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: P637998

Luminaire Tested: GWS-SA4D-830-U-T2R-W-GRSWH

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:	P637998
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-13)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4D-830-U-T2R-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	17121.3 lumens
Efficiency:	N/A
Efficacy:	105.6 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G2

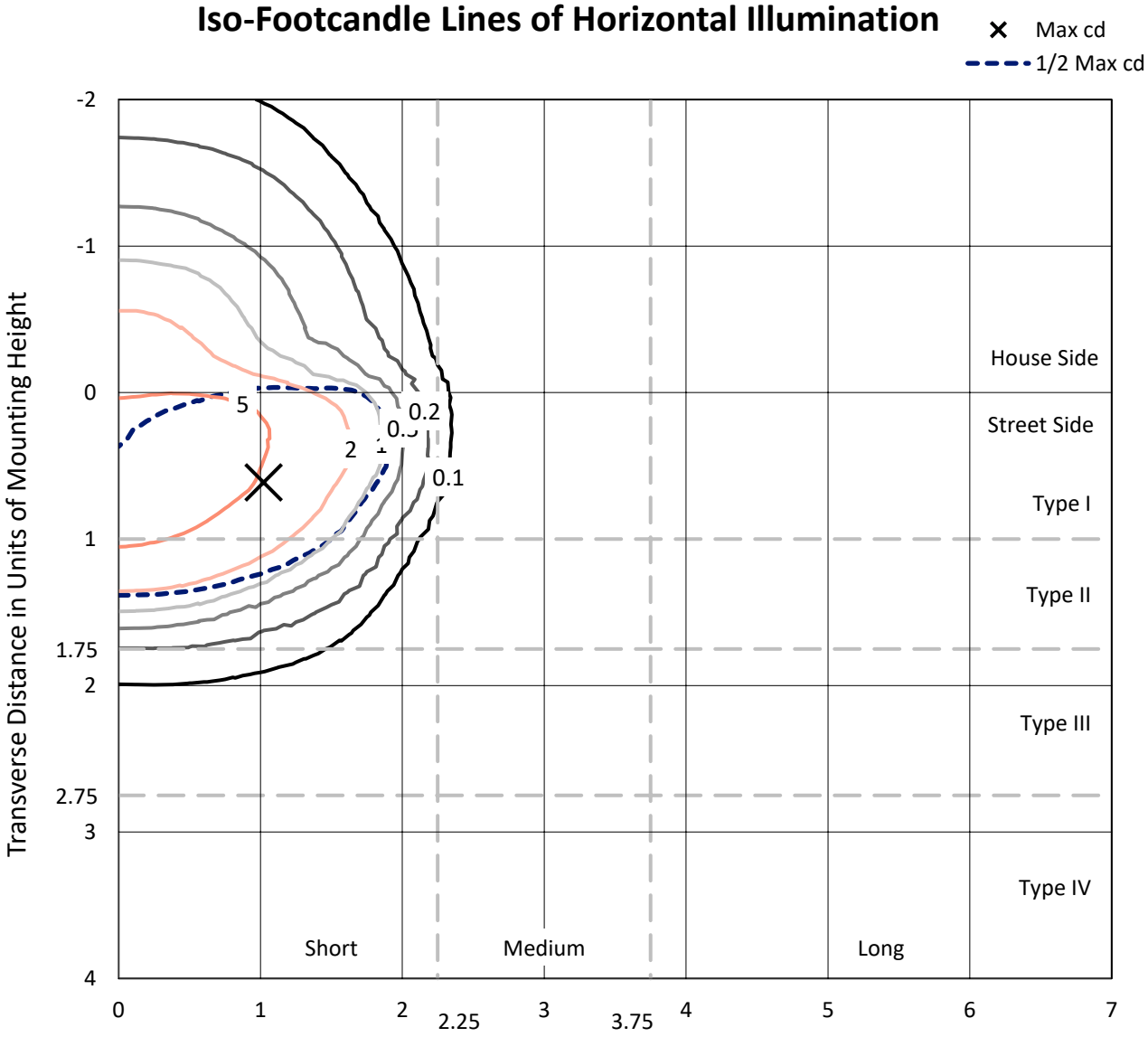
Input Watts (W):	162.1
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P637998
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



