

LM-79-19 Test Report

For

Reno LED Lighting Inc

7-615 Denison St, Markham L3R 1B8 Canada

Outdoor Pole/Arm-Mounted Area and Roadway Luminaires

Model Name(s):

RENO-SB-240W-MW-DV-MCCT-G2-R3

Representative (Tested) Model:

RENO-SB-240W-MW-DV-MCCT-G2-R3

Model Difference:

1. Product is wattage tunable, can be tunable from 180W, 200W, 220W and 240W;
2. Product is color tunable, can be tunable from 3000K, 4000K and 5000K;
3. All is the same construction, except function, mount mean and model design.

Prepared by:

Alan Wang

Engineer: Alan Wang

Date: 2024-01-24

Reviewed by:

Vincent Yuan

Technical Lead: Vincent Yuan

Issue Date: 2024-01-24

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.

Laboratory: Dongguan New Testing Centre Co., Ltd

Address: 3F, No. 1 the 1st North Industry Road, Songshan Lake Science & Technology Park, Dongguan, Guangdong, China

Tel: 86-769-22212079

Website: <http://www.ntc-cert.com>

Client Information:

Applicant Name:	Reno LED Lighting Inc
Brand Name:	RENO
Manufacturer Name:	Reno LED Lighting Inc
Manufacturer Address:	7-615 Denison St, Markham L3R 1B8 Canada

Product Information:

Model Number:	RENO-SB-240W-MW-DV-MCCT-G2-R3				
Product Type:	Outdoor Pole/Arm-Mounted Area and Roadway Luminaires				
Rating Input:	120-347Vac, 50/60Hz, 180W/200W/220W/240W				
Declared CCT:	3000K, 4000K and 5000K				
Declared Light Output:		180W	200W	220W	240W
	3000K	27540 lm	30600 lm	33660 lm	36720 lm
	4000K	30600 lm	34000 lm	37400 lm	40800 lm
	5000K	28800 lm	32000 lm	35200 lm	38400 lm
Declared Efficacy:	3000K: 153 lm/W 4000K: 170 lm/W 5000K: 160 lm/W				
LED Manufacturer:	LUMILEDS				
LED Model:	L130-3070003000X21 and L130-5070003000X21				
LED Driver Manufacturer:	KERHAM				
LED Driver Model:	KHM-NISG200H67M-1100				

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:	2023-12-07
Quantity of Receipt Samples:	1 pc
Sample Number:	231207023-S1
Test Representation:	N/A

Laboratory Information:

Test Laboratory:	Dongguan New Testing Centre Co., Ltd
Laboratory Address:	3F, No. 1 the 1 st 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:	2024-01-24
Revised Date of Test Report:	N/A
Test Report No.:	NTCLR24010182
Remark (If applicable):	1. This report is copied from NTCLR24010041, due to the same product.

Test Specification:	
Date of Test	2023-12-21
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 $25\text{ }^{\circ}\text{C} \pm 1^{\circ}\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample. 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° horizontal 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 $25\text{ }^{\circ}\text{C} \pm 1^{\circ}\text{C}$. 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)
25.4	41.0	Face Down	90	10

Electrical Data:

CCT Setting	Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor
3000K	120.0	60	2.0623	247.00	0.9981
4000K	120.0	60	1.9810	237.24	0.9980
5000K	120.0	60	2.0674	247.62	0.9981

Color Data:

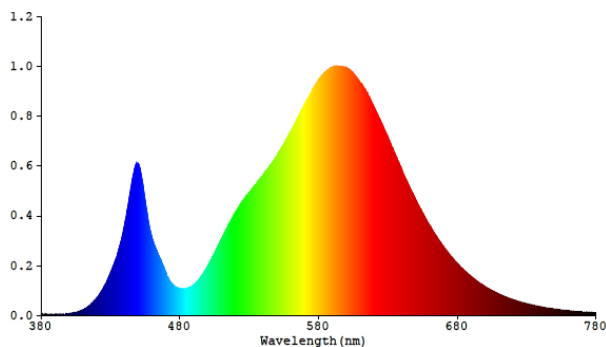
CCT Setting	Test CCT (K)	R _a	R ₉	R _f	R _g	R _{cs, h1}	Chromaticity		
							(x, y)	(u', v')	Duv
3000K	3059	72.3	-30	75	95	-16%	(0.4311, 0.3990)	(0.2490, 0.5185)	-0.0012
4000K	3838	74.5	-21	76	96	-16%	(0.3868, 0.3776)	(0.2289, 0.5029)	-0.0014
5000K	5033	72.8	-27	74	96	-16%	(0.3445, 0.3554)	(0.2096, 0.4864)	0.0021

Specify Color Rendering:

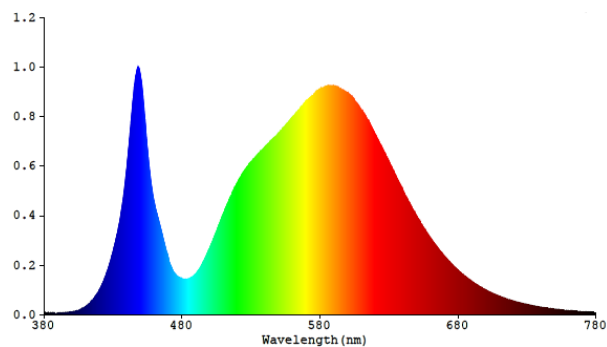
CCT Setting	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
3000K	69	82	93	68	68	75	78	45	-30	59	63	51	71	96	62
4000K	72	81	88	73	72	74	81	54	-21	55	69	49	74	93	66
5000K	71	77	82	74	72	69	80	57	-27	46	72	48	71	90	65

Spectrum Diagram:

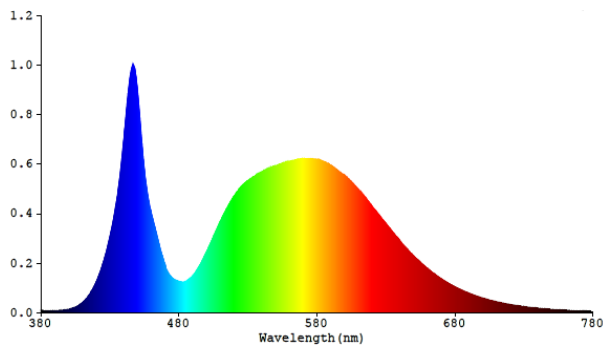
CCT Setting=3000K



CCT Setting=4000K



CCT Setting=5000K



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IES TM-30-18 Color Rendition Result (CCT Setting=3000K):

