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: P640944

Luminaire Tested: GWS-SA5E-830-U-SL2-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:	P640944
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-28)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5E-830-U-SL2-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II 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:	17511.1 lumens
Efficiency:	N/A
Efficacy:	65.0 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G2

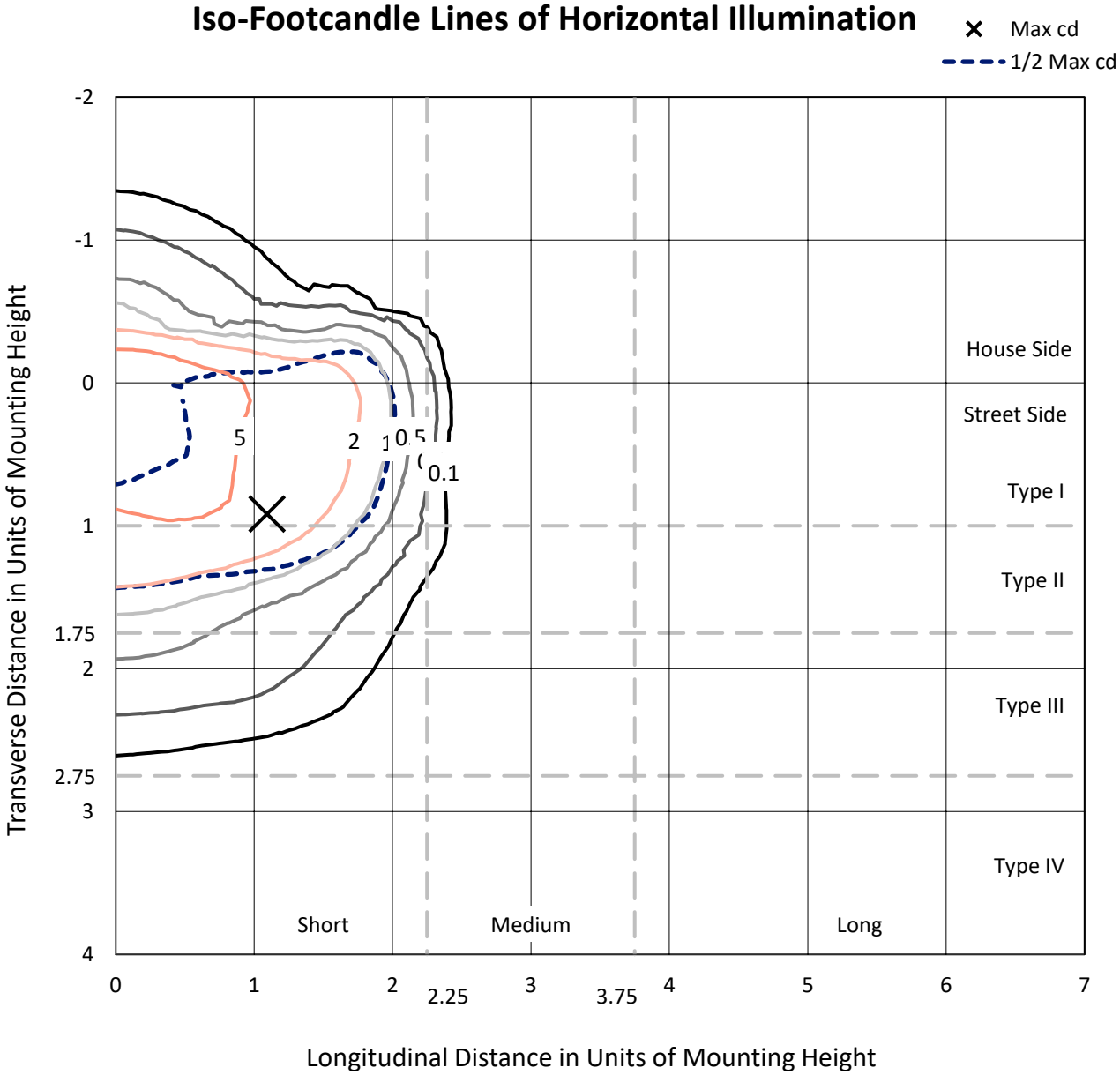
Input Watts (W):	269.6
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P640944
CATALOG NUMBER: GWS-SA5E-830-U-SL2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



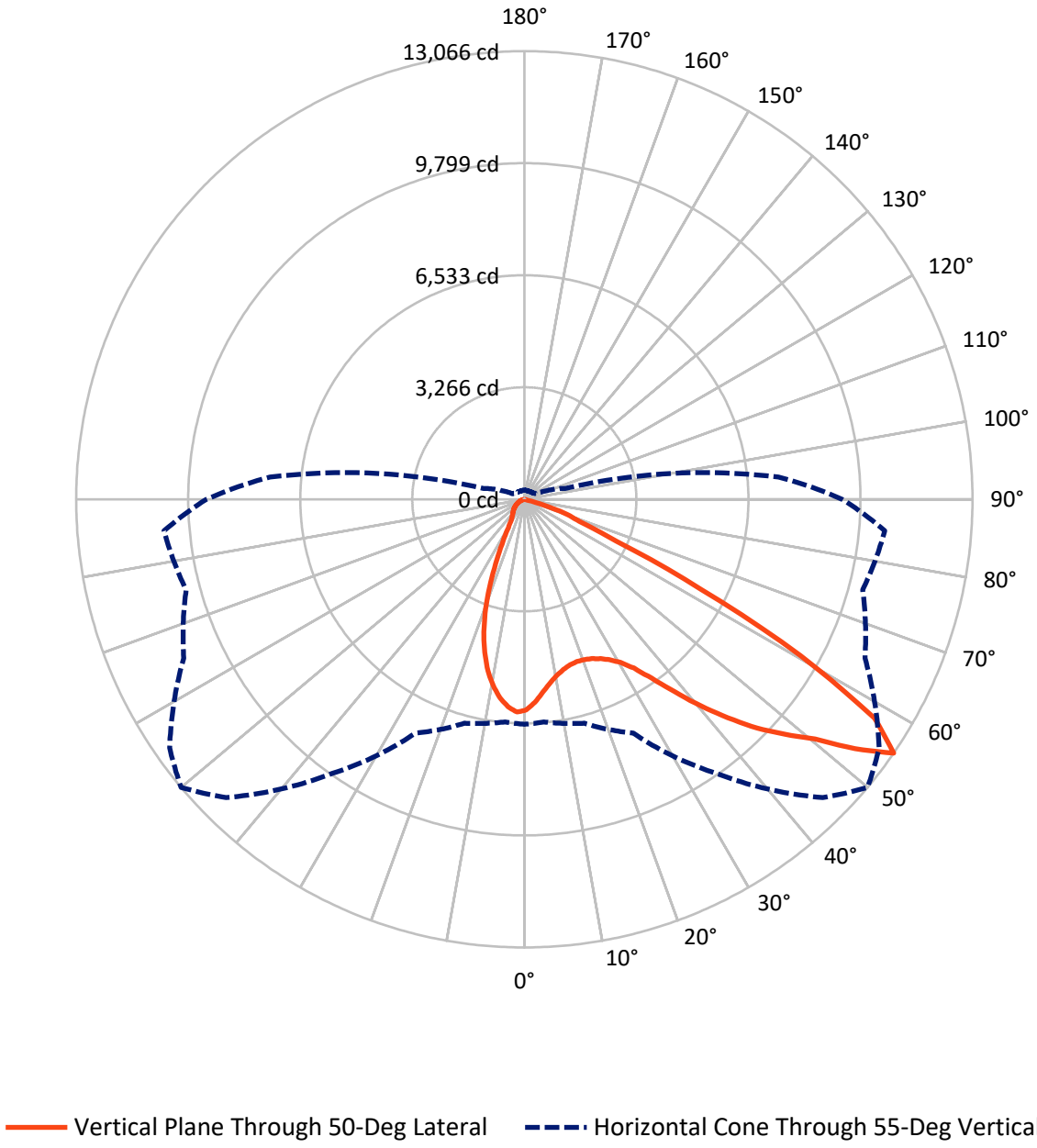
Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P640944
CATALOG NUMBER: GWS-SA5E-830-U-SL2-W-GRSBK

