LM-79-19 Test Report

For

LEDVANCE LLC

181 BALLARDVALE STREET, SUITE 203 WILMINGTON, MA 01887

HAZARDOUS FLOODLIGHT

Model Name(s):
HAZFLOODP/200HUVD850/GR

Representative (Tested) Model:
HAZFLOODP/200HUVD850/GR

Model Difference: N/A

Prepared by:

Engineer: Alan Wang
Date: 2025-07-25

Reviewed by:

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/200HUVD850/GR
Product Type:	HAZARDOUS FLOODLIGHT
Rating Input:	277-480Vac, 50/60Hz, 200W
Declared CCT:	5000K
Declared Light Output:	30000 lm
LED Manufacturer:	Bridgelux, Inc.
LED Model:	BXEN-50E-21L-3C-00-00-0
LED Quantity:	1120 pcs
LED Driver Manufacturer:	MEAN WELL ENTERPRISES CO., LTD.
LED Driver Model:	HVG-240-48AB

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:	250714016-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.:	NTCLR25070195
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:

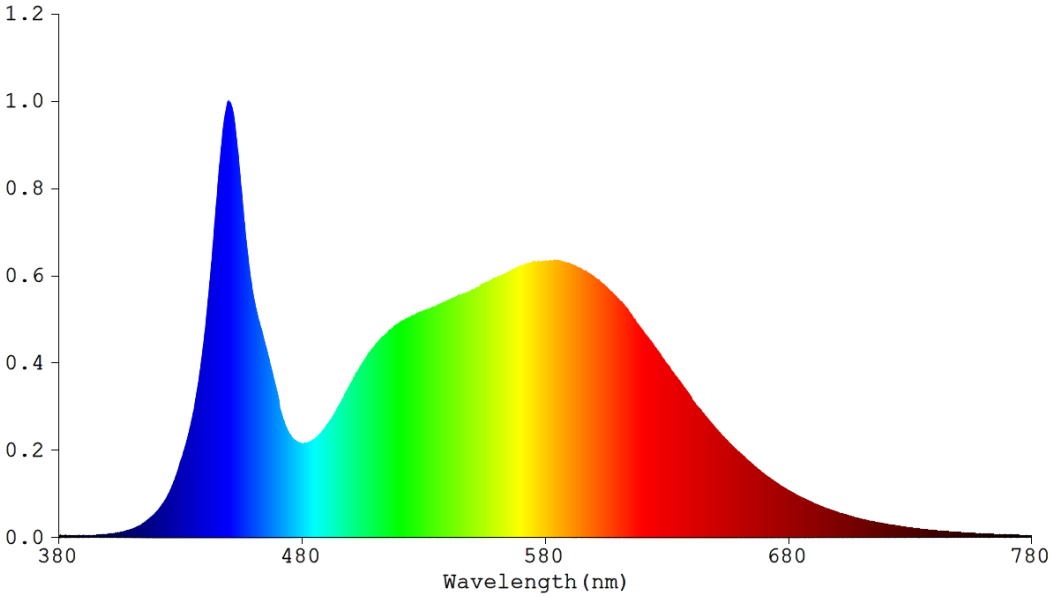
Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor
277.0	60	0.7301	199.96	0.9887

Color Data:

Parameter		Result
CCT(K)	7 steps: 5029±283	4992
	4 steps: 5029±220	
Ra		80.0
R_f		81
R_g		95
$R_{cs,\ h1}$		-14%
Chromaticity, (x, y)		(0.3459, 0.3565)
Chromaticity, (u', v')		(0.2101, 0.4871)
Duv		0.0021
SDCM		0.8

Specify Color Rendering			
R1	77	R9	-9
R2	86	R10	66
R3	92	R11	77
R4	79	R12	55
R5	78	R13	79
R6	80	R14	96
R7	86	R15	71
R8	62	-	-

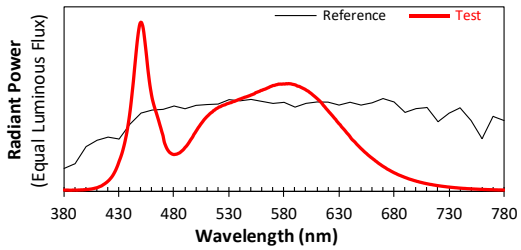
Spectrum Diagram:

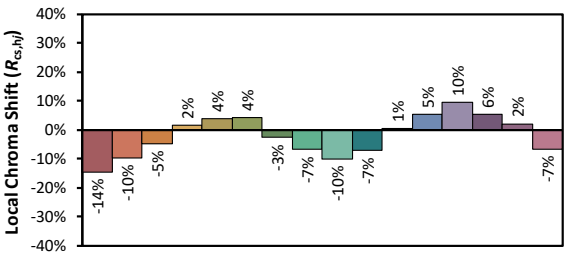


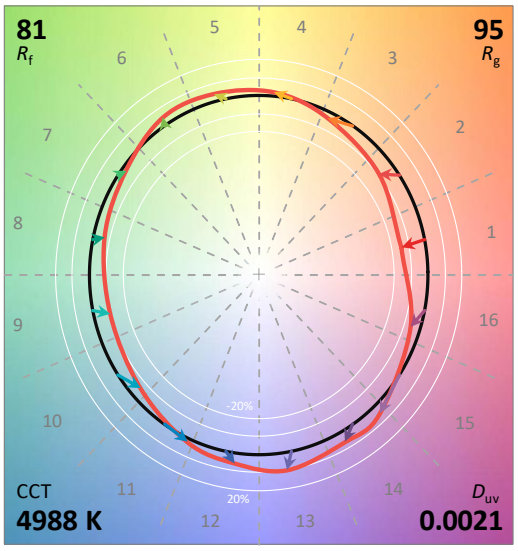
IES TM-30-18 Color Rendition Result:

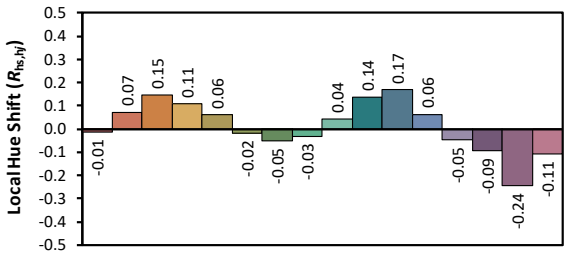
ANSI/IES TM-30-18 Color Rendition Report

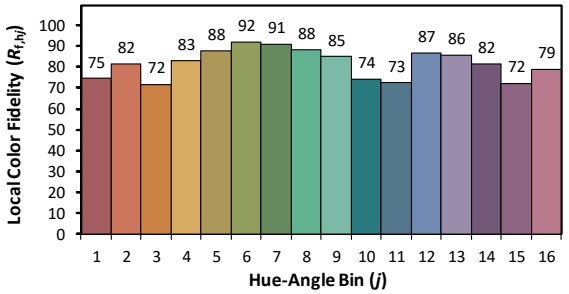
Source:	1 CIE F1	Manufacturer:	LEDVANCE LLC
Date:	2025/7/25	Model:	HAZFLOODP/200HUVD850/GR

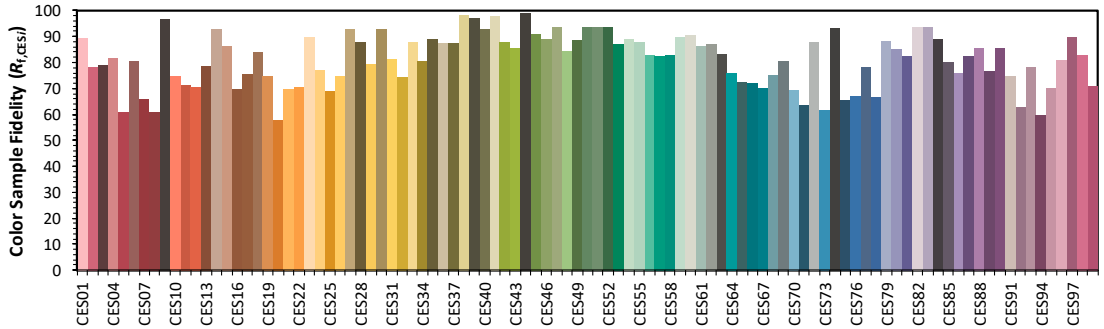












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3458
y	0.3563
u'	0.2101
v'	0.4871

CIE 13.3-1995 (CRI)

