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: P640948

Luminaire Tested: GWS-SA5E-830-U-SL3-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:	P640948
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-32)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5E-830-U-SL3-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	17442.7 lumens
Efficiency:	N/A
Efficacy:	64.7 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G2

Input Watts (W):	269.6
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

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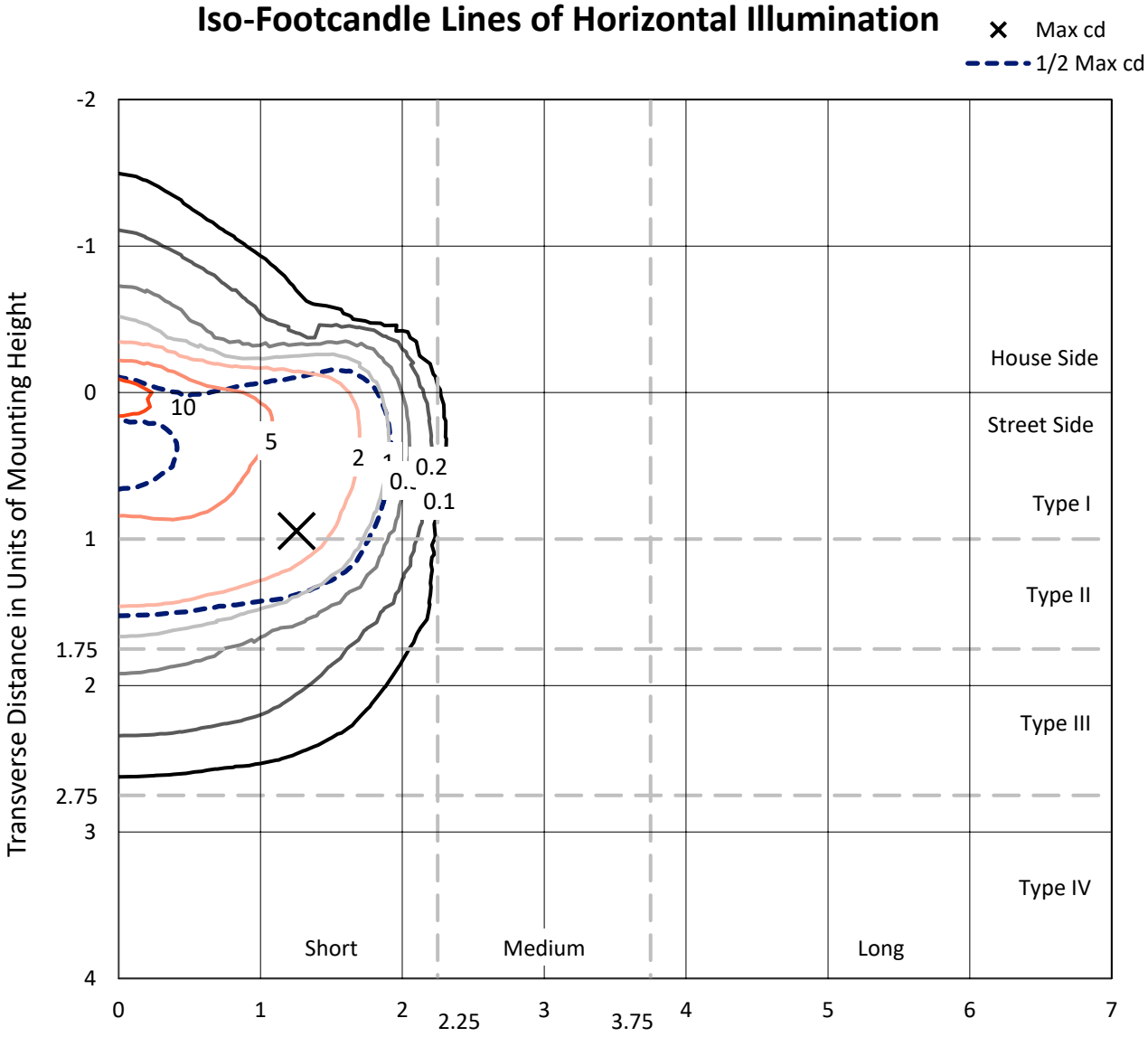
Scaled Data Report

REPORT NUMBER: P640948
CATALOG NUMBER: GWS-SA5E-830-U-SL3-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 12.2 fc
Type II - Short - N/A