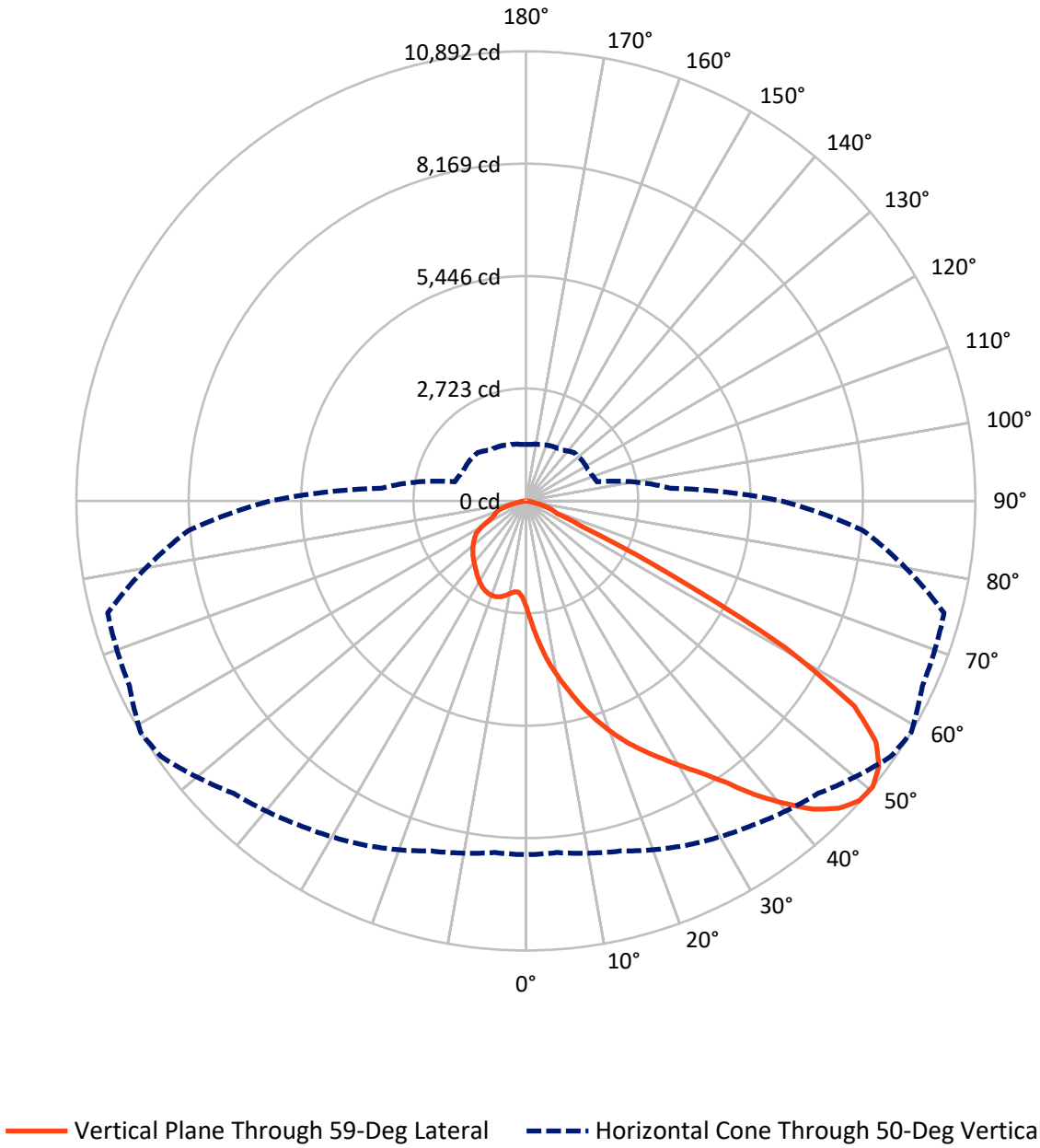
Based on 25 foot mounting height. Maximum calculated value = 8.2 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P637998
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSWH

Luminous Intensity Polar Plot



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

Scaled Data Report

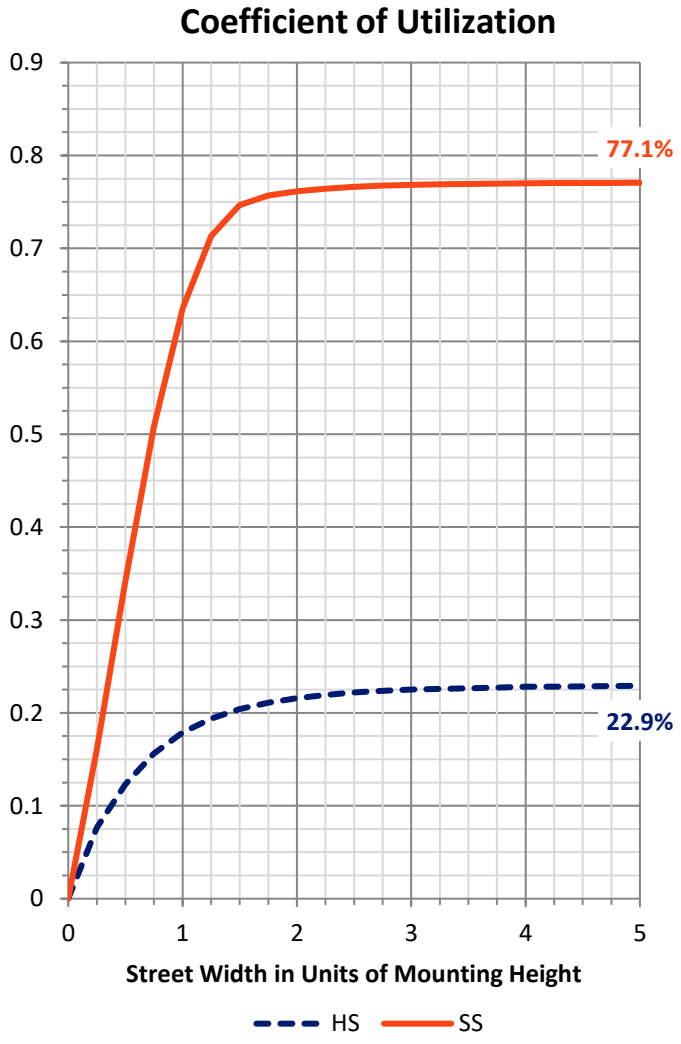
REPORT NUMBER: P637998
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3938.2	0.0	3938.2
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	13183.1	0.0	13183.1
	% Fixture	77.0	0.0	77.0
Total	Lumens	17121.3	0.0	17121.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.0	1.7
10°-20°	1056.4	6.2
20°-30°	2000.4	11.7
30°-40°	3317.2	19.4
40°-50°	4531.5	26.5
50°-60°	4113.5	24.0
60°-70°	1369.8	8.0
70°-80°	399.5	2.3
80°-90°	42.0	0.2
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°	17121.3	100.0
0°-180°	17121.3	100.0