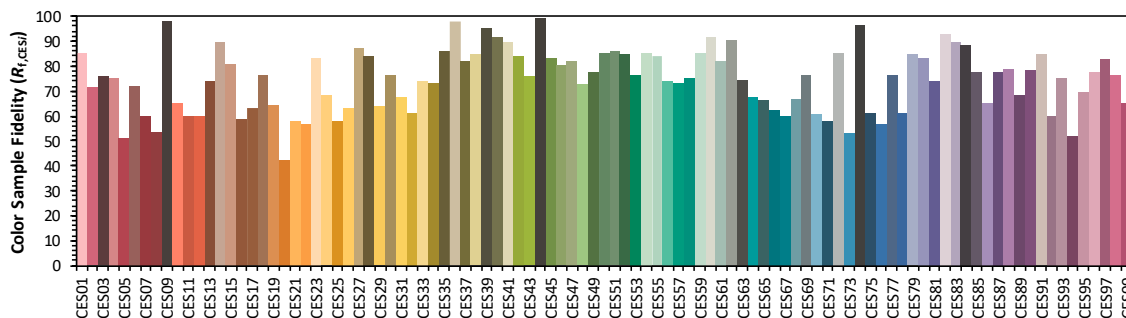
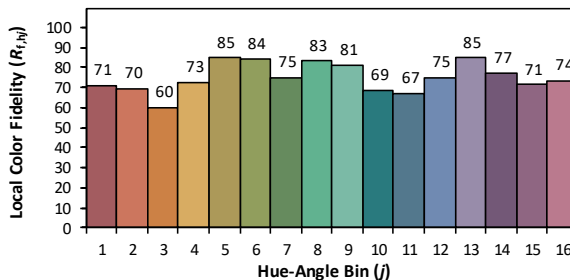
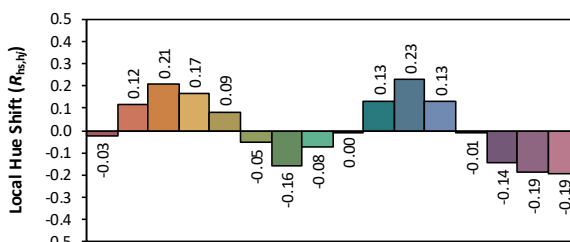
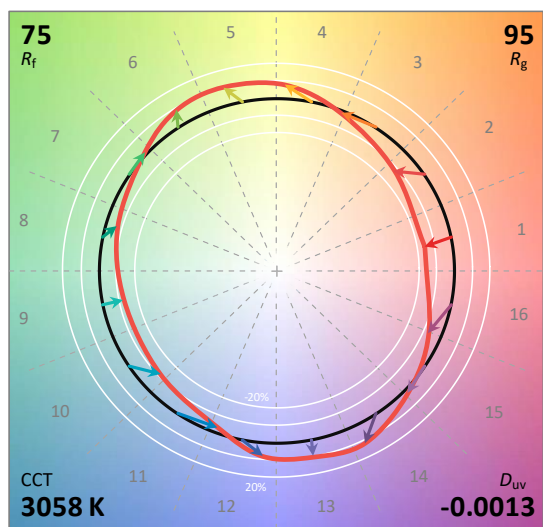
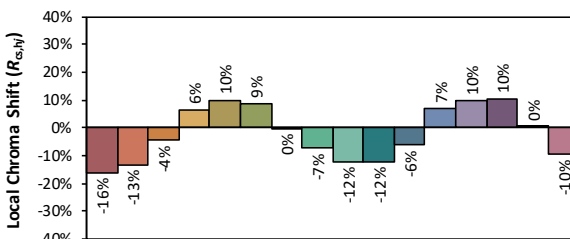
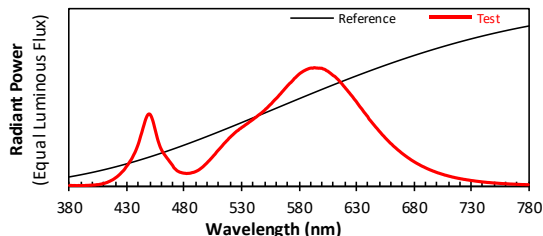
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: Reno LED Lighting Inc

Date: 2024/1/24

Model: RENO-SB-240W-MW-DV-MCCT-G2-R3



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

x 0.4311
 y 0.3988
 u' 0.2490
 v' 0.5184

CIE 13.3-1995
(CRI)

R_a 72
 R_g -30

Spectrum Data (CCT Setting=3000K):

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	4.70E-06	447	5.80E-04	514	3.51E-04	581	9.52E-04	648	4.87E-04	715	7.40E-05
381	5.60E-06	448	5.99E-04	515	3.62E-04	582	9.59E-04	649	4.76E-04	716	7.13E-05
382	4.60E-06	449	6.08E-04	516	3.71E-04	583	9.65E-04	650	4.64E-04	717	6.93E-05
383	4.30E-06	450	6.07E-04	517	3.82E-04	584	9.72E-04	651	4.53E-04	718	6.74E-05
384	4.70E-06	451	5.93E-04	518	3.91E-04	585	9.76E-04	652	4.42E-04	719	6.53E-05
385	4.40E-06	452	5.69E-04	519	4.03E-04	586	9.82E-04	653	4.31E-04	720	6.39E-05
386	3.70E-06	453	5.39E-04	520	4.12E-04	587	9.86E-04	654	4.21E-04	721	6.13E-05
387	3.70E-06	454	5.00E-04	521	4.22E-04	588	9.90E-04	655	4.10E-04	722	6.01E-05
388	5.00E-06	455	4.62E-04	522	4.30E-04	589	9.94E-04	656	4.00E-04	723	5.81E-05
389	3.60E-06	456	4.24E-04	523	4.40E-04	590	9.96E-04	657	3.90E-04	724	5.63E-05
390	4.70E-06	457	3.88E-04	524	4.49E-04	591	9.97E-04	658	3.80E-04	725	5.53E-05
391	4.70E-06	458	3.59E-04	525	4.57E-04	592	9.95E-04	659	3.70E-04	726	5.32E-05
392	4.00E-06	459	3.31E-04	526	4.65E-04	593	1.00E-03	660	3.60E-04	727	5.19E-05
393	3.70E-06	460	3.10E-04	527	4.71E-04	594	1.00E-03	661	3.52E-04	728	5.05E-05
394	5.50E-06	461	2.92E-04	528	4.80E-04	595	9.97E-04	662	3.42E-04	729	4.88E-05
395	5.60E-06	462	2.76E-04	529	4.86E-04	596	9.97E-04	663	3.33E-04	730	4.71E-05
396	6.00E-06	463	2.63E-04	530	4.94E-04	597	9.96E-04	664	3.25E-04	731	4.59E-05
397	6.40E-06	464	2.50E-04	531	5.01E-04	598	9.96E-04	665	3.16E-04	732	4.49E-05
398	7.40E-06	465	2.36E-04	532	5.07E-04	599	9.95E-04	666	3.08E-04	733	4.33E-05
399	6.90E-06	466	2.24E-04	533	5.15E-04	600	9.95E-04	667	3.00E-04	734	4.19E-05
400	8.00E-06	467	2.10E-04	534	5.21E-04	601	9.90E-04	668	2.92E-04	735	4.06E-05
401	8.80E-06	468	1.98E-04	535	5.28E-04	602	9.87E-04	669	2.84E-04	736	3.96E-05
402	8.90E-06	469	1.85E-04	536	5.35E-04	603	9.83E-04	670	2.76E-04	737	3.83E-05
403	1.05E-05	470	1.72E-04	537	5.43E-04	604	9.75E-04	671	2.69E-04	738	3.73E-05
404	1.22E-05	471	1.55E-04	538	5.49E-04	605	9.71E-04	672	2.61E-04	739	3.61E-05
405	1.17E-05	472	1.46E-04	539	5.56E-04	606	9.64E-04	673	2.54E-04	740	3.48E-05
406	1.39E-05	473	1.36E-04	540	5.63E-04	607	9.57E-04	674	2.47E-04	741	3.39E-05
407	1.59E-05	474	1.28E-04	541	5.71E-04	608	9.49E-04	675	2.40E-04	742	3.29E-05
408	1.75E-05	475	1.23E-04	542	5.78E-04	609	9.41E-04	676	2.34E-04	743	3.20E-05
409	2.07E-05	476	1.18E-04	543	5.85E-04	610	9.33E-04	677	2.27E-04	744	3.06E-05
410	2.21E-05	477	1.15E-04	544	5.93E-04	611	9.28E-04	678	2.20E-04	745	3.00E-05
411	2.51E-05	478	1.12E-04	545	6.01E-04	612	9.20E-04	679	2.14E-04	746	2.95E-05
412	2.84E-05	479	1.10E-04	546	6.08E-04	613	9.10E-04	680	2.08E-04	747	2.85E-05
413	3.16E-05	480	1.08E-04	547	6.15E-04	614	9.01E-04	681	2.02E-04	748	2.76E-05
414	3.66E-05	481	1.08E-04	548	6.23E-04	615	8.91E-04	682	1.96E-04	749	2.68E-05
415	4.04E-05	482	1.06E-04	549	6.32E-04	616	8.79E-04	683	1.91E-04	750	2.59E-05
416	4.57E-05	483	1.07E-04	550	6.40E-04	617	8.69E-04	684	1.85E-04	751	2.56E-05
417	5.02E-05	484	1.07E-04	551	6.51E-04	618	8.58E-04	685	1.80E-04	752	2.48E-05
418	5.55E-05	485	1.09E-04	552	6.59E-04	619	8.45E-04	686	1.75E-04	753	2.41E-05
419	6.21E-05	486	1.11E-04	553	6.68E-04	620	8.34E-04	687	1.70E-04	754	2.33E-05
420	6.92E-05	487	1.14E-04	554	6.79E-04	621	8.22E-04	688	1.65E-04	755	2.26E-05
421	7.59E-05	488	1.16E-04	555	6.88E-04	622	8.11E-04	689	1.61E-04	756	2.19E-05
422	8.37E-05	489	1.19E-04	556	6.96E-04	623	7.98E-04	690	1.56E-04	757	2.11E-05
423	9.24E-05	490	1.23E-04	557	7.08E-04	624	7.88E-04	691	1.51E-04	758	2.07E-05
424	1.01E-04	491	1.28E-04	558	7.19E-04	625	7.75E-04	692	1.47E-04	759	2.03E-05
425	1.12E-04	492	1.32E-04	559	7.29E-04	626	7.63E-04	693	1.43E-04	760	2.01E-05
426	1.21E-04	493	1.38E-04	560	7.38E-04	627	7.52E-04	694	1.38E-04	761	1.92E-05
427	1.31E-04	494	1.46E-04	561	7.48E-04	628	7.38E-04	695	1.34E-04	762	1.87E-05
428	1.43E-04	495	1.53E-04	562	7.59E-04	629	7.26E-04	696	1.31E-04	763	1.80E-05
429	1.57E-04	496	1.61E-04	563	7.70E-04	630	7.14E-04	697	1.26E-04	764	1.73E-05
430	1.71E-04	497	1.69E-04	564	7.80E-04	631	7.00E-04	698	1.23E-04	765	1.70E-05
431	1.83E-04	498	1.79E-04	565	7.92E-04	632	6.87E-04	699	1.19E-04	766	1.67E-05
432	1.98E-04	499	1.88E-04	566	8.03E-04	633	6.73E-04	700	1.16E-04	767	1.61E-05
433	2.13E-04	500	1.98E-04	567	8.14E-04	634	6.61E-04	701	1.12E-04	768	1.60E-05
434	2.27E-04	501	2.08E-04	568	8.25E-04	635	6.49E-04	702	1.09E-04	769	1.55E-05
435	2.45E-04	502	2.18E-04	569	8.36E-04	636	6.35E-04	703	1.06E-04	770	1.47E-05
436	2.65E-04	503	2.29E-04	570	8.47E-04	637	6.22E-04	704	1.03E-04	771	1.44E-05
437	2.84E-04	504	2.39E-04	571	8.57E-04	638	6.10E-04	705	9.97E-05	772	1.41E-05
438	3.06E-04	505	2.50E-04	572	8.68E-04	639	5.97E-04	706	9.70E-05	773	1.33E-05
439	3.31E-04	506	2.61E-04	573	8.76E-04	640	5.86E-04	707	9.32E-05	774	1.30E-05
440	3.57E-04	507	2.71E-04	574	8.86E-04	641	5.68E-04	708	9.12E-05	775	1.27E-05
441	3.88E-04	508	2.85E-04	575	8.96E-04	642	5.57E-04	709	8.85E-05	776	1.26E-05
442	4.23E-04	509	2.96E-04	576	9.09E-04	643	5.45E-04	710	8.59E-05	777	1.25E-05
443	4.53E-04	510	3.07E-04	577	9.17E-04	644	5.33E-04	711	8.31E-05	778	1.18E-05
444	4.88E-04	511	3.17E-04	578	9.26E-04	645	5.21E-04	712	8.09E-05	779	1.18E-05
445	5.20E-04	512	3.28E-04	579	9.36E-04	646	5.10E-04	713	7.83E-05	780	1.18E-05
446	5.54E-04	513	3.39E-04	580	9.45E-04	647	4.98E-04	714	7.55E-05	N/A	N/A