R_a	80
R_9	-9

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	5.20E-06	447	9.11E-04	514	4.64E-04	581	6.33E-04	648	2.63E-04	715	3.59E-05
381	4.10E-06	448	9.59E-04	515	4.69E-04	582	6.35E-04	649	2.57E-04	716	3.47E-05
382	4.50E-06	449	9.90E-04	516	4.76E-04	583	6.33E-04	650	2.50E-04	717	3.36E-05
383	4.40E-06	450	9.99E-04	517	4.79E-04	584	6.35E-04	651	2.44E-04	718	3.25E-05
384	4.10E-06	451	9.87E-04	518	4.85E-04	585	6.34E-04	652	2.38E-04	719	3.15E-05
385	3.50E-06	452	9.60E-04	519	4.88E-04	586	6.34E-04	653	2.32E-04	720	3.05E-05
386	3.60E-06	453	9.11E-04	520	4.92E-04	587	6.32E-04	654	2.26E-04	721	2.96E-05
387	3.50E-06	454	8.55E-04	521	4.97E-04	588	6.30E-04	655	2.21E-04	722	2.87E-05
388	4.80E-06	455	7.96E-04	522	4.98E-04	589	6.29E-04	656	2.14E-04	723	2.77E-05
389	3.90E-06	456	7.32E-04	523	5.02E-04	590	6.28E-04	657	2.09E-04	724	2.69E-05
390	4.90E-06	457	6.77E-04	524	5.05E-04	591	6.25E-04	658	2.04E-04	725	2.60E-05
391	4.20E-06	458	6.27E-04	525	5.08E-04	592	6.21E-04	659	1.98E-04	726	2.53E-05
392	4.00E-06	459	5.87E-04	526	5.09E-04	593	6.19E-04	660	1.93E-04	727	2.45E-05
393	4.90E-06	460	5.51E-04	527	5.12E-04	594	6.18E-04	661	1.88E-04	728	2.35E-05
394	4.80E-06	461	5.23E-04	528	5.15E-04	595	6.14E-04	662	1.84E-04	729	2.28E-05
395	5.50E-06	462	4.99E-04	529	5.17E-04	596	6.11E-04	663	1.78E-04	730	2.23E-05
396	5.70E-06	463	4.78E-04	530	5.19E-04	597	6.08E-04	664	1.73E-04	731	2.15E-05
397	5.70E-06	464	4.59E-04	531	5.22E-04	598	6.05E-04	665	1.68E-04	732	2.09E-05
398	6.70E-06	465	4.37E-04	532	5.23E-04	599	6.01E-04	666	1.63E-04	733	2.02E-05
399	6.70E-06	466	4.16E-04	533	5.26E-04	600	5.97E-04	667	1.58E-04	734	1.96E-05
400	7.70E-06	467	3.92E-04	534	5.29E-04	601	5.93E-04	668	1.54E-04	735	1.89E-05
401	8.20E-06	468	3.70E-04	535	5.30E-04	602	5.90E-04	669	1.49E-04	736	1.83E-05
402	8.50E-06	469	3.47E-04	536	5.33E-04	603	5.84E-04	670	1.45E-04	737	1.79E-05
403	9.60E-06	470	3.25E-04	537	5.35E-04	604	5.79E-04	671	1.41E-04	738	1.71E-05
404	1.03E-05	471	2.92E-04	538	5.39E-04	605	5.74E-04	672	1.37E-04	739	1.66E-05
405	1.11E-05	472	2.73E-04	539	5.41E-04	606	5.69E-04	673	1.33E-04	740	1.59E-05
406	1.25E-05	473	2.57E-04	540	5.44E-04	607	5.63E-04	674	1.28E-04	741	1.56E-05
407	1.38E-05	474	2.44E-04	541	5.46E-04	608	5.58E-04	675	1.25E-04	742	1.50E-05
408	1.56E-05	475	2.35E-04	542	5.49E-04	609	5.52E-04	676	1.22E-04	743	1.45E-05
409	1.71E-05	476	2.27E-04	543	5.51E-04	610	5.47E-04	677	1.18E-04	744	1.42E-05
410	1.87E-05	477	2.23E-04	544	5.54E-04	611	5.41E-04	678	1.14E-04	745	1.38E-05
411	2.11E-05	478	2.19E-04	545	5.55E-04	612	5.35E-04	679	1.11E-04	746	1.32E-05
412	2.41E-05	479	2.16E-04	546	5.57E-04	613	5.28E-04	680	1.07E-04	747	1.27E-05