Luminous Intensity Polar Plot



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

Scaled Data Report

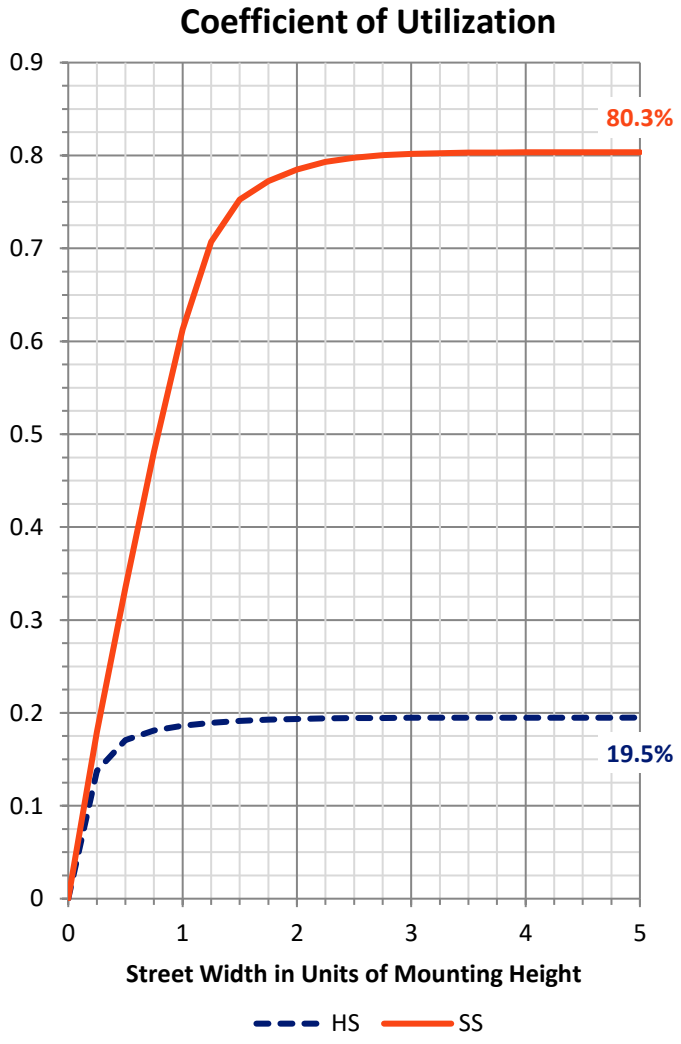
REPORT NUMBER: P640944
CATALOG NUMBER: GWS-SA5E-830-U-SL2-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3450.5	0.0	3450.5
	% Fixture	19.7	0.0	19.7
Street Side	Lumens	14060.6	0.0	14060.6
	% Fixture	80.3	0.0	80.3
Total	Lumens	17511.1	0.0	17511.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	539.6	3.1
10°-20°	1327.8	7.6
20°-30°	1872.9	10.7
30°-40°	2771.5	15.8
40°-50°	3998.3	22.8
50°-60°	4716.3	26.9
60°-70°	2103.9	12.0
70°-80°	180.9	1.0
80°-90°	0.1	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°	17511.1	100.0
0°-180°	17511.1	100.0