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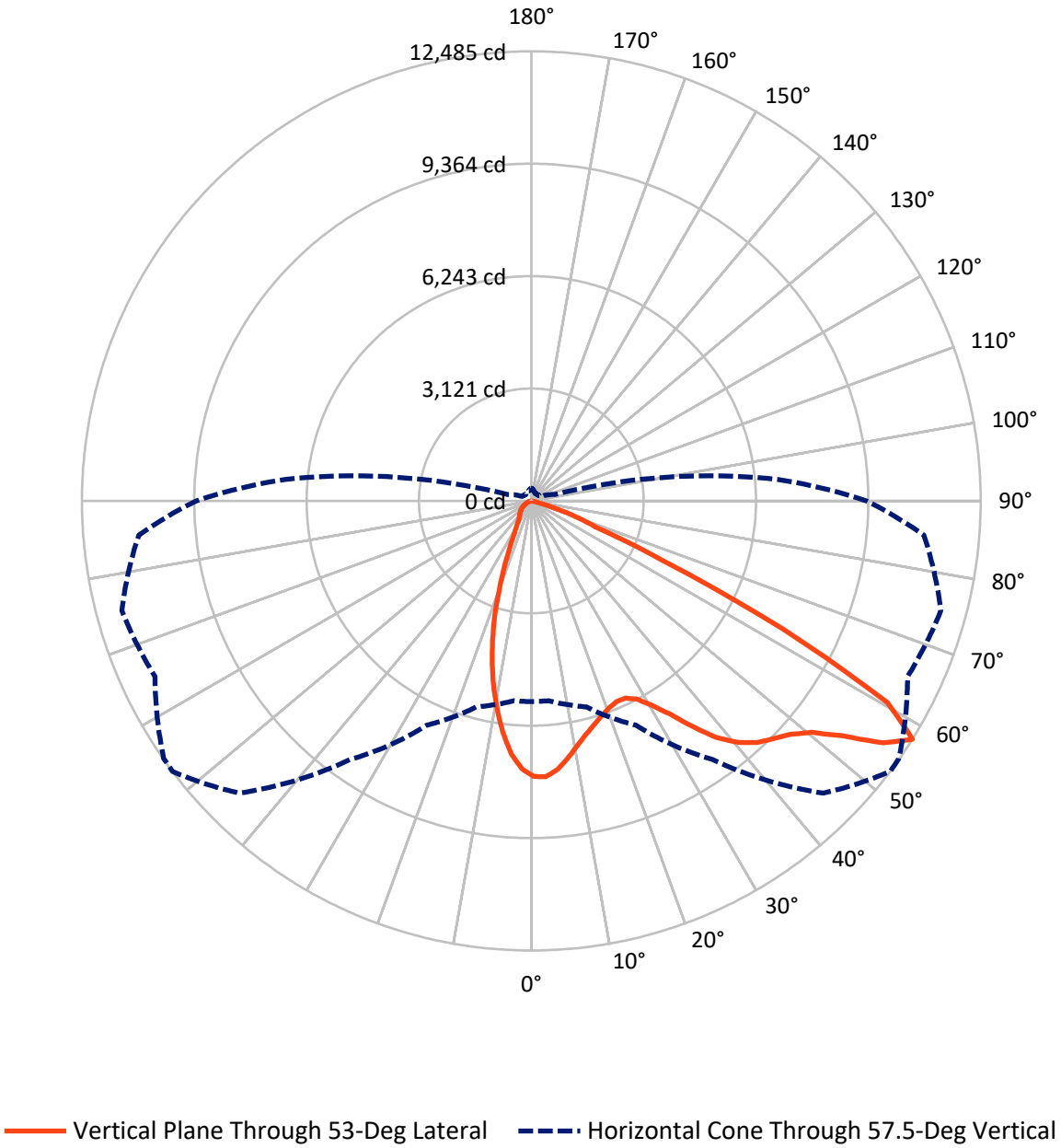
Luminous Intensity Polar Plot



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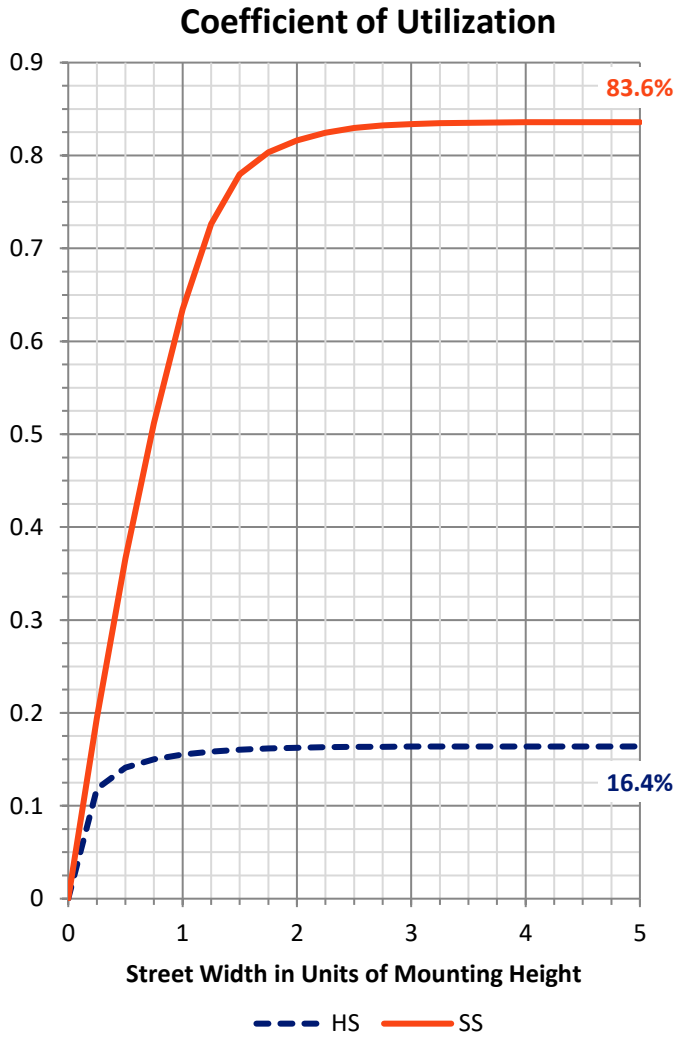
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2881.3	0.0	2881.3
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	14561.4	0.0	14561.4
	% Fixture	83.5	0.0	83.5
Total	Lumens	17442.7	0.0	17442.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	654.6	3.8
10°-20°	1437.2	8.2
20°-30°	1872.3	10.7
30°-40°	2715.7	15.6
40°-50°	3918.6	22.5
50°-60°	4739.2	27.2
60°-70°	1931.5	11.1
70°-80°	173.6	1.0
80°-90°	0.0	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°	17442.7	100.0
0°-180°	17442.7	100.0



