LM-79-19 Test Report

For

LEDVANCE LLC

181 BALLARDVALE STREET, SUITE 203 WILMINGTON, MA 01887

HAZARDOUS FLOODLIGHT

Model Name(s):
HAZFLOODP/300UNVD850/GR

Representative (Tested) Model:
HAZFLOODP/300UNVD850/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/300UNVD850/GR
Product Type:	HAZARDOUS FLOODLIGHT
Rating Input:	120-277Vac, 50/60Hz, 300W
Declared CCT:	5000K
Declared Light Output:	45000 lm
LED Manufacturer:	Bridgelux, Inc.
LED Model:	BXEN-50E-21L-3C-00-00-0
LED Quantity:	2240 pcs
LED Driver Manufacturer:	MEAN WELL ENTERPRISES CO., LTD.
LED Driver Model:	ELGC-300-H-AB

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:	250714019-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.:	NTCLR25070201
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:

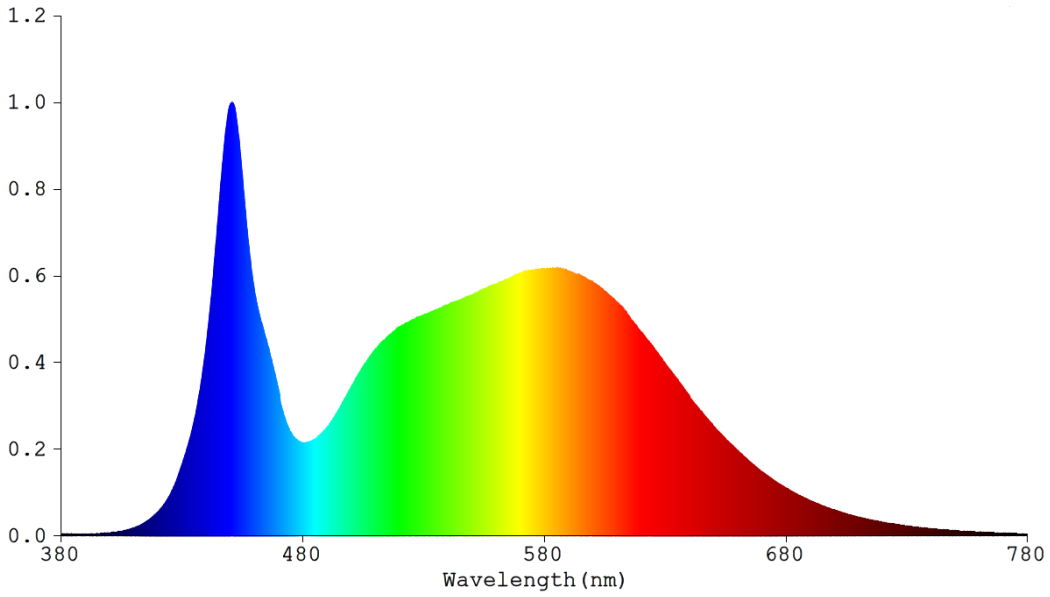
Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor
120.0	60	2.5236	302.59	0.9992

Color Data:

Parameter		Result
CCT(K)	7 steps: 5029±283	4999
	4 steps: 5029±220	
Ra		80.8
R_f		82
R_g		96
$R_{cs,\ h1}$		-14%
Chromaticity, (x, y)		(0.3453, 0.3546)
Chromaticity, (u', v')		(0.2104, 0.4861)
Duv		0.0014
SDCM		0.8

Specify Color Rendering			
R1	78	R9	-4
R2	87	R10	68
R3	92	R11	78
R4	80	R12	55
R5	79	R13	81
R6	81	R14	96
R7	86	R15	73
R8	64	-	-

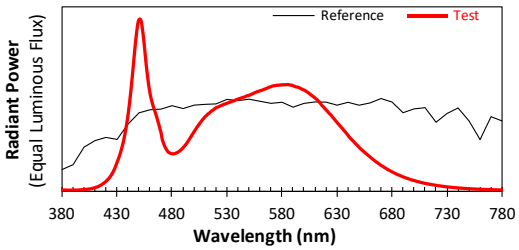
Spectrum Diagram:

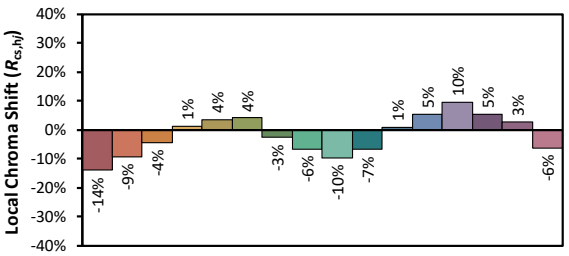


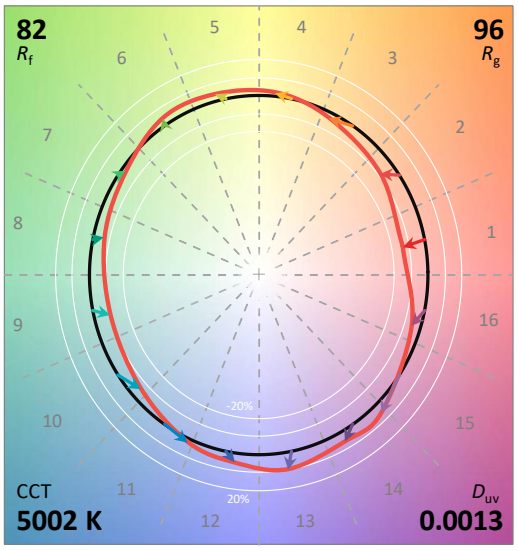
IES TM-30-18 Color Rendition Result:

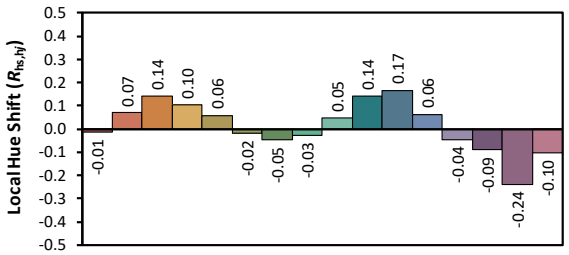
ANSI/IES TM-30-18 Color Rendition Report

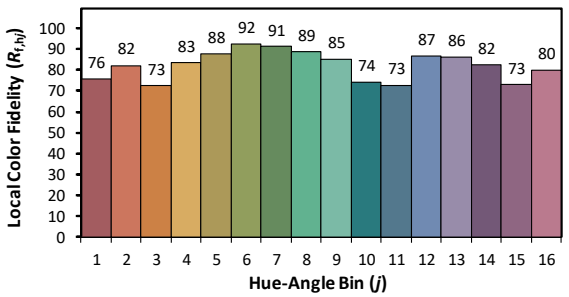
Source:	1 CIE F1	**Manufacturer:**	LEDVANCE LLC
Date:	2025/7/25	**Model:**	HAZFLOODP/300UNVD850/GR

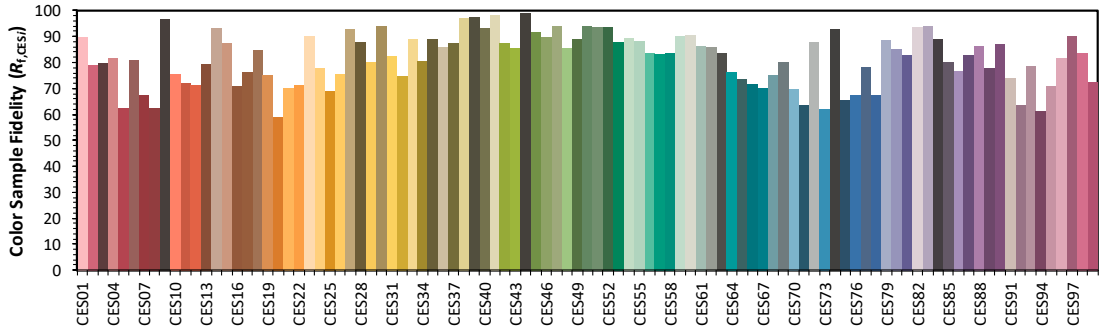












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3453
y	0.3544
u'	0.2105
v'	0.4860

CIE 13.3-1995 (CRI)

