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: P640472

Luminaire Tested: GWS-SA5D-830-U-T2R-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:	P640472
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-12)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5D-830-U-T2R-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY 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:	15997.3 lumens
Efficiency:	N/A
Efficacy:	78.2 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

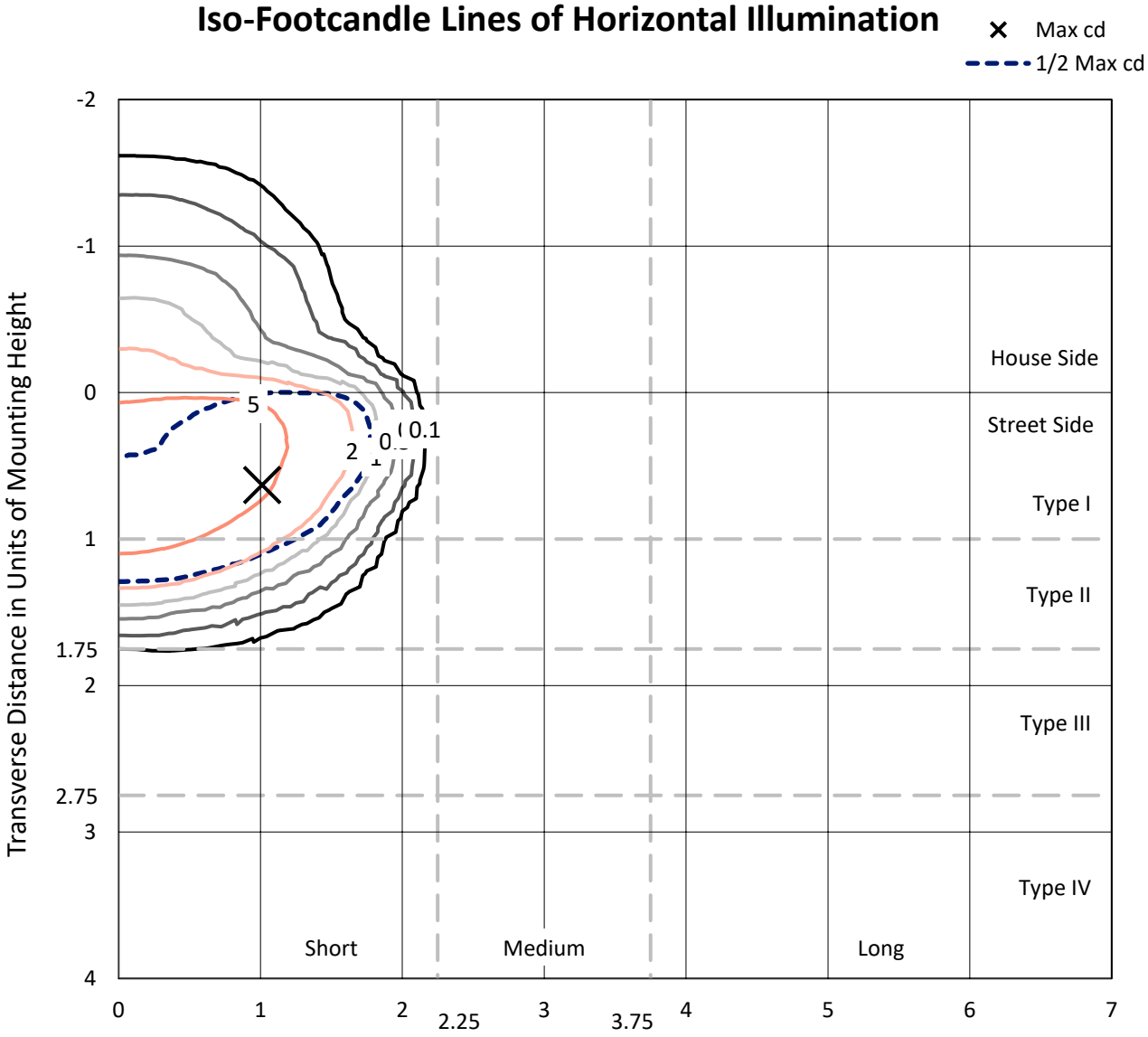
Input Watts (W):	204.6
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P640472
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



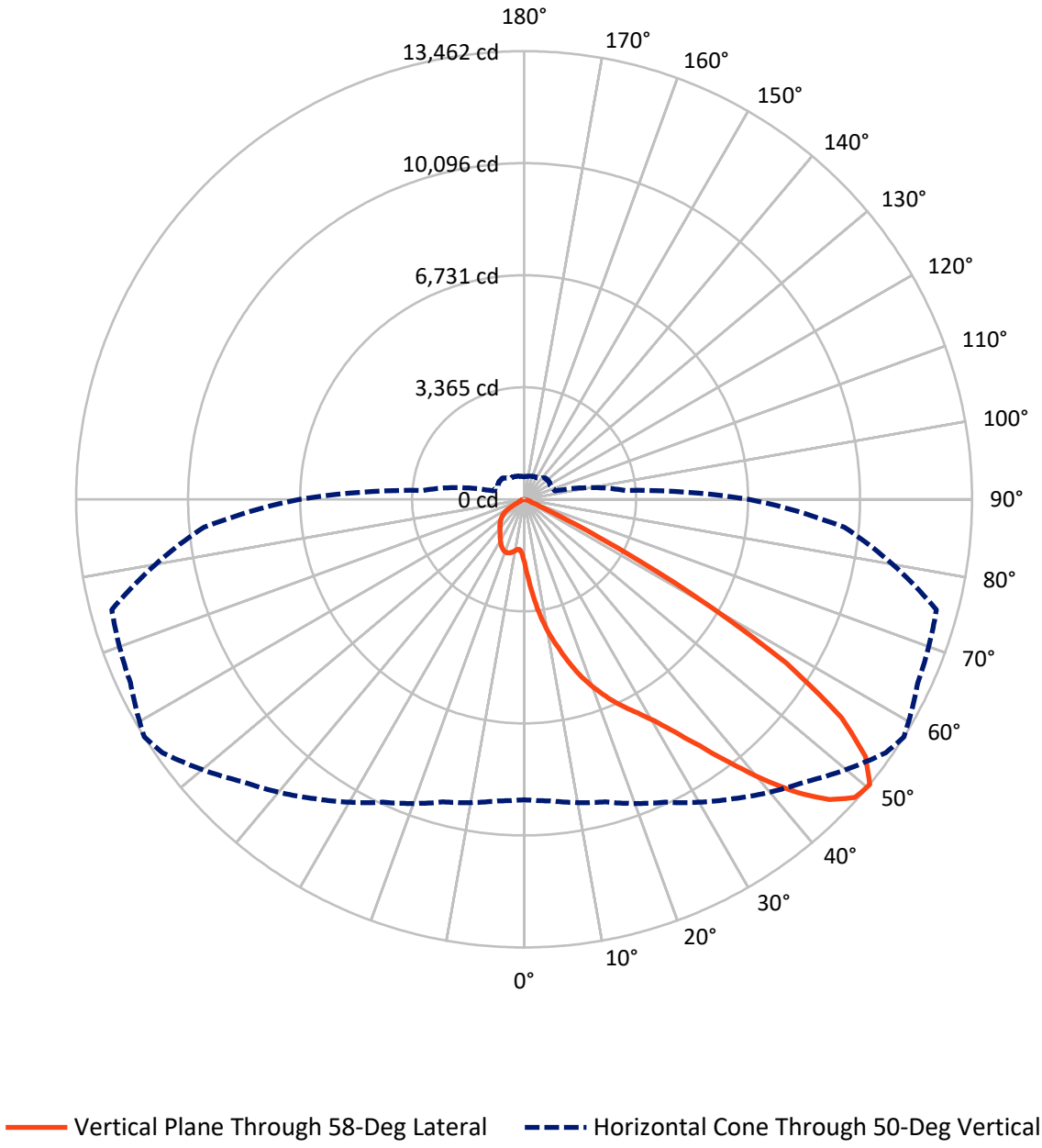
Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P640472
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W-GRSBK

