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: P643438

Luminaire Tested: GWS-SA6E-830-U-T2-W-GRSBK

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:	P643438
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-20)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA6E-830-U-T2-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(96) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	21122.9 lumens
Efficiency:	N/A
Efficacy:	65.2 lumens/watt
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G2

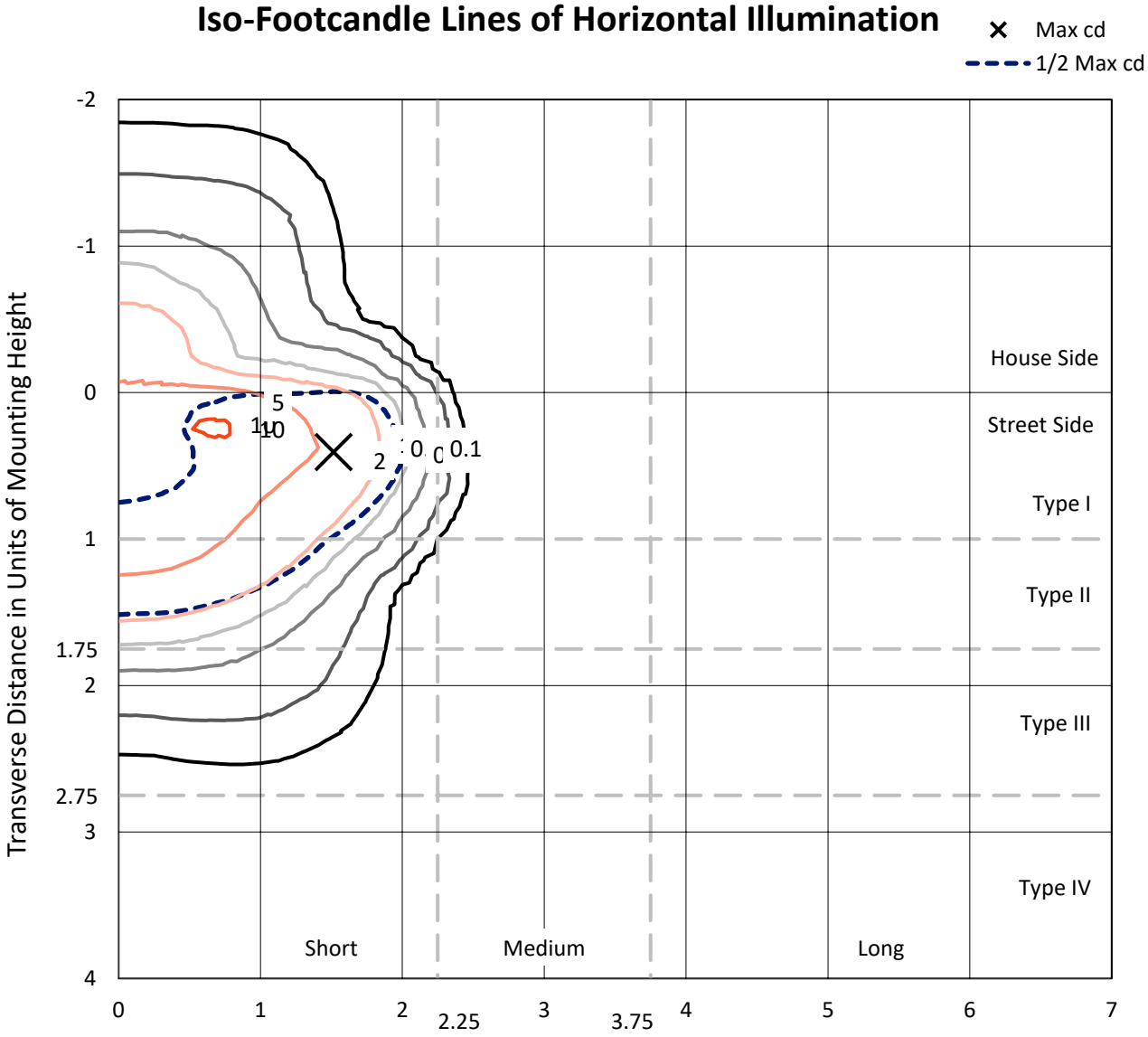
Input Watts (W):	323.8
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P643438
CATALOG NUMBER: GWS-SA6E-830-U-T2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



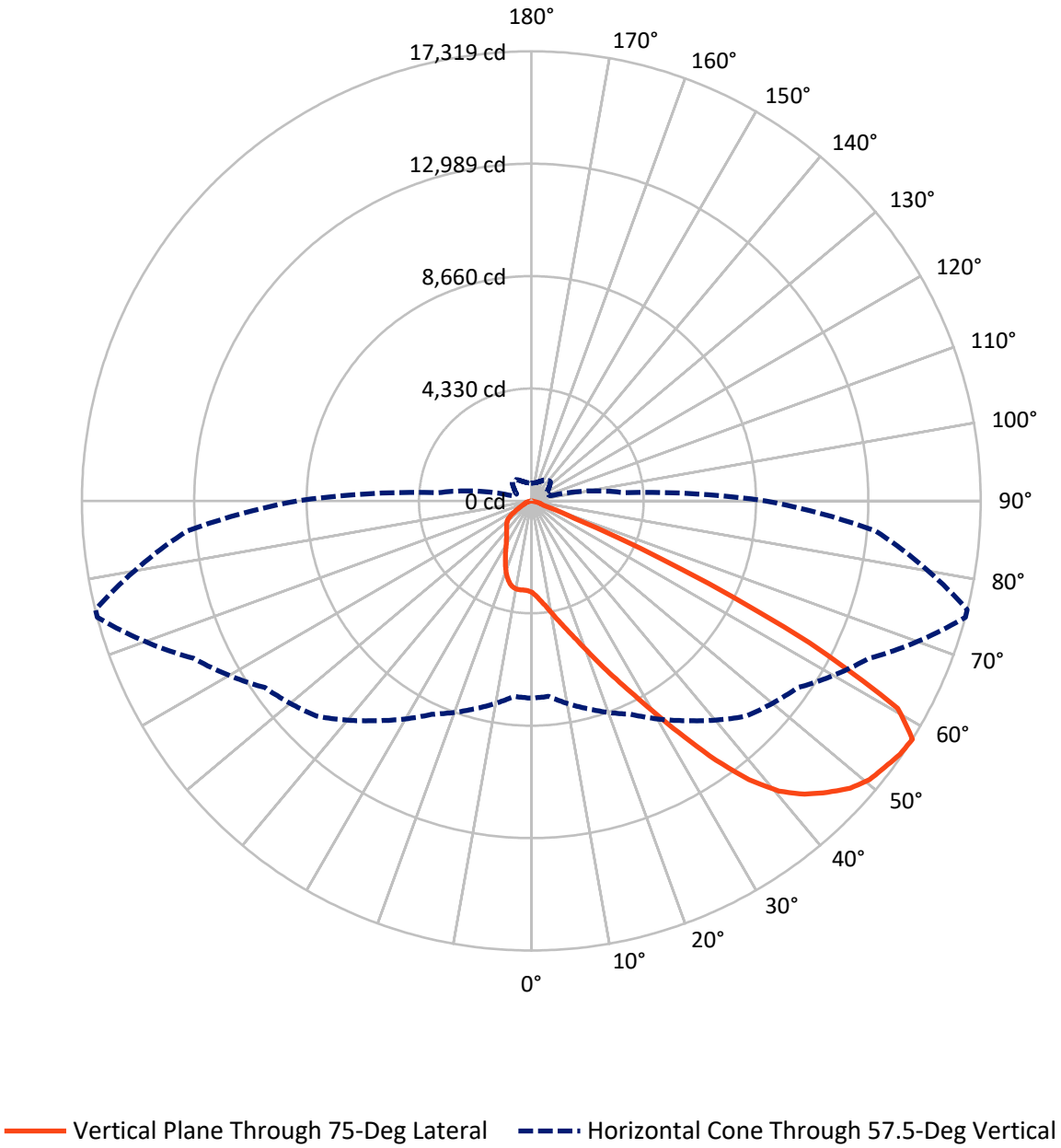
Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P643438
CATALOG NUMBER: GWS-SA6E-830-U-T2-W-GRSBK

