Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P636519

Luminaire Tested: GWS-SA3F-830-U-T3-W

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P636519
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-23)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3F-830-U-T3-W
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19436.5 lumens
Efficiency:	N/A
Efficacy:	106.1 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G3

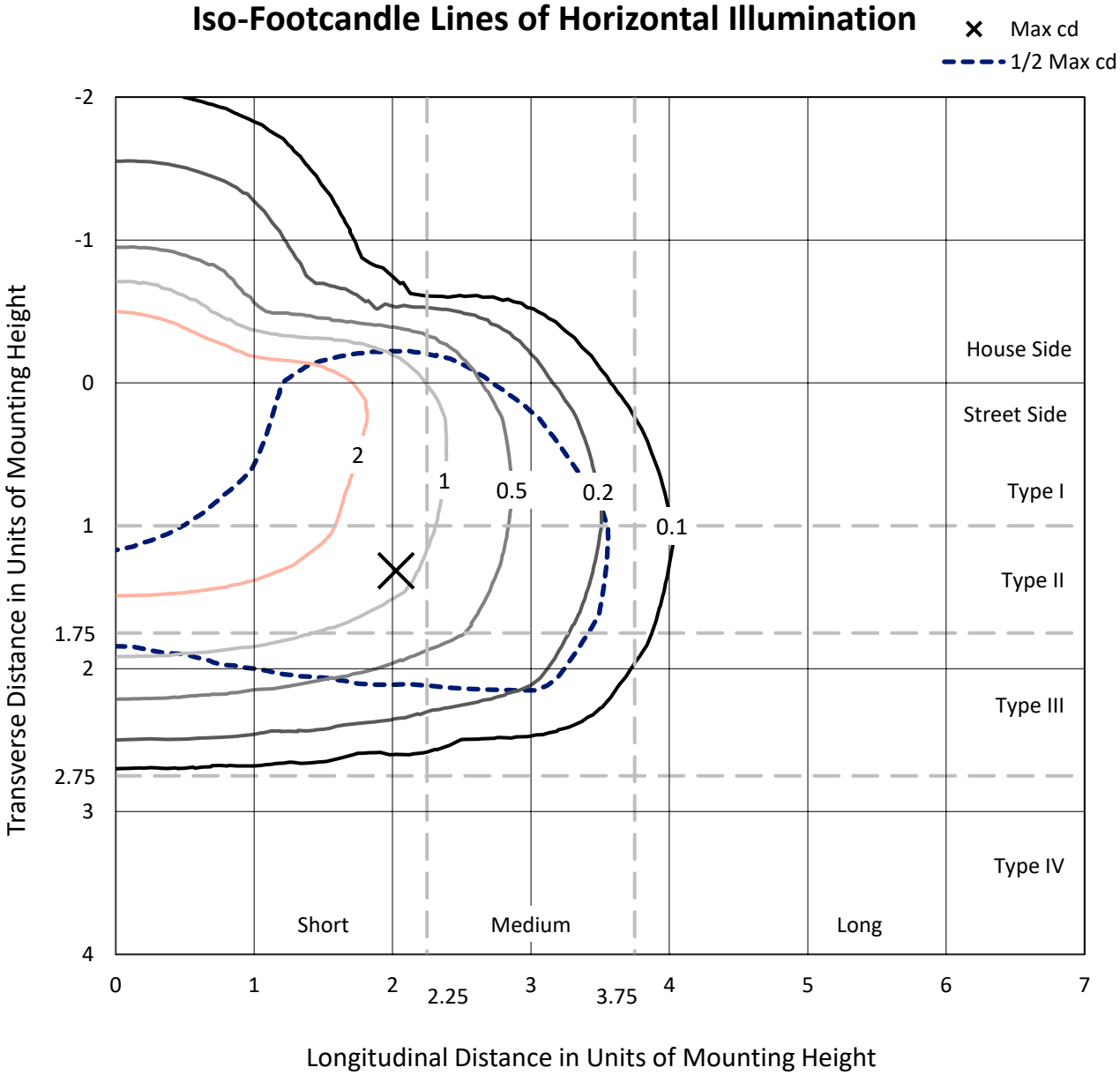
Input Watts (W):	183.2
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P636519
CATALOG NUMBER: GWS-SA3F-830-U-T3-W

Iso-Footcandle Lines of Horizontal Illumination



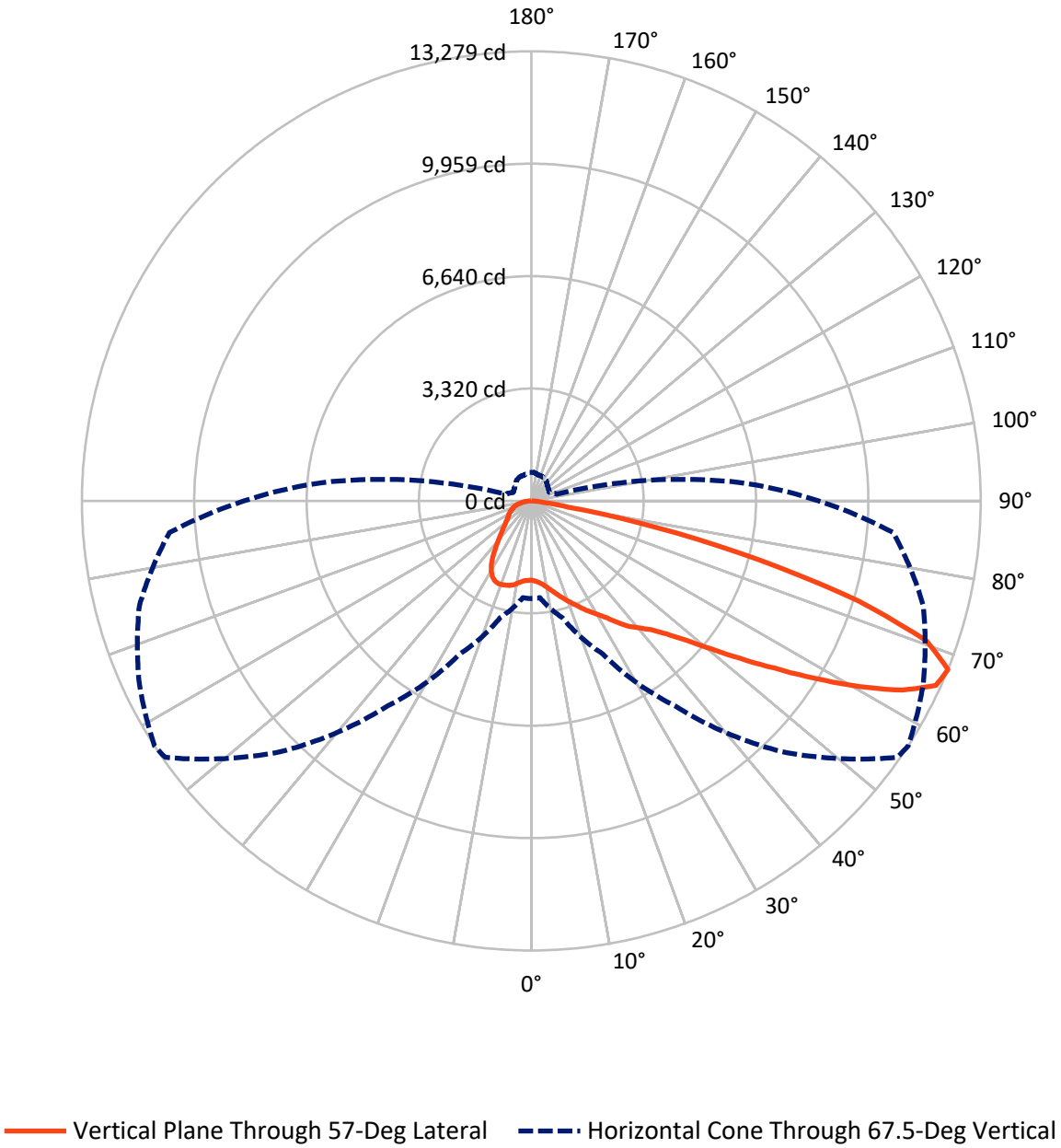
Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
Type III - Short - N/A