Luminous Intensity Polar Plot



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

Scaled Data Report

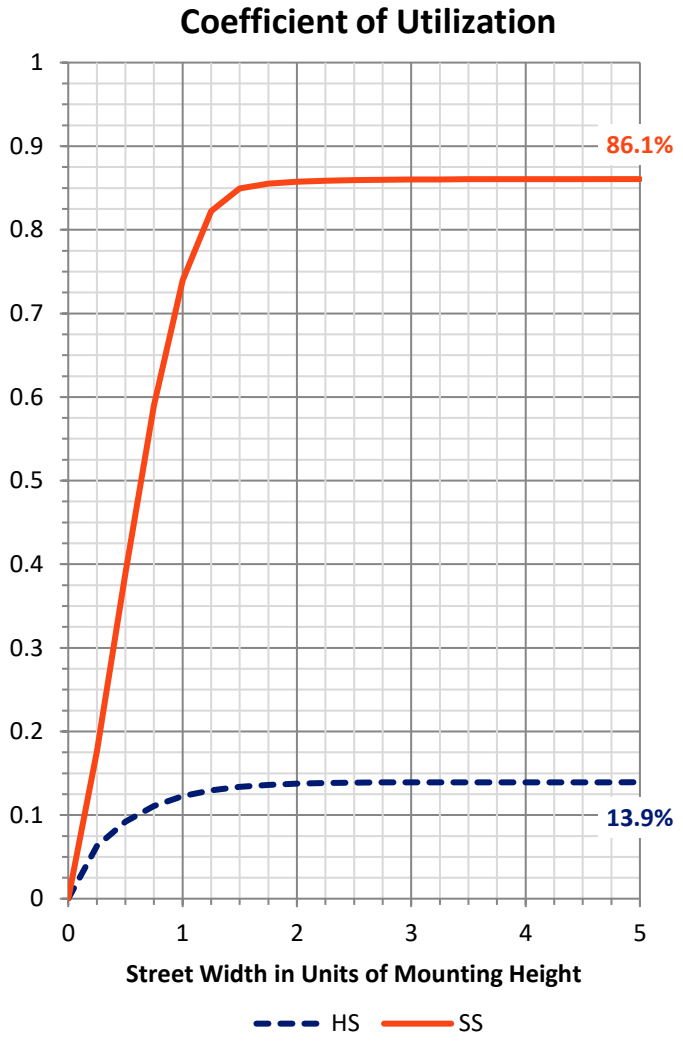
REPORT NUMBER: P640472
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2240.6	0.0	2240.6
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	13756.7	0.0	13756.7
	% Fixture	86.0	0.0	86.0
Total	Lumens	15997.3	0.0	15997.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.7	1.5
10°-20°	937.1	5.9
20°-30°	1896.3	11.9
30°-40°	3354.8	21.0
40°-50°	4890.6	30.6
50°-60°	3919.9	24.5
60°-70°	706.2	4.4
70°-80°	55.7	0.3
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°	15997.3	100.0
0°-180°	15997.3	100.0