Luminous Intensity Polar Plot



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

Scaled Data Report

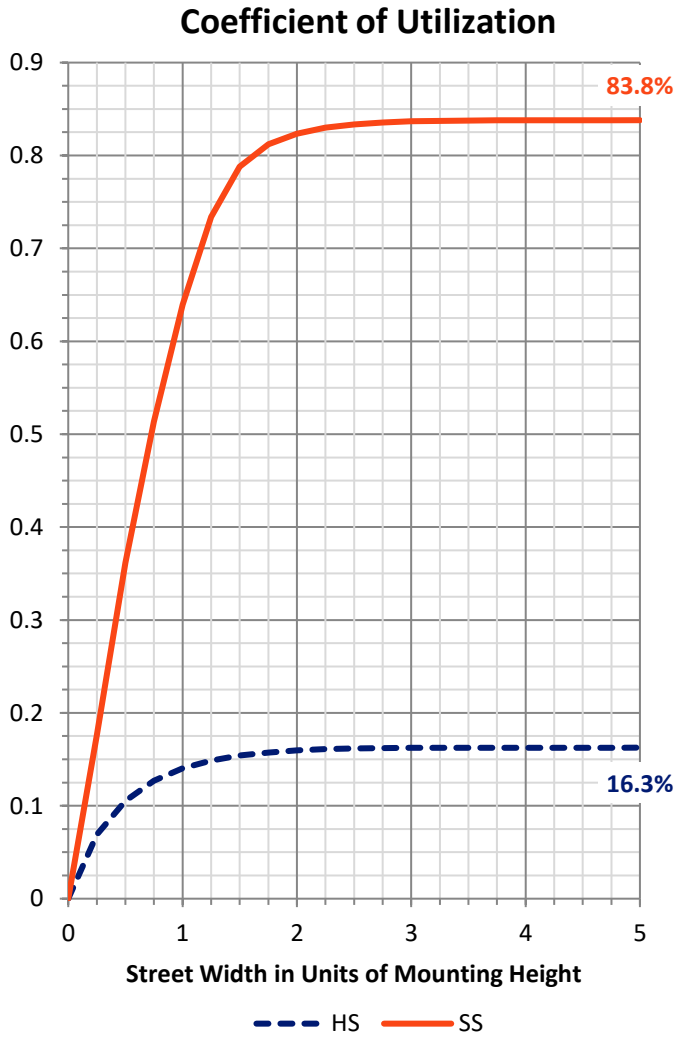
REPORT NUMBER: P643438
CATALOG NUMBER: GWS-SA6E-830-U-T2-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3450.4	0.0	3450.4
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	17672.5	0.0	17672.5
	% Fixture	83.7	0.0	83.7
Total	Lumens	21122.9	0.0	21122.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	358.5	1.7
10°-20°	1164.6	5.5
20°-30°	2132.6	10.1
30°-40°	3538.1	16.8
40°-50°	5403.6	25.6
50°-60°	6071.8	28.7
60°-70°	2239.6	10.6
70°-80°	214.1	1.0
80°-90°	0.2	0.0
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°	21122.9	100.0
0°-180°	21122.9	100.0