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P636519
CATALOG NUMBER: GWS-SA3F-830-U-T3-W

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

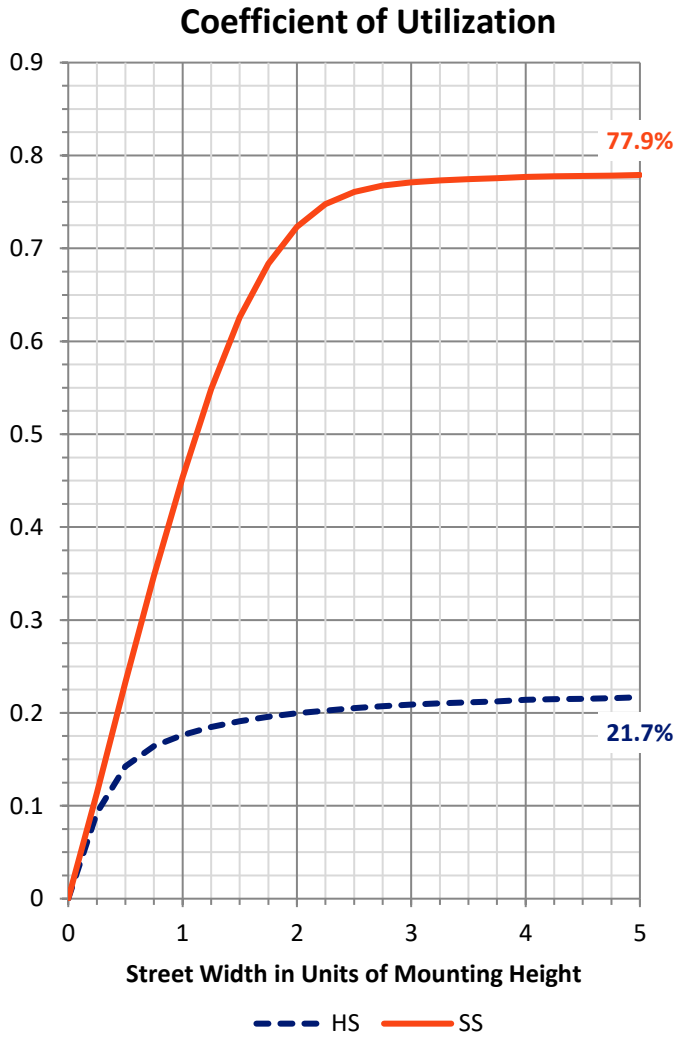
REPORT NUMBER: P636519
CATALOG NUMBER: GWS-SA3F-830-U-T3-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4273.3	0.0	4273.3
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	15163.1	0.0	15163.1
	% Fixture	78.0	0.0	78.0
Total	Lumens	19436.5	0.0	19436.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.3	1.2
10°-20°	768.9	4.0
20°-30°	1370.9	7.1
30°-40°	1993.1	10.3
40°-50°	2884.7	14.8
50°-60°	4514.4	23.2
60°-70°	5266.4	27.1
70°-80°	2198.4	11.3
80°-90°	207.5	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	19436.5	100.0
0°-180°	19436.5	100.0