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

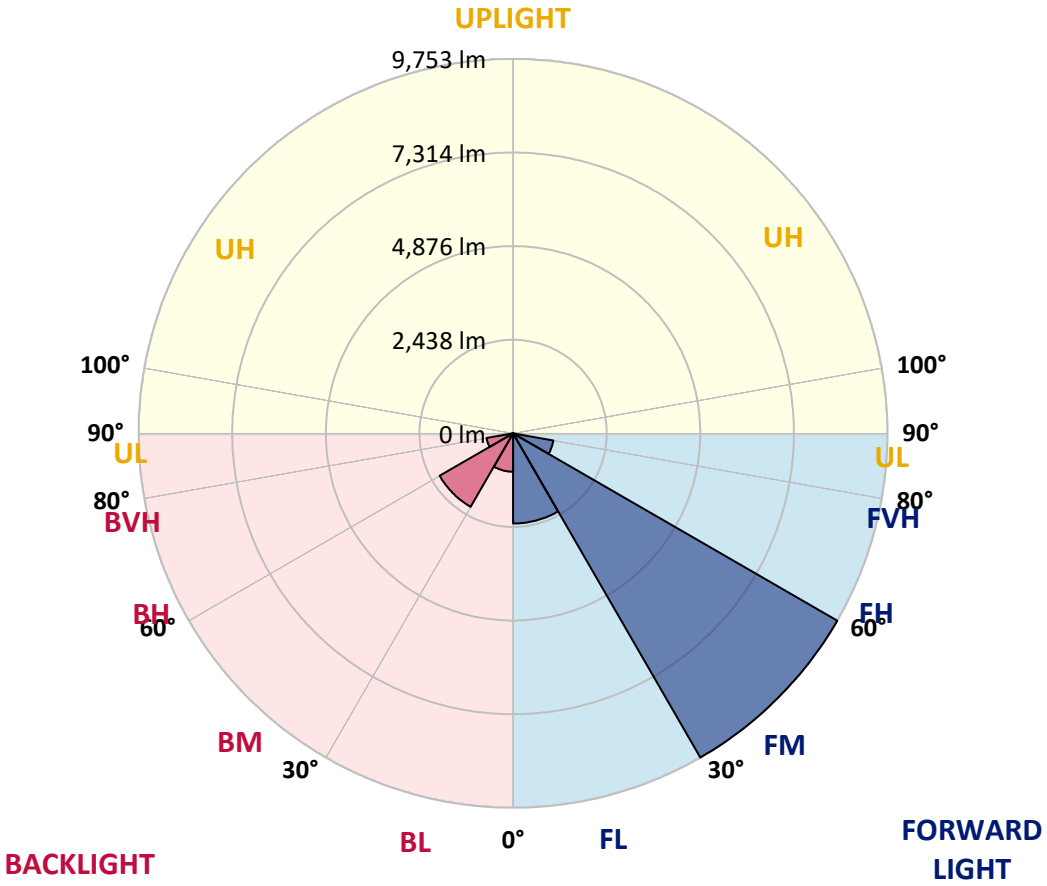
Scaled Data Report

REPORT NUMBER: P637998
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2347.7	13.7			
FM	(30°-60°)	9752.5	57.0			
FH	(60°-80°)	1066.4	6.2			G1/1800
FVH	(80°-90°)	16.4	0.1			G1/100
BL	(0°-30°)	1000.0	5.8	B3/2500		
BM	(30°-60°)	2209.7	12.9	B2/2500		
BH	(60°-80°)	702.9	4.1	B2/1000		G2/1000
BVH	(80°-90°)	25.6	0.1			G1/100
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: P637998
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	*2594.0*	2594.0	2594.0	2594.0
2.5°	3361.0	3386.1	3347.1	3349.9	3252.3	3207.6	3082.1	*3008.2*	2959.4	2822.7	2698.6
5°	4038.8	4009.5	3978.9	3960.7	3875.7	3755.7	3599.5	*3475.4*	3361.0	3093.3	2835.3
7.5°	4454.4	4439.1	4418.2	4407.0	4323.3	4197.8	4041.6	*3935.6*	3769.7	3407.1	3001.2
10°	4807.3	4789.1	4776.6	4785.0	4716.6	4635.7	4465.6	*4344.2*	4157.4	3739.0	3202.1
12.5°	5080.6	5090.4	5094.6	5139.2	5109.9	5061.1	4885.4	*4757.1*	4549.3	4089.0	3437.7
15°	5296.8	5294.0	5342.8	5427.9	5475.3	5444.6	5303.7	*5196.4*	4942.5	4433.5	3691.6
17.5°	5347.0	5349.8	5426.5	5575.7	5730.5	5805.8	5726.3	*5598.0*	5347.0	4773.8	3955.1
20°	5387.4	5393.0	5472.5	5642.6	5868.6	6079.2	6091.7	*5999.7*	5783.5	5142.0	4222.9
22.5°	5642.6	5655.2	5676.1	5783.5	5987.1	6253.5	6399.9	*6380.4*	6199.1	5528.3	4511.6
25°	6313.5	6275.8	6174.0	6143.3	6221.4	6437.6	6687.2	*6724.9*	6635.6	5953.6	4822.6
27.5°	7141.9	7101.4	6950.8	6791.8	6623.1	6698.4	6964.7	*7077.7*	7079.1	6422.2	5135.0