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

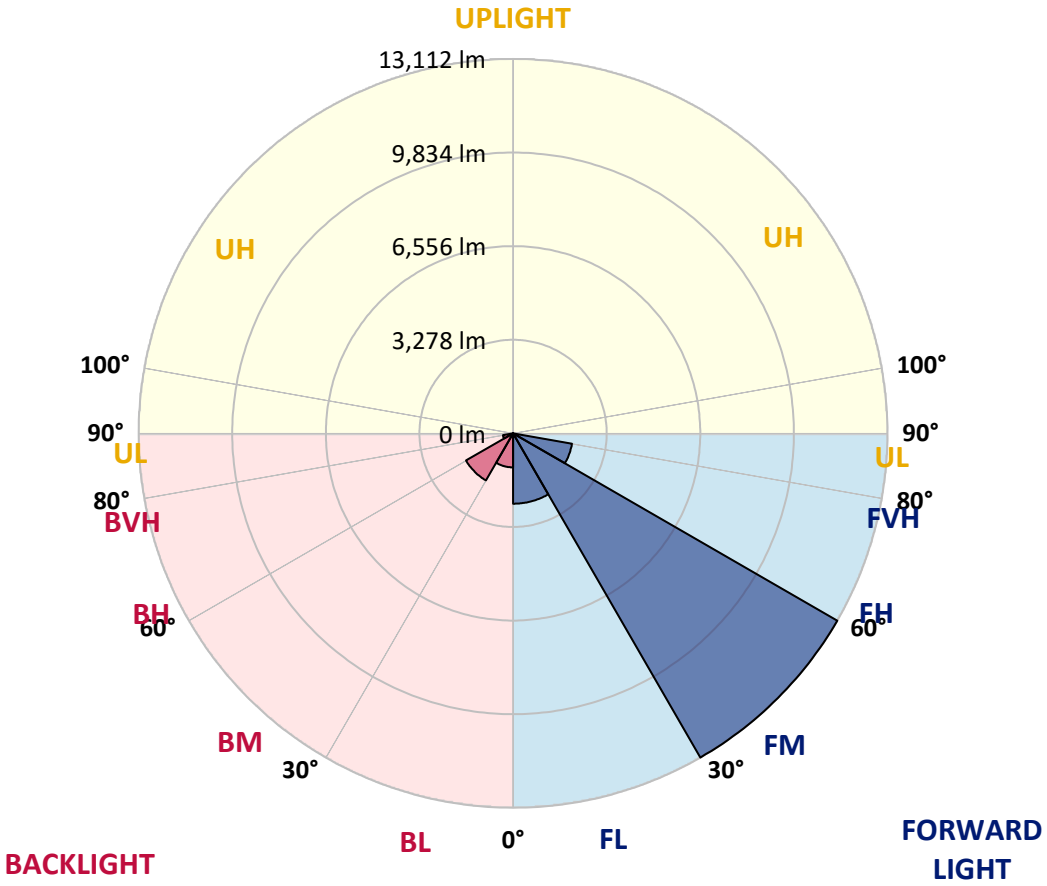
Scaled Data Report

REPORT NUMBER: P643438
CATALOG NUMBER: GWS-SA6E-830-U-T2-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2465.0	11.7			
FM	(30°-60°)	13112.1	62.1			
FH	(60°-80°)	2095.3	9.9			G2/5000
FVH	(80°-90°)	0.1	0.0			G0/10
BL	(0°-30°)	1190.6	5.6	B3/2500		
BM	(30°-60°)	1901.4	9.0	B2/2500		
BH	(60°-80°)	358.3	1.7	B1/500		G1/500
BVH	(80°-90°)	0.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2
Type II Short



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

Scaled Data Report

REPORT NUMBER: P643438
CATALOG NUMBER: GWS-SA6E-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0
2.5°	3936.0	3976.8	3964.0	3938.5	3923.2	3869.7	3836.6	3739.7	3670.9	3663.2	3599.5
5°	4433.1	4425.4	4415.2	4384.6	4359.1	4275.0	4175.6	4012.5	3867.1	3849.3	3714.2
7.5°	4705.8	4710.9	4716.0	4710.9	4693.1	4629.4	4519.7	4328.6	4106.8	4091.5	3877.3
10°	4818.0	4828.2	4853.7	4902.1	4945.5	4940.4	4876.6	4680.3	4407.6	4382.1	4094.0
12.5°	4871.5	4884.3	4925.1	5016.8	5134.1	5225.9	5236.1	5060.2	4759.4	4718.6	4351.5
15°	4945.5	4958.2	5009.2	5129.0	5299.8	5480.8	5598.1	5485.9	5149.4	5106.1	4634.5
17.5°	4978.6	4996.4	5070.4	5228.4	5450.2	5728.1	5993.2	5983.0	5610.8	5577.7	4963.3
20°	5042.3	5055.1	5121.4	5292.2	5559.8	5960.0	6406.2	6566.8	6174.2	6125.7	5361.0
22.5°	5243.7	5248.8	5279.4	5386.5	5636.3	6128.3	6826.8	7247.4	6839.5	6775.8	5807.1
25°	5572.6	5570.0	5582.8	5600.6	5784.2	6299.1	7232.1	8014.7	7601.7	7532.9	6311.8
27.5°	5990.6	5990.6	6021.2	5970.2	6044.2	6510.7	7632.3	8896.7	8488.9	8392.0	6865.0
30°	6482.6	6480.1	6551.5	6469.9	6492.8	6844.6	8063.1	9857.8	9559.5	9439.7	7502.3
32.5°	7150.5	7135.2	7216.8	7104.6	7028.2	7349.4	8588.3	10862.2	10841.8	10658.2	8302.8
35°	7994.3	7968.8	7994.3	7884.7	7747.0	8055.5	9276.6	11864.0	12264.2	12070.5	9256.2
37.5°	8833.0	8914.6	8942.6	8754.0	8641.8	8950.3	10105.1	12761.3	13623.0	13421.6	10247.8
40°	9822.1	9796.6	9893.5	9681.9	9610.5	9952.1	10915.7	13429.2	14698.7	14507.5	11129.8
42.5°	10551.2	10597.1	10716.9	10599.6	10543.5	10864.7	11596.3	13819.3	15445.7	15257.0	11759.5
45°	11425.6	11458.7	11504.6	11407.7	11349.1	11665.2	12088.3	13990.1	16014.1	15810.2	12182.7
47.5°	12371.3	12396.8	12396.8	12198.0	12009.3	12139.3	12417.2	14086.9	16536.7	16340.4	12496.2
50°	13049.4	13062.1	13174.3	13034.1	12623.7	12422.3	12567.6	14181.2	16883.4	16699.9	12598.2
52.5°	12447.8	12432.5	12802.1	13092.7	13202.3	12802.1	12827.6	14318.9	17051.7	16893.6	12679.8
55°	10482.3	10456.9	10976.9	11683.0	12649.2	13161.6	13141.2	14400.5	17237.7	17140.9	12975.5
57.5°	7599.2	7555.9	8279.8	9065.0	10331.9	11721.3	12537.0	14354.6	17319.3	17311.7	13319.6
60°	4568.2	4532.5	5215.7	6041.6	7020.5	8417.5	9771.1	12858.2	16228.3	16243.6	12424.8
62.5°	2811.8	2844.9	3461.8	3882.4	4247.0	4667.6	5450.2	8649.5	12022.1	12121.5	8731.0
65°	1891.5	1917.0	2488.0	3018.3	3018.3	2467.6	2118.4	4134.8	6413.8	6245.6	4129.7
67.5°	1269.5	1297.5	1748.8	2368.2	2457.4	1720.7	859.1	1233.8	1787.0	1733.5	1022.2
70°	746.9	777.5	1165.0	1623.8	1789.5	1198.1	573.6	522.6	507.3	492.0	397.7
72.5°	333.9	346.7	594.0	825.9	754.6	504.7	405.3	418.1	395.1	387.5	323.7
75°	102.0	107.1	153.0	178.4	181.0	181.0	244.7	328.8	311.0	313.6	249.8
77.5°	25.5	25.5	40.8	38.2	20.4	17.8	45.9	73.9	76.5	68.8	51.0
80°	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5	2.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