IES TM-30-18 Color Rendition Result (CCT Setting=4000K):

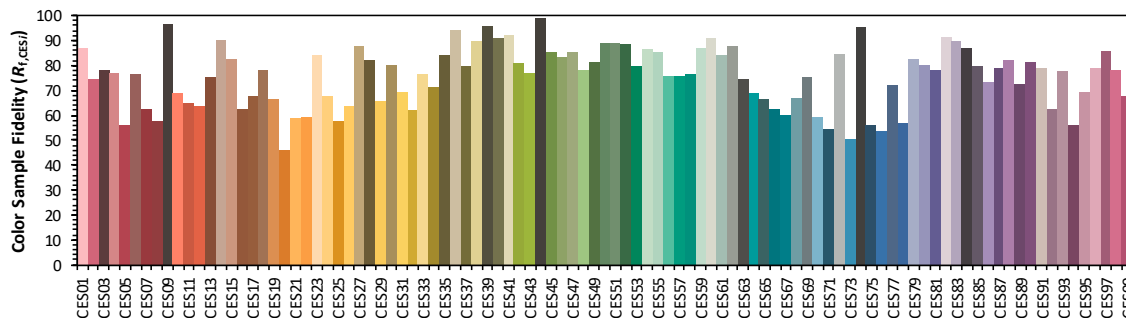
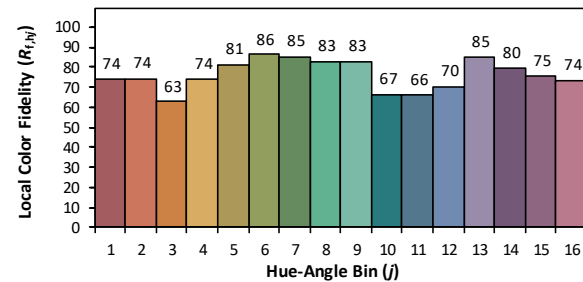
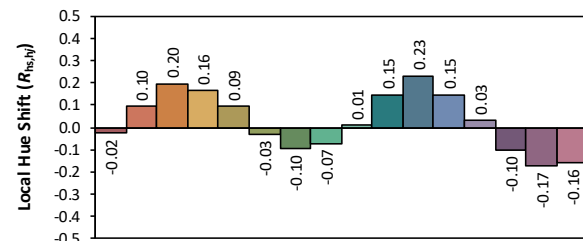
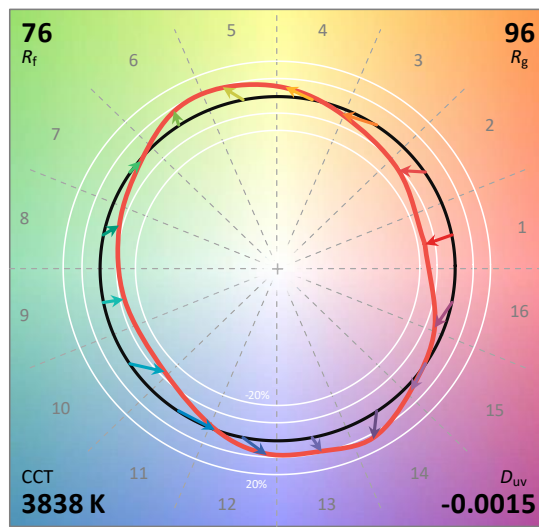
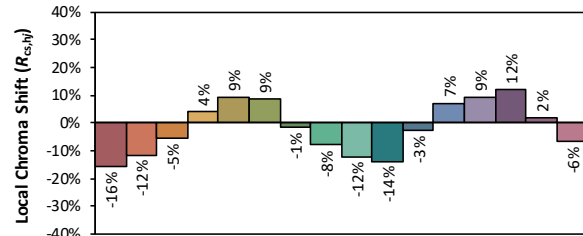
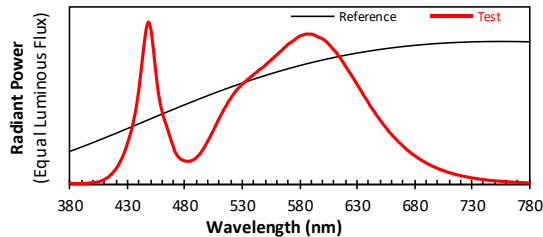
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: Reno LED Lighting Inc