R_a	81
R_9	-5

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	4.20E-06	447	8.77E-04	514	4.52E-04	581	6.17E-04	648	2.67E-04	715	3.70E-05
381	4.00E-06	448	9.33E-04	515	4.59E-04	582	6.18E-04	649	2.60E-04	716	3.59E-05
382	4.60E-06	449	9.77E-04	516	4.64E-04	583	6.17E-04	650	2.53E-04	717	3.48E-05
383	4.30E-06	450	9.96E-04	517	4.69E-04	584	6.18E-04	651	2.47E-04	718	3.40E-05
384	4.80E-06	451	9.99E-04	518	4.73E-04	585	6.18E-04	652	2.41E-04	719	3.29E-05
385	3.30E-06	452	9.84E-04	519	4.79E-04	586	6.18E-04	653	2.35E-04	720	3.16E-05
386	3.50E-06	453	9.43E-04	520	4.83E-04	587	6.16E-04	654	2.30E-04	721	3.07E-05
387	3.80E-06	454	8.91E-04	521	4.86E-04	588	6.15E-04	655	2.24E-04	722	2.94E-05
388	4.00E-06	455	8.31E-04	522	4.89E-04	589	6.15E-04	656	2.18E-04	723	2.91E-05
389	3.80E-06	456	7.64E-04	523	4.91E-04	590	6.11E-04	657	2.13E-04	724	2.83E-05
390	4.10E-06	457	7.03E-04	524	4.94E-04	591	6.09E-04	658	2.08E-04	725	2.71E-05
391	4.50E-06	458	6.50E-04	525	4.98E-04	592	6.06E-04	659	2.02E-04	726	2.62E-05
392	4.20E-06	459	6.04E-04	526	4.99E-04	593	6.04E-04	660	1.97E-04	727	2.53E-05
393	4.20E-06	460	5.65E-04	527	5.04E-04	594	6.04E-04	661	1.91E-04	728	2.43E-05
394	4.50E-06	461	5.36E-04	528	5.05E-04	595	6.02E-04	662	1.87E-04	729	2.36E-05
395	4.60E-06	462	5.11E-04	529	5.07E-04	596	5.98E-04	663	1.81E-04	730	2.30E-05
396	5.60E-06	463	4.89E-04	530	5.10E-04	597	5.95E-04	664	1.76E-04	731	2.21E-05
397	5.90E-06	464	4.70E-04	531	5.12E-04	598	5.91E-04	665	1.71E-04	732	2.15E-05
398	6.40E-06	465	4.50E-04	532	5.14E-04	599	5.89E-04	666	1.66E-04	733	2.09E-05
399	6.60E-06	466	4.30E-04	533	5.17E-04	600	5.86E-04	667	1.62E-04	734	2.05E-05
400	7.30E-06	467	4.06E-04	534	5.19E-04	601	5.83E-04	668	1.57E-04	735	1.96E-05
401	8.00E-06	468	3.85E-04	535	5.21E-04	602	5.78E-04	669	1.53E-04	736	1.89E-05
402	8.60E-06	469	3.61E-04	536	5.23E-04	603	5.74E-04	670	1.48E-04	737	1.85E-05
403	9.00E-06	470	3.37E-04	537	5.26E-04	604	5.70E-04	671	1.44E-04	738	1.80E-05
404	1.04E-05	471	3.01E-04	538	5.29E-04	605	5.64E-04	672	1.40E-04	739	1.74E-05
405	1.07E-05	472	2.81E-04	539	5.32E-04	606	5.60E-04	673	1.36E-04	740	1.67E-05
406	1.18E-05	473	2.64E-04	540	5.33E-04	607	5.54E-04	674	1.32E-04	741	1.63E-05
407	1.32E-05	474	2.50E-04	541	5.37E-04	608	5.50E-04	675	1.28E-04	742	1.57E-05
408	1.48E-05	475	2.39E-04	542	5.38E-04	609	5.45E-04	676	1.24E-04	743	1.51E-05
409	1.69E-05	476	2.30E-04	543	5.40E-04	610	5.40E-04	677	1.21E-04	744	1.46E-05
410	1.86E-05	477	2.24E-04	544	5.42E-04	611	5.34E-04	678	1.17E-04	745	1.43E-05
411	2.09E-05	478	2.19E-04	545	5.45E-04	612	5.30E-04	679	1.14E-04	746	1.38E-05
412	2.26E-05	479	2.17E-04	546	5.46E-04	613	5.22E-04	680	1.10E-04	747	1.35E-05