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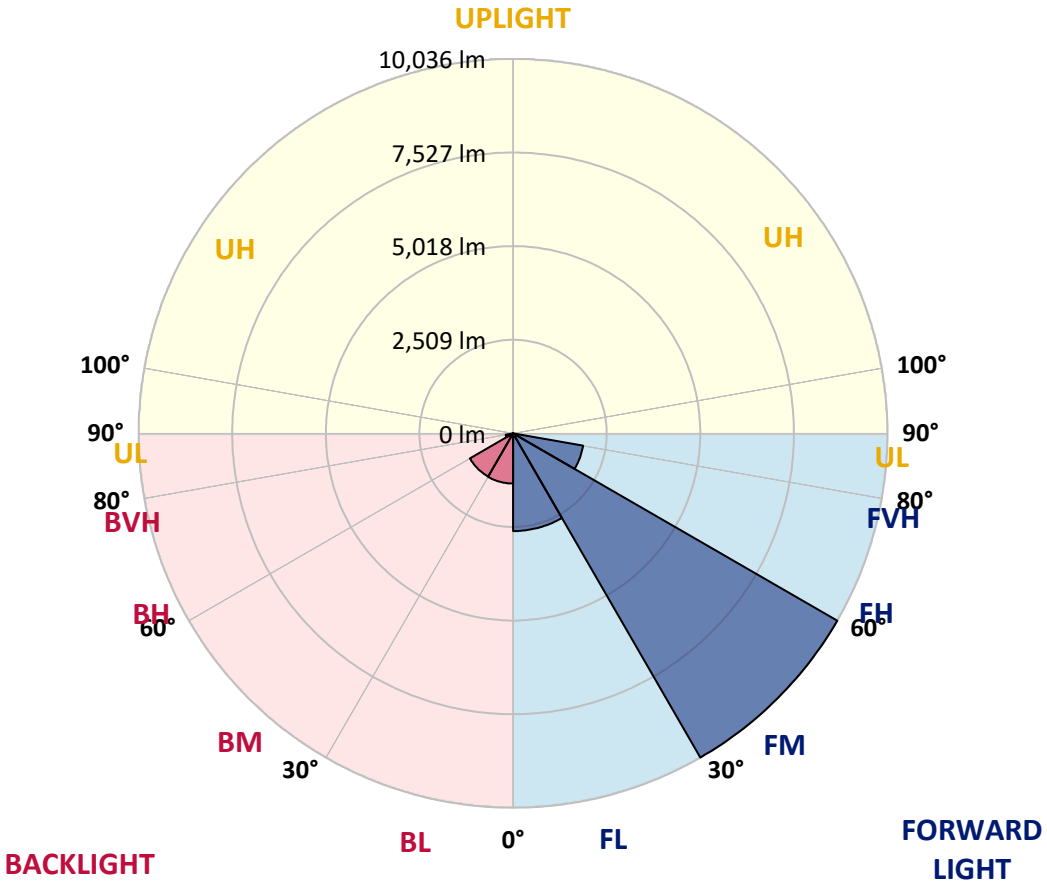
REPORT NUMBER: P640948
CATALOG NUMBER: GWS-SA5E-830-U-SL3-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2619.3	15.0			
FM	(30°-60°)	10036.2	57.5			
FH	(60°-80°)	1905.9	10.9			G2/5000
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	1344.7	7.7	B3/2500		
BM	(30°-60°)	1337.4	7.7	B2/2500		
BH	(60°-80°)	199.2	1.1	B1/500		G1/500
BVH	(80°-90°)	0.0	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



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Scaled Data Report

REPORT NUMBER: P640948
CATALOG NUMBER: GWS-SA5E-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4
2.5°	7544.5	7561.6	7591.5	7630.0	7655.6	7668.5	7668.5	7704.8	7681.3	7662.1	7640.7
5°	7221.7	7238.8	7279.4	7341.4	7403.4	7448.3	7499.6	7538.1	7553.0	7553.0	7516.7
7.5°	6766.3	6789.8	6815.5	6901.0	7035.7	7136.1	7223.8	7279.4	7360.6	7386.3	7335.0
10°	6276.7	6300.2	6358.0	6475.5	6629.5	6779.1	6928.8	6999.3	7138.3	7211.0	7153.2
12.5°	5862.0	5872.7	5949.6	6090.7	6287.4	6492.6	6674.4	6747.1	6943.7	7052.8	6984.4
15°	5519.9	5526.3	5603.3	5759.4	5986.0	6238.2	6467.0	6541.8	6783.4	6948.0	6845.4
17.5°	5261.2	5263.4	5329.7	5498.5	5735.8	6015.9	6287.4	6379.3	6691.5	6890.3	6736.4
20°	5130.8	5124.4	5171.5	5319.0	5543.4	5823.5	6144.2	6257.5	6640.2	6881.7	6653.0
22.5°	5133.0	5118.0	5137.3	5242.0	5432.3	5695.2	6054.4	6182.7	6644.4	6918.1	6582.4
25°	5254.8	5233.5	5237.7	5293.3	5428.0	5667.4	6067.2	6204.0	6729.9	7039.9	6556.8
27.5°	5460.1	5436.6	5436.6	5464.3	5537.0	5755.1	6227.6	6383.6	6958.7	7277.2	6610.2
30°	5725.2	5701.6	5693.1	5720.9	5780.7	5981.7	6584.6	6747.1	7349.9	7666.3	6781.3
32.5°	6028.7	6000.9	6015.9	6054.4	6112.1	6390.0	7044.2	7260.1	7839.5	8190.1	7089.1
35°	6349.4	6325.9	6394.3	6477.7	6567.5	6956.6	7679.2	7867.3	8440.2	8842.1	7559.4
37.5°	6655.1	6644.4	6787.7	6963.0	7149.0	7636.4	8324.8	8470.2	8955.5	9551.9	8134.5
40°	6960.8	6958.7	7204.6	7512.4	7809.6	8314.1	8814.4	8934.1	9269.7	10103.5	8686.1
42.5°	7302.9	7302.9	7642.8	8053.3	8448.8	8887.0	9173.5	9227.0	9410.8	10422.0	9100.8
45°	7630.0	7649.2	8042.6	8519.3	8987.5	9333.8	9421.5	9425.8	9468.5	10610.1	9445.0
47.5°	7888.7	7905.8	8376.1	8925.5	9430.1	9673.8	9686.6	9667.4	9620.3	10789.7	9710.1
50°	8098.2	8123.8	8615.5	9197.0	9733.6	10000.9	10099.2	10080.0	9960.2	10982.1	9896.1
52.5°	8200.8	8237.1	8698.9	9331.7	10071.4	10561.0	10834.6	10879.5	10469.0	11089.0	10073.5
55°	7379.9	7433.3	7858.7	8724.6	10259.5	11426.8	11856.5	11848.0	11020.6	11407.6	10505.4
57.5°	5573.4	5569.1	5921.8	6868.9	8763.0	11476.0	12485.0	12467.9	11535.8	11777.4	10947.9
60°	3794.7	3769.0	3863.1	4320.6	6127.1	9348.8	11362.7	11593.6	11170.3	10879.5	9295.4
62.5°	3123.4	3099.9	3070.0	2943.8	3518.9	5823.5	7850.2	8200.8	8145.2	7561.6	5829.9
65°	2556.9	2576.1	2659.5	2606.0	2447.8	2986.6	4074.7	4282.1	3914.4	3294.4	2037.4
67.5°	1885.6	1894.1	2003.2	2285.4	2199.8	1988.2	1917.7	1951.9	1143.7	525.9	339.9
70°	1113.8	1120.2	1220.7	1599.1	1785.1	1526.4	1295.5	1276.3	453.2	141.1	153.9
72.5°	630.7	617.8	637.1	761.1	972.7	810.2	667.0	607.1	136.8	79.1	79.1
75°	299.3	290.7	250.1	235.2	213.8	136.8	85.5	72.7	34.2	32.1	32.1
77.5°	2.1	6.4	4.3	6.4	6.4	4.3	2.1	2.1	6.4	6.4	8.6
80°	0.0	0.0	0.0	0.0	0.0	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