Date: 2024/1/24

Model: RENO-SB-240W-MW-DV-MCCT-G2-R3



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

x 0.3867
 y 0.3774
 u' 0.2290
 v' 0.5028

CIE 13.3-1995
(CRI)

R_a 74
 R_g -21

Spectrum Data (CCT Setting=4000K):

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	7.20E-06	447	9.79E-04	514	4.61E-04	581	9.15E-04	648	4.17E-04	715	6.40E-05
381	7.80E-06	448	9.97E-04	515	4.74E-04	582	9.17E-04	649	4.09E-04	716	6.24E-05
382	6.80E-06	449	9.90E-04	516	4.84E-04	583	9.17E-04	650	3.98E-04	717	6.09E-05
383	7.40E-06	450	9.63E-04	517	4.98E-04	584	9.21E-04	651	3.88E-04	718	5.89E-05
384	6.00E-06	451	9.22E-04	518	5.10E-04	585	9.23E-04	652	3.79E-04	719	5.70E-05
385	7.30E-06	452	8.63E-04	519	5.20E-04	586	9.24E-04	653	3.69E-04	720	5.55E-05
386	6.10E-06	453	7.99E-04	520	5.30E-04	587	9.24E-04	654	3.61E-04	721	5.41E-05
387	5.10E-06	454	7.29E-04	521	5.42E-04	588	9.24E-04	655	3.51E-04	722	5.22E-05
388	6.20E-06	455	6.67E-04	522	5.51E-04	589	9.24E-04	656	3.43E-04	723	5.08E-05
389	5.90E-06	456	6.08E-04	523	5.61E-04	590	9.24E-04	657	3.34E-04	724	4.94E-05
390	7.40E-06	457	5.58E-04	524	5.71E-04	591	9.22E-04	658	3.25E-04	725	4.79E-05
391	7.70E-06	458	5.17E-04	525	5.79E-04	592	9.20E-04	659	3.18E-04	726	4.65E-05
392	5.90E-06	459	4.81E-04	526	5.88E-04	593	9.18E-04	660	3.10E-04	727	4.54E-05
393	7.30E-06	460	4.52E-04	527	5.95E-04	594	9.13E-04	661	3.01E-04	728	4.35E-05
394	7.80E-06	461	4.22E-04	528	6.00E-04	595	9.12E-04	662	2.94E-04	729	4.26E-05
395	8.10E-06	462	4.03E-04	529	6.10E-04	596	9.07E-04	663	2.86E-04	730	4.11E-05
396	8.60E-06	463	3.81E-04	530	6.16E-04	597	9.04E-04	664	2.79E-04	731	4.02E-05
397	9.70E-06	464	3.60E-04	531	6.22E-04	598	9.01E-04	665	2.72E-04	732	3.93E-05
398	1.01E-05	465	3.37E-04	532	6.27E-04	599	8.99E-04	666	2.64E-04	733	3.77E-05
399	1.12E-05	466	3.16E-04	533	6.34E-04	600	8.95E-04	667	2.57E-04	734	3.64E-05
400	1.10E-05	467	2.93E-04	534	6.41E-04	601	8.89E-04	668	2.51E-04	735	3.57E-05
401	1.24E-05	468	2.70E-04	535	6.48E-04	602	8.85E-04	669	2.44E-04	736	3.42E-05
402	1.36E-05	469	2.49E-04	536	6.52E-04	603	8.79E-04	670	2.37E-04	737	3.37E-05
403	1.47E-05	470	2.32E-04	537	6.59E-04	604	8.73E-04	671	2.30E-04	738	3.25E-05
404	1.64E-05	471	2.07E-04	538	6.64E-04	605	8.65E-04	672	2.25E-04	739	3.16E-05
405	1.72E-05	472	1.94E-04	539	6.70E-04	606	8.58E-04	673	2.18E-04	740	3.09E-05
406	1.98E-05	473	1.82E-04	540	6.76E-04	607	8.51E-04	674	2.12E-04	741	2.97E-05
407	2.20E-05	474	1.71E-04	541	6.81E-04	608	8.41E-04	675	2.07E-04	742	2.90E-05
408	2.59E-05	475	1.65E-04	542	6.87E-04	609	8.33E-04	676	2.01E-04	743	2.80E-05
409	2.84E-05	476	1.58E-04	543	6.92E-04	610	8.25E-04	677	1.95E-04	744	2.72E-05
410	3.20E-05	477	1.53E-04	544	7.00E-04	611	8.19E-04	678	1.89E-04	745	2.66E-05
411	3.57E-05	478	1.50E-04	545	7.05E-04	612	8.11E-04	679	1.84E-04	746	2.58E-05
412	4.06E-05	479	1.47E-04	546	7.10E-04	613	8.01E-04	680	1.79E-04	747	2.53E-05
413	4.48E-05	480	1.45E-04	547	7.15E-04	614	7.90E-04	681	1.74E-04	748	2.44E-05
414	5.13E-05	481	1.44E-04	548	7.19E-04	615	7.82E-04	682	1.70E-04	749	2.35E-05
415	5.77E-05	482	1.43E-04	549	7.26E-04	616	7.72E-04	683	1.64E-04	750	2.30E-05
416	6.38E-05	483	1.43E-04	550	7.32E-04	617	7.60E-04	684	1.60E-04	751	2.24E-05
417	7.25E-05	484	1.43E-04	551	7.39E-04	618	7.49E-04	685	1.55E-04	752	2.17E-05
418	8.01E-05	485	1.46E-04	552	7.44E-04	619	7.40E-04	686	1.51E-04	753	2.15E-05
419	8.77E-05	486	1.47E-04	553	7.53E-04	620	7.27E-04	687	1.46E-04	754	2.05E-05
420	9.82E-05	487	1.51E-04	554	7.57E-04	621	7.16E-04	688	1.43E-04	755	1.99E-05
421	1.09E-04	488	1.55E-04	555	7.63E-04	622	7.06E-04	689	1.39E-04	756	1.93E-05
422	1.20E-04	489	1.59E-04	556	7.71E-04	623	6.94E-04	690	1.35E-04	757	1.86E-05
423	1.32E-04	490	1.65E-04	557	7.77E-04	624	6.85E-04	691	1.31E-04	758	1.85E-05
424	1.47E-04	491	1.73E-04	558	7.84E-04	625	6.73E-04	692	1.26E-04	759	1.80E-05
425	1.61E-04	492	1.80E-04	559	7.90E-04	626	6.62E-04	693	1.23E-04	760	1.74E-05
426	1.76E-04	493	1.88E-04	560	7.95E-04	627	6.52E-04	694	1.20E-04	761	1.71E-05
427	1.94E-04	494	1.97E-04	561	8.02E-04	628	6.39E-04	695	1.16E-04	762	1.61E-05
428	2.12E-04	495	2.09E-04	562	8.09E-04	629	6.29E-04	696	1.13E-04	763	1.62E-05
429	2.33E-04	496	2.19E-04	563	8.16E-04	630	6.17E-04	697	1.10E-04	764	1.56E-05
430	2.56E-04	497	2.30E-04	564	8.21E-04	631	6.05E-04	698	1.06E-04	765	1.51E-05
431	2.76E-04	498	2.42E-04	565	8.27E-04	632	5.95E-04	699	1.04E-04	766	1.46E-05
432	3.01E-04	499	2.56E-04	566	8.36E-04	633	5.82E-04	700	1.01E-04	767	1.41E-05
433	3.25E-04	500	2.67E-04	567	8.42E-04	634	5.71E-04	701	9.71E-05	768	1.42E-05
434	3.54E-04	501	2.81E-04	568	8.47E-04	635	5.59E-04	702	9.40E-05	769	1.33E-05
435	3.82E-04	502	2.93E-04	569	8.55E-04	636	5.47E-04	703	9.15E-05	770	1.31E-05
436	4.18E-04	503	3.08E-04	570	8.63E-04	637	5.35E-04	704	8.90E-05	771	1.29E-05
437	4.53E-04	504	3.22E-04	571	8.66E-04	638	5.25E-04	705	8.60E-05	772	1.25E-05
438	4.95E-04	505	3.35E-04	572	8.71E-04	639	5.15E-04	706	8.40E-05	773	1.20E-05
439	5.42E-04	506	3.51E-04	573	8.76E-04	640	5.03E-04	707	8.11E-05	774	1.16E-05
440	5.93E-04	507	3.65E-04	574	8.81E-04	641	4.90E-04	708	7.94E-05	775	1.13E-05
441	6.53E-04	508	3.79E-04	575	8.85E-04	642	4.78E-04	709	7.66E-05	776	1.13E-05
442	7.12E-04	509	3.95E-04	576	8.91E-04	643	4.69E-04	710	7.48E-05	777	1.08E-05
443	7.75E-04	510	4.07E-04	577	8.97E-04	644	4.58E-04	711	7.20E-05	778	1.04E-05
444	8.38E-04	511	4.21E-04	578	9.02E-04	645	4.49E-04	712	7.00E-05	779	1.03E-05
445	8.93E-04	512	4.34E-04	579	9.07E-04	646	4.39E-04	713	6.83E-05	780	1.03E-05
446	9.45E-04	513	4.47E-04	580	9.10E-04	647	4.27E-04	714	6.61E-05	N/A	N/A