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

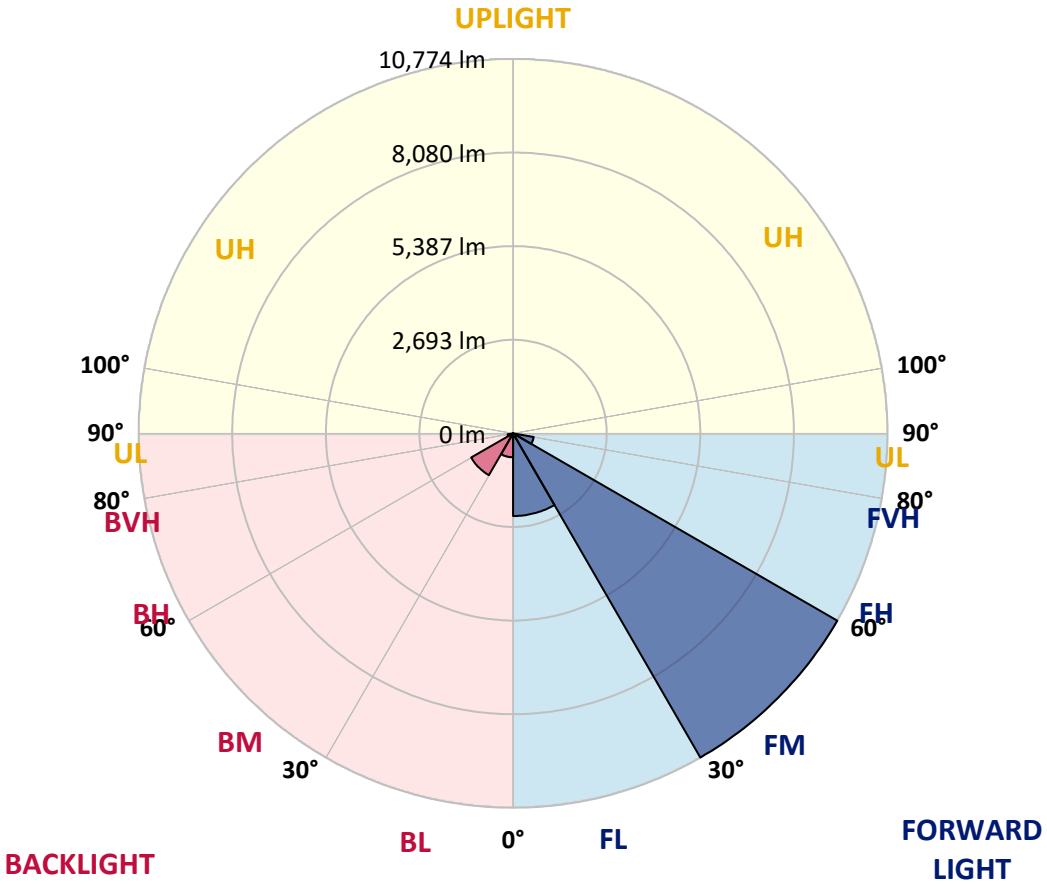
Scaled Data Report

REPORT NUMBER: P640472
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2380.3	14.9			
FM	(30°-60°)	10773.7	67.3			
FH	(60°-80°)	602.6	3.8			G0/660
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	689.8	4.3	B2/1000		
BM	(30°-60°)	1391.5	8.7	B2/2500		
BH	(60°-80°)	159.2	1.0	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: B2-U0-G1
Type II Short



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

Scaled Data Report

REPORT NUMBER: P640472
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1910.9	1910.9	1910.9	1910.9	1910.9	1910.9	1910.9	*1910.9*	1910.9	1910.9	1910.9
2.5°	2827.8	2783.3	2757.6	2737.1	2646.5	2502.8	2408.7	*2359.1*	2276.9	2138.4	2018.6
5°	3690.0	3657.5	3597.6	3556.5	3440.2	3236.6	3026.2	*2942.4*	2755.9	2442.9	2162.3
7.5°	4261.3	4237.4	4215.2	4160.4	4050.9	3866.2	3633.5	*3546.3*	3258.9	2814.1	2353.9
10°	4701.0	4682.2	4656.5	4654.8	4569.3	4403.3	4175.8	*4085.1*	3773.8	3217.8	2579.7
12.5°	5087.6	5072.2	5067.1	5115.0	5060.2	4937.1	4690.7	*4577.8*	4247.7	3630.1	2829.5
15°	5352.8	5349.4	5371.6	5465.7	5496.5	5440.0	5233.0	*5111.6*	4731.8	4044.1	3104.9
17.5°	5474.2	5484.5	5527.3	5689.8	5826.6	5874.5	5715.4	*5612.8*	5212.5	4463.2	3399.2
20°	5681.2	5677.8	5703.5	5857.4	6025.1	6196.1	6148.2	*6061.0*	5698.3	4906.3	3725.9
22.5°	6264.6	6215.0	6160.2	6184.2	6244.0	6444.2	6533.2	*6488.7*	6199.6	5361.3	4062.9
25°	7161.0	7109.7	6933.5	6762.4	6649.5	6740.2	6861.6	*6883.9*	6697.4	5828.3	4415.3
27.5°	8112.1	8065.9	7867.5	7610.9	7287.6	7130.2	7220.9	*7265.3*	7186.6	6384.3	4790.0
30°	9003.4	8941.8	8724.6	8406.4	8031.7	7790.5	7687.9	*7718.7*	7764.9	7042.9	5229.6
32.5°	9776.6	9730.5	9470.4	9135.1	8774.2	8522.7	8283.2	*8334.5*	8447.4	7848.7	5792.4
35°	10431.8	10407.9	10132.5	9798.9	9417.4	9289.1	9083.8	*9094.1*	9207.0	8822.1	6478.4
37.5°	11001.5	10960.4	10710.7	10401.0	10098.3	10077.7	10021.3	*10026.4*	10084.6	9956.3	7267.0
40°	11360.7	11323.1	11145.2	10953.6	10738.1	10741.5	11034.0	*11056.2*	10989.5	11069.9	8100.2
42.5°	11495.9	11468.5	11372.7	11374.4	11352.2	11453.1	12002.3	*12043.3*	11803.8	11944.1	8811.8
45°	11261.5	11249.6	11256.4	11502.7	11769.6	12081.0	12794.3	*12866.2*	12527.4	12524.0	9367.8
47.5°	10505.4	10481.4	10681.6	11100.7	11718.3	12323.9	13273.3	*13384.5*	13033.8	12855.9	9716.8
50°	*9023.9*	*9092.4*	*9408.8*	*10038.4*	*10977.6*	*11990.3*	*13268.2*	*13461.5*	*13052.6*	*12826.8*	*9658.6*
52.5°	6536.6	6522.9	7215.7	8081.3	9224.1	10922.8	12563.4	*12845.6*	12595.9	12541.1	9528.6
55°	3556.5	3681.4	4148.4	5294.6	6721.3	8902.5	10953.6	*11569.5*	11858.6	12436.8	9763.0
57.5°	1307.0	1361.7	1654.2	2465.1	3558.3	5535.8	8367.0	*9295.9*	10188.9	12146.0	9723.6
60°	526.9	537.2	653.5	906.7	1495.2	2817.5	5019.2	*5843.7*	6685.4	9297.6	7462.1
62.5°	383.2	396.9	443.1	530.3	756.1	1231.7	2164.0	*2516.4*	2750.8	4605.2	3676.3
65°	309.6	319.9	357.5	396.9	499.5	662.0	698.0	*672.3*	668.9	1190.6	843.4
67.5°	256.6	266.9	294.2	321.6	359.2	330.2	239.5	*251.5*	205.3	203.6	165.9
70°	188.2	200.2	227.5	256.6	215.5	89.0	138.6	*205.3*	155.7	130.0	126.6
72.5°	142.0	150.5	176.2	167.6	63.3	34.2	92.4	*148.8*	119.7	95.8	94.1
75°	106.1	111.2	89.0	27.4	6.8	8.6	34.2	*61.6*	66.7	54.7	54.7
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	*5.1*	6.8	8.6	10.3
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