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

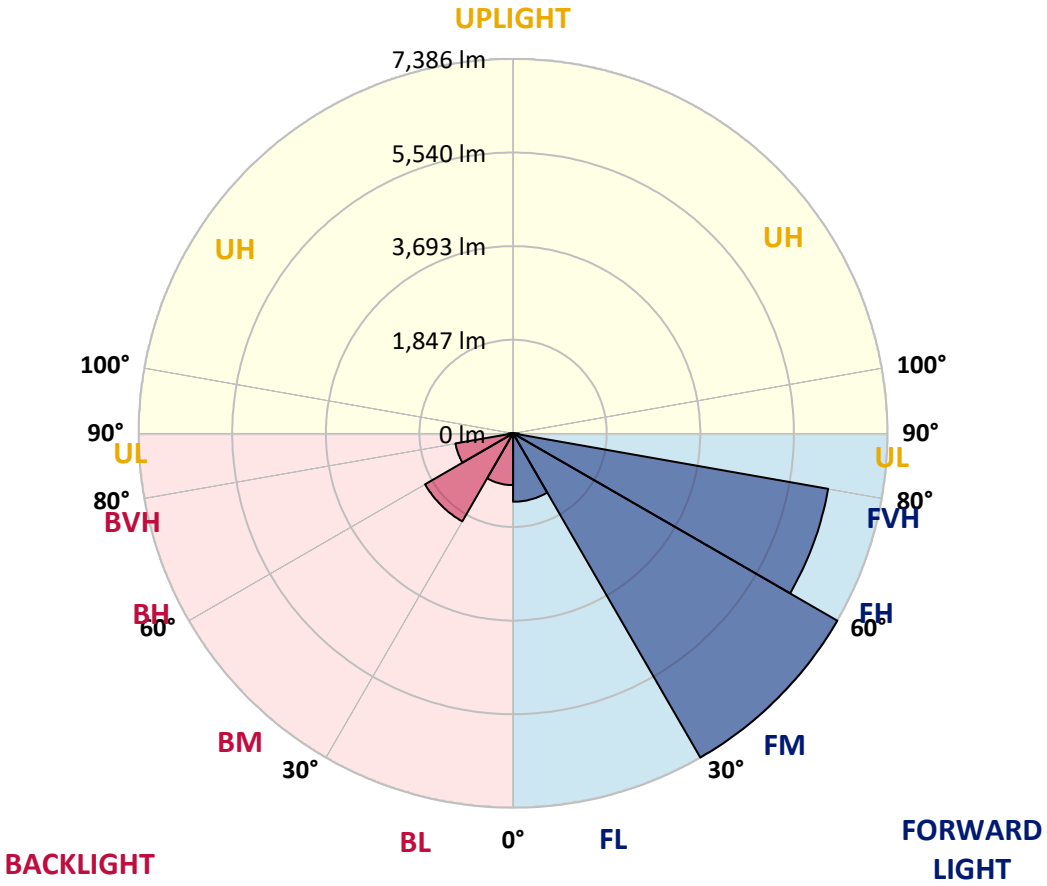
Scaled Data Report

REPORT NUMBER: P636519
CATALOG NUMBER: GWS-SA3F-830-U-T3-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1350.1	6.9			
FM	(30°-60°)	7386.1	38.0			
FH	(60°-80°)	6311.4	32.5			G3/7500
FVH	(80°-90°)	115.6	0.6			G2/225
BL	(0°-30°)	1022.0	5.3	B3/2500		
BM	(30°-60°)	2006.0	10.3	B2/2500		
BH	(60°-80°)	1153.4	5.9	B3/2500		G3/2500
BVH	(80°-90°)	91.9	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type III Short