413	2.54E-05	480	2.16E-04	547	5.50E-04	614	5.15E-04	681	1.07E-04	748	1.28E-05
414	2.86E-05	481	2.15E-04	548	5.52E-04	615	5.07E-04	682	1.04E-04	749	1.24E-05
415	3.21E-05	482	2.16E-04	549	5.54E-04	616	4.98E-04	683	1.00E-04	750	1.24E-05
416	3.58E-05	483	2.18E-04	550	5.56E-04	617	4.92E-04	684	9.77E-05	751	1.19E-05
417	4.04E-05	484	2.21E-04	551	5.58E-04	618	4.86E-04	685	9.42E-05	752	1.13E-05
418	4.50E-05	485	2.23E-04	552	5.61E-04	619	4.78E-04	686	9.22E-05	753	1.11E-05
419	4.99E-05	486	2.28E-04	553	5.64E-04	620	4.71E-04	687	8.97E-05	754	1.08E-05
420	5.53E-05	487	2.33E-04	554	5.67E-04	621	4.64E-04	688	8.66E-05	755	1.07E-05
421	6.21E-05	488	2.38E-04	555	5.70E-04	622	4.57E-04	689	8.38E-05	756	1.03E-05
422	6.84E-05	489	2.44E-04	556	5.72E-04	623	4.50E-04	690	8.13E-05	757	9.70E-06
423	7.60E-05	490	2.51E-04	557	5.76E-04	624	4.44E-04	691	7.89E-05	758	9.50E-06
424	8.48E-05	491	2.58E-04	558	5.77E-04	625	4.37E-04	692	7.62E-05	759	9.20E-06
425	9.42E-05	492	2.66E-04	559	5.80E-04	626	4.28E-04	693	7.43E-05	760	8.80E-06
426	1.06E-04	493	2.74E-04	560	5.82E-04	627	4.21E-04	694	7.20E-05	761	8.70E-06
427	1.18E-04	494	2.83E-04	561	5.84E-04	628	4.13E-04	695	6.93E-05	762	8.50E-06
428	1.32E-04	495	2.93E-04	562	5.86E-04	629	4.05E-04	696	6.76E-05	763	8.10E-06
429	1.49E-04	496	3.03E-04	563	5.88E-04	630	3.98E-04	697	6.52E-05	764	7.90E-06
430	1.66E-04	497	3.13E-04	564	5.92E-04	631	3.90E-04	698	6.36E-05	765	7.70E-06
431	1.83E-04	498	3.24E-04	565	5.93E-04	632	3.83E-04	699	6.09E-05	766	7.60E-06
432	2.00E-04	499	3.34E-04	566	5.96E-04	633	3.76E-04	700	6.00E-05	767	7.10E-06
433	2.20E-04	500	3.44E-04	567	5.99E-04	634	3.68E-04	701	5.81E-05	768	7.00E-06
434	2.42E-04	501	3.53E-04	568	6.02E-04	635	3.61E-04	702	5.60E-05	769	6.80E-06
435	2.67E-04	502	3.64E-04	569	6.04E-04	636	3.53E-04	703	5.40E-05	770	6.60E-06
436	2.94E-04	503	3.73E-04	570	6.06E-04	637	3.46E-04	704	5.26E-05	771	6.50E-06
437	3.26E-04	504	3.82E-04	571	6.09E-04	638	3.38E-04	705	5.11E-05	772	6.30E-06
438	3.60E-04	505	3.91E-04	572	6.10E-04	639	3.31E-04	706	4.90E-05	773	6.10E-06
439	4.00E-04	506	3.99E-04	573	6.12E-04	640	3.23E-04	707	4.76E-05	774	5.80E-06
440	4.44E-04	507	4.08E-04	574	6.12E-04	641	3.14E-04	708	4.63E-05	775	5.80E-06
441	4.94E-04	508	4.16E-04	575	6.14E-04	642	3.07E-04	709	4.45E-05	776	5.40E-06
442	5.50E-04	509	4.23E-04	576	6.14E-04	643	3.00E-04	710	4.36E-05	777	5.50E-06
443	6.10E-04	510	4.31E-04	577	6.15E-04	644	2.93E-04	711	4.21E-05	778	5.10E-06
444	6.77E-04	511	4.37E-04	578	6.15E-04	645	2.87E-04	712	4.07E-05	779	5.00E-06
445	7.45E-04	512	4.43E-04	579	6.16E-04	646	2.80E-04	713	3.95E-05	780	5.10E-06
446	8.14E-04	513	4.49E-04	580	6.17E-04	647	2.73E-04	714	3.85E-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:

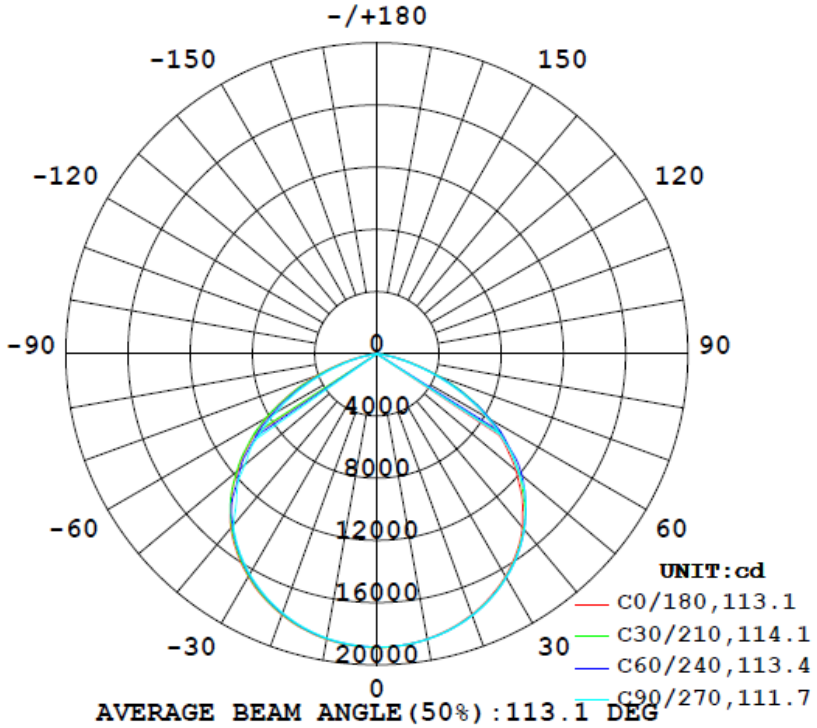
Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor
120.0	60	2.5236	302.59	0.9992

Goniophotometer Data:

Parameter	Results	
Total Luminous (lm)	52459.6	
Luminous Efficacy (lm/W)	173.37	
Zonal Lumens Distribution (0-90°)	99.9%	
Beam Angle (50%) (°)	Horizontal	Vertical
	112.9	111.7
Field Angle (10%) (°)	Horizontal	Vertical
	153.9	150.9
NEAM Type	7H x 7V	

Luminous Intensity Distribution Diagram:

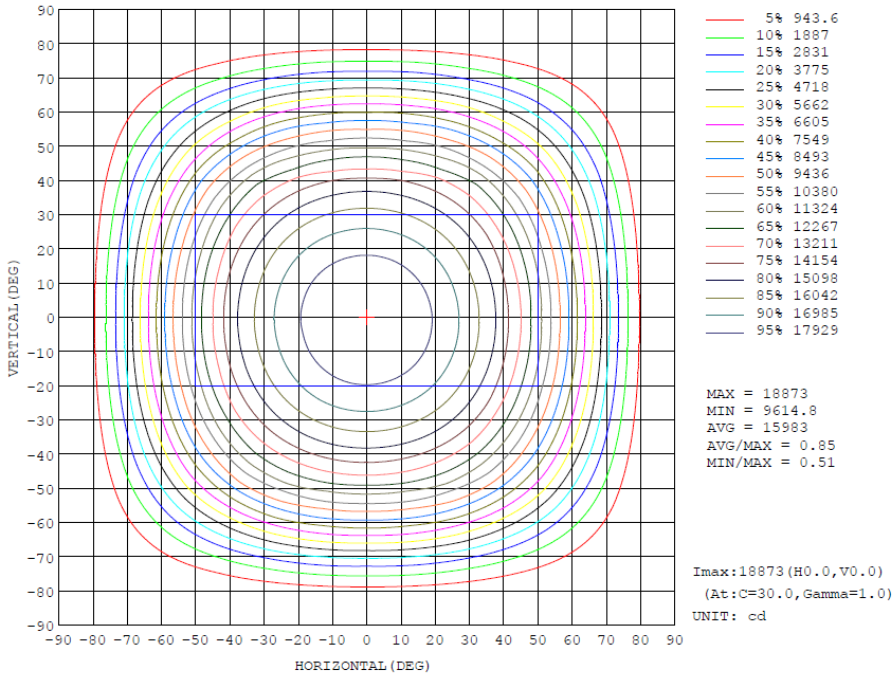
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Zonal Flux Diagram:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1861	1864	1864	1863	1864	1860	1856	1857	0- 10	1788	1788	3.41,3.41
20	1784	1790	1791	1790	1786	1779	1773	1776	10- 20	5165	6954	13.3,13.3
30	1653	1661	1662	1660	1654	1644	1635	1642	20- 30	7952	14906	28.4,28.4
40	1452	1473	1474	1471	1461	1449	1437	1448	30- 40	9778	24684	47.1,47.1
50	1169	1214	1190	1215	1168	1190	1110	1185	40- 50	10231	34915	66.6,66.6
60	812.2	846.0	816.1	844.4	817.0	791.7	746.2	793.3	50- 60	8952	43867	83.6,83.6
70	416.7	420.6	398.2	417.9	414.1	384.0	352.8	386.7	60- 70	6009	49876	95.1,95.1
80	86.77	77.60	68.72	74.49	82.95	65.58	56.60	68.89	70- 80	2325	52200	99.5,99.5
90	0.4541	0.2502	1.035	0.9829	0.2816	0.2785	0.2681	0.2853	80- 90	205.5	52406	99.9,99.9
100	0.2353	0.2257	0.2171	0.2308	0.5085	0.5184	0.5075	0.5169	90-100	3.238	52409	99.9,99.9
110	0.3506	0.3430	0.3393	0.3612	0.6580	0.6832	0.6771	0.6854	100-110	4.735	52414	99.9,99.9
120	0.5363	0.4968	0.5243	0.5543	0.8108	0.8320	0.8571	0.8280	110-120	5.806	52420	99.9,99.9
130	0.8193	0.7506	0.7555	0.8118	1.177	1.205	1.226	1.143	120-130	7.356	52427	99.9,99.9
140	1.052	0.9935	0.9930	1.046	1.449	1.575	1.574	1.491	130-140	8.730	52436	100,100
150	1.221	1.200	1.226	1.213	1.790	1.935	1.996	1.900	140-150	8.904	52445	100,100
160	1.493	1.461	1.386	1.480	2.167	2.226	2.177	2.166	150-160	7.852	52452	100,100
170	1.690	1.714	1.538	1.628	2.192	2.219	2.169	2.118	160-170	5.353	52458	100,100
180	1.963	2.073	1.927	1.940	1.977	2.019	1.937	1.906	170-180	1.833	52460	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	1887	1887	1887	1887	1886	1885	1885	1885	1885	1885	1885	1885	1887	1887	1887	1887	1886	1885	1885
5	1880	1881	1882	1882	1881	1880	1880	1880	1880	1880	1880	1880	1882	1881	1880	1879	1878	1876	1876
10	1861	1862	1863	1864	1864	1863	1864	1864	1864	1863	1862	1861	1864	1862	1862	1860	1858	1856	1856
15	1829	1830	1832	1834	1834	1833	1834	1834	1834	1833	1832	1830	1831	1830	1828	1826	1824	1822	1821
20	1784	1786	1788	1790	1790	1790	1791	1791	1791	1790	1788	1786	1786	1784	1782	1779	1777	1774	1773
25	1725	1728	1731	1733	1733	1733	1734	1734	1734	1732	1730	1727	1727	1724	1722	1719	1716	1712	1711
30	1653	1656	1659	1661	1662	1662	1662	1663	1663	1660	1658	1654	1654	1650	1648	1644	1640	1637	1635
35	1564	1568	1573	1575	1576	1576	1576	1577	1576	1574	1571	1567	1566	1562	1558	1554	1550	1547	1545
40	1452	1463	1469	1473	1473	1473	1474	1474	1474	1471	1468	1463	1461	1457	1454	1449	1445	1441	1437
45	1323	1329	1342	1353	1354	1353	1354	1354	1354	1353	1348	1327	1322	1321	1332	1328	1314	1278	1276