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

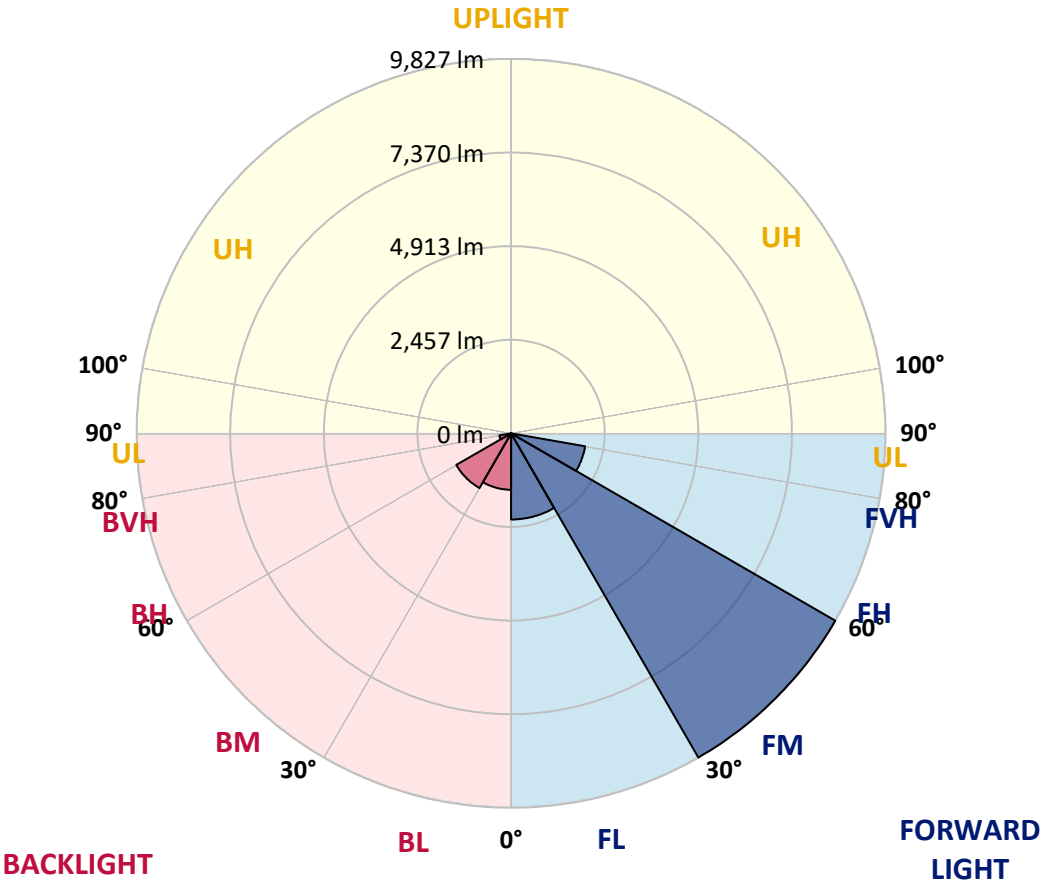
Scaled Data Report

REPORT NUMBER: P640944
CATALOG NUMBER: GWS-SA5E-830-U-SL2-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2260.7	12.9			
FM	(30°-60°)	9826.7	56.1			
FH	(60°-80°)	1973.2	11.3			G2/5000
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	1479.4	8.4	B3/2500		
BM	(30°-60°)	1659.4	9.5	B2/2500		
BH	(60°-80°)	311.6	1.8	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: P640944
CATALOG NUMBER: GWS-SA5E-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9
2.5°	5707.8	5712.0	5714.2	5771.9	5793.3	5878.8	5923.7	5947.2	6009.2	6081.9	6141.7
5°	5325.1	5318.7	5329.4	5402.1	5449.1	5575.2	5643.6	5690.7	5827.5	5998.5	6141.7
7.5°	4991.6	5004.5	5017.3	5096.4	5166.9	5303.7	5402.1	5472.6	5662.9	5917.3	6158.8
10°	4756.5	4756.5	4775.7	4865.5	4948.9	5117.8	5216.1	5305.9	5532.5	5844.6	6178.1
12.5°	4583.3	4585.5	4609.0	4711.6	4807.8	4983.1	5085.7	5173.3	5423.4	5771.9	6182.3
15°	4502.1	4495.7	4514.9	4623.9	4730.8	4895.4	5002.3	5087.8	5346.5	5731.3	6203.7
17.5°	4480.7	4476.4	4491.4	4598.3	4707.3	4867.6	4972.4	5057.9	5335.8	5744.1	6267.9
20°	4542.7	4534.1	4527.7	4619.7	4722.3	4880.5	4989.5	5085.7	5387.1	5814.7	6366.2
22.5°	4690.2	4690.2	4675.2	4720.1	4788.5	4931.8	5045.1	5171.2	5521.8	5955.7	6511.6
25°	4961.7	4940.3	4912.5	4931.8	4923.2	5013.0	5147.7	5323.0	5776.2	6188.8	6689.0
27.5°	5271.7	5290.9	5243.9	5246.0	5171.2	5139.1	5295.2	5560.3	6154.6	6518.0	6951.9
30°	5692.8	5677.8	5680.0	5673.6	5500.4	5348.6	5517.5	5870.2	6631.3	7020.3	7294.0
32.5°	6022.0	6043.4	6113.9	6154.6	5928.0	5684.3	5863.8	6291.4	7174.3	7593.3	7713.0
35°	6370.5	6408.9	6552.2	6684.7	6494.5	6214.4	6406.8	6849.3	7685.2	8159.8	8194.0
37.5°	6738.2	6815.1	6986.1	7219.2	7189.2	6941.2	7116.5	7505.6	8087.1	8501.8	8591.6
40°	7159.3	7234.1	7514.2	7849.8	7920.3	7864.7	7922.5	8149.1	8352.2	8516.8	8762.6
42.5°	7621.0	7723.7	8078.5	8527.4	8792.5	8841.7	8707.0	8683.5	8467.6	8345.7	8726.3
45°	8166.2	8285.9	8687.8	9269.2	9690.4	9756.6	9523.6	9222.2	8540.3	8219.6	8617.2
47.5°	8777.6	8890.9	9290.6	9989.7	10616.0	10641.7	10235.5	9750.2	8756.2	8365.0	8700.6
50°	8982.8	9053.3	9399.6	10220.5	11374.9	11571.6	10983.7	10344.5	9190.1	8792.5	9106.8
52.5°	8277.3	8305.1	8606.5	9436.0	11221.0	12484.4	12076.1	11231.7	9961.9	9444.5	9733.1
55°	6558.6	6513.7	6757.4	7518.4	9752.4	12298.4	13065.9	12625.5	10955.9	10209.9	10547.6
57.5°	4587.6	4534.1	4478.6	4993.8	7276.9	10425.8	12039.8	12820.0	11902.9	10968.7	11426.2
60°	3771.0	3719.7	3450.3	3213.0	4399.5	7486.4	9247.9	10716.5	11826.0	10930.3	11398.4
62.5°	3257.9	3228.0	3119.0	2796.2	2588.8	4273.3	5791.1	7197.8	9074.7	8583.0	8608.7
65°	2558.9	2550.3	2625.1	2659.3	2289.5	2364.3	2954.4	3741.0	4906.1	4626.1	4386.6
67.5°	1748.7	1729.4	1870.5	2300.2	2201.9	1866.2	1729.4	1744.4	2122.8	1297.6	1030.4