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P636519
CATALOG NUMBER: GWS-SA3F-830-U-T3-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0
2.5°	2375.4	2372.6	2371.2	2379.6	2376.8	2375.4	2375.4	2374.0	2371.2	2360.1	2344.8
5°	2440.8	2435.3	2429.7	2436.6	2431.1	2425.5	2424.1	2421.3	2411.6	2394.9	2371.2
7.5°	2509.1	2503.5	2504.9	2509.1	2504.9	2502.1	2497.9	2495.1	2479.8	2453.4	2421.3
10°	2605.1	2605.1	2607.9	2612.1	2613.5	2609.3	2600.9	2596.8	2578.7	2545.3	2500.7
12.5°	2744.4	2741.6	2741.6	2738.8	2743.0	2738.8	2730.4	2723.5	2701.2	2658.0	2594.0
15°	2928.2	2917.0	2907.3	2889.2	2883.6	2868.3	2871.1	2866.9	2846.0	2787.5	2706.8
17.5°	3124.5	3123.1	3107.8	3071.6	3035.4	3010.3	3015.9	3014.5	3003.3	2924.0	2820.9
20°	3297.1	3304.1	3290.2	3262.3	3213.6	3166.2	3163.5	3170.4	3156.5	3077.1	2933.7
22.5°	3490.7	3485.1	3471.2	3435.0	3398.8	3348.6	3331.9	3326.4	3320.8	3230.3	3049.3
25°	3674.5	3691.2	3673.1	3639.7	3584.0	3529.7	3515.7	3521.3	3506.0	3386.2	3173.2
27.5°	3907.0	3914.0	3902.8	3856.9	3809.5	3732.9	3706.5	3706.5	3700.9	3532.4	3270.7
30°	4154.8	4174.3	4154.8	4117.2	4068.5	3958.5	3901.4	3895.9	3879.1	3682.8	3384.9
32.5°	4404.1	4418.0	4404.1	4367.9	4312.2	4216.1	4133.9	4121.4	4099.1	3847.1	3501.8
35°	4625.5	4638.0	4635.2	4643.6	4597.6	4476.5	4426.3	4420.8	4362.3	4061.5	3660.5
37.5°	4867.7	4883.0	4862.2	4878.9	4860.8	4746.6	4731.3	4703.4	4619.9	4263.4	3827.6
40°	5143.4	5157.3	5123.9	5130.9	5110.0	5045.9	4968.0	4930.4	4806.5	4482.0	4090.8
42.5°	5438.6	5470.6	5485.9	5473.4	5424.7	5388.5	5252.0	5204.7	5101.6	4876.1	4523.8
45°	5866.1	5913.4	5935.7	5903.6	5882.8	5831.2	5664.2	5607.1	5552.8	5431.6	5128.1
47.5°	6326.9	6370.1	6441.1	6455.0	6471.7	6432.7	6197.4	6141.7	6151.5	6137.6	5871.6
50°	6694.5	6730.7	6890.8	7062.1	7204.1	7215.3	6914.5	6854.6	6907.5	6952.1	6766.9
52.5°	6961.8	6993.9	7205.5	7559.2	7880.8	8118.9	7794.5	7726.3	7769.4	7869.7	7784.7
55°	7179.1	7223.6	7445.0	7988.0	8638.3	9014.2	8806.7	8720.4	8702.3	8826.2	8875.0
57.5°	7293.2	7307.2	7617.7	8323.6	9193.8	9892.8	9983.3	9885.8	9713.2	9781.4	10034.8
60°	7032.9	7056.5	7481.2	8409.9	9632.4	10764.4	11218.3	11137.6	10770.0	10807.6	11087.4
62.5°	6313.0	6346.4	6857.4	7999.2	9668.6	11346.4	12358.7	12307.2	11814.3	11611.0	11694.5
65°	5064.0	5075.2	5604.3	6982.7	8948.8	11418.8	13153.7	13141.2	12543.9	12067.7	11709.8
67.5°	2887.8	2868.3	3575.6	4980.5	7385.1	10477.6	13205.2	13279.0	12780.6	11992.5	10735.2
70°	1251.7	1254.5	1580.3	2457.5	4780.0	8468.4	12265.4	12392.1	12095.5	10740.7	8540.8
72.5°	579.2	587.6	728.2	1063.8	2041.2	5253.4	10001.4	10115.6	9860.8	8596.5	6214.1
75°	409.4	416.3	485.9	609.9	938.5	2046.8	6690.3	6929.8	7053.7	6430.0	4095.0
77.5°	310.5	320.2	355.1	423.3	579.2	725.4	3201.1	3771.9	4493.2	4000.3	2109.4
80°	197.7	197.7	235.3	282.7	353.7	377.3	924.5	1095.8	2198.6	1648.6	828.5
82.5°	133.7	137.8	160.1	179.6	203.3	214.4	396.8	423.3	634.9	561.1	341.1
85°	71.0	73.8	83.5	82.1	97.5	84.9	167.1	165.7	232.5	254.8	129.5
87.5°	0.0	0.0	1.4	1.4	2.8	4.2	18.1	19.5	48.7	78.0	43.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P636519
CATALOG NUMBER: GWS-SA3F-830-U-T3-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0	2342.0
2.5°	2353.1	2336.4	2344.8	2342.0	2350.3	2350.3	2335.0	2330.8	2332.2	2315.5	2309.9
5°	2374.0	2354.5	2358.7	2353.1	2361.5	2368.4	2361.5	2361.5	2369.8	2357.3	2350.3
7.5°	2421.3	2399.1	2399.1	2392.1	2401.8	2407.4	2401.8	2410.2	2425.5	2413.0	2406.0
10°	2496.5	2470.1	2471.5	2463.1	2467.3	2464.5	2442.2	2435.3	2439.4	2428.3	2422.7
12.5°	2594.0	2557.8	2557.8	2541.1	2531.3	2502.1	2456.1	2439.4	2442.2	2432.5	2428.3
15°	2687.3	2653.9	2646.9	2613.5	2568.9	2514.6	2472.8	2461.7	2464.5	2454.7	2447.8
17.5°	2797.3	2754.1	2729.0	2667.8	2585.6	2529.9	2488.2	2461.7	2439.4	2417.2	2411.6
20°	2898.9	2844.6	2798.7	2704.0	2603.7	2527.2	2449.2	2383.7	2329.4	2300.2	2293.2
22.5°	3003.3	2933.7	2853.0	2729.0	2602.3	2477.0	2333.6	2234.8	2154.0	2110.8	2119.2
25°	3102.2	3014.5	2904.5	2752.7	2557.8	2365.6	2170.7	2023.1	1931.2	1897.8	1888.1
27.5°	3184.3	3075.7	2951.8	2741.6	2465.9	2205.5	1947.9	1783.6	1694.5	1656.9	1647.2
30°	3276.2	3153.7	3020.0	2690.1	2321.1	1981.3	1695.9	1562.2	1498.2	1462.0	1463.4
32.5°	3382.1	3254.0	3116.1	2591.2	2135.9	1739.1	1488.4	1396.5	1345.0	1308.8	1303.3
35°	3524.1	3397.4	3180.2	2442.2	1900.6	1516.3	1346.4	1271.2	1207.2	1159.8	1150.1
37.5°	3699.5	3613.2	3187.1	2243.1	1648.6	1363.1	1244.8	1164.0	1086.0	1023.4	1016.4
40°	4000.3	3901.4	3130.0	1993.9	1434.1	1264.3	1159.8	1066.6	976.1	906.4	896.7
42.5°	4429.1	4225.8	3007.5	1712.6	1272.6	1186.3	1079.1	960.7	868.8	820.1	813.1
45°	4974.9	4587.9	2823.7	1448.1	1152.9	1109.7	994.2	870.2	821.5	786.7	779.7
47.5°	5643.3	5009.7	2612.1	1242.0	1059.6	1040.1	907.8	839.6	796.4	767.2	760.2
50°	6442.5	5547.2	2438.0	1080.5	976.1	959.3	880.0	821.5	786.7	763.0	757.4
52.5°	7354.5	6144.5	2353.1	964.9	903.6	886.9	870.2	817.3	788.1	770.0	763.0
55°	8301.3	6773.9	2273.7	875.8	842.4	852.1	871.6	831.2	809.0	785.3	778.3
57.5°	9216.1	7364.2	2078.8	806.2	797.8	835.4	878.6	845.2	818.7	795.0	786.7
60°	9846.8	7687.3	1748.8	750.5	764.4	814.5	860.5	824.3	790.9	781.1	776.9
62.5°	10016.7	7648.3	1357.6	693.4	724.0	768.6	813.1	789.5	754.7	770.0	771.4
65°	9619.9	7230.6	1019.2	637.7	671.1	708.7	764.4	754.7	742.1	783.9	785.3
67.5°	*8496.2*	*6204.4*	*776.9*	*589.0*	*616.8*	*662.8*	*749.1*	*789.5*	*792.3*	*845.2*	*839.6*
70°	6428.6	4635.2	608.5	543.0	575.0	662.8	797.8	815.9	782.5	831.2	820.1
72.5°	4444.4	3059.0	518.0	502.6	523.5	632.1	796.4	796.4	760.2	760.2	739.3
75°	2761.1	1798.9	451.1	451.1	451.1	552.8	774.2	733.8	669.7	640.5	623.8
77.5°	1363.1	874.4	378.7	392.6	377.3	462.3	632.1	600.1	561.1	530.5	519.4
80°	582.0	437.2	306.3	321.6	303.5	348.1	501.3	494.3	456.7	416.3	403.8
82.5°	267.3	225.6	245.1	252.0	221.4	261.8	366.2	366.2	345.3	289.6	268.7
85°	114.2	119.7	169.9	169.9	139.2	147.6	196.3	186.6	167.1	136.5	125.3
87.5°	39.0	58.5	86.3	75.2	29.2	12.5	7.0	2.8	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

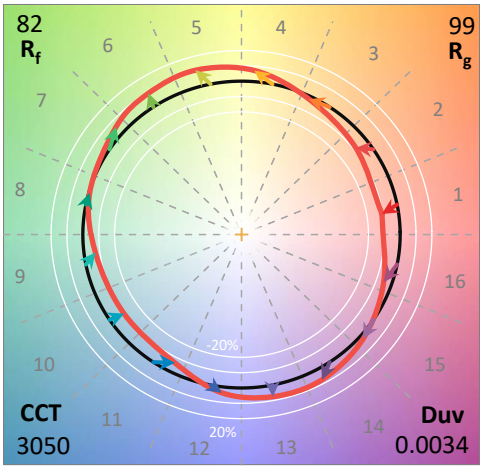
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2408-195-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	08/07/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**GALN-SB1A-830-U-5WQ**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K):	3050	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