Scaled Data Report

REPORT NUMBER: P643438
CATALOG NUMBER: GWS-SA6E-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0	3523.0
2.5°	3571.4	3505.2	3461.8	3400.6	3357.3	3311.4	3270.6	3237.5	3219.6	3214.6	3217.1
5°	3653.0	3548.5	3446.5	3329.3	3247.7	3171.2	3110.0	3061.6	3038.7	3031.0	3031.0
7.5°	3777.9	3632.6	3451.6	3268.1	3130.4	3010.6	2939.2	2885.7	2865.3	2860.2	2844.9
10°	3941.1	3742.2	3444.0	3158.5	2964.7	2839.8	2788.8	2773.5	2781.2	2783.7	2781.2
12.5°	4137.4	3857.0	3395.5	2997.9	2788.8	2712.4	2717.5	2758.2	2804.1	2827.1	2832.2
15°	4346.4	3961.5	3285.9	2806.7	2638.4	2635.9	2709.8	2804.1	2893.4	2931.6	2941.8
17.5°	4580.9	4045.6	3117.7	2602.7	2508.4	2582.3	2714.9	2860.2	2980.0	3043.8	3056.5
20°	4838.4	4114.4	2903.5	2411.6	2393.7	2526.3	2709.8	2888.3	3036.1	3107.5	3120.2
22.5°	5106.1	4162.9	2656.3	2235.7	2289.2	2462.5	2661.4	2834.7	2974.9	3056.5	3066.7
25°	5412.0	4168.0	2403.9	2087.8	2192.3	2375.9	2544.1	2686.9	2804.1	2875.5	2883.2
27.5°	5679.6	4106.8	2179.6	1968.0	2103.1	2268.8	2381.0	2460.0	2541.6	2582.3	2584.9
30°	5988.1	3999.7	1968.0	1871.1	2011.3	2136.2	2192.3	2210.2	2217.8	2225.5	2215.3
32.5°	6355.2	3869.7	1809.9	1776.8	1906.8	1990.9	2006.2	1970.5	1927.2	1866.0	1850.7
35°	6806.4	3752.4	1679.9	1685.0	1792.1	1843.1	1830.3	1753.9	1669.7	1595.8	1583.1
37.5°	7295.8	3653.0	1580.5	1595.8	1667.2	1702.9	1664.6	1580.5	1542.3	1478.5	1481.1
40°	7729.2	3571.4	1491.3	1506.6	1539.7	1572.9	1511.7	1455.6	1527.0	1521.9	1527.0
42.5°	8037.7	3502.6	1414.8	1407.2	1430.1	1453.0	1407.2	1379.1	1498.9	1465.8	1483.6
45°	8218.6	3438.9	1351.1	1305.2	1340.9	1381.7	1351.1	1315.4	1356.2	1203.2	1190.5
47.5°	8341.0	3403.2	1295.0	1205.8	1269.5	1340.9	1277.2	1190.5	1131.8	999.3	989.1
50°	8353.8	3385.3	1228.7	1103.8	1185.4	1261.9	1187.9	1068.1	984.0	925.4	917.7
52.5°	8420.0	3421.0	1136.9	973.8	1063.0	1185.4	1134.4	1014.6	899.9	848.9	838.7
55°	8715.7	3571.4	984.0	795.4	925.4	1126.7	1091.1	905.0	795.4	764.8	757.1
57.5°	*9021.6*	*3602.0*	*775.0*	*629.7*	*805.5*	*1042.6*	*996.7*	*833.6*	*726.5*	*690.8*	*683.2*
60°	8249.2	2967.3	581.2	520.0	711.2	963.6	922.8	790.3	665.3	622.0	614.4
62.5°	5419.6	1603.5	461.4	441.0	599.1	815.7	841.2	713.8	594.0	548.1	545.5
65°	2498.2	744.4	354.3	349.2	469.1	650.0	724.0	624.6	502.2	461.4	461.4
67.5°	680.6	369.6	277.9	257.5	318.7	435.9	527.7	466.5	356.9	308.5	305.9
70°	339.0	298.3	249.8	221.8	229.4	270.2	311.0	260.0	181.0	147.9	145.3
72.5°	277.9	244.7	211.6	188.6	173.3	165.7	160.6	130.0	84.1	63.7	61.2
75°	206.5	175.9	150.4	122.4	104.5	96.9	86.7	63.7	35.7	20.4	17.8
77.5°	45.9	43.3	40.8	30.6	28.0	22.9	17.8	12.7	5.1	0.0	0.0
80°	2.5	2.5	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