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

Scaled Data Report

REPORT NUMBER: P640472
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1910.9	1910.9	1910.9	1910.9	1910.9	1910.9	1910.9	1910.9	1910.9	1910.9	1910.9
2.5°	1950.2	1878.3	1775.7	1690.2	1625.2	1561.9	1514.0	1466.1	1464.4	1440.4	1435.3
5°	2032.3	1902.3	1714.1	1579.0	1496.9	1447.3	1413.0	1395.9	1387.4	1378.8	1375.4
7.5°	2150.3	1963.9	1703.9	1560.2	1491.7	1459.2	1435.3	1425.0	1419.9	1413.0	1411.3
10°	2295.8	2052.8	1741.5	1596.1	1536.2	1505.4	1479.8	1464.4	1455.8	1443.8	1440.4
12.5°	2470.2	2162.3	1801.4	1656.0	1592.7	1551.6	1517.4	1495.2	1483.2	1467.8	1464.4
15°	2658.4	2280.4	1868.1	1710.7	1635.4	1582.4	1539.6	1505.4	1483.2	1464.4	1459.2
17.5°	2853.4	2400.1	1928.0	1748.3	1656.0	1592.7	1531.1	1484.9	1457.5	1433.6	1426.7
20°	3072.4	2523.3	1967.3	1755.2	1649.1	1565.3	1493.4	1435.3	1407.9	1375.4	1368.6
22.5°	3301.6	2637.9	1984.4	1739.8	1611.5	1514.0	1437.0	1377.1	1337.8	1303.6	1293.3
25°	3524.0	2740.5	1975.9	1697.0	1555.0	1442.1	1363.4	1301.8	1259.1	1224.9	1216.3
27.5°	3760.1	2826.1	1945.1	1633.7	1478.0	1363.4	1288.2	1235.1	1195.8	1158.1	1149.6
30°	4025.3	2904.8	1895.5	1556.7	1387.4	1283.0	1224.9	1188.9	1146.2	1106.8	1094.8
32.5°	4345.2	2974.9	1823.6	1464.4	1307.0	1212.9	1180.4	1153.0	1103.4	1062.3	1053.8
35°	4711.3	3033.1	1732.9	1368.6	1228.3	1168.4	1161.6	1125.6	1060.6	1012.7	1002.5
37.5°	5135.5	3089.5	1625.2	1274.5	1170.1	1147.9	1149.6	1088.0	1009.3	951.1	944.3
40°	5592.3	3146.0	1505.4	1192.4	1117.1	1135.9	1120.5	1033.3	905.0	848.5	841.7
42.5°	6067.8	3207.6	1384.0	1115.4	1072.6	1089.7	1067.5	923.8	831.4	802.3	798.9
45°	6497.2	3281.1	1252.2	1038.4	1028.1	1023.0	985.4	836.5	797.2	776.7	774.9
47.5°	6806.9	3269.1	1112.0	964.8	980.2	963.1	848.5	795.5	763.0	735.6	728.8
50°	*6750.4*	*3060.4*	*966.5*	*882.7*	*918.6*	*903.2*	*763.0*	*747.6*	*718.5*	*689.4*	*679.1*
52.5°	6606.7	2776.5	840.0	795.5	851.9	816.0	704.8	689.4	663.8	626.1	614.1
55°	6683.7	2509.6	740.7	725.3	783.5	675.7	639.8	615.9	588.5	547.4	542.3
57.5°	6435.6	2047.7	595.3	605.6	692.8	576.5	561.1	523.5	477.3	449.9	446.5
60°	4454.7	1100.0	372.9	384.9	501.2	484.1	502.9	468.7	412.3	386.6	381.5
62.5°	2046.0	441.4	203.6	195.0	263.4	328.5	431.1	427.7	357.5	316.5	313.1
65°	496.1	201.9	145.4	136.9	148.8	196.7	280.6	337.0	289.1	241.2	236.1
67.5°	160.8	164.2	133.4	124.9	131.7	147.1	167.6	186.5	184.8	169.4	165.9
70°	128.3	148.8	123.2	112.9	112.9	118.0	112.9	90.7	78.7	85.5	89.0
72.5°	95.8	112.9	97.5	87.2	83.8	82.1	70.1	51.3	35.9	32.5	30.8
75°	56.5	63.3	59.9	51.3	47.9	42.8	34.2	22.2	12.0	8.6	5.1
77.5°	10.3	12.0	13.7	10.3	8.6	6.8	5.1	1.7	0.0	0.0	0.0
80°	0.0	1.7	1.7	1.7	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