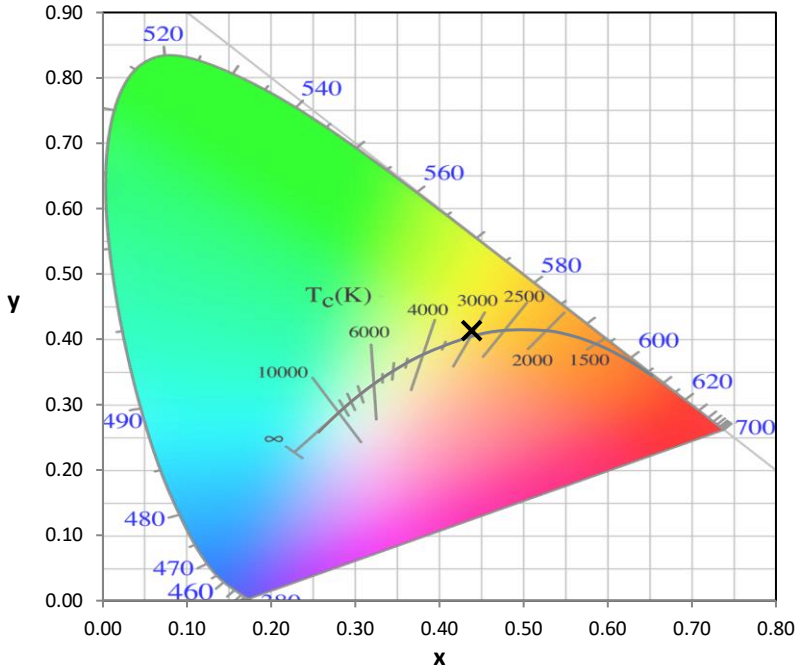
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

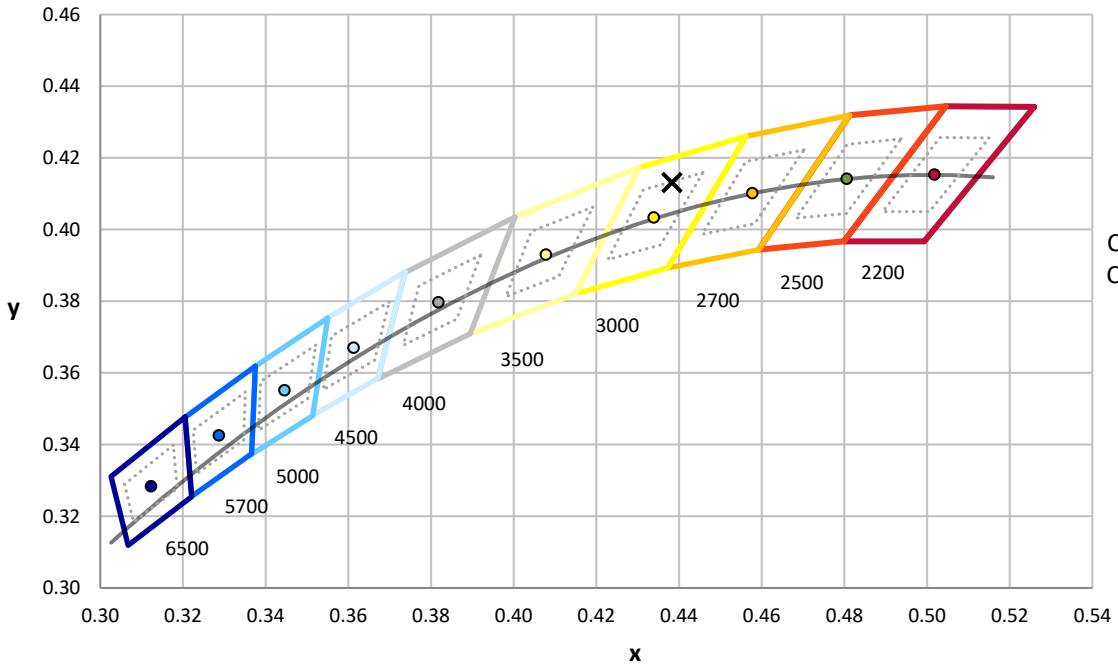
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