70°	1111.6	1066.7	1068.9	1425.9	1791.4	1472.9	1334.0	1173.6	1056.0	192.4	218.0
72.5°	711.9	684.1	587.9	643.5	829.4	718.3	724.7	624.2	416.9	102.6	119.7
75°	299.3	275.8	211.6	168.9	166.7	104.7	91.9	85.5	57.7	57.7	62.0
77.5°	2.1	0.0	0.0	2.1	4.3	2.1	2.1	4.3	8.6	12.8	15.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
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: P640944
CATALOG NUMBER: GWS-SA5E-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9	6143.9
2.5°	6178.1	6126.8	6184.5	6205.9	6203.7	6205.9	6143.9	6101.1	6099.0	6045.5	6019.9
5°	6201.6	6161.0	6203.7	6175.9	6109.7	6026.3	5915.1	5818.9	5776.2	5714.2	5684.3
7.5°	6246.5	6203.7	6197.3	6086.1	5921.5	5746.2	5549.6	5374.3	5280.2	5166.9	5173.3
10°	6278.5	6229.4	6146.0	5919.4	5645.8	5365.7	5072.9	4812.1	4647.4	4495.7	4470.0
12.5°	6291.4	6218.7	6024.2	5682.1	5297.3	4931.8	4502.1	4130.1	3873.6	3674.8	3647.0
15°	6314.9	6197.3	5868.1	5395.7	4867.6	4350.3	3803.0	3294.3	2954.4	2725.6	2744.9
17.5°	6351.2	6173.8	5692.8	5075.0	4405.9	3674.8	2935.1	2351.5	2039.4	1906.9	1909.0
20°	6402.5	6146.0	5500.4	4722.3	3852.2	2911.6	2052.2	1611.9	1524.2	1519.9	1513.5
22.5°	6470.9	6118.2	5295.2	4335.3	3195.9	2039.4	1366.0	1229.2	1265.5	1336.1	1348.9
25°	6552.2	6084.0	5066.4	3899.2	2479.8	1338.2	1024.0	1002.6	1090.2	1184.3	1205.7
27.5°	6678.3	6066.9	4805.6	3403.3	1740.1	959.8	838.0	850.8	929.9	1009.0	1028.3
30°	6892.1	6099.0	4521.3	2847.5	1118.0	765.3	726.8	746.1	788.8	829.4	846.5
32.5°	7182.8	6193.0	4245.6	2240.4	797.4	664.8	656.3	667.0	684.1	707.6	714.0
35°	7522.7	6355.5	3961.2	1603.3	658.4	607.1	598.6	598.6	607.1	611.4	613.5
37.5°	7802.8	6526.5	3694.0	1066.7	590.0	562.2	549.4	543.0	540.8	545.1	547.3
40°	7924.6	6597.1	3403.3	776.0	540.8	521.6	502.4	483.1	483.1	498.1	500.2
42.5°	7839.1	6518.0	3067.7	641.3	506.6	478.9	448.9	431.8	440.4	455.3	459.6
45°	7657.4	6323.4	2697.8	566.5	472.4	436.1	401.9	391.2	399.8	419.0	423.3
47.5°	7627.5	6195.2	2255.3	517.3	436.1	399.8	363.4	352.7	363.4	378.4	382.7
50°	7924.6	6306.3	1763.6	474.6	401.9	361.3	331.3	320.7	327.1	335.6	339.9
52.5°	8467.6	6718.9	1423.7	434.0	361.3	322.8	303.6	290.7	290.7	299.3	301.4
55°	*9269.2*	*7439.3*	*1229.2*	*386.9*	*314.2*	*292.9*	*275.8*	*262.9*	*262.9*	*267.2*	*269.4*
57.5°	10192.7	8311.5	1274.1	324.9	275.8	265.1	250.1	239.4	243.7	243.7	243.7
60°	10064.5	8247.4	1363.9	273.6	243.7	239.4	226.6	222.3	233.0	224.5	220.2
62.5°	7413.7	5697.1	714.0	224.5	209.5	205.2	196.7	205.2	220.2	196.7	188.1
65°	3600.0	2757.7	286.5	183.8	177.4	173.2	168.9	181.7	190.3	153.9	145.4
67.5°	846.5	688.4	186.0	156.1	147.5	139.0	143.2	145.4	139.0	104.7	100.5
70°	220.2	215.9	145.4	130.4	117.6	109.0	109.0	106.9	91.9	66.3	62.0
72.5°	119.7	117.6	104.7	98.3	81.2	72.7	74.8	66.3	51.3	38.5	36.3
75°	59.9	64.1	59.9	55.6	44.9	40.6	40.6	36.3	25.7	15.0	15.0
77.5°	12.8	15.0	15.0	12.8	10.7	8.6	8.6	10.7	4.3	0.0	0.0
80°	2.1	2.1	2.1	2.1	2.1	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