IES TM-30-18 Color Rendition Result (CCT Setting=5000K):

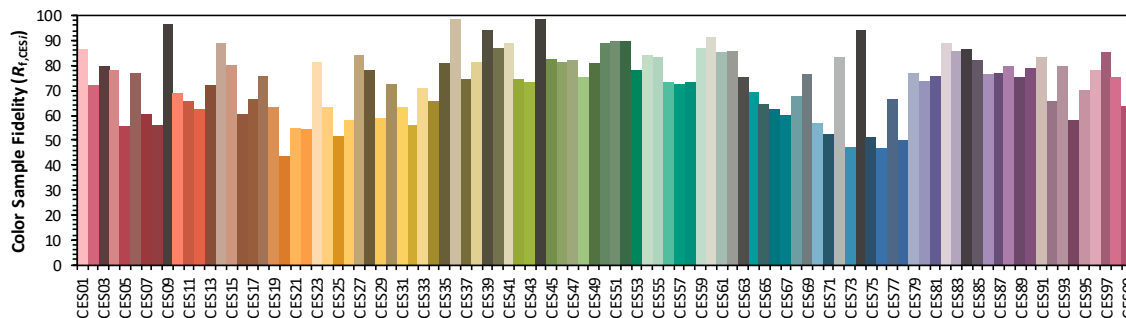
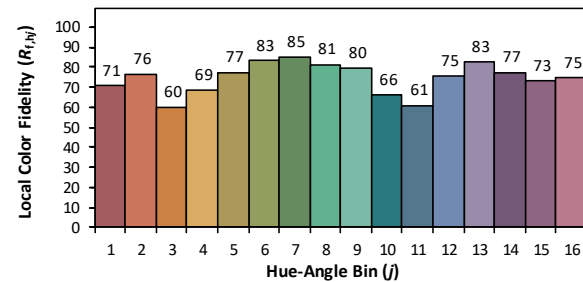
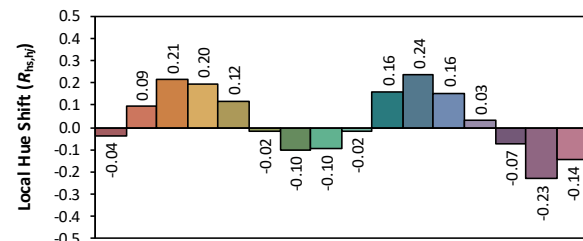
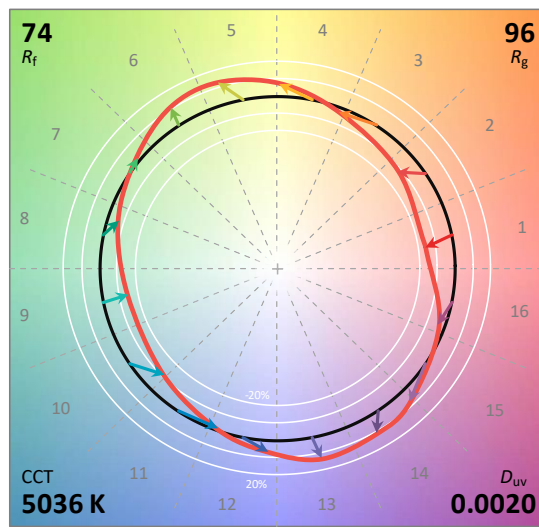
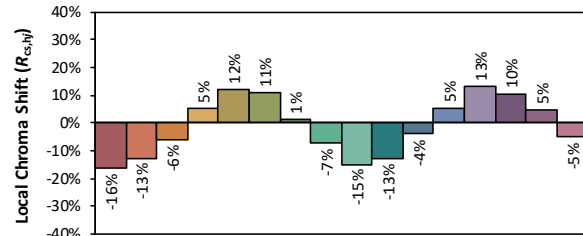
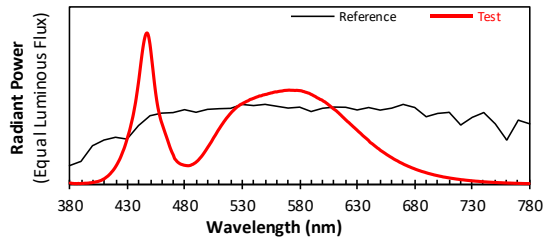
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: Reno LED Lighting Inc

Date: 2024/1/24

Model: RENO-SB-240W-MW-DV-MCCT-G2-R3



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

x 0.3445
 y 0.3552
 u' 0.2096
 v' 0.4863

CIE 13.3-1995
(CRI)

R_a 73
 R_g -27

Spectrum Data (CCT Setting=5000K):