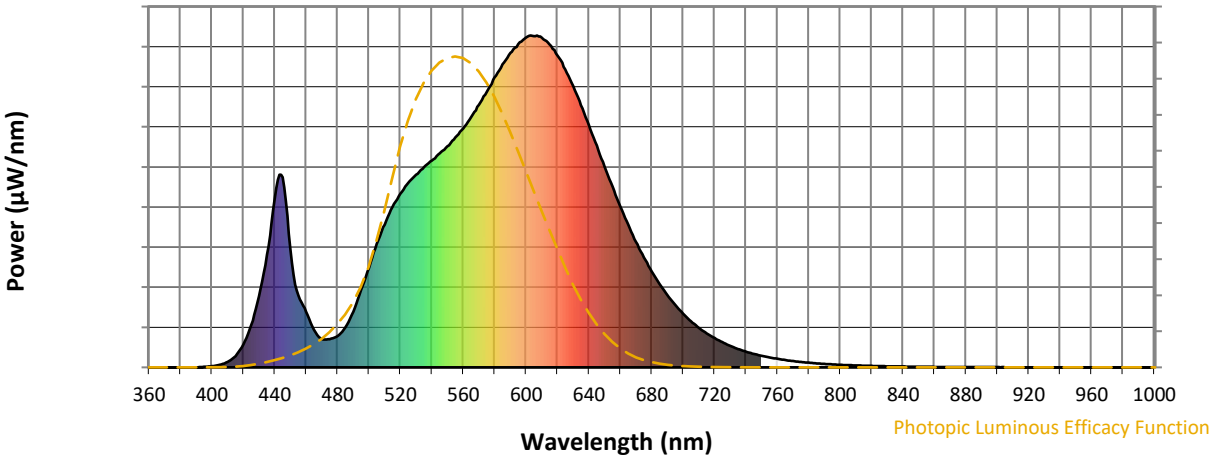


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

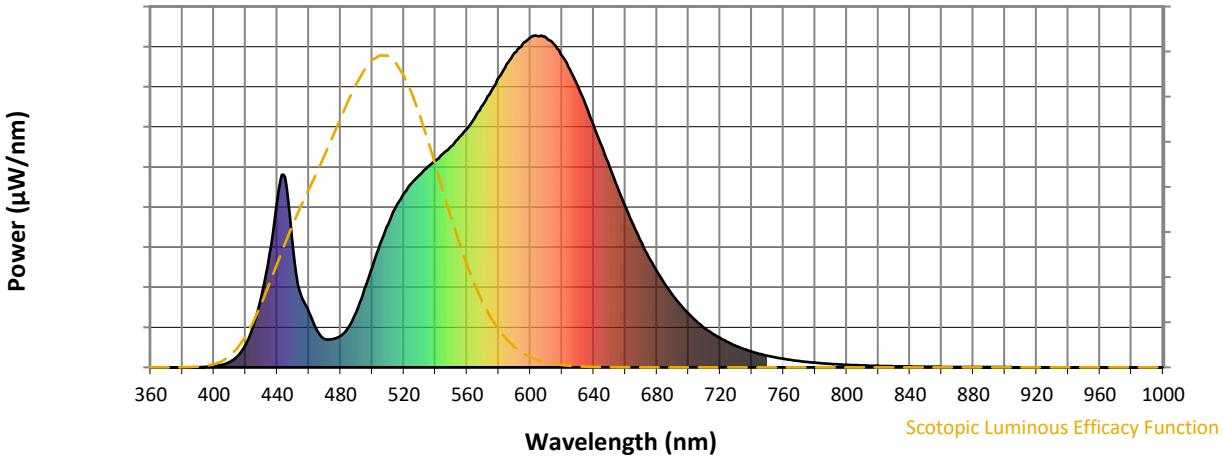


Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength

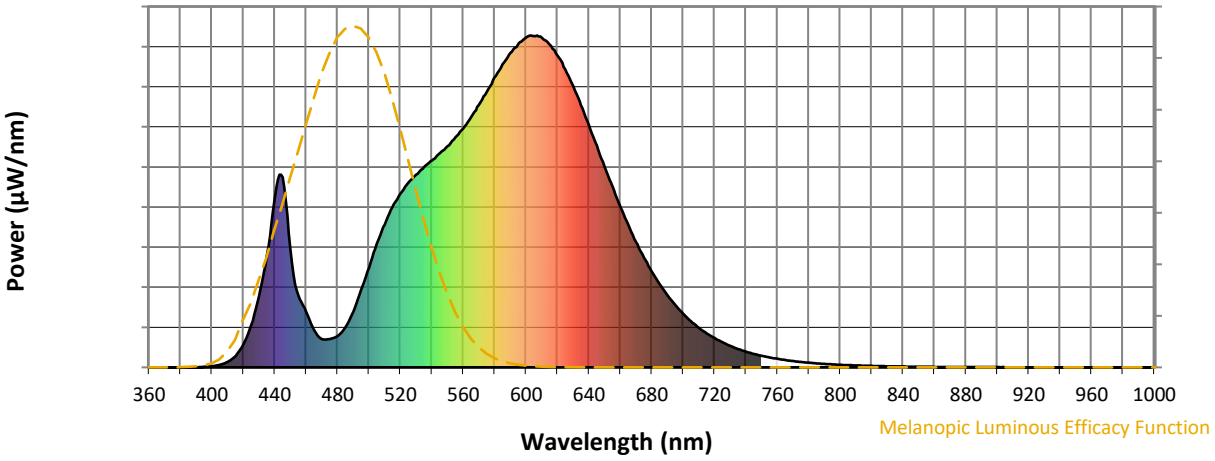


Scotopic Lumens: NR **S/P: 1.27**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

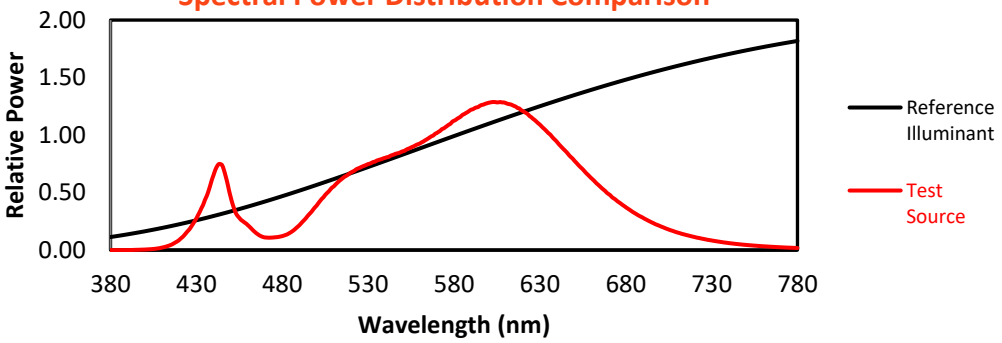
REPORT NUMBER: SP1-2408-195-9

TM-30-18

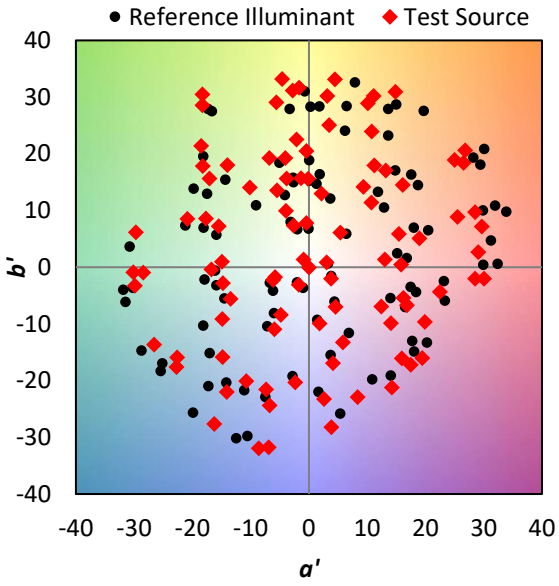
Summary

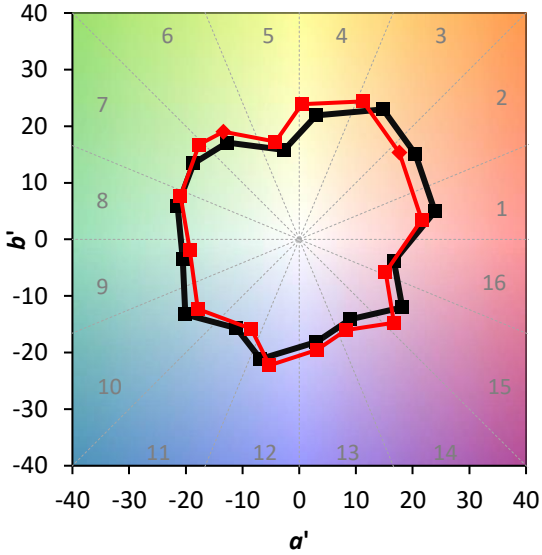
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