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REPORT NUMBER: P640948
CATALOG NUMBER: GWS-SA5E-830-U-SL3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4	7651.4
2.5°	7602.2	7538.1	7523.1	7518.8	7459.0	7394.8	7328.5	7302.9	7264.4	7240.9	7260.1
5°	7459.0	7367.0	7285.8	7211.0	7078.4	6933.0	6806.9	6725.7	6648.7	6597.4	6610.2
7.5°	7255.9	7136.1	6950.1	6759.9	6516.2	6298.1	6054.4	5904.7	5765.8	5688.8	5725.2
10°	7039.9	6881.7	6584.6	6261.8	5879.1	5537.0	5188.6	4904.2	4739.6	4583.5	4600.7
12.5°	6828.3	6618.8	6174.1	5684.5	5201.4	4696.9	4170.9	3777.6	3508.2	3313.7	3283.7
15°	6631.6	6362.2	5774.3	5128.7	4470.2	3799.0	3127.7	2565.4	2253.3	2060.9	2048.1
17.5°	6456.3	6122.8	5359.6	4547.2	3722.0	2862.6	2090.8	1669.7	1490.1	1406.7	1398.2
20°	6287.4	5881.2	4936.3	3957.2	2905.3	2009.6	1443.0	1248.5	1190.8	1156.6	1160.9
22.5°	6124.9	5618.3	4491.6	3303.0	2178.5	1411.0	1118.1	1043.3	1036.9	1041.1	1043.3
25°	5988.1	5376.7	4034.1	2672.3	1554.2	1075.3	934.2	912.9	932.1	959.9	964.2
27.5°	5917.6	5180.0	3587.3	2037.4	1124.5	874.4	810.2	818.8	853.0	882.9	887.2
30°	5936.8	5032.5	3125.5	1477.3	865.8	737.6	716.2	733.3	767.5	795.3	799.6
32.5°	6073.6	4957.7	2653.1	1075.3	711.9	643.5	634.9	647.8	677.7	699.1	701.2
35°	6345.1	4974.8	2204.1	823.1	611.4	572.9	570.8	579.4	594.3	609.3	611.4
37.5°	6744.9	5113.7	1761.6	684.1	553.7	525.9	517.4	517.4	528.0	534.5	538.7
40°	7174.6	5323.2	1411.0	605.0	513.1	483.2	466.1	459.6	468.2	476.7	478.9
42.5°	7529.5	5532.8	1145.9	549.4	481.0	440.4	419.0	414.7	425.4	440.4	444.7
45°	7801.0	5695.2	955.6	504.5	444.7	399.8	376.3	376.3	395.5	421.2	425.4
47.5°	8049.0	5825.6	814.5	463.9	410.5	363.4	339.9	344.2	376.3	410.5	416.9
50°	8217.9	5930.4	709.8	427.6	382.7	333.5	312.1	320.7	359.2	399.8	406.2
52.5°	8399.6	6058.7	641.4	395.5	357.0	310.0	290.7	297.2	339.9	384.8	393.4
55°	8902.0	6488.4	639.2	352.7	312.1	277.9	269.4	271.5	314.3	365.6	376.3
57.5°	*9312.5*	*6866.8*	*682.0*	*297.2*	*260.8*	*243.7*	*239.4*	*241.6*	*280.1*	*337.8*	*350.6*
60°	7704.8	5336.1	564.4	245.9	218.1	213.8	207.4	211.6	248.0	299.3	310.0
62.5°	4560.0	3050.7	269.4	188.1	186.0	181.7	175.3	183.9	218.1	263.0	269.4
65°	1558.5	904.3	171.0	153.9	158.2	151.8	145.4	153.9	183.9	209.5	211.6
67.5°	299.3	239.4	136.8	128.3	130.4	117.6	115.4	124.0	141.1	145.4	143.2
70°	156.1	139.0	104.8	104.8	100.5	83.4	83.4	91.9	91.9	85.5	83.4
72.5°	81.2	77.0	68.4	77.0	64.1	51.3	51.3	55.6	51.3	42.8	42.8
75°	32.1	32.1	29.9	38.5	27.8	23.5	21.4	25.7	19.2	15.0	15.0
77.5°	8.6	8.6	8.6	10.7	6.4	6.4	4.3	4.3	2.1	0.0	0.0
80°	0.0	2.1	0.0	2.1	0.0	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

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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