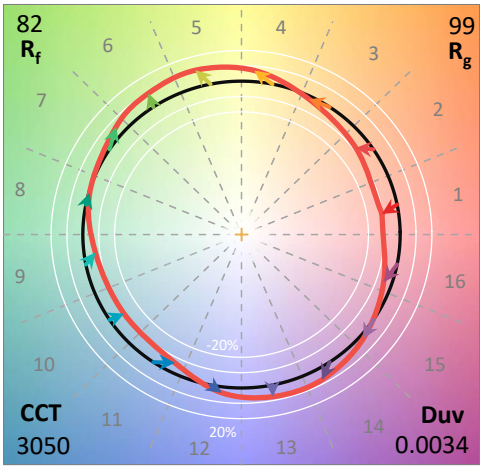
Test Information

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

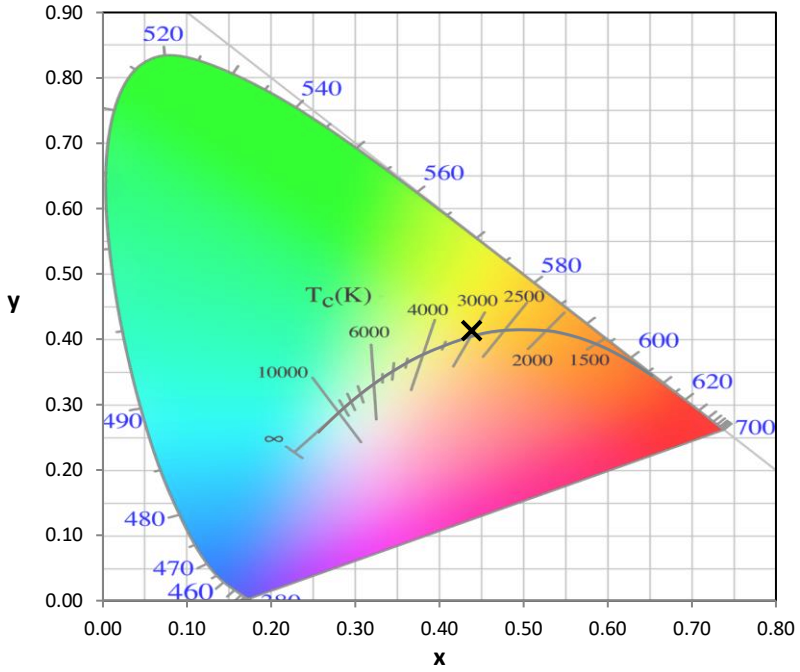
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

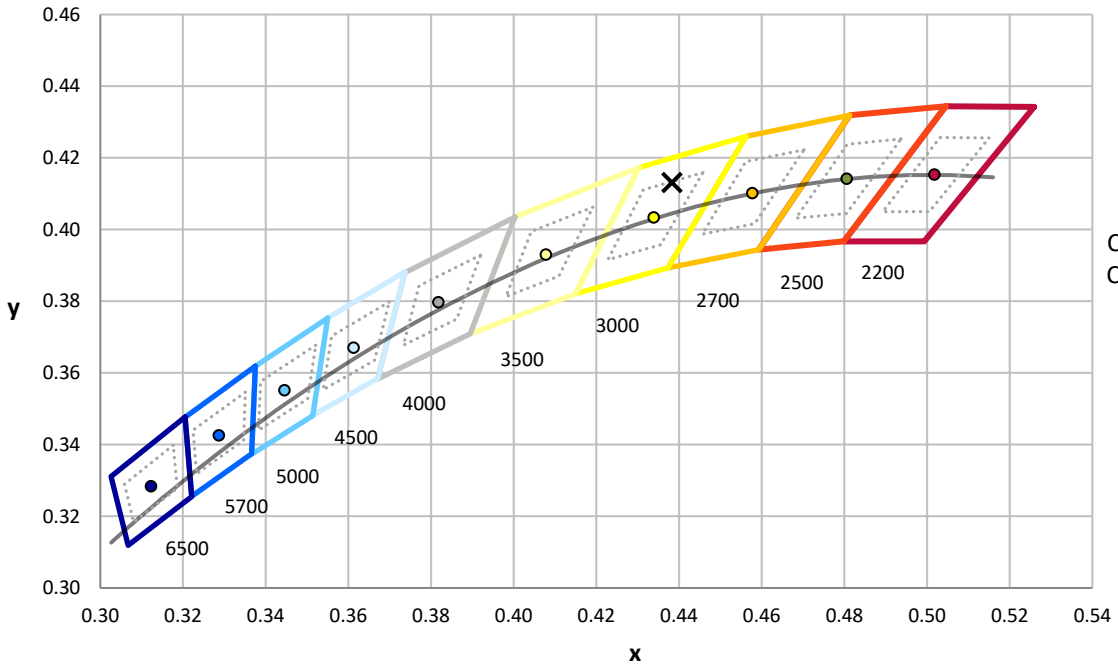
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