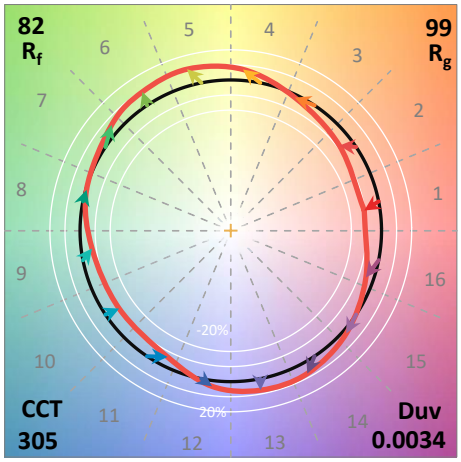
Spectral Power Distribution Comparison

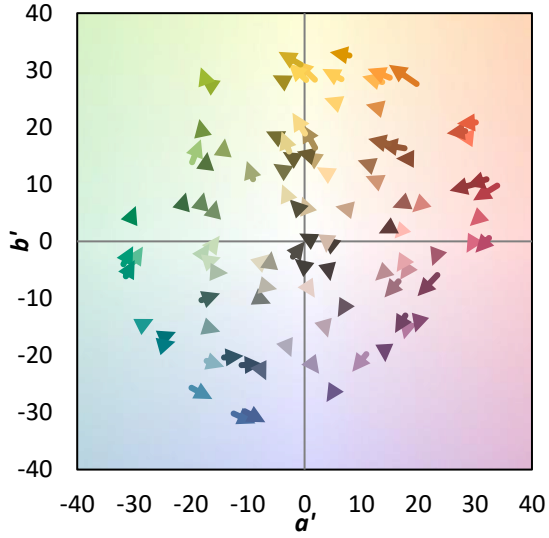


Color Vector Graphics







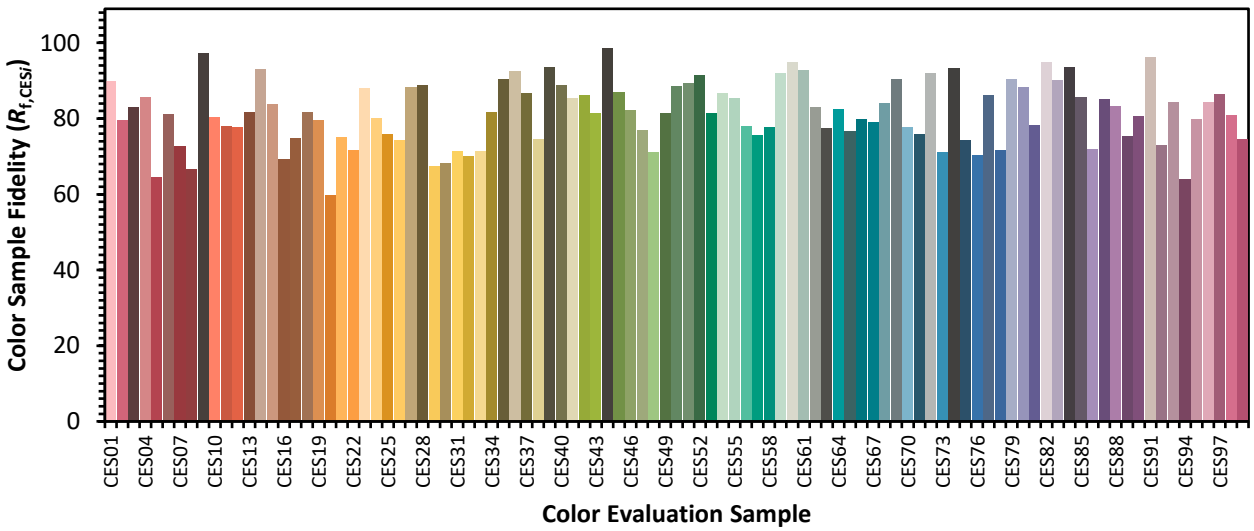


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Individual Sample Fidelity Index ($R_{f,i}$)

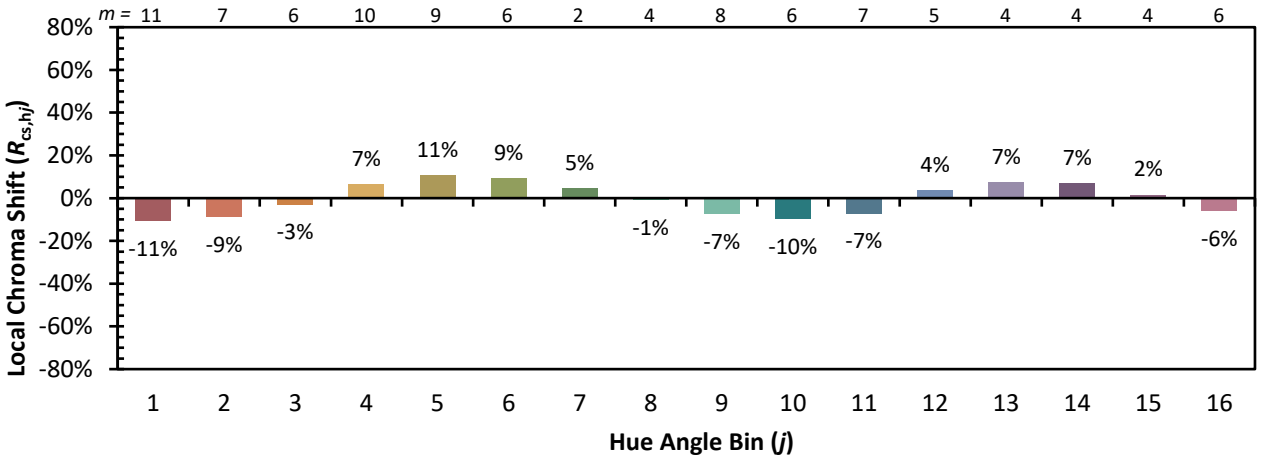
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	