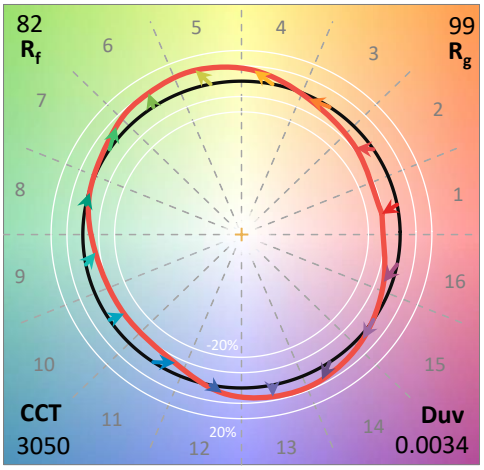
Test Information

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

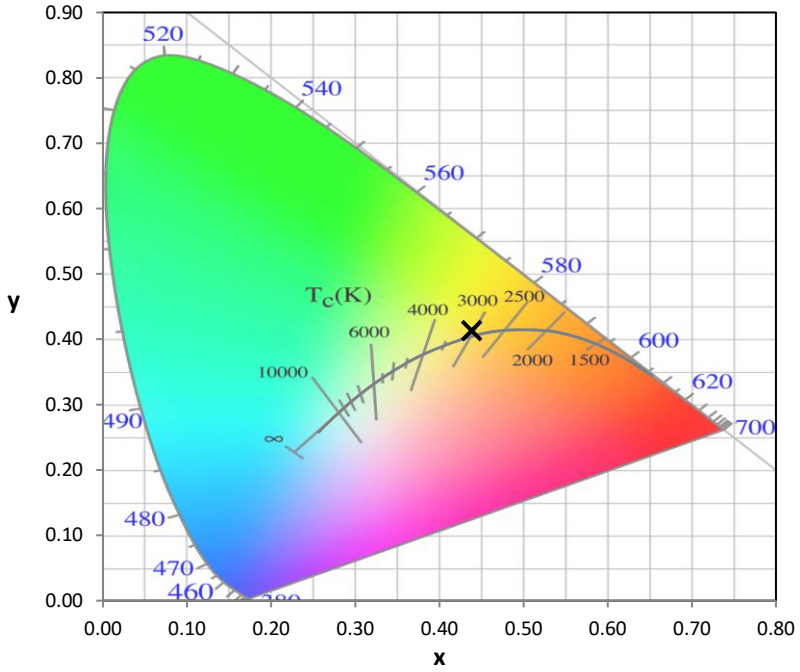
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

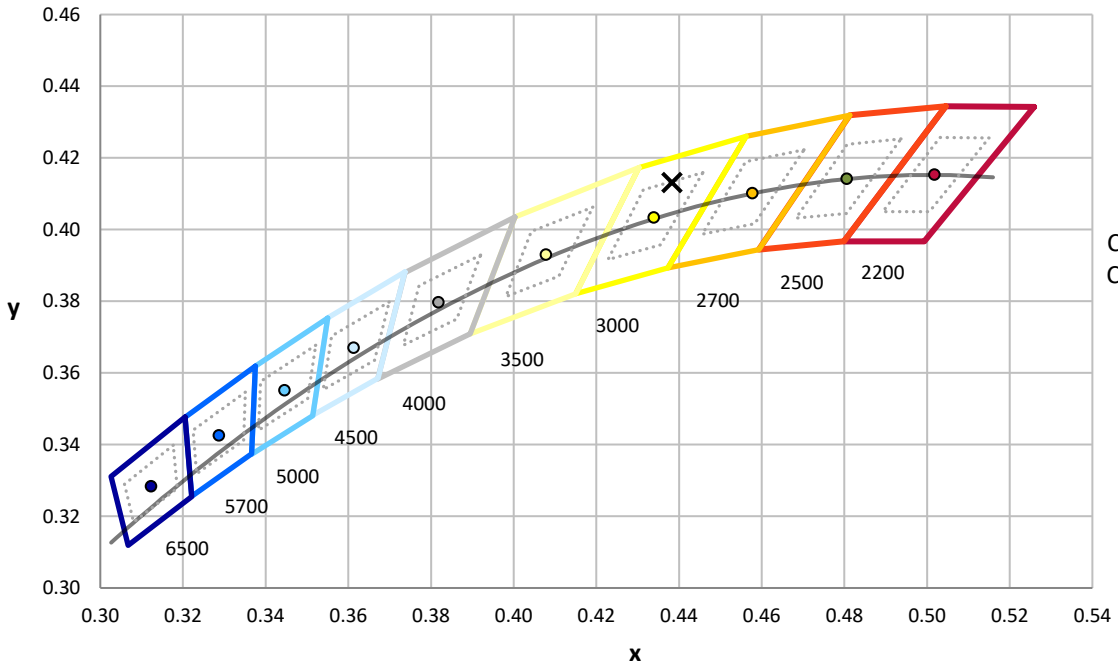
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