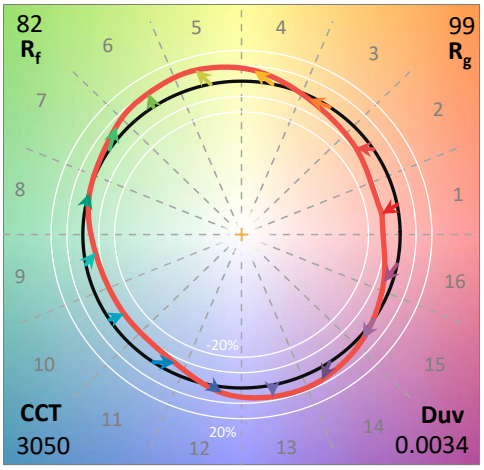
Test Information

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

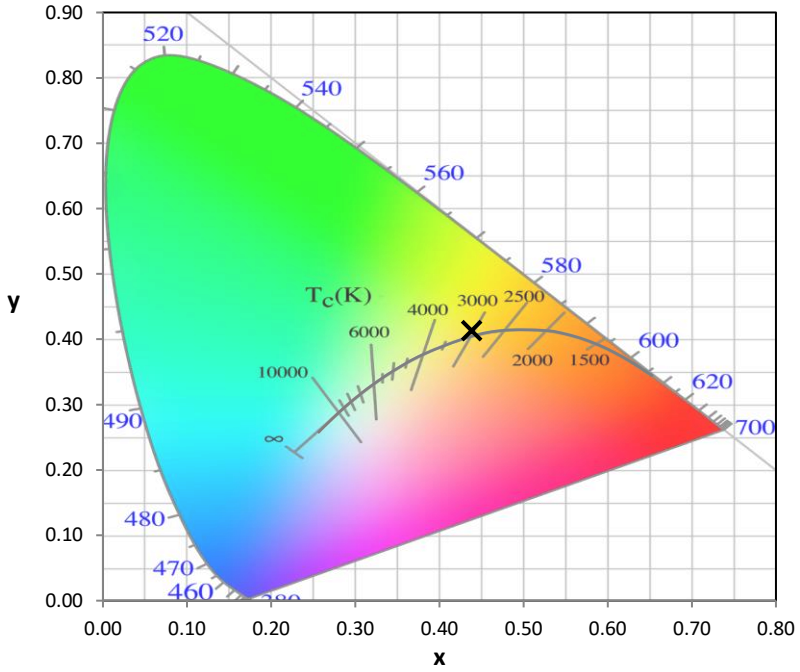
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

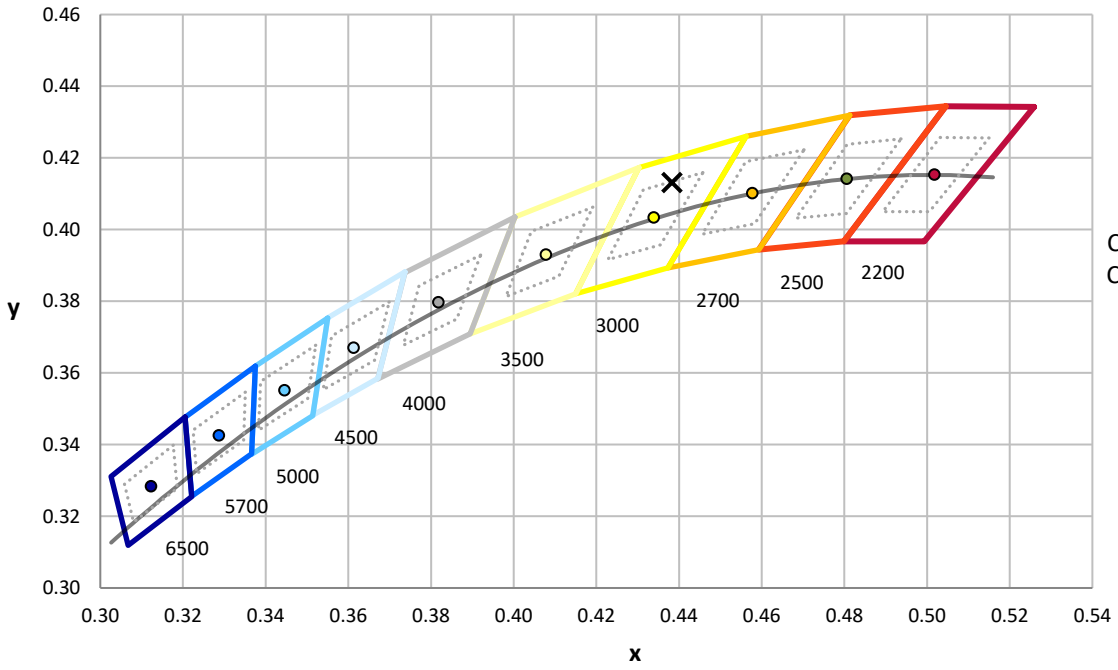
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