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

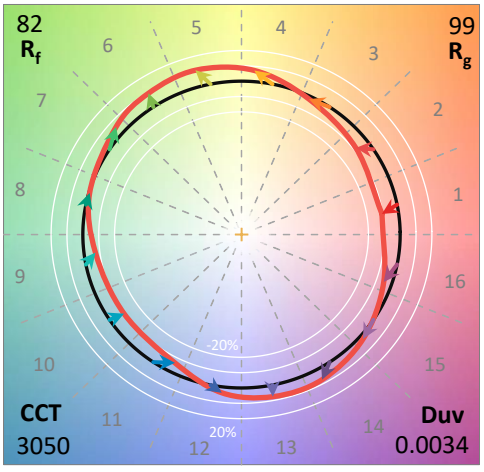
Test Information

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

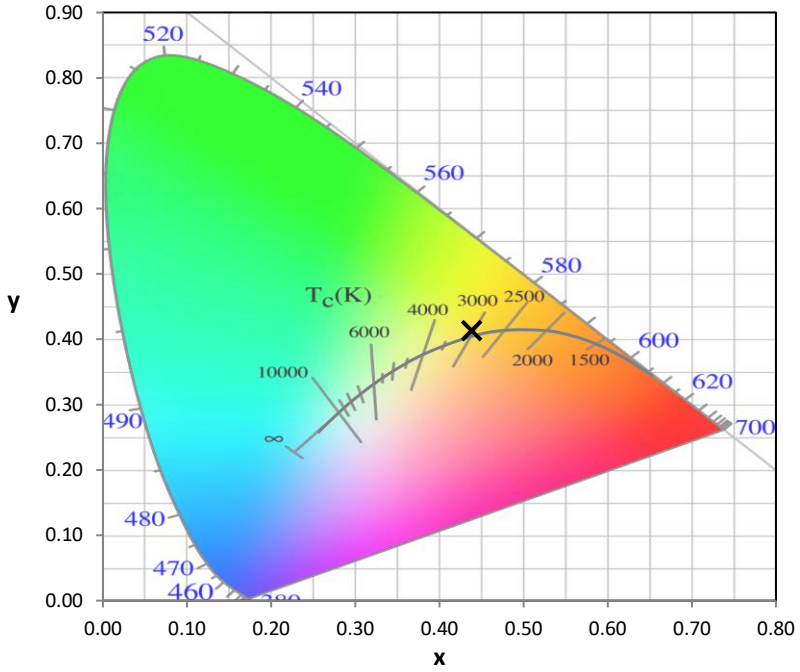
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

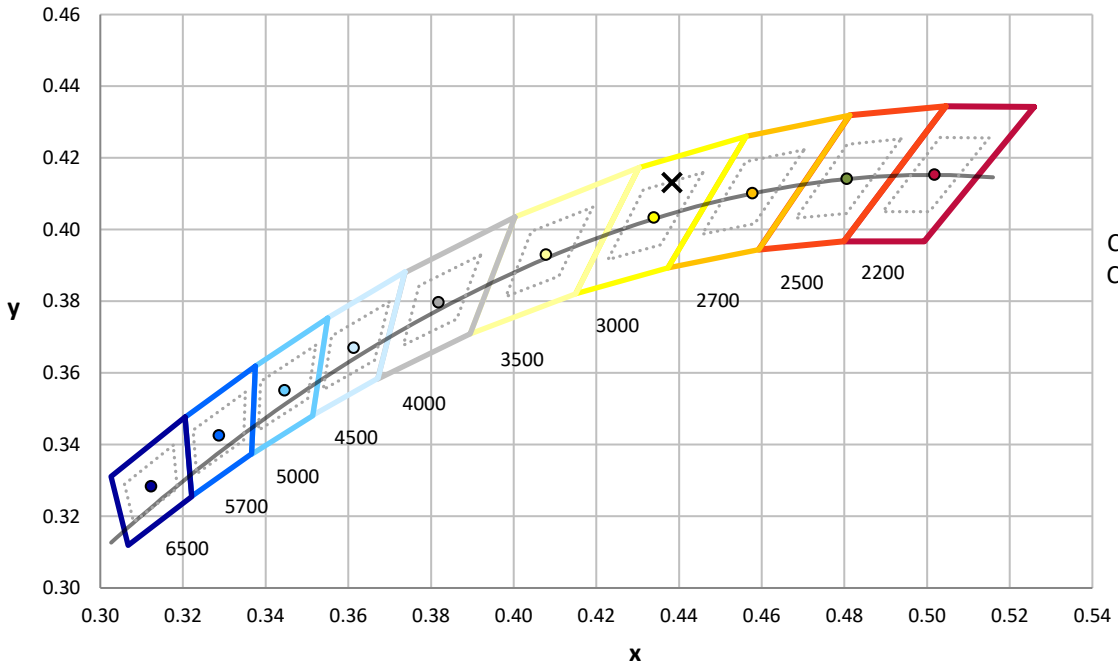
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