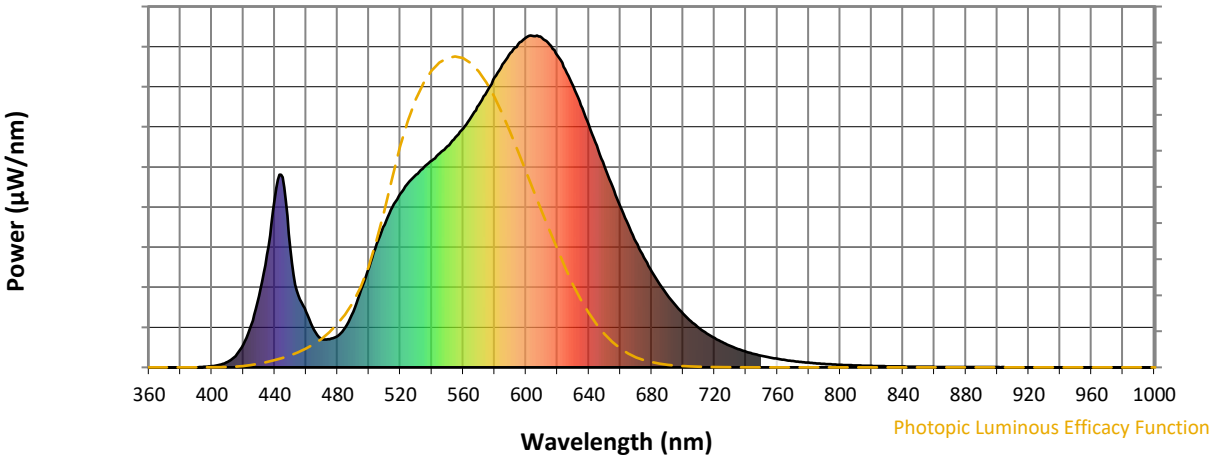


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

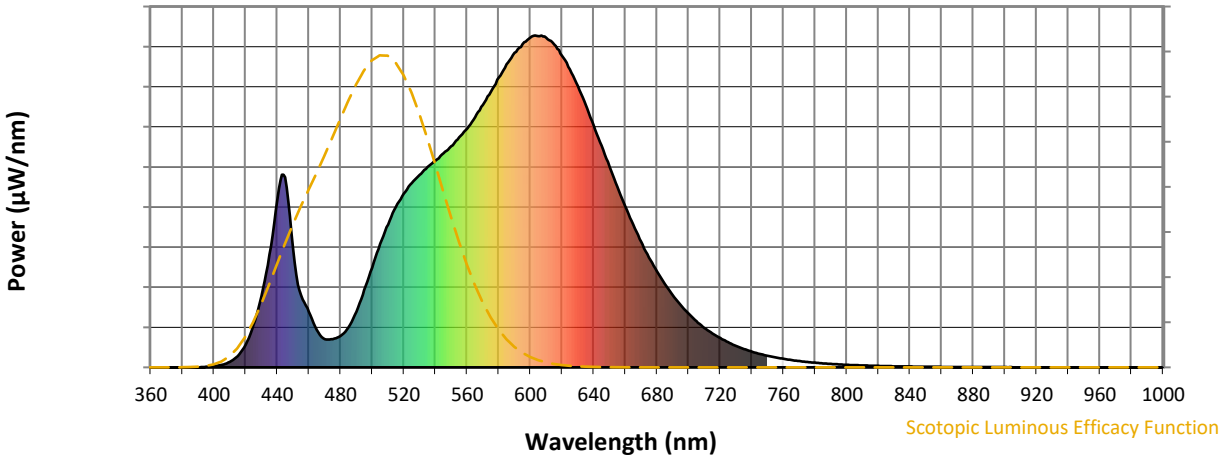


Photopic Lumens: NR

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

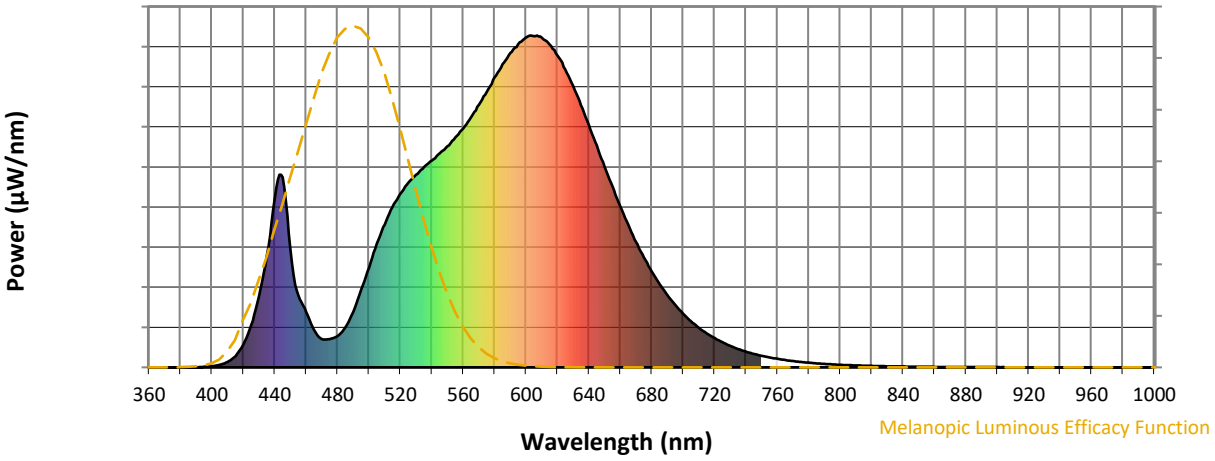


Scotopic Lumens: NR **S/P: 1.27**

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			

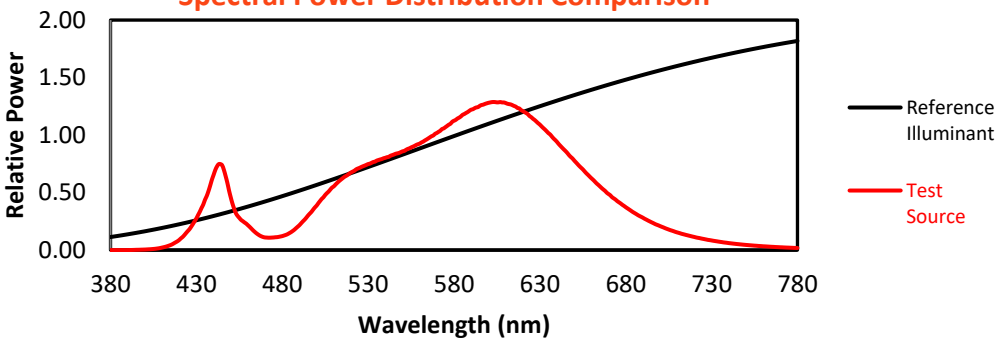
REPORT NUMBER: SP1-2408-195-9

TM-30-18

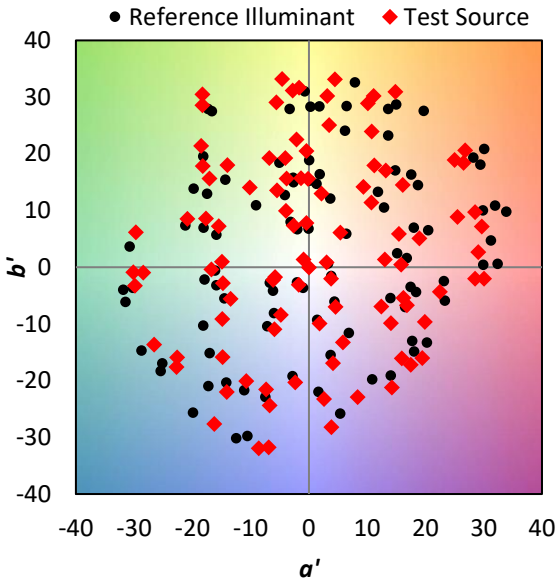
Summary

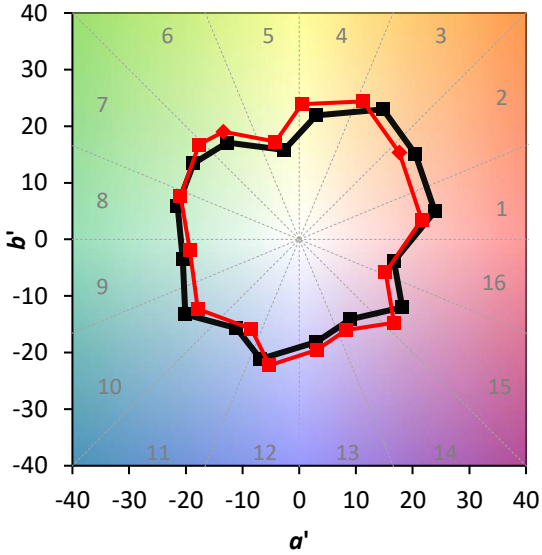
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