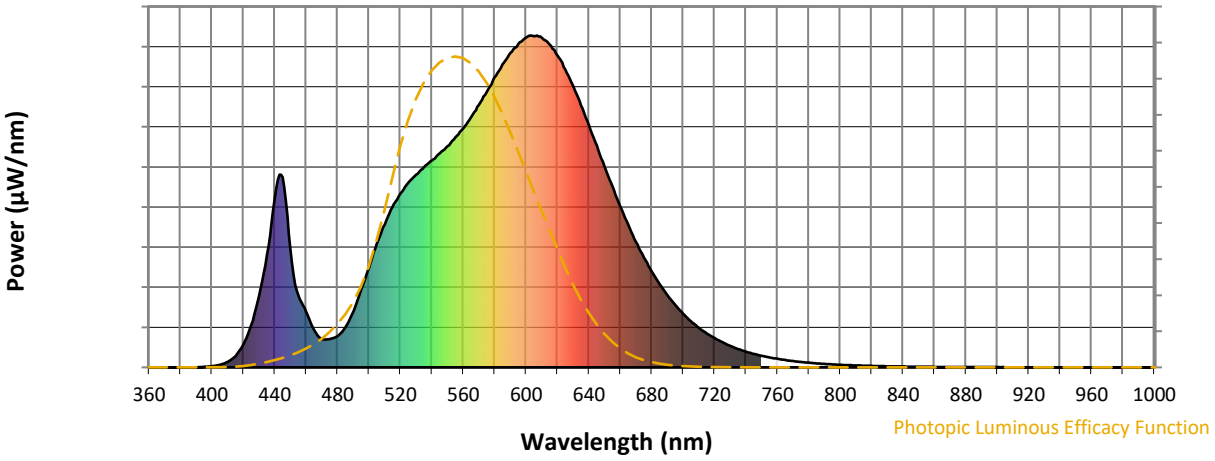


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

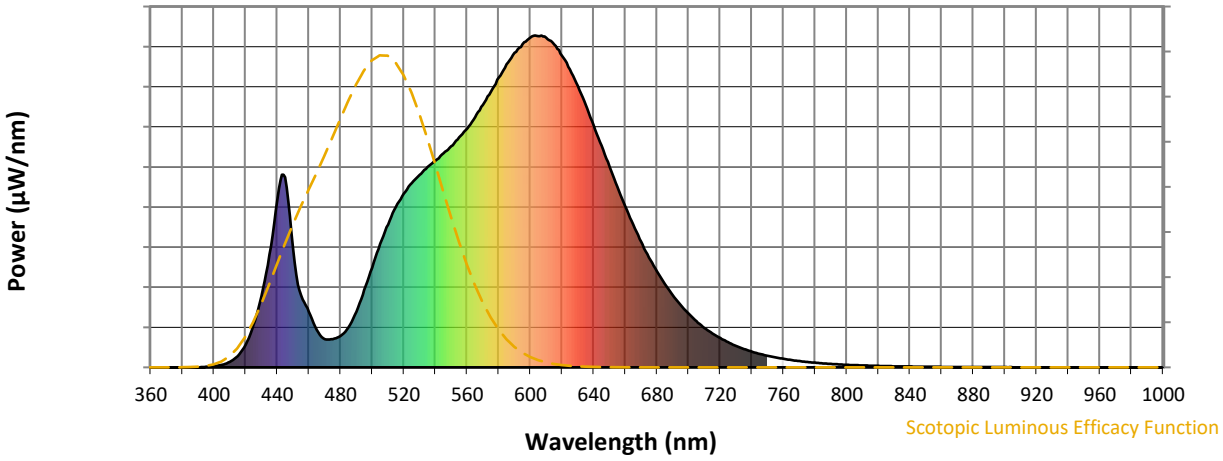


Photopic Lumens: NR

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

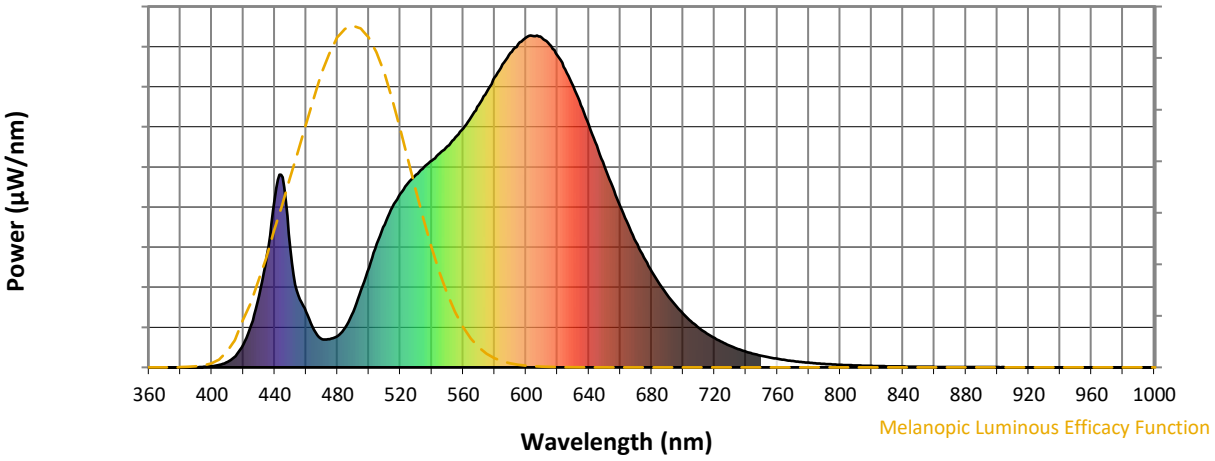


Scotopic Lumens: NR **S/P: 1.27**

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			

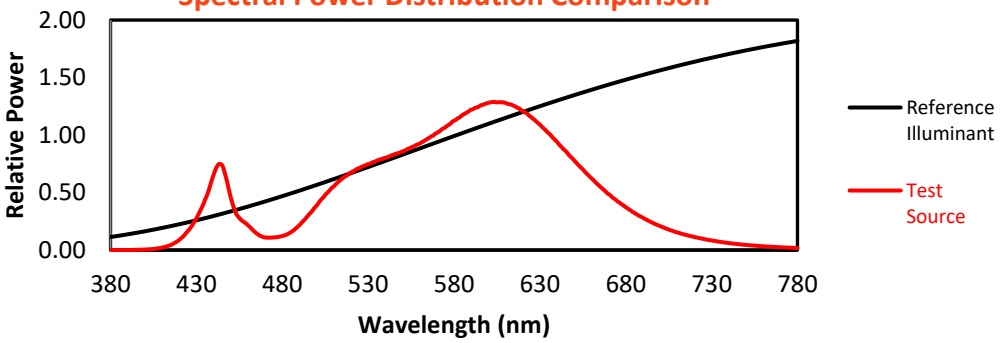
REPORT NUMBER: SP1-2408-195-9

TM-30-18

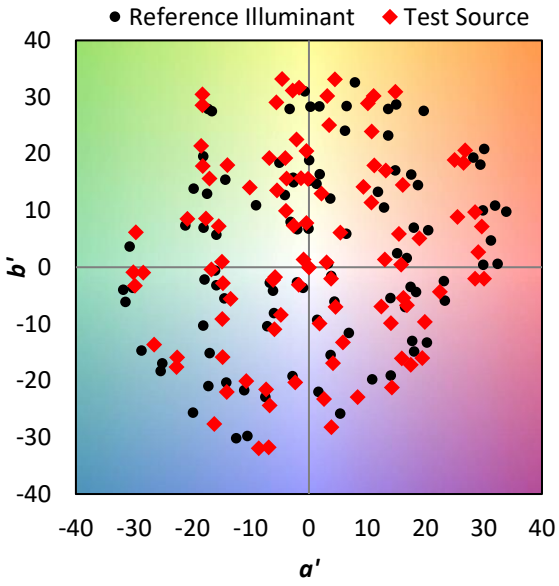
Summary

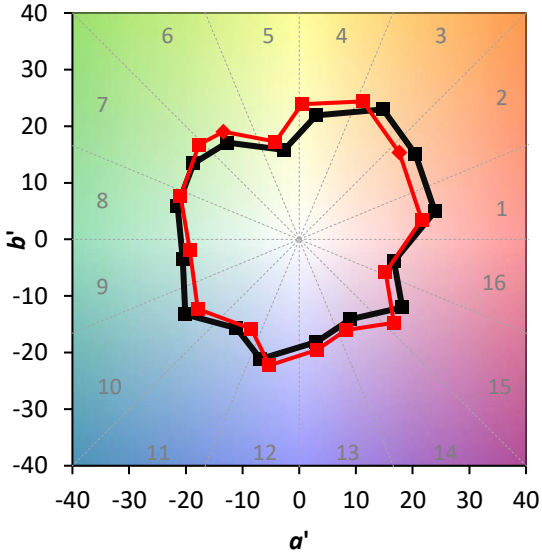
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

