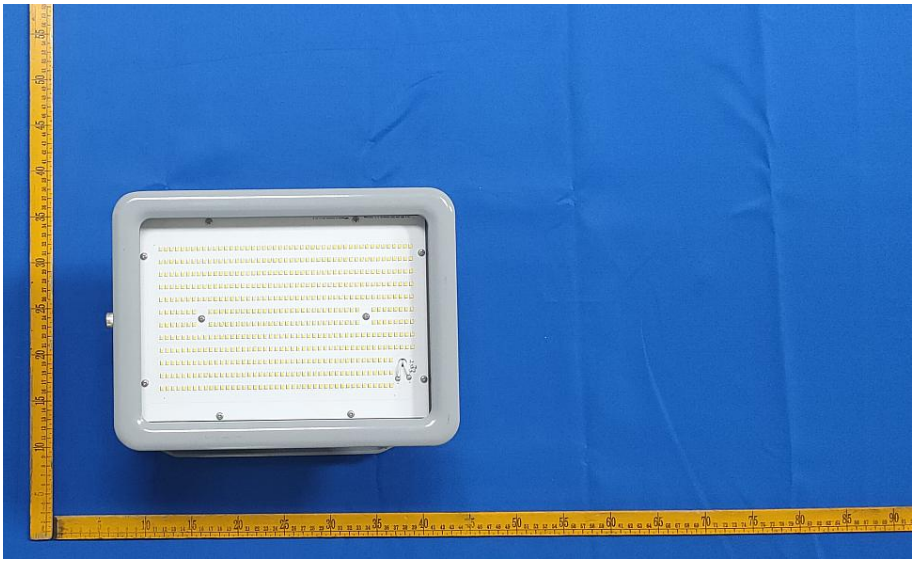
γ (DEG) \ C (DEG)	285	300	315	330	345
0	6010	6010	6010	6010	6010
5	5996	5995	5994	5993	5992
10	5942	5941	5941	5938	5935
15	5842	5841	5841	5840	5835
20	5699	5698	5700	5698	5694
25	5515	5512	5511	5510	5506
30	5286	5286	5281	5278	5275
35	5004	5007	5004	4996	4996
40	4675	4677	4677	4670	4669
45	4293	4297	4294	4292	4269
50	3845	3854	3859	3803	3778
55	3343	3355	3331	3278	3222
60	2587	2720	2738	2689	2636
65	1914	2009	2030	2061	2024
70	1232	1279	1343	1404	1380
75	617	630	697	740	777
80	160	182	225	267	290
85	24.1	26.4	31.5	39.8	43.3
90	0.79	0.80	0.82	0.84	0.85
95	1.13	1.14	1.16	1.16	1.13
100	1.51	1.52	1.53	1.53	1.49
105	1.83	1.84	1.85	1.83	1.79
110	2.00	2.00	2.00	1.97	1.93
115	2.23	2.21	2.18	2.13	2.08
120	2.55	2.53	2.52	2.47	2.46
125	3.09	3.03	3.01	2.94	2.94
130	3.73	3.66	3.52	3.49	3.48
135	4.26	4.06	4.05	4.14	4.06
140	4.73	4.72	4.72	4.66	4.50
145	5.51	5.52	5.44	5.33	5.10
150	6.17	6.10	6.11	6.02	5.62
155	6.57	6.60	6.56	6.71	6.19
160	6.71	6.91	6.93	7.08	6.61
165	6.79	6.91	6.93	7.07	6.59
170	6.52	6.59	6.58	6.84	6.37
175	6.30	6.35	6.50	6.65	6.21
180	5.88	5.88	5.88	5.88	5.88

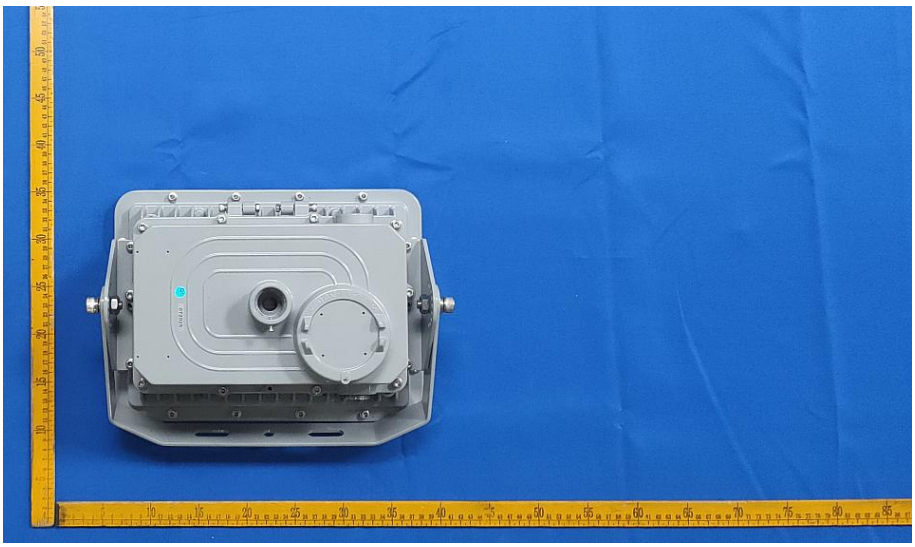
THD and PF Measurement Test Results:

Electrical Measurement:

Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor	iTHD(%)
277.0	60	0.3672	100.13	0.9843	13.41
347.0	60	0.2967	100.00	0.9712	12.43
480.0	60	0.2233	99.67	0.9298	12.01

Photo of Sample:





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	2024-08-06	2025-08-05
NTC-F01-020	Temperature & Humidity Meter	2024-10-29	2025-10-28

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