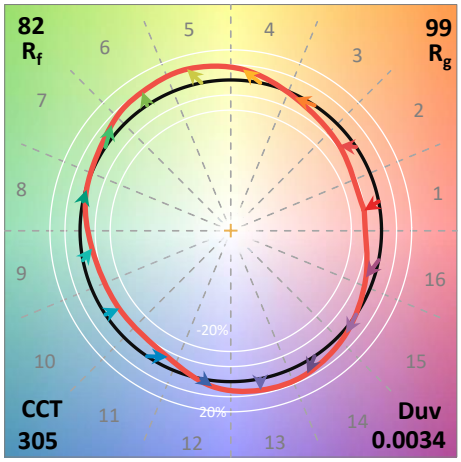
Spectral Power Distribution Comparison

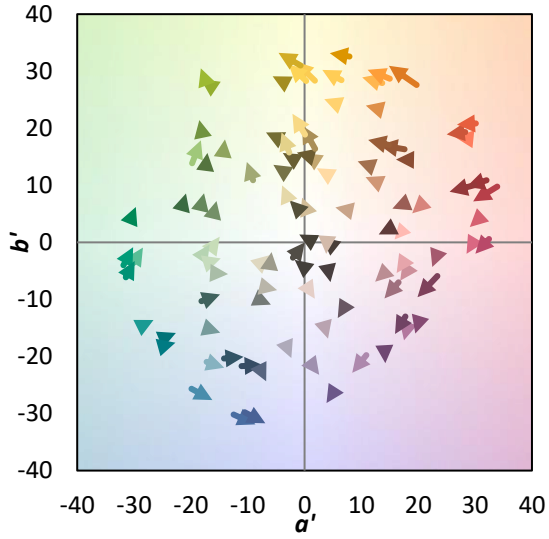


Color Vector Graphics







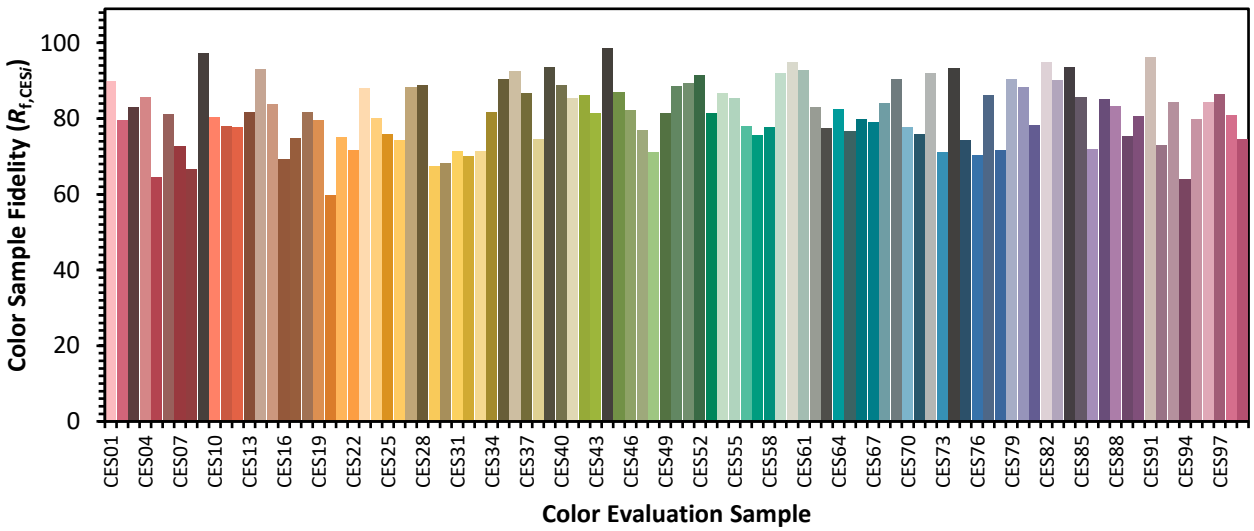


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

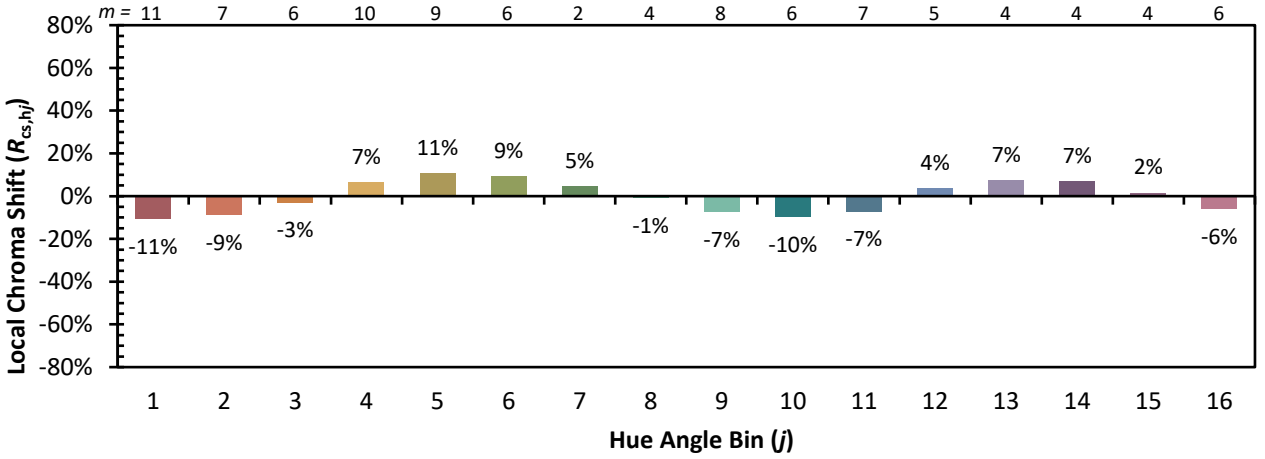
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