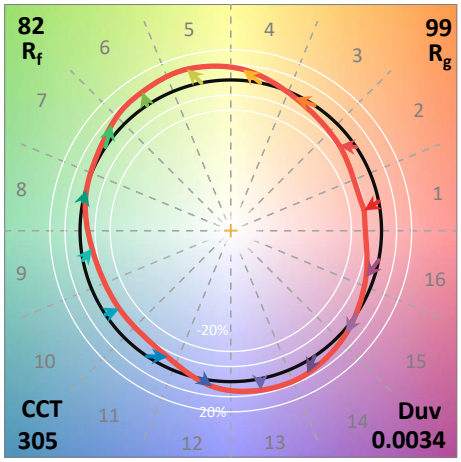
Spectral Power Distribution Comparison

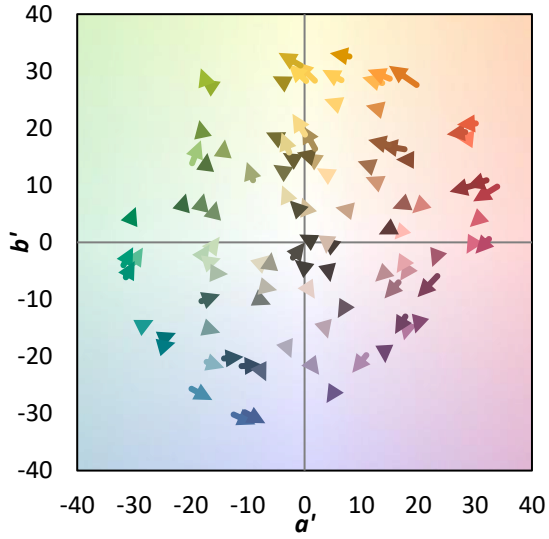


Color Vector Graphics







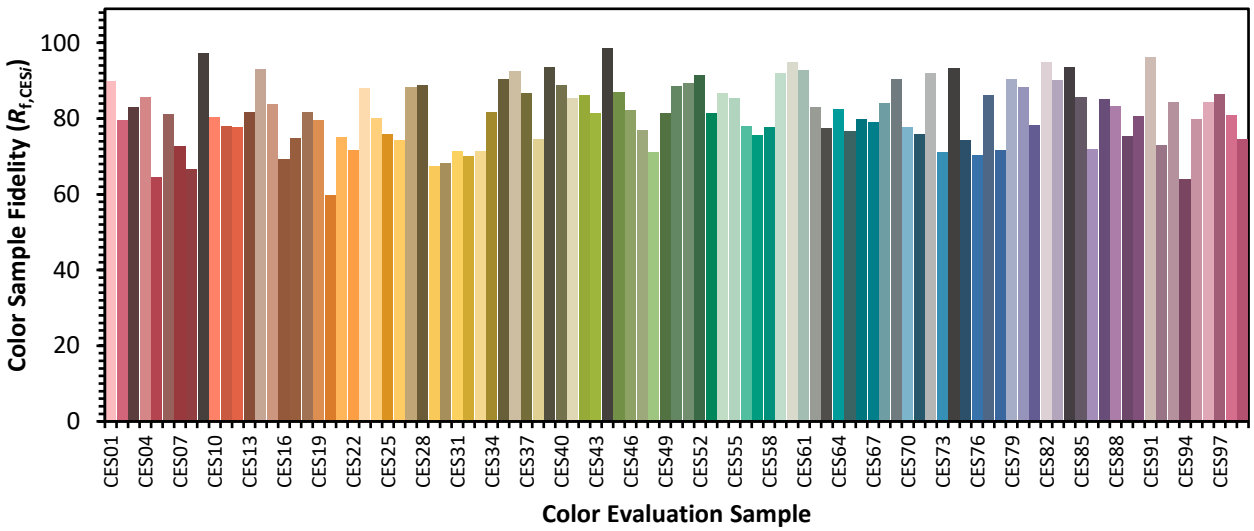


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

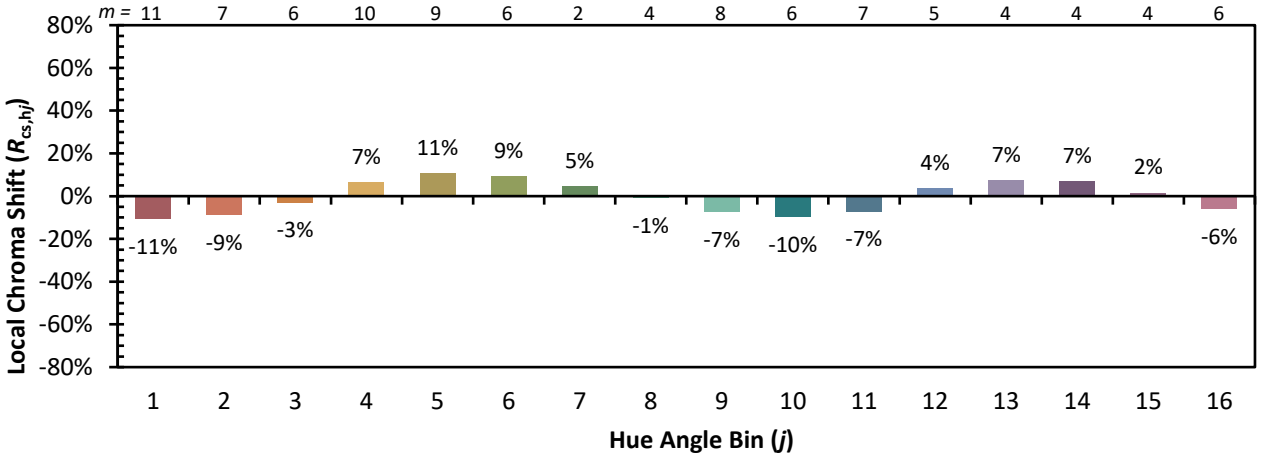
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