413	2.66E-05	480	2.15E-04	547	5.60E-04	614	5.21E-04	681	1.04E-04	748	1.26E-05
414	2.93E-05	481	2.16E-04	548	5.62E-04	615	5.13E-04	682	1.01E-04	749	1.21E-05
415	3.36E-05	482	2.17E-04	549	5.64E-04	616	5.04E-04	683	9.78E-05	750	1.16E-05
416	3.80E-05	483	2.19E-04	550	5.68E-04	617	4.98E-04	684	9.49E-05	751	1.14E-05
417	4.20E-05	484	2.22E-04	551	5.70E-04	618	4.89E-04	685	9.21E-05	752	1.10E-05
418	4.70E-05	485	2.25E-04	552	5.73E-04	619	4.82E-04	686	8.98E-05	753	1.07E-05
419	5.19E-05	486	2.30E-04	553	5.75E-04	620	4.74E-04	687	8.69E-05	754	1.03E-05
420	5.79E-05	487	2.36E-04	554	5.80E-04	621	4.66E-04	688	8.45E-05	755	1.01E-05
421	6.40E-05	488	2.41E-04	555	5.83E-04	622	4.59E-04	689	8.17E-05	756	9.70E-06
422	7.15E-05	489	2.48E-04	556	5.85E-04	623	4.52E-04	690	7.93E-05	757	9.40E-06
423	7.92E-05	490	2.57E-04	557	5.88E-04	624	4.44E-04	691	7.68E-05	758	9.10E-06
424	8.82E-05	491	2.63E-04	558	5.90E-04	625	4.37E-04	692	7.45E-05	759	8.80E-06
425	9.88E-05	492	2.71E-04	559	5.95E-04	626	4.29E-04	693	7.18E-05	760	8.70E-06
426	1.11E-04	493	2.81E-04	560	5.95E-04	627	4.22E-04	694	6.96E-05	761	8.30E-06
427	1.24E-04	494	2.91E-04	561	5.99E-04	628	4.12E-04	695	6.76E-05	762	7.90E-06
428	1.39E-04	495	3.01E-04	562	6.01E-04	629	4.05E-04	696	6.57E-05	763	7.90E-06
429	1.55E-04	496	3.11E-04	563	6.03E-04	630	3.97E-04	697	6.36E-05	764	7.60E-06
430	1.74E-04	497	3.20E-04	564	6.06E-04	631	3.91E-04	698	6.15E-05	765	7.20E-06
431	1.91E-04	498	3.33E-04	565	6.09E-04	632	3.81E-04	699	5.96E-05	766	7.20E-06
432	2.09E-04	499	3.43E-04	566	6.12E-04	633	3.74E-04	700	5.78E-05	767	6.90E-06
433	2.30E-04	500	3.53E-04	567	6.16E-04	634	3.67E-04	701	5.56E-05	768	6.80E-06
434	2.55E-04	501	3.63E-04	568	6.18E-04	635	3.60E-04	702	5.45E-05	769	6.60E-06
435	2.81E-04	502	3.74E-04	569	6.21E-04	636	3.52E-04	703	5.22E-05	770	6.30E-06
436	3.11E-04	503	3.83E-04	570	6.24E-04	637	3.43E-04	704	5.09E-05	771	6.10E-06
437	3.44E-04	504	3.92E-04	571	6.24E-04	638	3.37E-04	705	4.92E-05	772	5.90E-06
438	3.83E-04	505	4.01E-04	572	6.26E-04	639	3.29E-04	706	4.77E-05	773	5.80E-06
439	4.24E-04	506	4.10E-04	573	6.28E-04	640	3.20E-04	707	4.59E-05	774	5.60E-06
440	4.72E-04	507	4.19E-04	574	6.29E-04	641	3.11E-04	708	4.47E-05	775	5.20E-06
441	5.27E-04	508	4.26E-04	575	6.32E-04	642	3.03E-04	709	4.31E-05	776	5.30E-06
442	5.87E-04	509	4.33E-04	576	6.32E-04	643	2.97E-04	710	4.19E-05	777	5.10E-06
443	6.48E-04	510	4.40E-04	577	6.32E-04	644	2.91E-04	711	4.06E-05	778	5.00E-06
444	7.19E-04	511	4.46E-04	578	6.31E-04	645	2.84E-04	712	3.93E-05	779	5.00E-06
445	7.86E-04	512	4.53E-04	579	6.33E-04	646	2.77E-04	713	3.80E-05	780	5.00E-06
446	8.53E-04	513	4.59E-04	580	6.33E-04	647	2.70E-04	714	3.73E-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