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	1.01E-05	447	9.99E-04	514	4.14E-04	581	6.18E-04	648	2.40E-04	715	3.84E-05
381	9.20E-06	448	9.86E-04	515	4.24E-04	582	6.17E-04	649	2.36E-04	716	3.73E-05
382	7.60E-06	449	9.50E-04	516	4.35E-04	583	6.14E-04	650	2.29E-04	717	3.62E-05
383	7.30E-06	450	8.97E-04	517	4.44E-04	584	6.12E-04	651	2.23E-04	718	3.53E-05
384	6.30E-06	451	8.31E-04	518	4.53E-04	585	6.09E-04	652	2.18E-04	719	3.43E-05
385	7.10E-06	452	7.65E-04	519	4.63E-04	586	6.07E-04	653	2.13E-04	720	3.33E-05
386	5.80E-06	453	6.96E-04	520	4.71E-04	587	6.04E-04	654	2.08E-04	721	3.20E-05
387	7.80E-06	454	6.32E-04	521	4.80E-04	588	6.02E-04	655	2.03E-04	722	3.15E-05
388	6.50E-06	455	5.76E-04	522	4.87E-04	589	5.99E-04	656	1.98E-04	723	3.08E-05
389	6.60E-06	456	5.27E-04	523	4.94E-04	590	5.94E-04	657	1.93E-04	724	2.97E-05
390	8.00E-06	457	4.88E-04	524	5.01E-04	591	5.91E-04	658	1.88E-04	725	2.89E-05
391	7.60E-06	458	4.55E-04	525	5.08E-04	592	5.86E-04	659	1.83E-04	726	2.80E-05
392	8.30E-06	459	4.25E-04	526	5.15E-04	593	5.83E-04	660	1.79E-04	727	2.74E-05
393	9.00E-06	460	4.02E-04	527	5.19E-04	594	5.79E-04	661	1.74E-04	728	2.65E-05
394	8.90E-06	461	3.79E-04	528	5.25E-04	595	5.73E-04	662	1.69E-04	729	2.58E-05
395	9.40E-06	462	3.57E-04	529	5.30E-04	596	5.70E-04	663	1.65E-04	730	2.47E-05
396	9.90E-06	463	3.34E-04	530	5.33E-04	597	5.66E-04	664	1.61E-04	731	2.42E-05
397	1.15E-05	464	3.13E-04	531	5.38E-04	598	5.61E-04	665	1.57E-04	732	2.37E-05
398	1.18E-05	465	2.91E-04	532	5.41E-04	599	5.59E-04	666	1.53E-04	733	2.28E-05
399	1.30E-05	466	2.67E-04	533	5.45E-04	600	5.54E-04	667	1.48E-04	734	2.23E-05
400	1.42E-05	467	2.45E-04	534	5.49E-04	601	5.48E-04	668	1.45E-04	735	2.18E-05
401	1.54E-05	468	2.26E-04	535	5.52E-04	602	5.45E-04	669	1.41E-04	736	2.13E-05
402	1.73E-05	469	2.08E-04	536	5.56E-04	603	5.39E-04	670	1.37E-04	737	2.04E-05
403	1.88E-05	470	1.92E-04	537	5.61E-04	604	5.33E-04	671	1.33E-04	738	1.98E-05
404	2.01E-05	471	1.72E-04	538	5.63E-04	605	5.27E-04	672	1.30E-04	739	1.90E-05
405	2.25E-05	472	1.63E-04	539	5.66E-04	606	5.21E-04	673	1.26E-04	740	1.88E-05
406	2.51E-05	473	1.53E-04	540	5.69E-04	607	5.15E-04	674	1.23E-04	741	1.81E-05
407	2.77E-05	474	1.46E-04	541	5.72E-04	608	5.09E-04	675	1.20E-04	742	1.77E-05
408	3.21E-05	475	1.41E-04	542	5.75E-04	609	5.02E-04	676	1.17E-04	743	1.73E-05
409	3.62E-05	476	1.36E-04	543	5.78E-04	610	4.97E-04	677	1.13E-04	744	1.66E-05
410	4.01E-05	477	1.33E-04	544	5.80E-04	611	4.91E-04	678	1.10E-04	745	1.62E-05
411	4.61E-05	478	1.31E-04	545	5.84E-04	612	4.86E-04	679	1.07E-04	746	1.57E-05
412	5.16E-05	479	1.28E-04	546	5.84E-04	613	4.79E-04	680	1.05E-04	747	1.53E-05
413	5.75E-05	480	1.27E-04	547	5.87E-04	614	4.72E-04	681	1.01E-04	748	1.49E-05
414	6.49E-05	481	1.25E-04	548	5.90E-04	615	4.65E-04	682	9.84E-05	749	1.44E-05
415	7.24E-05	482	1.25E-04	549	5.91E-04	616	4.58E-04	683	9.58E-05	750	1.43E-05
416	8.17E-05	483	1.24E-04	550	5.94E-04	617	4.50E-04	684	9.31E-05	751	1.39E-05
417	9.01E-05	484	1.25E-04	551	5.94E-04	618	4.43E-04	685	9.07E-05	752	1.35E-05
418	9.99E-05	485	1.27E-04	552	5.97E-04	619	4.35E-04	686	8.79E-05	753	1.30E-05
419	1.11E-04	486	1.31E-04	553	6.00E-04	620	4.28E-04	687	8.56E-05	754	1.26E-05
420	1.23E-04	487	1.34E-04	554	6.01E-04	621	4.21E-04	688	8.36E-05	755	1.24E-05
421	1.36E-04	488	1.39E-04	555	6.04E-04	622	4.14E-04	689	8.14E-05	756	1.21E-05
422	1.51E-04	489	1.43E-04	556	6.05E-04	623	4.08E-04	690	7.88E-05	757	1.16E-05
423	1.65E-04	490	1.50E-04	557	6.07E-04	624	4.01E-04	691	7.66E-05	758	1.12E-05
424	1.82E-04	491	1.56E-04	558	6.09E-04	625	3.94E-04	692	7.42E-05	759	1.10E-05
425	2.01E-04	492	1.64E-04	559	6.11E-04	626	3.87E-04	693	7.22E-05	760	1.08E-05
426	2.20E-04	493	1.73E-04	560	6.11E-04	627	3.80E-04	694	7.04E-05	761	1.04E-05
427	2.39E-04	494	1.81E-04	561	6.12E-04	628	3.73E-04	695	6.82E-05	762	9.90E-06
428	2.61E-04	495	1.91E-04	562	6.14E-04	629	3.66E-04	696	6.65E-05	763	1.00E-05
429	2.86E-04	496	2.01E-04	563	6.15E-04	630	3.59E-04	697	6.42E-05	764	9.80E-06
430	3.12E-04	497	2.12E-04	564	6.16E-04	631	3.52E-04	698	6.26E-05	765	9.20E-06
431	3.37E-04	498	2.23E-04	565	6.17E-04	632	3.45E-04	699	6.08E-05	766	9.20E-06
432	3.64E-04	499	2.35E-04	566	6.19E-04	633	3.39E-04	700	5.92E-05	767	8.60E-06
433	3.95E-04	500	2.47E-04	567	6.20E-04	634	3.31E-04	701	5.75E-05	768	8.70E-06
434	4.27E-04	501	2.58E-04	568	6.21E-04	635	3.24E-04	702	5.58E-05	769	8.40E-06
435	4.62E-04	502	2.70E-04	569	6.21E-04	636	3.17E-04	703	5.42E-05	770	8.30E-06
436	5.03E-04	503	2.81E-04	570	6.22E-04	637	3.11E-04	704	5.28E-05	771	7.90E-06
437	5.44E-04	504	2.95E-04	571	6.22E-04	638	3.05E-04	705	5.07E-05	772	7.60E-06
438	5.94E-04	505	3.08E-04	572	6.21E-04	639	2.98E-04	706	4.95E-05	773	7.50E-06
439	6.46E-04	506	3.20E-04	573	6.21E-04	640	2.91E-04	707	4.83E-05	774	7.20E-06
440	7.02E-04	507	3.32E-04	574	6.21E-04	641	2.82E-04	708	4.69E-05	775	7.00E-06
441	7.64E-04	508	3.45E-04	575	6.21E-04	642	2.75E-04	709	4.57E-05	776	6.80E-06
442	8.24E-04	509	3.57E-04	576	6.20E-04	643	2.70E-04	710	4.44E-05	777	6.70E-06
443	8.81E-04	510	3.69E-04	577	6.21E-04	644	2.65E-04	711	4.29E-05	778	6.60E-06
444	9.30E-04	511	3.81E-04	578	6.21E-04	645	2.58E-04	712	4.19E-05	779	6.50E-06
445	9.68E-04	512	3.92E-04	579	6.20E-04	646	2.52E-04	713	4.07E-05	780	6.50E-06
446	9.92E-04	513	4.03E-04	580	6.19E-04	647	2.46E-04	714	3.97E-05	N/A	N/A

Goniophotometer Test Results:

Test Condition:

Test Ambient (°C)	Test Humidity (%)	Orientation	Stabilization Time (minute)	Test Time (minute)
24.8	41.9	Face Down	90	25

Electrical Data:

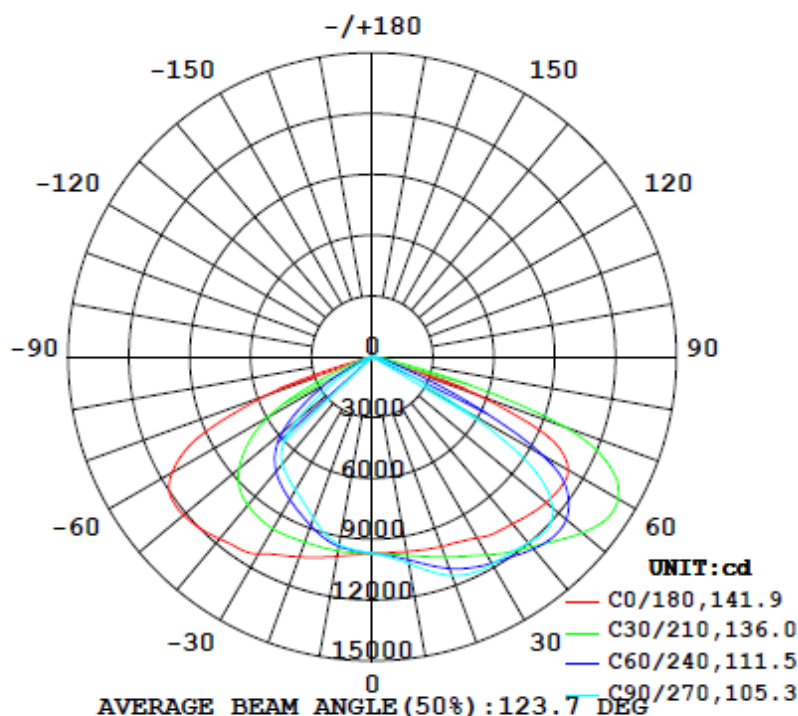
Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor
120.0	60	2.0622	247.00	0.9981

Goniophotometer Data:

Parameter	Results		
	3000K	4000K	5000K
Total Luminous (lm)	38324.6	41466.4	40209.3
Luminous Efficacy (lm/W)	155.16	174.79	162.38
Zonal Lumens Distribution (0-90°)	100.0%	100.0%	100.0%
Zonal Lumens Distribution (80-90°)	0.4%	0.4%	0.4%
Beam Angle (°)	123.7	123.8	123.7
BUG	B5-U0-G3	B5-U0-G3	B5-U0-G3

Luminous Intensity Distribution Diagram (CCT Setting=3000K):

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

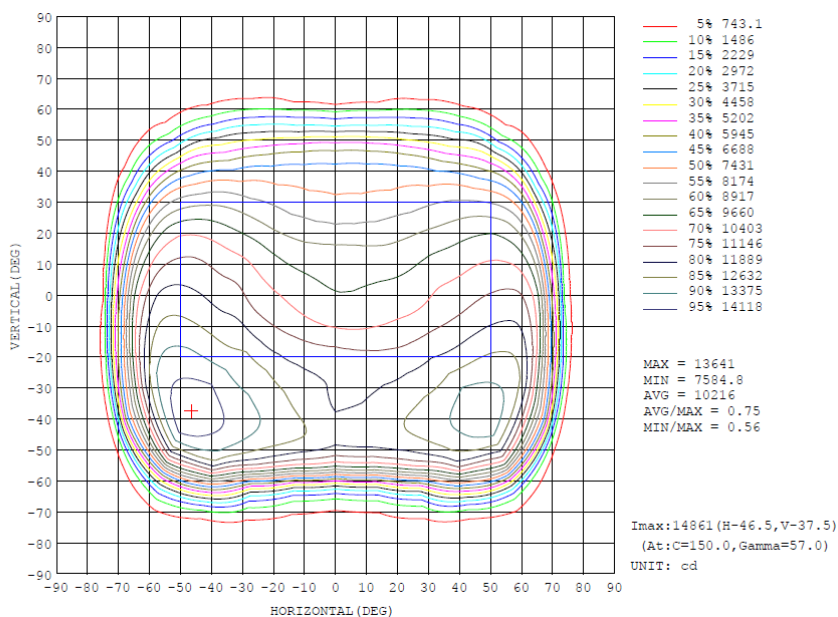


Zonal Flux Diagram (CCT Setting=3000K):

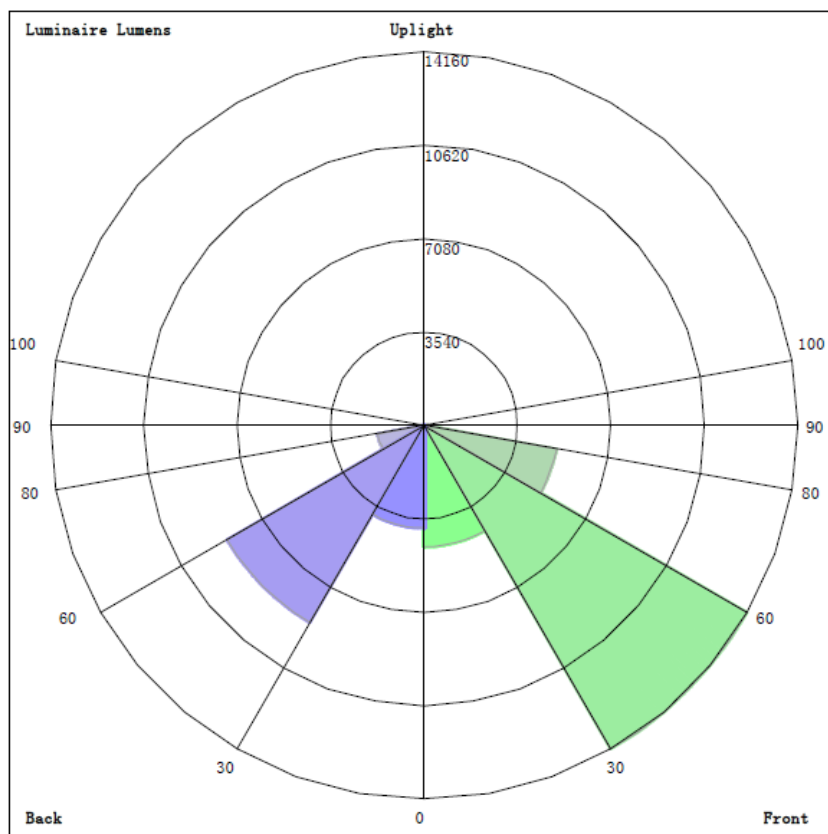
ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	975.6	1005	1036	1030	999.2	959.3	940.2	951.4	0~ 10	934.4	934.4	2.44,2.44
20	995.8	1082	1147	1127	1051	927.1	847.8	904.5	10~ 20	2838	3772	9.84,9.84
30	1032	1161	1182	1235	1123	884.8	758.5	847.7	20~ 30	4718	8490	22.2,22.2
40	1077	1241	1197	1326	1172	822.3	691.2	787.3	30~ 40	6520	15010	39.2,39.2
50	1119	1316	1162	1395	1215	675.8	488.8	666.8	40~ 50	8038	23048	60.1,60.1
60	1115	1254	519.6	1329	1140	372.7	118.0	358.5	50~ 60	8235	31283	81.6,81.6
70	565.5	561.3	68.02	589.8	559.0	62.55	45.57	58.80	60~ 70	5490	36773	96,96
80	30.07	38.77	36.22	38.44	29.58	17.40	19.05	17.21	70~ 80	1396	38169	99.6,99.6
90	0	0	0	0	0	0	0	0	80~ 90	155.8	38325	100,100
100	0	0	0	0	0	0	0	0	90~100	0	38325	100,100
110	0	0	0	0	0	0	0	0	100~110	0	38325	100,100
120	0	0	0	0	0	0	0	0	110~120	0	38325	100,100
130	0	0	0	0	0	0	0	0	120~130	0	38325	100,100
140	0	0	0	0	0	0	0	0	130~140	0	38325	100,100
150	0	0	0	0	0	0	0	0	140~150	0	38325	100,100
160	0	0	0	0	0	0	0	0	150~160	0	38325	100,100
170	0	0	0	0	0	0	0	0	160~170	0	38325	100,100
180	0	0	0	0	0	0	0	0	170~180	0	38325	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Isocandela Diagram (CCT Setting=3000K):



BUG Rating (CCT Setting=3000K):



LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	4606.2	N.A.	12.0
FM - Front-Medium (30-60)	14159.8	N.A.	36.9
FH - Front-High (60-80)	5095.9	N.A.	13.3
FVH - Front-Very High (80-90)	113.8	N.A.	0.3
BL - Back-Low (0-30)	3884.0	N.A.	10.1
BM - Back-Medium (30-60)	8632.7	N.A.	22.5
BH - Back-High (60-80)	1790.1	N.A.	4.7
BVH - Back-Very High (80-90)	42.0	N.A.	0.1
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	38324.5	N.A.	100.0
BUG Rating	B5-U0-G3		