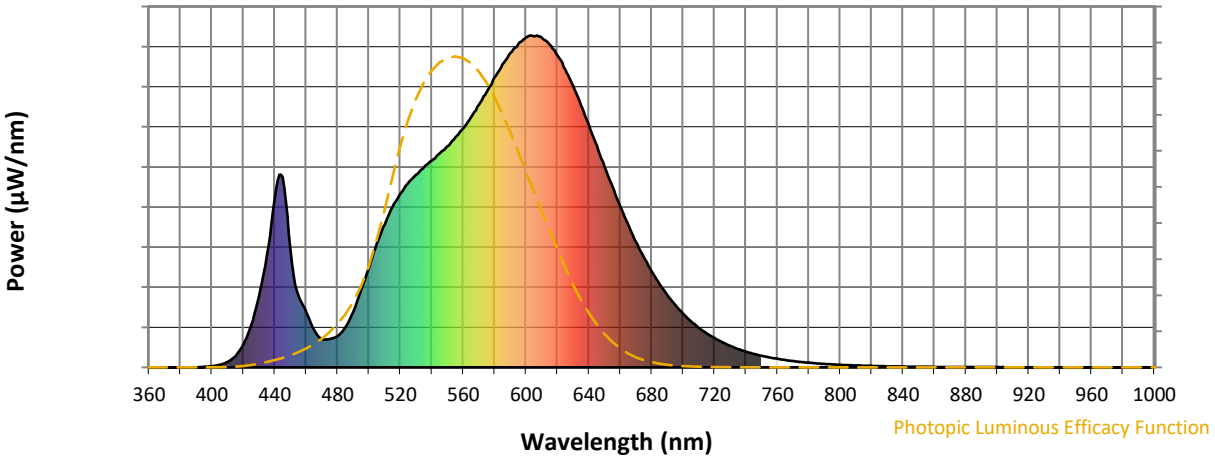


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

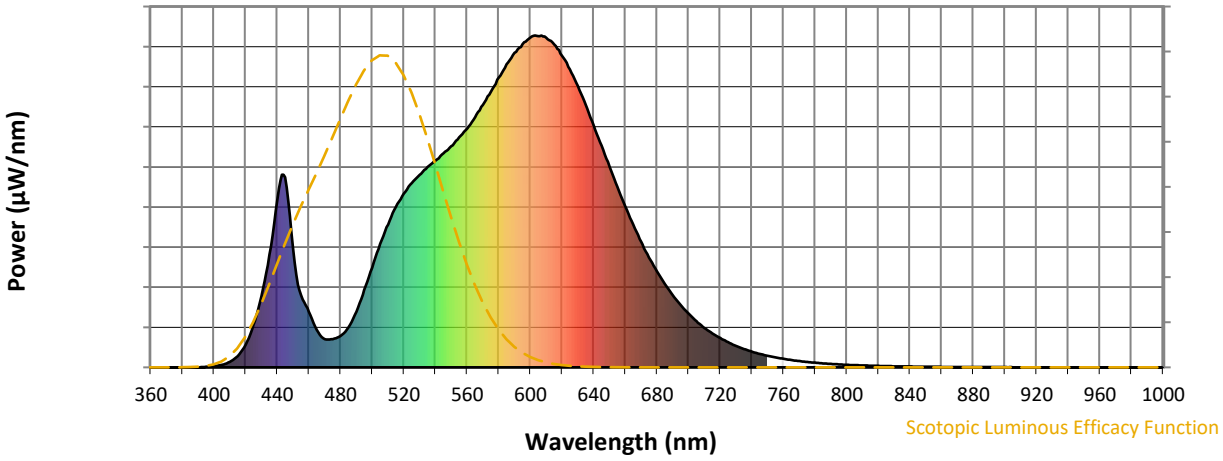


Photopic Lumens: NR

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

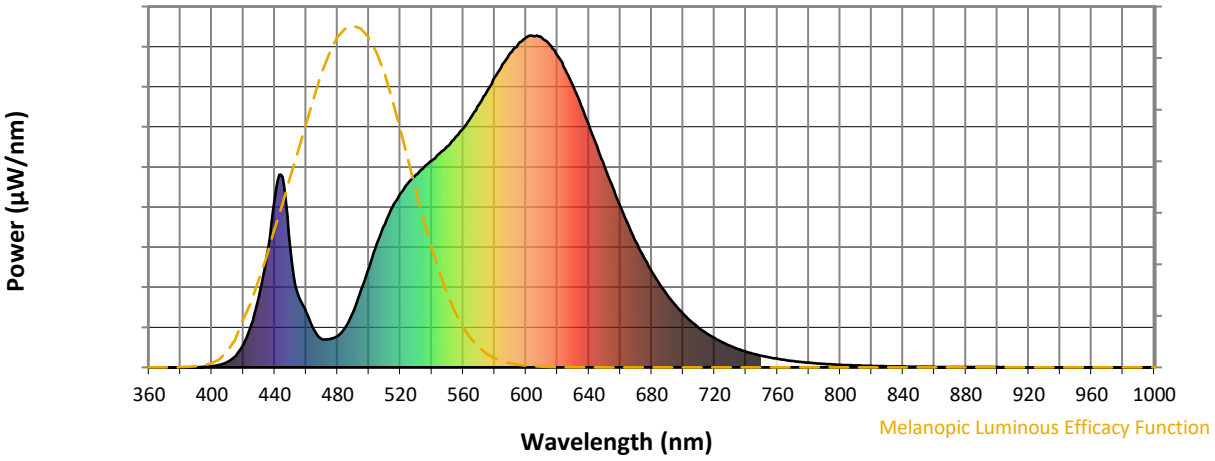


Scotopic Lumens: NR **S/P: 1.27**

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			

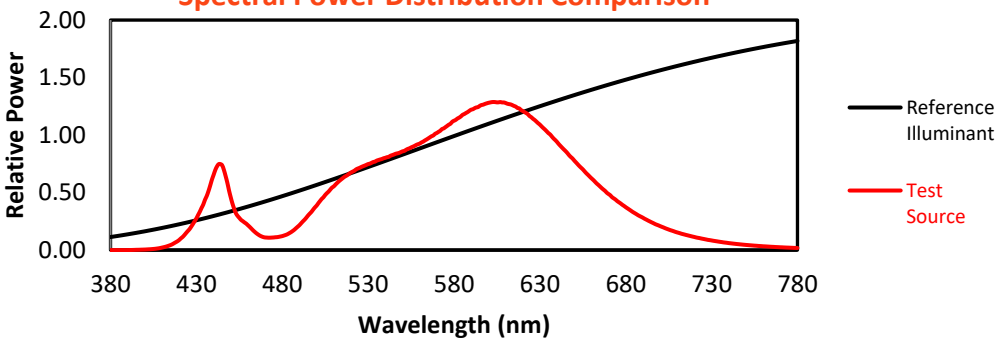
REPORT NUMBER: SP1-2408-195-9

TM-30-18

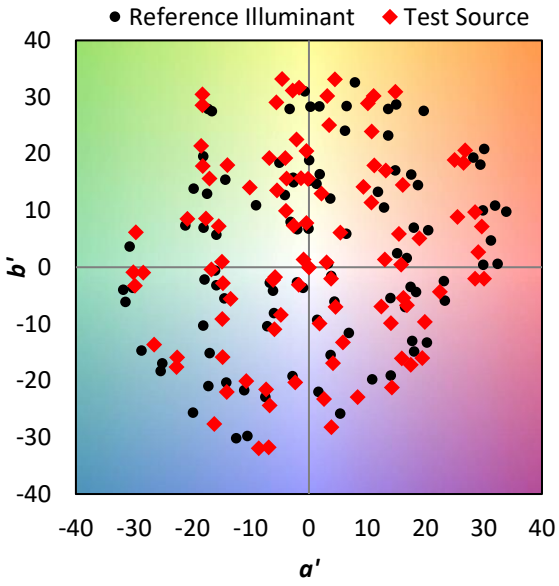
Summary

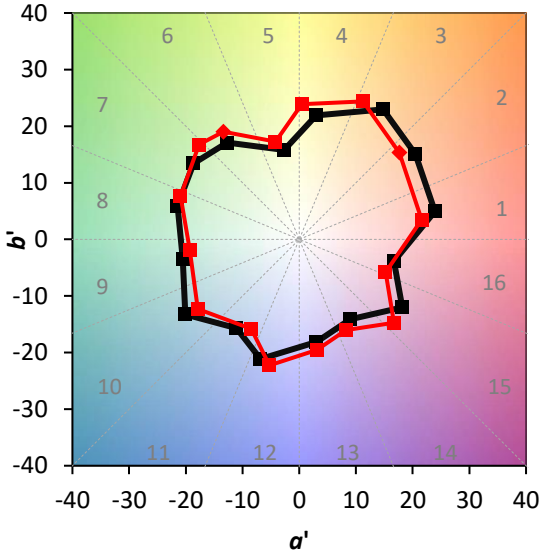
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