50	1169	1176	1197	1214	1216	1204	1190	1205	1216	1215	1195	1178	1168	1172	1177	1190	1148	1123	1110
55	1000	1008	1029	1048	1033	1031	1016	1032	1034	1045	1025	1006	998	1000	1008	990	965	956	937
60	812	826	842	846	839	833	816	833	839	844	841	822	817	815	826	792	777	763	746
65	615	626	642	633	631	618	615	618	630	630	639	621	617	615	608	584	579	559	554
70	417	423	427	421	413	408	398	407	411	418	425	421	414	416	401	384	370	362	353
75	233	239	229	218	214	212	210	211	212	215	227	233	230	231	214	197	190	188	183
80	86.8	90.4	83.6	77.6	72.5	70.6	68.7	69.7	71.3	74.5	82.2	87.6	83.0	81.0	71.9	65.6	59.9	58.4	56.6
85	10.00	10.7	10.3	9.31	10.3	8.59	7.40	8.17	9.81	8.74	9.82	9.65	9.21	9.35	8.59	7.43	6.31	6.26	5.99
90	0.45	0.37	0.30	0.25	1.14	1.07	1.04	1.02	1.00	0.98	0.96	1.03	0.28	0.28	0.28	0.28	0.27	0.27	0.27
95	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.18	0.39	0.39	0.39	0.39	0.39	0.38	0.38
100	0.24	0.23	0.23	0.23	0.22	0.22	0.22	0.22	0.23	0.23	0.23	0.24	0.51	0.51	0.52	0.52	0.51	0.51	0.51
105	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.30	0.30	0.61	0.61	0.62	0.63	0.63	0.62	0.62
110	0.35	0.35	0.34	0.34	0.34	0.33	0.34	0.35	0.36	0.36	0.36	0.36	0.66	0.66	0.67	0.68	0.69	0.68	0.68
115	0.43	0.42	0.40	0.42	0.41	0.41	0.42	0.44	0.44	0.45	0.44	0.44	0.72	0.72	0.72	0.74	0.75	0.75	0.75
120	0.54	0.53	0.49	0.50	0.51	0.51	0.52	0.54	0.55	0.55	0.55	0.55	0.81	0.82	0.81	0.83	0.84	0.84	0.86
125	0.68	0.65	0.60	0.61	0.60	0.62	0.63	0.64	0.66	0.67	0.66	0.67	0.99	0.99	0.98	1.00	1.01	1.00	1.02
130	0.82	0.79	0.75	0.75	0.77	0.75	0.76	0.77	0.80	0.81	0.82	0.82	1.18	1.18	1.17	1.20	1.21	1.22	1.23
135	0.95	0.93	0.90	0.88	0.91	0.89	0.90	0.92	0.92	0.93	0.95	0.94	1.32	1.33	1.35	1.37	1.38	1.42	1.41
140	1.05	1.06	1.02	0.99	1.01	0.99	0.99	1.00	1.01	1.05	1.01	1.05	1.45	1.48	1.51	1.58	1.56	1.60	1.57
145	1.14	1.17	1.13	1.11	1.15	1.16	1.13	1.14	1.14	1.13	1.09	1.14	1.63	1.66	1.68	1.77	1.78	1.80	1.79
150	1.22	1.27	1.25	1.20	1.22	1.24	1.23	1.24	1.23	1.21	1.16	1.20	1.79	1.83	1.84	1.94	1.97	2.02	2.00
155	1.34	1.41	1.44	1.32	1.35	1.35	1.33	1.37	1.36	1.34	1.36	1.30	1.97	1.96	2.05	2.07	2.11	2.15	2.10
160	1.49	1.54	1.57	1.46	1.42	1.43	1.39	1.48	1.47	1.48	1.50	1.46	2.17	2.15	2.19	2.23	2.23	2.25	2.18
165	1.58	1.66	1.68	1.60	1.52	1.49	1.46	1.55	1.59	1.60	1.59	1.57	2.21	2.20	2.23	2.28	2.31	2.28	2.21
170	1.69	1.74	1.75	1.71	1.58	1.56	1.54	1.60	1.63	1.63	1.64	1.67	2.19	2.19	2.19	2.22	2.25	2.25	2.17
175	1.85	1.89	1.89	1.87	1.74	1.72	1.65	1.70	1.75	1.78	1.80	1.83	2.14	2.14	2.17	2.18	2.15	2.13	2.07
180	1.96	2.01	2.00	2.07	1.95	1.93	1.93	1.87	1.91	1.94	1.91	1.94	1.98	1.97	2.01	2.02	2.01	1.96	1.94