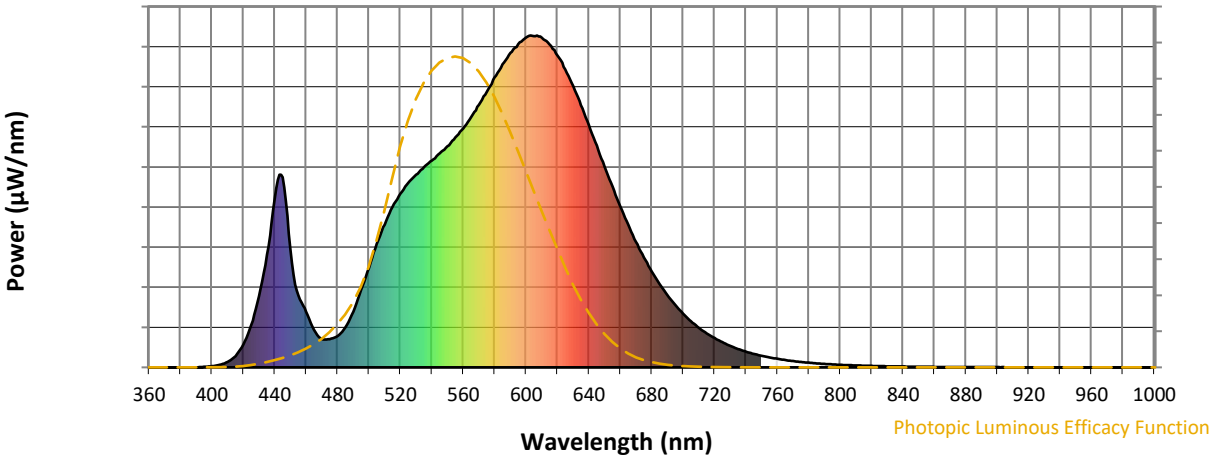


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

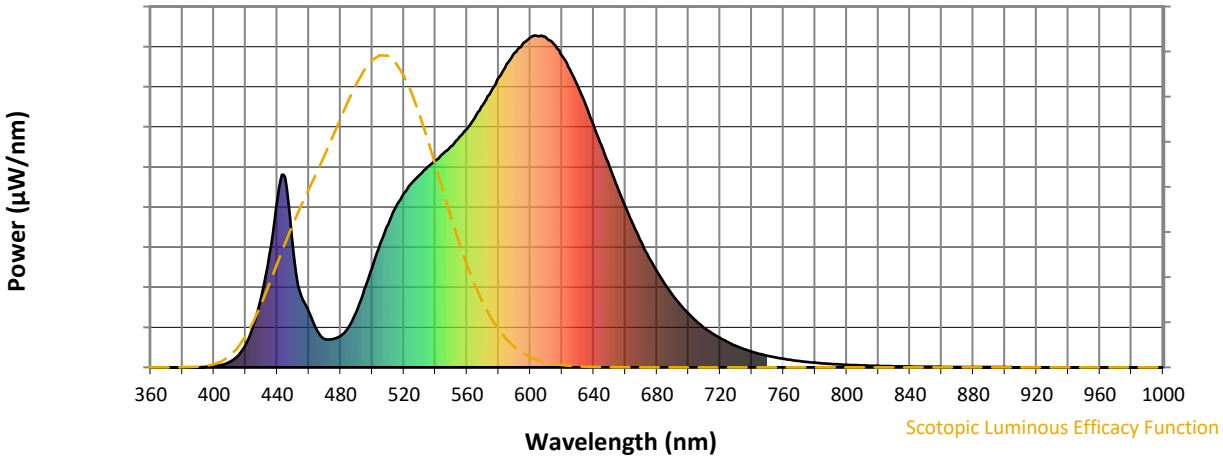


Photopic Lumens: NR

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

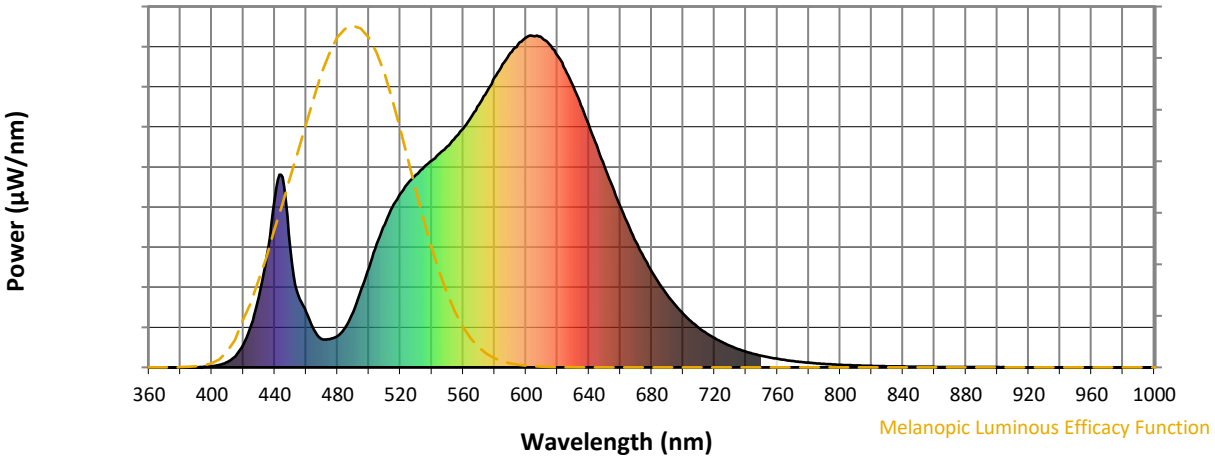


Scotopic Lumens: NR **S/P: 1.27**

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			

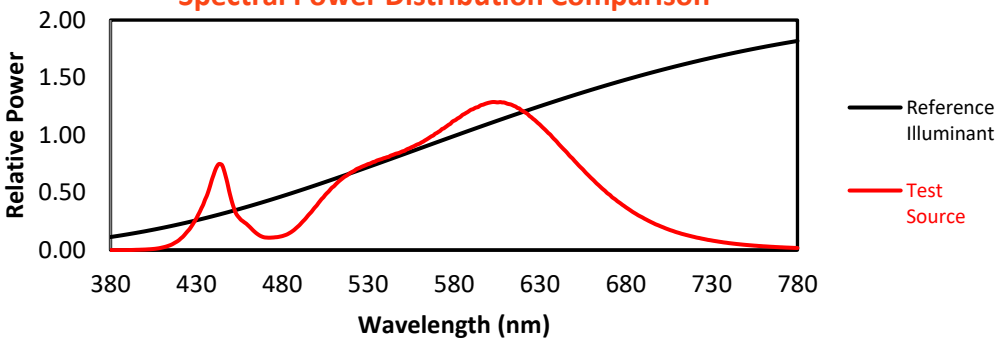
REPORT NUMBER: SP1-2408-195-9

TM-30-18

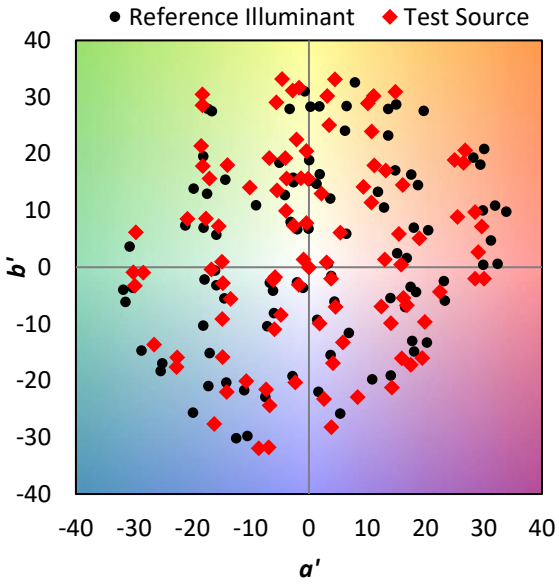
Summary

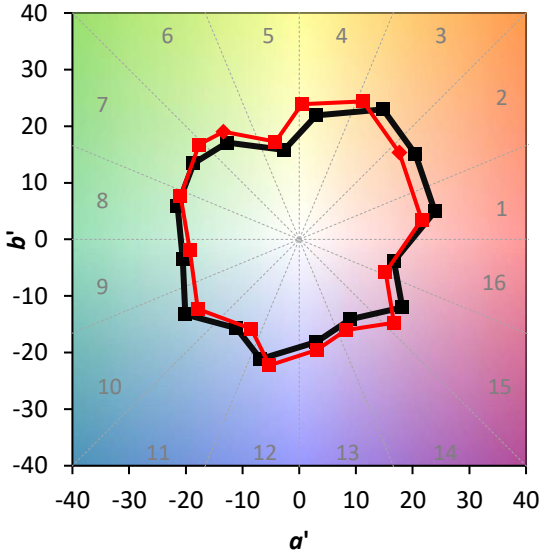
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