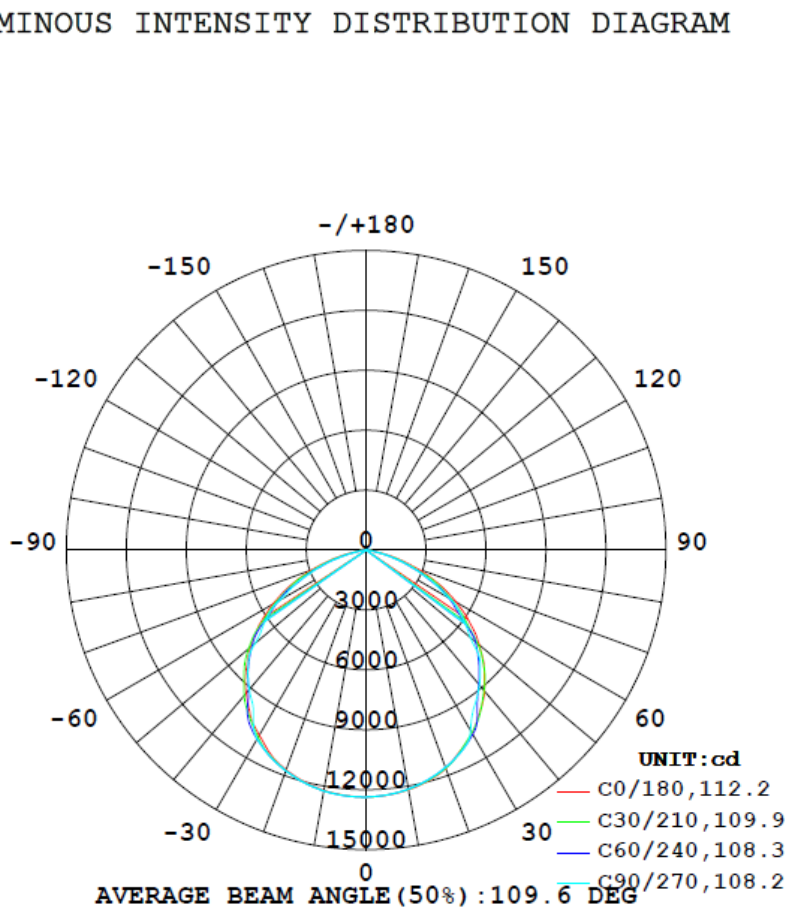
Electrical Data:

Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor
277.0	60	0.7301	199.96	0.9887

Goniophotometer Data:

Parameter	Results	
Total Luminous (lm)	33315.0	
Luminous Efficacy (lm/W)	166.61	
Zonal Lumens Distribution (0-90°)	99.9%	
Beam Angle (50%) (°)	Horizontal	Vertical
	112.1	108.6
Field Angle (10%) (°)	Horizontal	Vertical
	154.8	150.2
NEAM Type	7H x 7V	

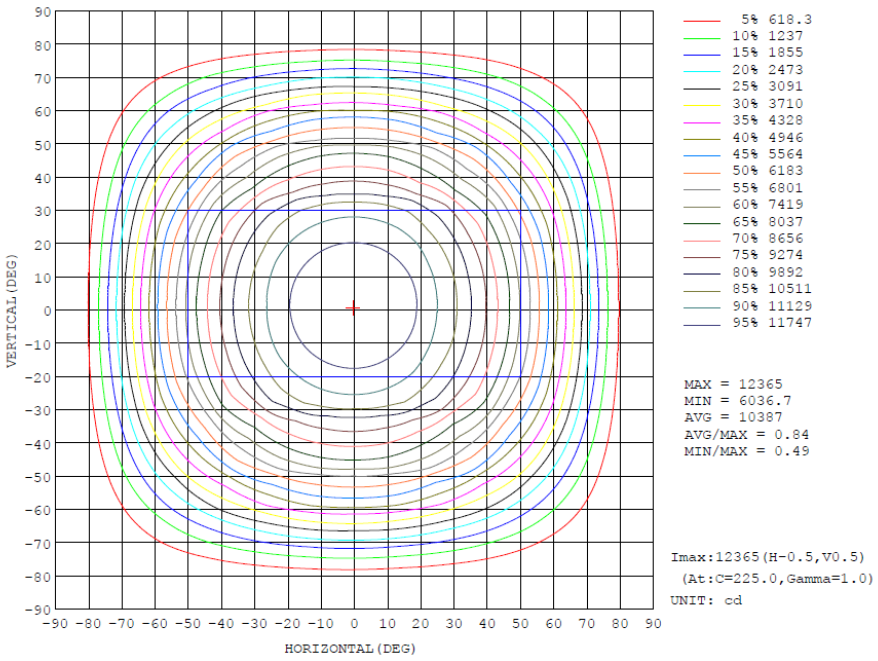
Luminous Intensity Distribution Diagram:



Zonal Flux Diagram:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1218	1216	1215	1217	1221	1225	1225	1223	0- 10	1172	1172	3.52,3.52
20	1164	1160	1158	1163	1171	1176	1176	1173	10- 20	3384	4556	13.7,13.7
30	1062	1061	1044	1073	1071	1092	1093	1079	20- 30	5191	9747	29.3,29.3
40	920.9	902.2	881.5	911.0	934.9	954.7	910.7	945.5	30- 40	6238	15985	48,48
50	737.8	704.7	679.8	713.1	759.0	735.1	727.2	725.2	40- 50	6395	22380	67.2,67.2
60	519.9	466.5	478.1	482.7	538.5	514.4	494.8	498.1	50- 60	5532	27912	83.8,83.8
70	272.5	232.7	233.1	243.5	291.3	254.4	249.5	244.6	60- 70	3747	31659	95,95
80	54.39	40.93	35.79	47.57	65.82	48.66	35.86	44.06	70- 80	1485	33144	99.5,99.5
90	0.6691	0.7313	0.8599	0.4091	0.1804	0.1761	0.1864	0.1953	80- 90	136.7	33281	99.9,99.9
100	0.1539	0.1488	0.1431	0.1468	0.3177	0.2991	0.2973	0.3115	90-100	2.098	33283	99.9,99.9
110	0.2257	0.2230	0.2193	0.2277	0.4094	0.3917	0.3865	0.4038	100-110	2.883	33286	99.9,99.9
120	0.3514	0.3259	0.3361	0.3526	0.5184	0.5032	0.4955	0.5085	110-120	3.557	33289	99.9,99.9
130	0.5402	0.4961	0.4935	0.5194	0.7456	0.7472	0.7404	0.7094	120-130	4.628	33294	99.9,99.9
140	0.6916	0.6662	0.6642	0.6768	0.9337	0.9991	0.9873	0.9509	130-140	5.588	33299	100,100
150	0.7999	0.7977	0.8082	0.7897	1.172	1.252	1.280	1.231	140-150	5.766	33305	100,100
160	0.9851	0.9666	0.9065	0.9653	1.422	1.459	1.422	1.404	150-160	5.129	33310	100,100
170	1.118	1.151	1.023	1.067	1.443	1.463	1.408	1.375	160-170	3.510	33314	100,100
180	1.309	1.345	1.286	1.271	1.316	1.350	1.293	1.260	170-180	1.212	33315	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Isocandela Diagram:



Luminous Distribution Intensity Data:

Table--1 UNIT: ×10cd

γ (DEG) \ C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236
5	1231	1231	1230	1230	1230	1230	1230	1230	1230	1230	1231	1232	1233	1233	1234	1234	1234	1234	1234
10	1218	1217	1216	1216	1215	1215	1215	1215	1216	1217	1218	1219	1221	1222	1224	1225	1225	1225	1225
15	1197	1195	1194	1192	1191	1190	1190	1191	1192	1194	1196	1198	1200	1202	1204	1204	1204	1205	1204
20	1164	1164	1162	1160	1158	1158	1158	1159	1161	1163	1166	1168	1171	1173	1175	1176	1176	1177	1176
25	1111	1110	1113	1118	1117	1117	1117	1118	1120	1122	1126	1129	1130	1135	1137	1138	1140	1140	1140
30	1062	1061	1056	1061	1066	1056	1044	1058	1070	1073	1070	1068	1071	1075	1083	1092	1093	1093	1093
35	991	990	994	995	969	947	947	950	974	1010	1005	1010	1012	1017	1020	1031	1031	997	984
40	921	921	917	902	877	881	881	884	887	911	934	931	935	939	949	955	915	912	911
45	835	831	835	788	796	806	807	809	809	805	850	850	851	858	866	837	836	839	838
50	738	735	729	705	713	688	680	691	719	713	743	755	759	764	769	735	746	747	727
55	632	632	599	604	573	587	588	590	585	617	616	650	654	659	642	638	618	617	616
60	520	520	491	467	476	487	478	491	483	483	507	539	539	547	520	514	506	513	495
65	398	399	379	358	344	352	358	359	354	372	392	415	417	421	403	387	370	380	379
70	272	262	244	233	223	232	233	235	231	244	258	279	291	292	266	254	244	250	249
75	152	145	134	125	121	116	120	120	127	135	149	158	169	162	153	143	135	128	128
80	54.4	50.3	46.7	40.9	36.7	34.8	35.8	36.5	41.8	47.6	54.6	59.3	65.8	61.2	56.5	48.7	42.0	38.0	35.9
85	8.96	8.91	7.99	7.25	6.62	5.98	5.35	6.51	7.50	8.40	8.89	9.96	10.4	9.79	8.17	5.81	5.33	5.28	5.09
90	0.67	0.66	0.65	0.73	0.78	0.83	0.86	0.94	0.24	0.41	0.56	0.67	0.18	0.18	0.17	0.18	0.18	0.18	0.19
95	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.24	0.24	0.24	0.23	0.23	0.23	0.23
100	0.15	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.32	0.31	0.30	0.30	0.30	0.30	0.30
105	0.19	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.18	0.38	0.37	0.37	0.36	0.36	0.36	0.36
110	0.23	0.23	0.22	0.22	0.22	0.22	0.22	0.22	0.23	0.23	0.23	0.22	0.41	0.40	0.39	0.39	0.39	0.38	0.39
115	0.28	0.28	0.26	0.27	0.27	0.27	0.27	0.27	0.28	0.28	0.28	0.27	0.44	0.43	0.43	0.43	0.43	0.42	0.43
120	0.35	0.35	0.33	0.33	0.33	0.33	0.34	0.34	0.35	0.35	0.35	0.34	0.52	0.51	0.50	0.50	0.49	0.49	0.50
125	0.44	0.43	0.41	0.41	0.41	0.41	0.41	0.41	0.42	0.43	0.43	0.42	0.63	0.62	0.61	0.62	0.61	0.60	0.61
130	0.54	0.53	0.51	0.50	0.52	0.49	0.49	0.50	0.51	0.52	0.52	0.52	0.75	0.74	0.74	0.75	0.74	0.74	0.74
135	0.63	0.62	0.60	0.59	0.60	0.58	0.60	0.60	0.60	0.60	0.61	0.61	0.85	0.84	0.85	0.87	0.86	0.88	0.87
140	0.69	0.70	0.68	0.67	0.67	0.67	0.66	0.67	0.67	0.68	0.65	0.67	0.93	0.94	0.96	1.00	0.99	1.00	0.99
145	0.75	0.77	0.75	0.73	0.77	0.77	0.75	0.76	0.75	0.73	0.71	0.73	1.05	1.06	1.08	1.13	1.14	1.15	1.13
150	0.80	0.83	0.82	0.80	0.81	0.82	0.81	0.82	0.80	0.79	0.75	0.77	1.17	1.18	1.19	1.25	1.27	1.30	1.28
155	0.89	0.93	0.95	0.88	0.90	0.91	0.88	0.90	0.89	0.88	0.89	0.84	1.29	1.28	1.34	1.36	1.37	1.39	1.36
160	0.99	1.02	1.02	0.97	0.95	0.96	0.91	0.97	0.97	0.97	0.97	0.95	1.42	1.41	1.43	1.46	1.45	1.47	1.42
165	1.04	1.09	1.10	1.06	1.02	1.01	0.97	1.02	1.04	1.04	1.02	1.02	1.45	1.44	1.46	1.49	1.51	1.49	1.44
170	1.12	1.15	1.17	1.15	1.07	1.05	1.02	1.05	1.07	1.07	1.07	1.09	1.44	1.44	1.45	1.46	1.47	1.47	1.41
175	1.24	1.26	1.26	1.25	1.18	1.15	1.11	1.14	1.17	1.18	1.19	1.21	1.42	1.42	1.44	1.44	1.43	1.41	1.36
180	1.31	1.34	1.35	1.35	1.31	1.29	1.29	1.24	1.26	1.27	1.26	1.28	1.32	1.32	1.35	1.35	1.34	1.32	1.29