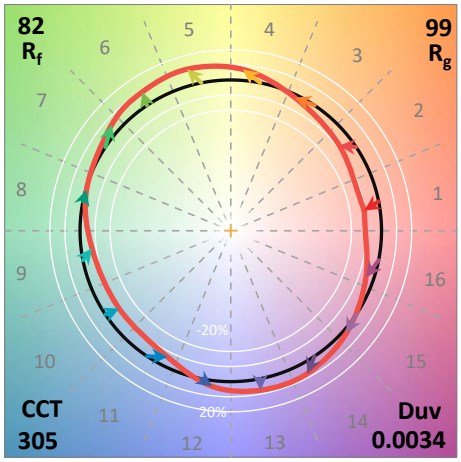
Spectral Power Distribution Comparison

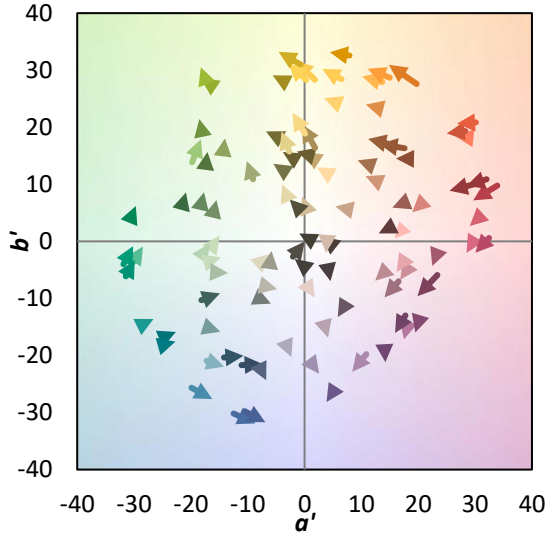


Color Vector Graphics







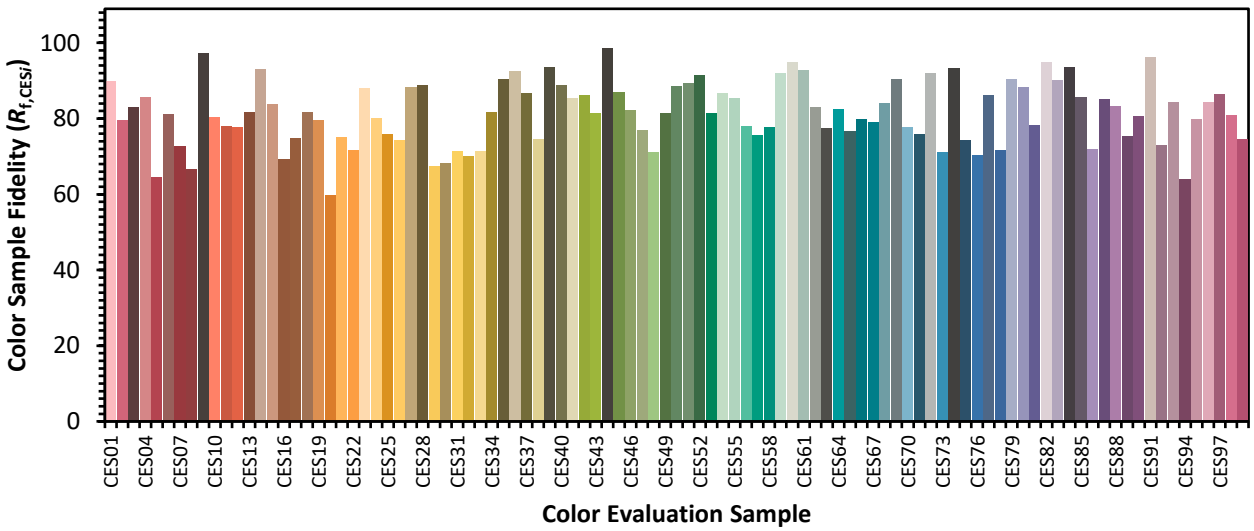


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

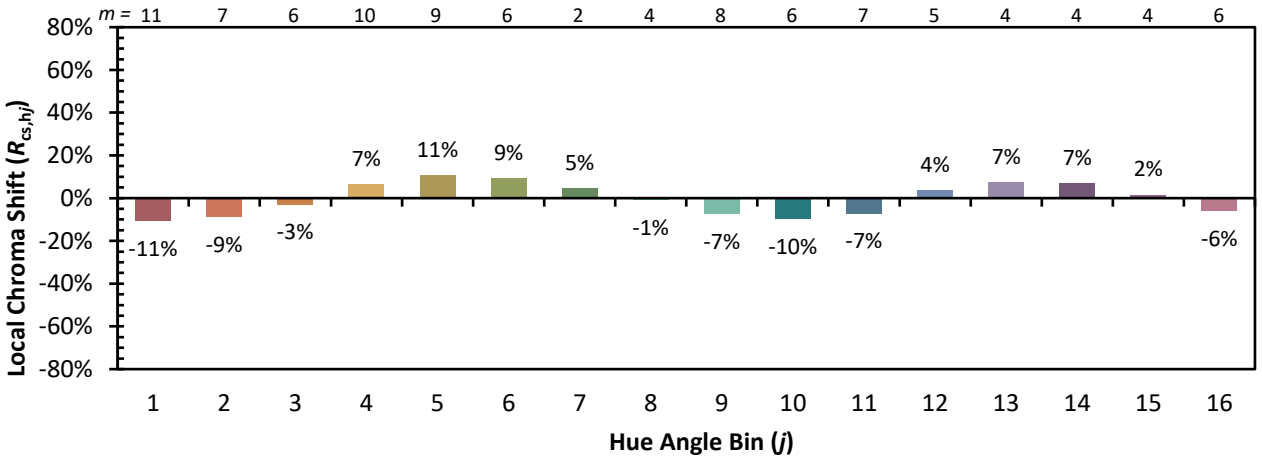
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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	