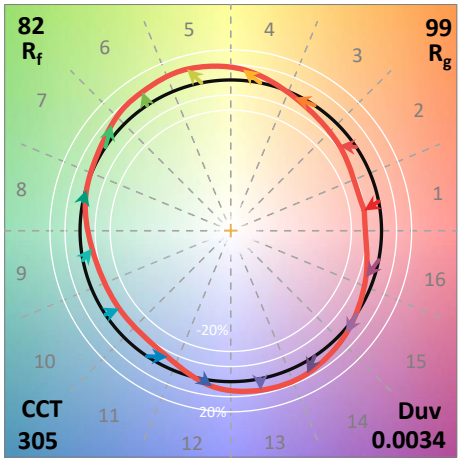
Spectral Power Distribution Comparison

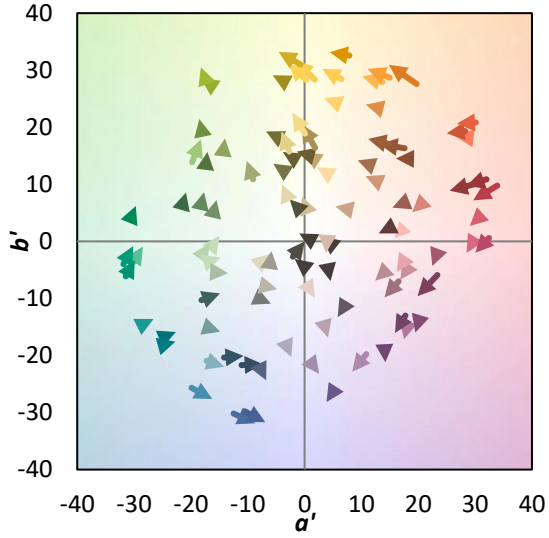


Color Vector Graphics







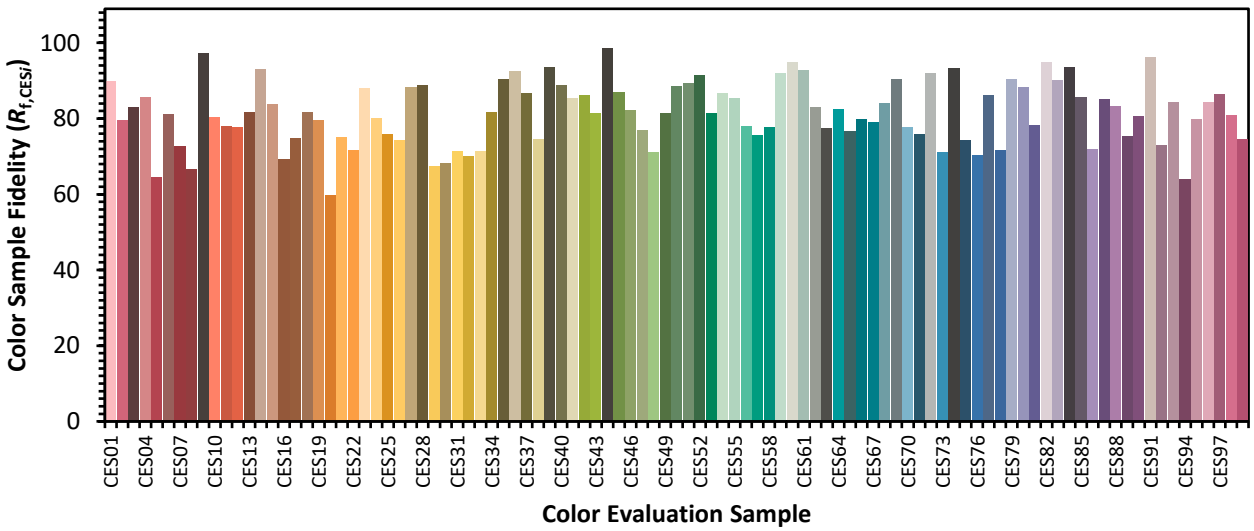


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

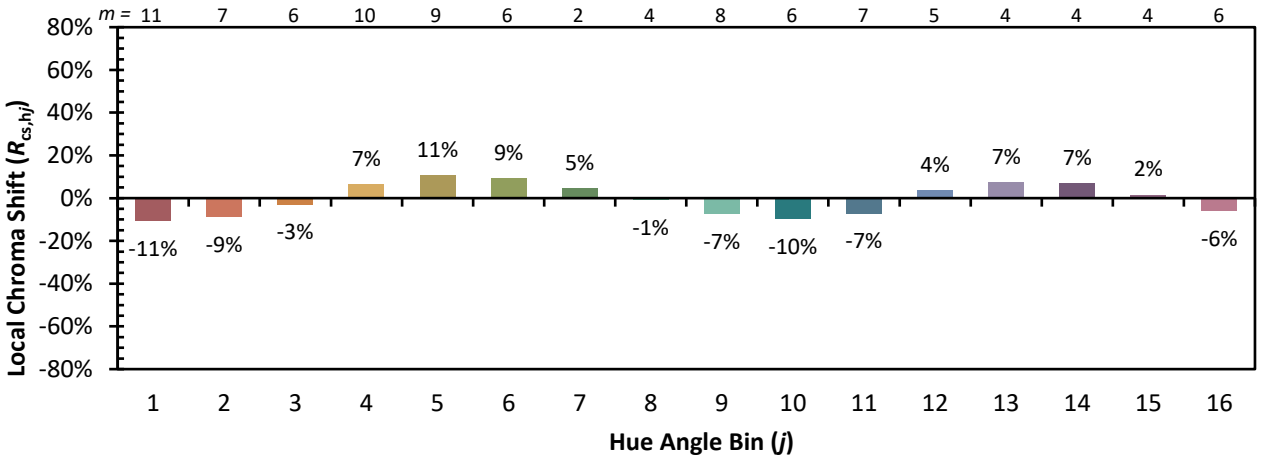
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