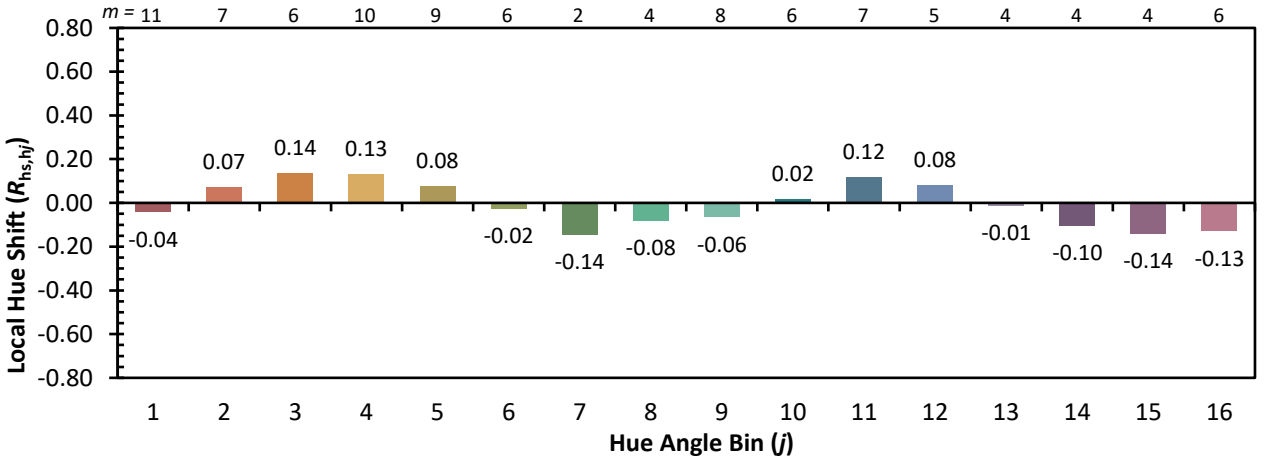


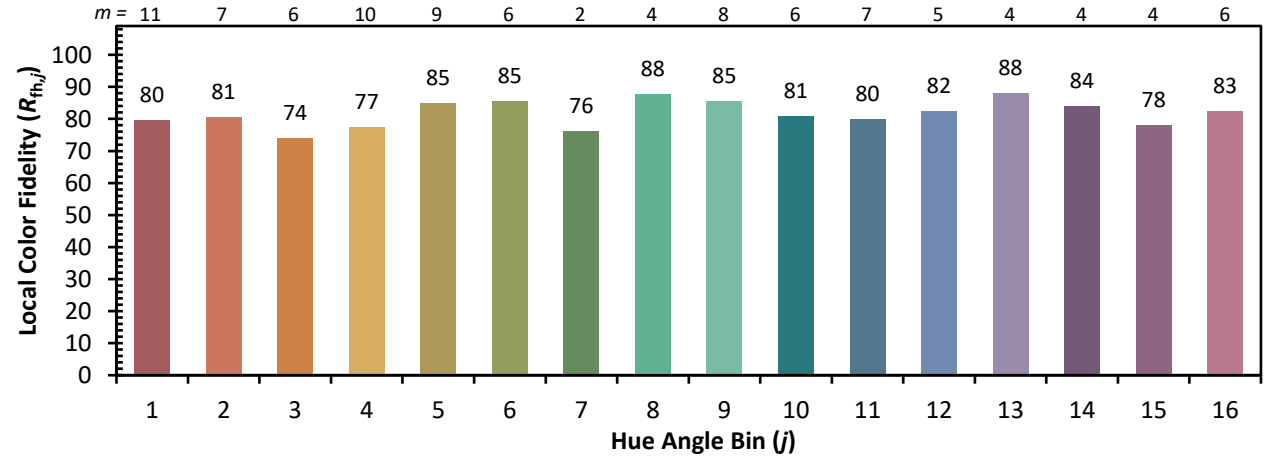
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



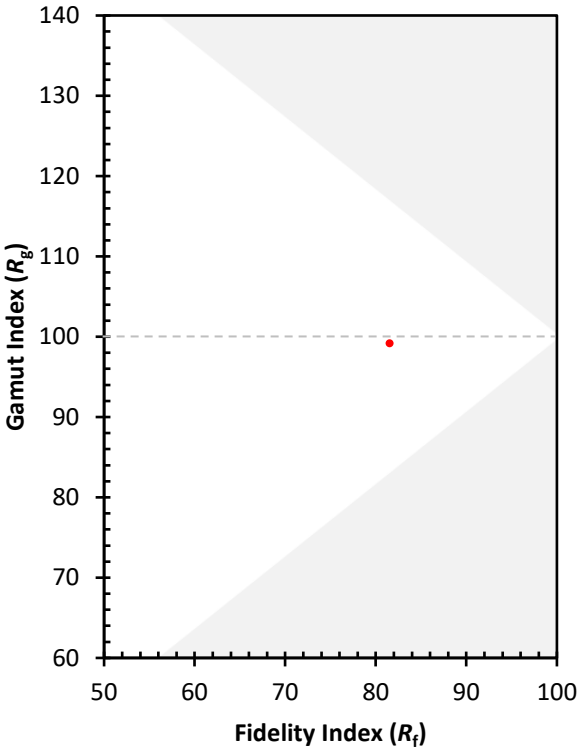


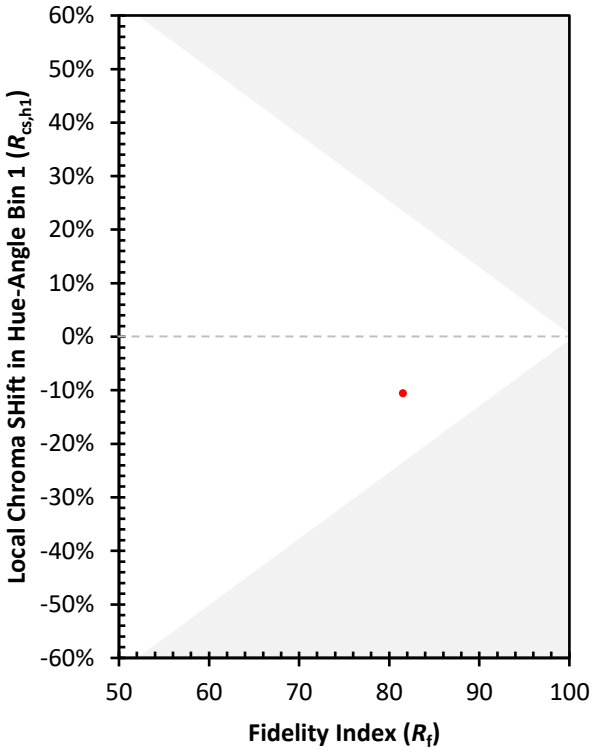


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)