Luminous Distribution Intensity Data (CCT Setting=3000K):

Table--1

UNIT: $\times 10\text{cd}$

C (DEG) y (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969
5	969	973	977	981	986	989	992	994	994	992	989	985	980	975	970	965	961	958	956
10	976	984	994	1005	1017	1027	1036	1037	1036	1030	1022	1011	999	986	972	959	949	943	940
15	985	1002	1019	1040	1063	1082	1094	1095	1089	1078	1063	1045	1025	999	972	946	924	910	903
20	996	1023	1051	1082	1111	1134	1147	1147	1140	1127	1105	1080	1051	1016	973	927	888	861	848
25	1008	1045	1085	1122	1149	1166	1175	1183	1185	1176	1151	1116	1079	1036	977	907	849	813	798
30	1032	1077	1129	1161	1176	1178	1182	1202	1226	1235	1217	1171	1123	1067	981	885	814	775	758
35	1060	1114	1176	1199	1203	1187	1182	1219	1264	1287	1274	1215	1153	1079	972	859	779	741	726
40	1077	1148	1222	1241	1236	1207	1197	1248	1300	1326	1316	1250	1172	1087	956	822	739	702	691
45	1100	1195	1283	1283	1259	1227	1211	1270	1321	1364	1376	1296	1199	1091	925	765	679	640	628
50	1119	1242	1351	1316	1249	1189	1162	1226	1308	1395	1437	1338	1215	1072	859	676	580	514	489
55	1131	1279	1404	1312	1177	1042	979	1073	1236	1393	1482	1366	1211	1010	749	543	422	321	280
60	1115	1298	1401	1254	971	636	520	657	1017	1329	1470	1354	1140	878	593	373	256	167	118
65	987	1205	1299	1053	499	234	180	240	513	1108	1336	1194	954	630	323	182	104	55.9	52.0
70	566	891	1011	561	178	84.8	68.0	90.5	194	590	968	845	559	268	102	62.6	51.9	46.2	45.6
75	87.7	324	355	147	67.0	49.7	46.3	51.5	72.0	157	328	303	64.9	54.8	38.6	35.9	38.1	36.5	35.9
80	30.1	37.9	63.8	38.8	40.8	33.7	36.2	35.5	43.5	38.4	56.9	37.2	29.6	28.5	17.3	17.4	19.8	21.5	19.1
85	10.7	14.4	25.9	23.0	20.7	22.2	24.7	24.8	23.5	22.6	18.8	14.3	12.1	8.18	6.01	5.13	5.27	4.79	2.82
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table--2

UNIT: $\times 10\text{cd}$

C (DEG) y (DEG)	295	300	315	330	345														
0	969	969	969	969	969														
5	957	958	960	963	966														
10	942	945	951	959	967														
15	908	918	933	950	968														
20	856	876	905	937	967														
25	806	832	876	929	973														
30	767	795	848	921	988														
35	734	762	820	909	999														
40	701	727	787	889	1000														
45	645	680	742	862	1002														
50	520	583	667	813	993														
55	320	409	533	720	956														
60	165	246	359	580	866														
65	54.5	99.0	180	324	655														
70	45.5	49.6	58.8	88.3	247														
75	36.4	37.1	36.6	38.9	55.4														
80	21.8	19.8	17.2	17.0	30.5														
85	4.97	5.08	4.84	5.55	7.60														
90	0.00	0.00	0.00	0.00	0.00														
95	0.00	0.00	0.00	0.00	0.00														
100	0.00	0.00	0.00	0.00	0.00														
105	0.00	0.00	0.00	0.00	0.00														
110	0.00	0.00	0.00	0.00	0.00														
115	0.00	0.00	0.00	0.00	0.00														
120	0.00	0.00	0.00	0.00	0.00														
125	0.00	0.00	0.00	0.00	0.00														
130	0.00	0.00	0.00	0.00	0.00														
135	0.00	0.00	0.00	0.00	0.00														
140	0.00	0.00	0.00	0.00	0.00														
145	0.00	0.00	0.00	0.00	0.00														
150	0.00	0.00	0.00	0.00	0.00														
155	0.00	0.00	0.00	0.00	0.00														
160	0.00	0.00	0.00	0.00	0.00														
165	0.00	0.00	0.00	0.00	0.00														
170	0.00	0.00	0.00	0.00	0.00														
175	0.00	0.00	0.00	0.00	0.00														
180	0.00	0.00	0.00	0.00	0.00														

THD and PF Measurement Test Results:

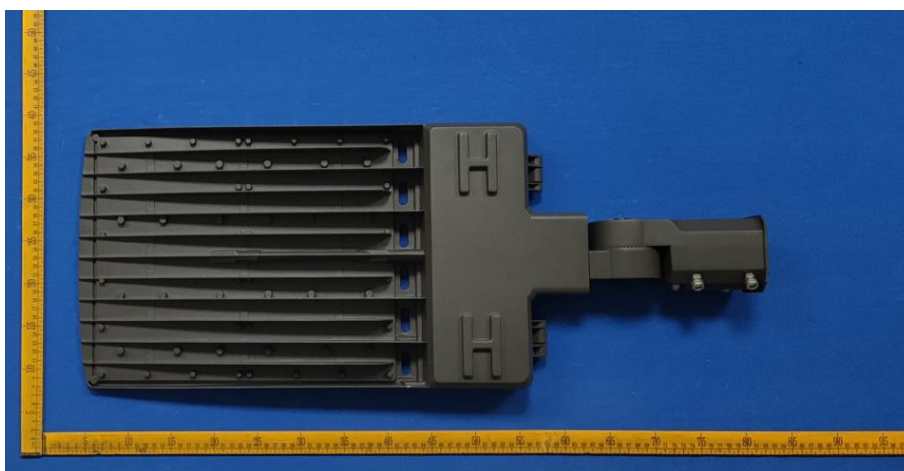
Electrical Measurement:

CCT Setting	Voltage (V)	Frequency (Hz)	Current (A)	Wattage (W)	Power Factor	iTHD(%)
3000K	120.0	60	2.0623	247.00	0.9981	5.82
	277.0	60	0.8997	242.80	0.9742	7.26
	347.0	60	0.7378	241.90	0.9449	9.52
4000K	120.0	60	1.9810	237.24	0.9980	5.93
	277.0	60	0.8609	231.90	0.9725	7.97
	347.0	60	0.7079	231.30	0.9416	10.55
5000K	120.0	60	2.0674	247.62	0.9981	5.87
	277.0	60	0.8976	242.20	0.9741	7.80
	347.0	60	0.7359	241.40	0.9453	10.10

Annex:

ANSI CCT Quadrangle (omit any outside product range)/Worst-Case Value	Actual CCT (K)	Power Consumption (W)	Lumen Output (lm)	Efficacy (lm/W)	Input Control Signal Applied
3000K	3059	247.00	38324.6	155.16	Set Switch 0% to 3000K
4000K	3838	237.24	41466.4	174.79	Set Switch 50% to 4000K
5000K	5033	247.62	40209.3	162.38	Set Switch 100% to 5000K
Lowest Efficacy	155.16 lm/W (@3000K)				
Maximum Power	247.62 W				

Photo of Sample:



Equipment List:

Equipment ID	Equipment Name	Last Cal.	Due Cal.
NTC-F01-001	Goniophotometer System	2023-11-08	2024-11-07
NTC-F01-006	2.0 meter Integrating Sphere	2023-11-08	2024-11-07
NTC-F01-012	Standard Lamp	2023-11-02	2024-11-01
NTC-F01-013	Standard Lamp	2023-11-02	2024-11-01
NTC-F01-031	Digital Power Meter	2023-08-25	2024-08-24
NTC-F01-020	Temperature & Humidity Meter	2023-11-06	2024-11-05

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