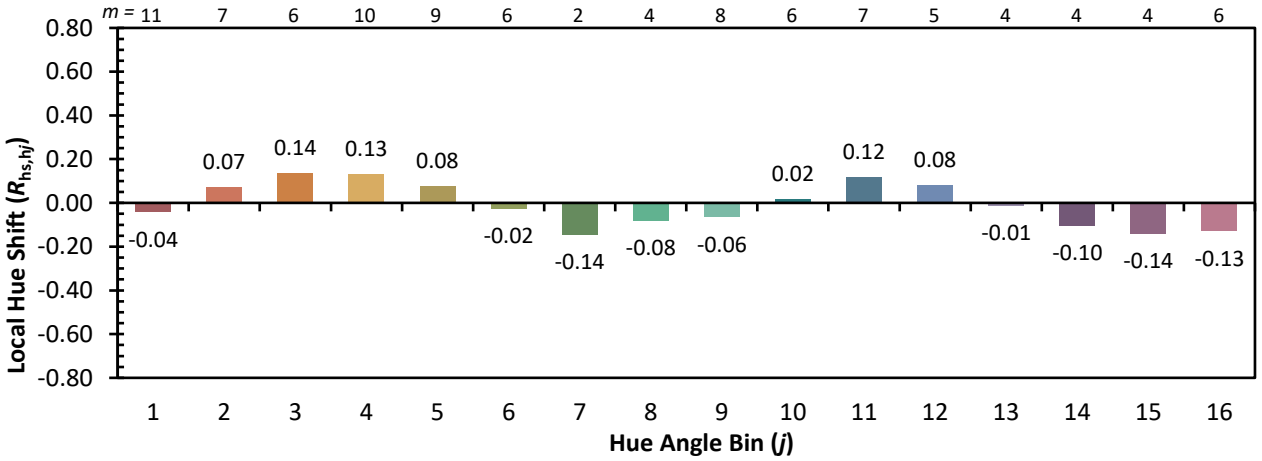


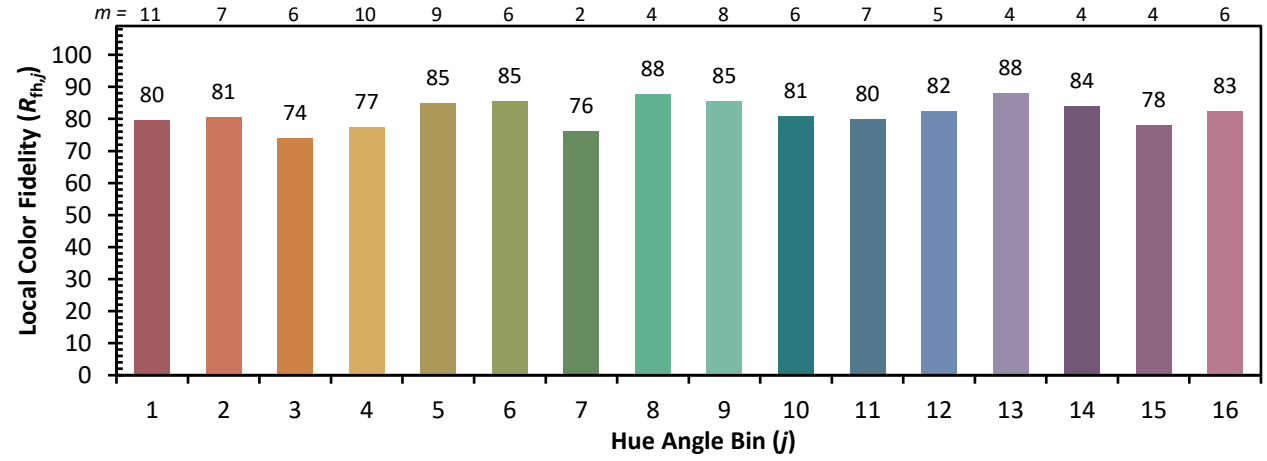
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



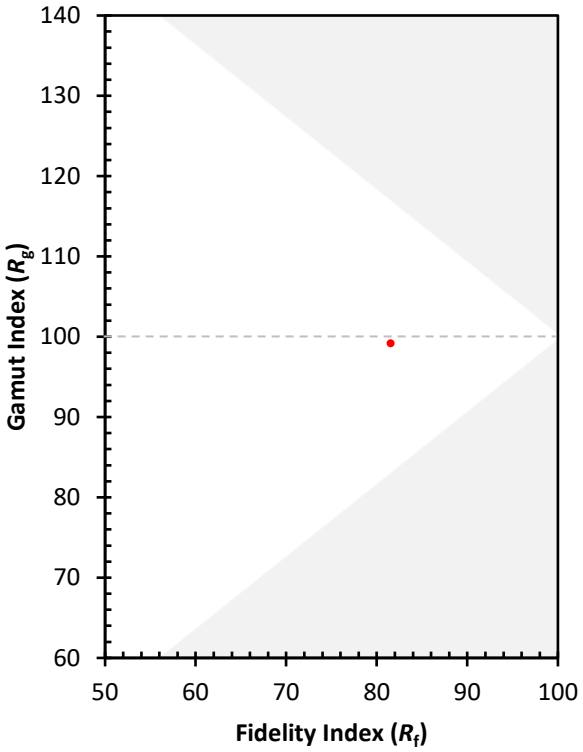


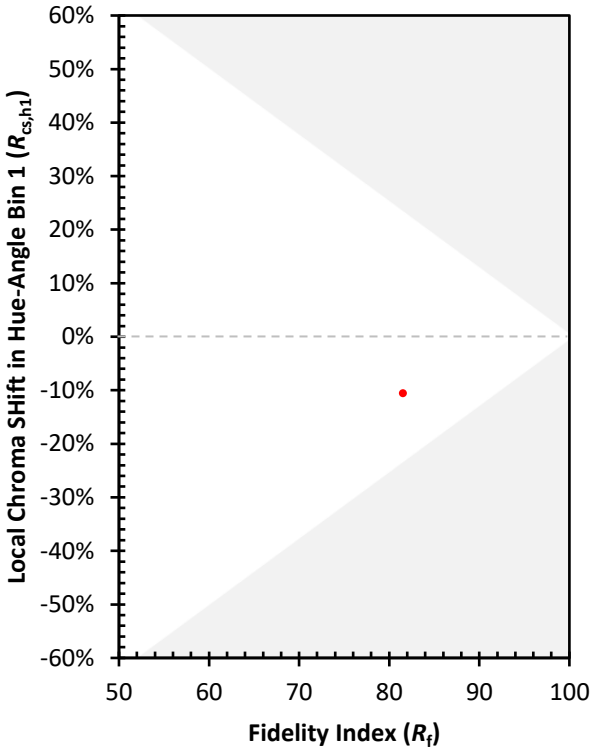


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)