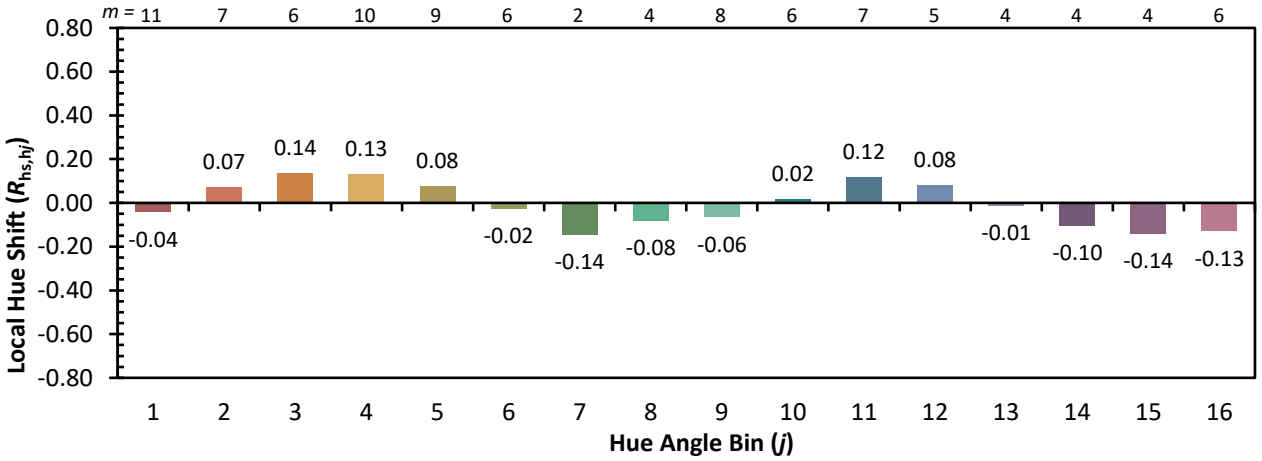


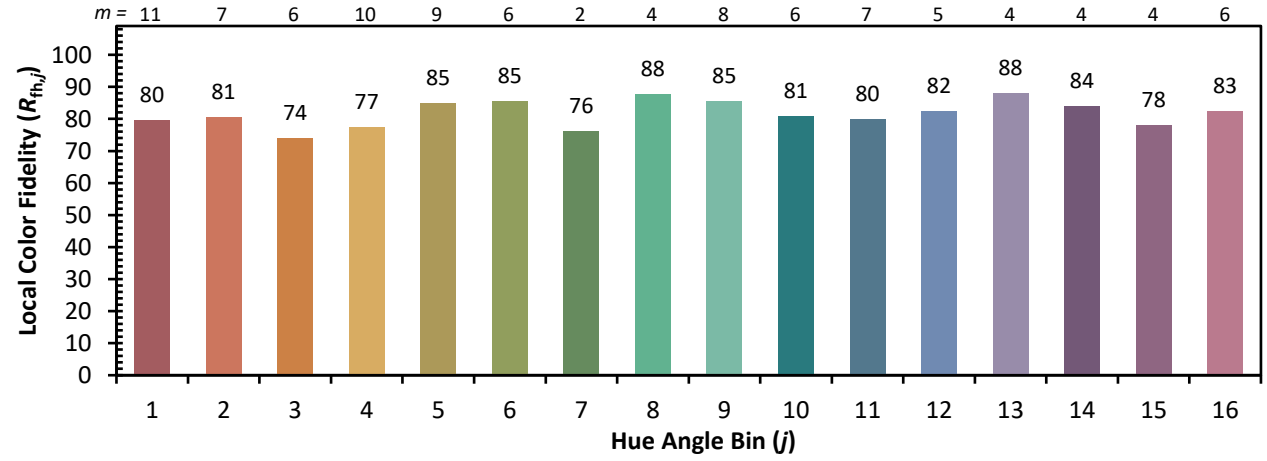
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



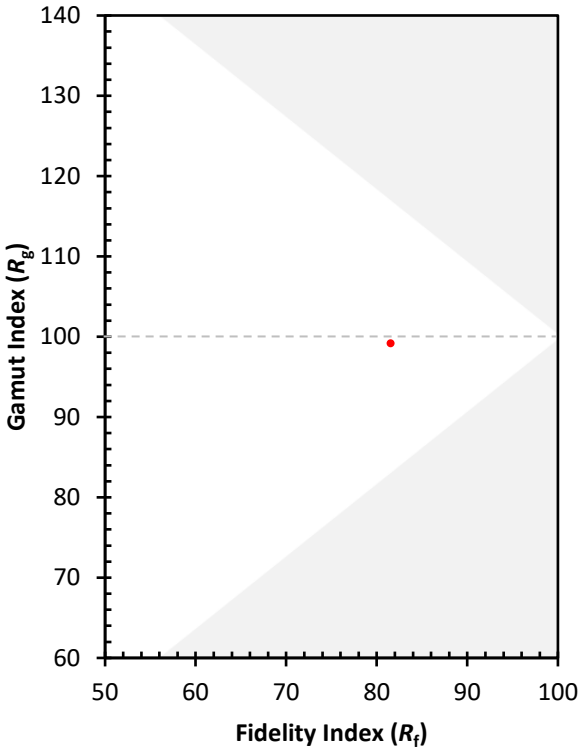


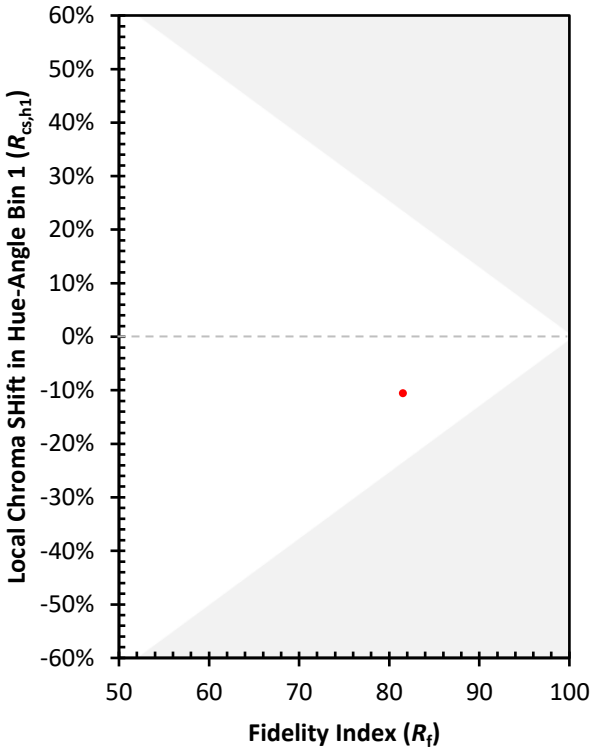


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)