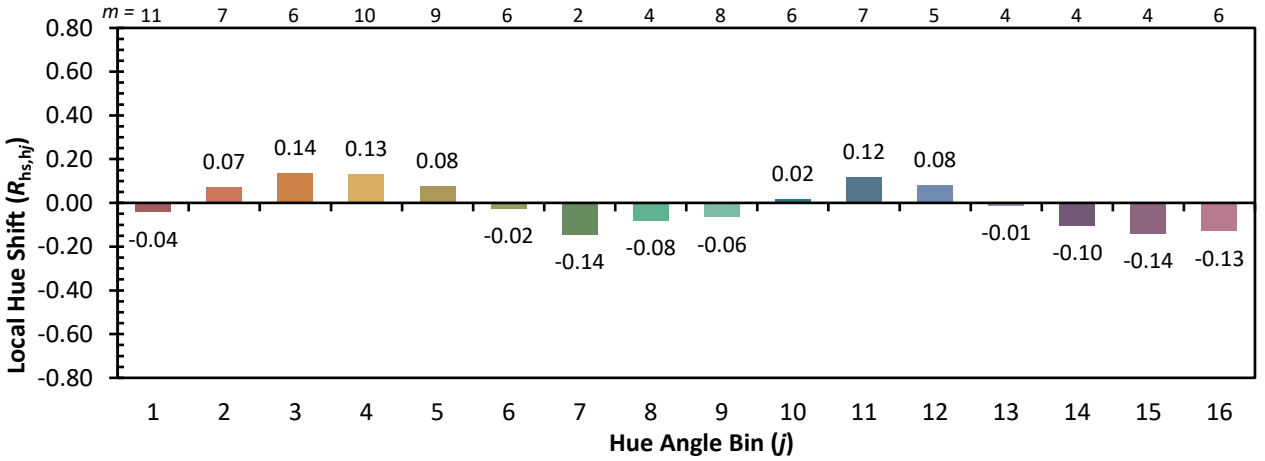


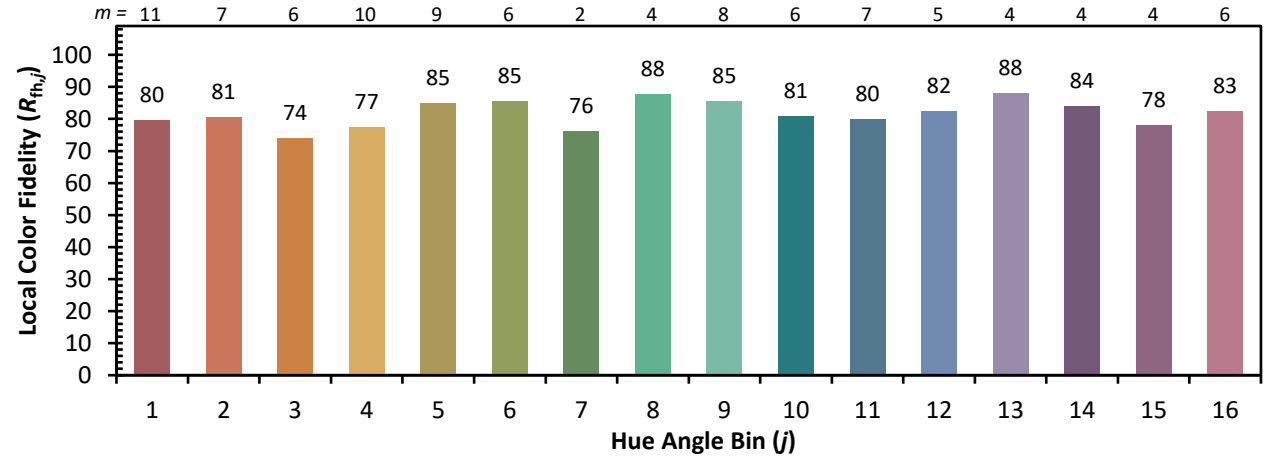
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



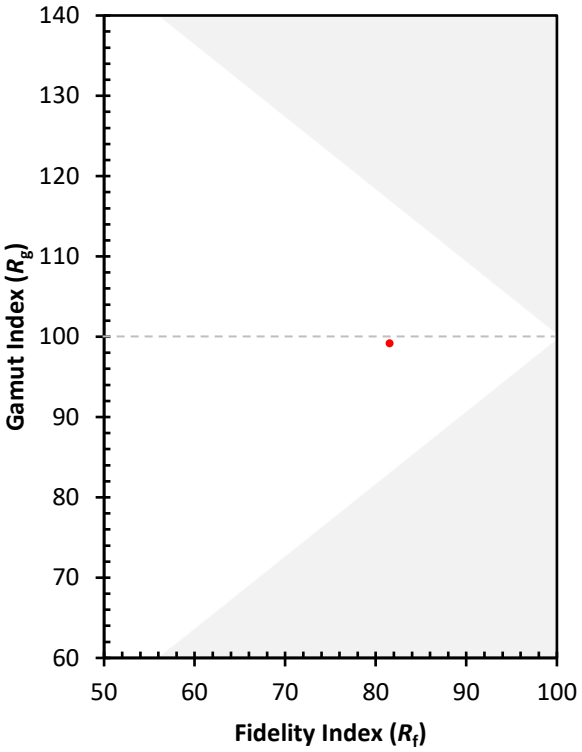


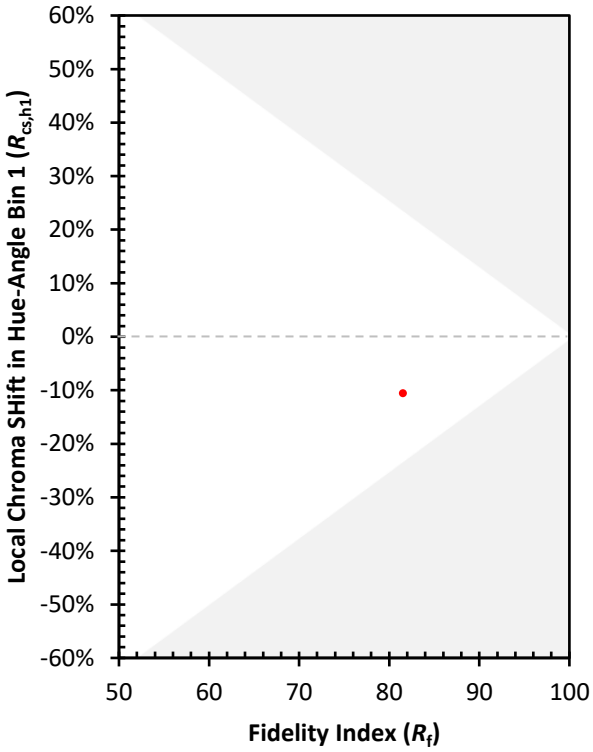


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)