Table--2 UNIT: ×10cd

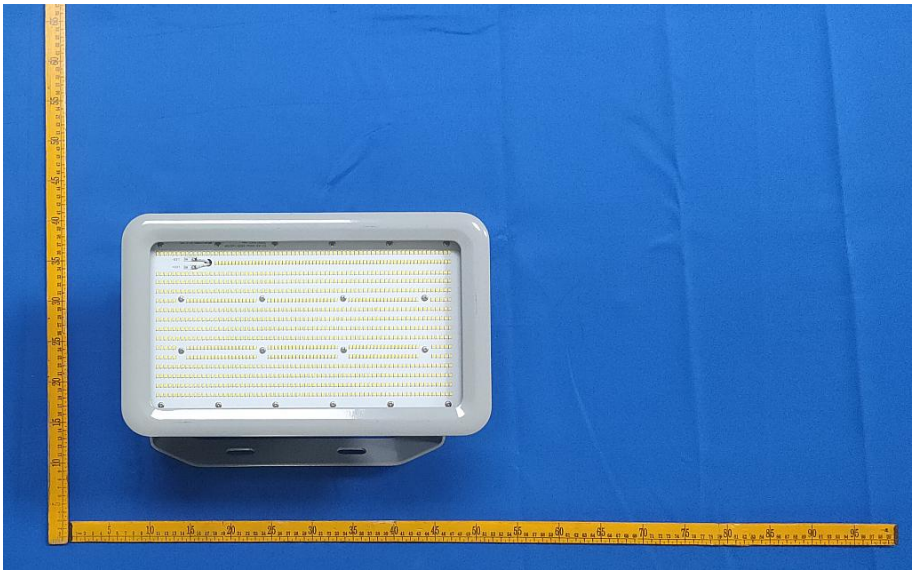
γ (DEG) \ C (DEG)	285	300	315	330	345
0	1236	1236	1236	1236	1236
5	1234	1234	1233	1233	1232
10	1224	1224	1223	1222	1220
15	1204	1203	1202	1201	1199
20	1175	1174	1173	1171	1168
25	1139	1137	1134	1124	1116
30	1091	1089	1079	1069	1067
35	995	1027	1015	1008	997
40	909	904	945	932	929
45	836	822	820	850	840
50	743	739	725	756	743
55	614	605	624	626	639
60	508	498	498	505	527
65	372	361	374	390	406
70	246	237	245	253	274
75	125	129	135	140	149
80	36.8	39.3	44.1	50.0	53.0
85	5.23	5.23	5.13	6.63	7.25
90	0.19	0.19	0.20	0.19	0.19
95	0.23	0.24	0.24	0.25	0.26
100	0.30	0.30	0.31	0.32	0.33
105	0.36	0.37	0.37	0.38	0.39
110	0.39	0.40	0.40	0.42	0.42
115	0.43	0.43	0.44	0.45	0.45
120	0.50	0.50	0.51	0.51	0.52
125	0.60	0.60	0.61	0.61	0.63
130	0.73	0.73	0.71	0.71	0.73
135	0.87	0.84	0.82	0.83	0.85
140	0.97	0.94	0.95	0.95	0.95
145	1.11	1.12	1.09	1.08	1.09
150	1.25	1.24	1.23	1.20	1.21
155	1.35	1.33	1.32	1.35	1.34
160	1.40	1.42	1.40	1.45	1.44
165	1.40	1.44	1.44	1.46	1.47
170	1.39	1.40	1.37	1.42	1.45
175	1.32	1.34	1.32	1.38	1.40
180	1.28	1.24	1.26	1.27	1.27

THD and PF Measurement Test Results:

Electrical Measurement:

Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor	iTHD(%)
277.0	60	0.7301	199.96	0.9887	4.47
347.0	60	0.5848	198.68	0.9790	4.01
480.0	60	0.4406	197.01	0.9315	7.60

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************