Table--2 UNIT: ×10cd

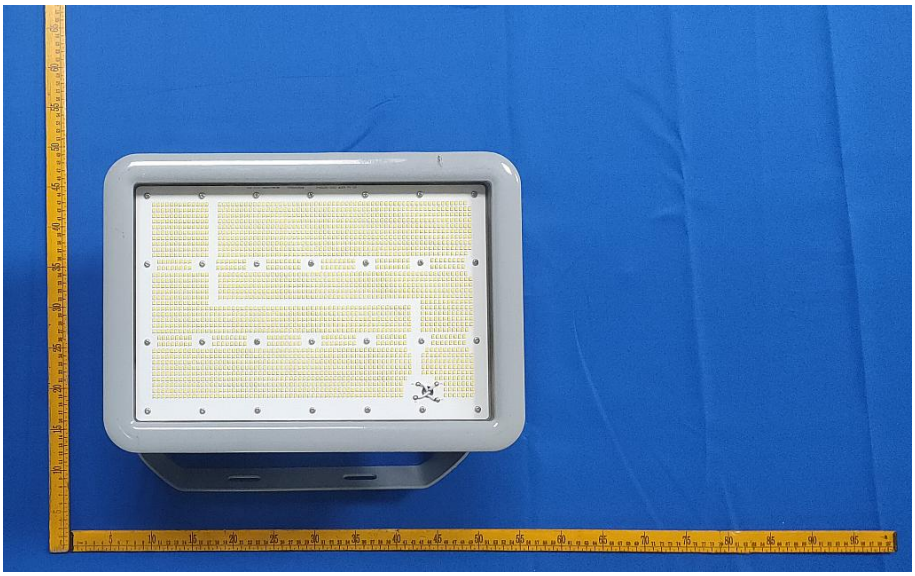
γ (DEG) \ C (DEG)	285	300	315	330	345
0	1885	1885	1885	1885	1885
5	1876	1876	1877	1877	1878
10	1856	1856	1857	1858	1859
15	1821	1822	1823	1824	1826
20	1773	1775	1776	1778	1780
25	1712	1713	1716	1719	1721
30	1636	1638	1642	1645	1649
35	1546	1549	1553	1557	1560
40	1440	1444	1448	1452	1454
45	1277	1317	1326	1322	1320
50	1126	1147	1185	1177	1167
55	958	966	989	1010	999
60	767	779	793	824	818
65	559	578	588	609	619
70	362	369	387	401	418
75	189	190	202	219	236
80	58.2	60.9	68.9	75.3	85.2
85	6.35	6.54	8.63	10.1	10.8
90	0.27	0.28	0.29	0.29	0.28
95	0.38	0.39	0.39	0.39	0.39
100	0.51	0.51	0.52	0.51	0.51
105	0.62	0.63	0.63	0.62	0.61
110	0.68	0.69	0.69	0.67	0.66
115	0.75	0.75	0.74	0.73	0.72
120	0.85	0.84	0.83	0.82	0.82
125	1.00	0.99	0.99	0.96	0.99
130	1.19	1.17	1.14	1.11	1.15
135	1.40	1.35	1.29	1.29	1.31
140	1.54	1.49	1.49	1.48	1.48
145	1.74	1.73	1.72	1.68	1.69
150	1.94	1.94	1.90	1.85	1.87
155	2.05	2.05	2.04	2.07	2.08
160	2.14	2.18	2.17	2.23	2.23
165	2.15	2.19	2.22	2.26	2.29
170	2.11	2.14	2.12	2.19	2.23
175	2.00	2.04	2.01	2.10	2.15
180	1.92	1.87	1.91	1.93	1.92

THD and PF Measurement Test Results:

Electrical Measurement:

Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor	iTHD(%)
120.0	60	2.5236	302.59	0.9992	2.33
277.0	60	1.0983	291.70	0.9588	3.55

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