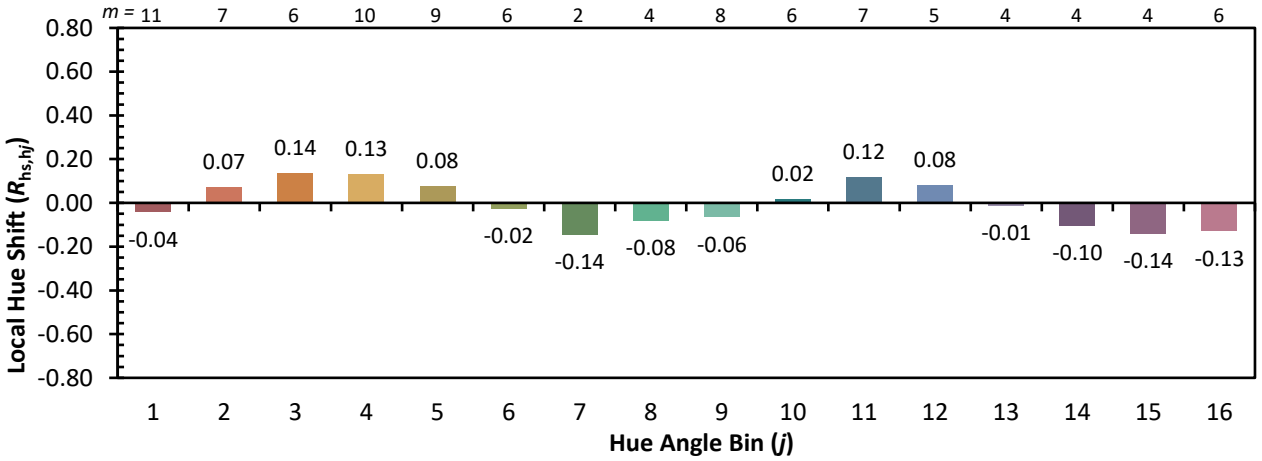


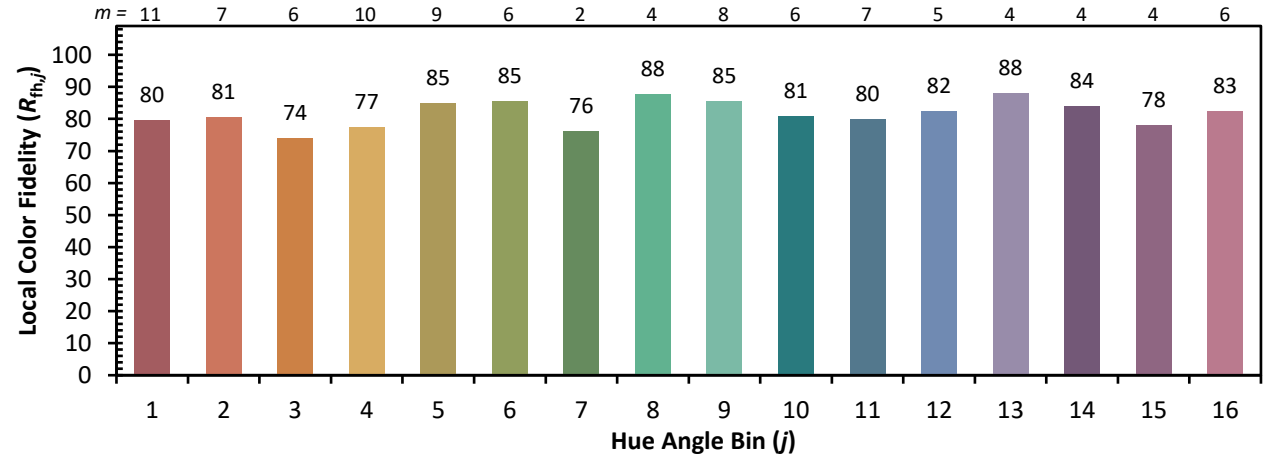
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



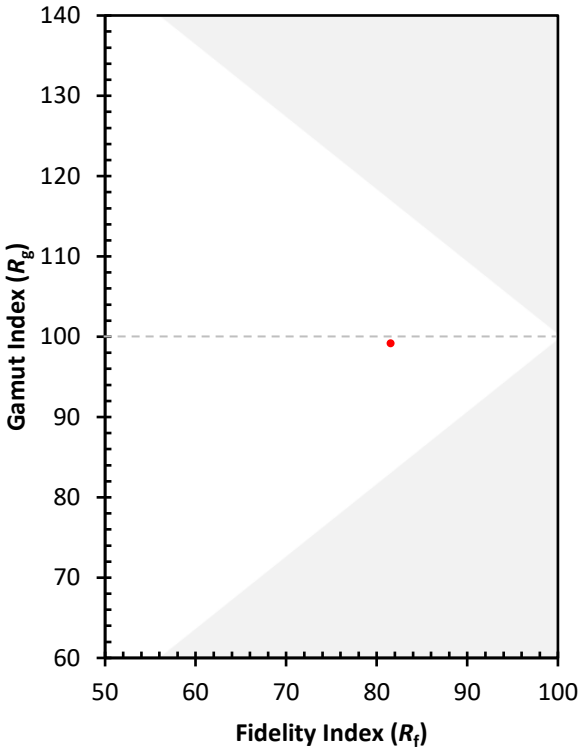


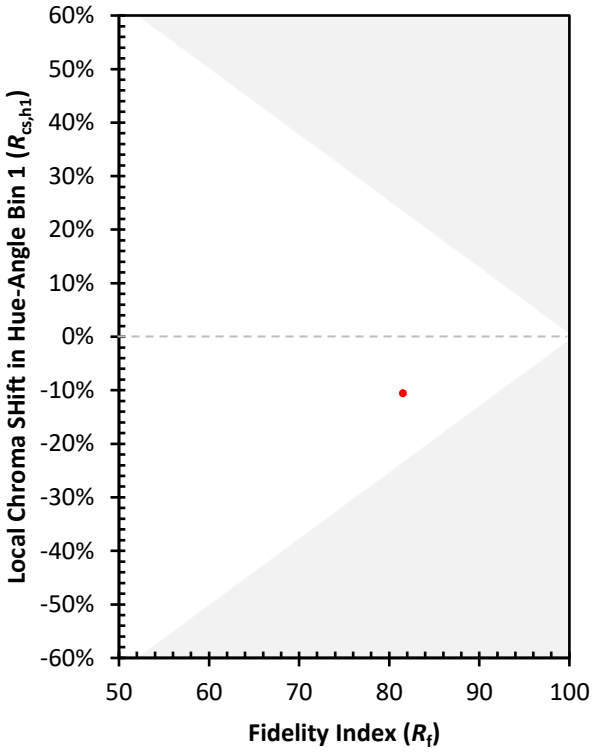


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)