30°	7893.6	7861.5	7738.8	7511.4	7220.0	7111.2	7307.8	*7459.8*	7550.5	6963.4	5490.6
32.5°	8536.5	8507.2	8341.2	8155.8	7871.2	7652.3	7723.4	*7869.9*	8081.8	7663.5	5932.7
35°	9077.6	9048.3	8889.3	8702.4	8438.9	8307.8	8282.7	*8383.1*	8657.8	8394.2	6440.4
37.5°	9516.9	9487.6	9321.7	9145.9	8945.1	8953.5	8991.1	*9039.9*	9197.5	9176.6	6982.9
40°	9801.4	9770.7	9652.2	9526.7	9399.8	9500.2	9687.0	*9628.5*	9712.2	9808.4	7482.2
42.5°	9928.3	9889.3	9820.9	9793.0	9754.0	9910.2	10270.0	*10211.4*	10111.0	10229.6	7853.1
45°	9801.4	9767.9	9766.5	9851.6	9942.3	10143.1	10673.0	*10625.6*	10371.8	10433.2	8074.9
47.5°	9412.3	9383.0	9462.5	9685.7	9908.8	10201.7	10853.0	*10861.3*	10557.3	10518.2	8218.5
50°	*8571.4*	*8551.8*	*8781.9*	*9204.5*	*9589.4*	*10019.0*	*10795.8*	*10892.0*	*10601.9*	*10491.7*	*8200.4*
52.5°	6861.5	6952.2	7452.9	8158.5	8906.1	9698.2	10583.8	*10709.3*	10387.1	10317.4	8102.8
55°	4697.1	4738.9	5239.6	6270.2	7455.7	9003.7	10097.1	*10290.9*	10133.3	10288.1	8204.6
57.5°	2432.2	2465.7	2860.4	3775.2	5056.9	7115.4	8745.7	*9381.6*	9621.5	10436.0	8521.1
60°	998.5	1026.4	1189.6	1631.7	2550.8	4143.4	6293.9	*7236.7*	7800.1	9530.9	7567.2
62.5°	725.2	739.1	817.2	973.4	1336.0	2030.6	3561.9	*3909.1*	4305.2	5973.2	4804.5
65°	610.8	626.2	688.9	783.8	974.8	1245.4	1521.5	*1529.9*	1686.1	2433.6	1780.9
67.5°	511.8	525.8	581.6	662.4	788.0	884.2	817.2	*818.6*	815.9	882.8	853.5
70°	398.9	410.0	465.8	552.3	617.8	567.6	638.7	*707.1*	677.8	704.3	744.7
72.5°	291.5	304.0	352.8	418.4	401.7	404.4	517.4	*587.1*	570.4	599.7	637.3
75°	210.6	219.0	244.1	209.2	220.4	266.4	364.0	*401.7*	418.4	443.5	477.0
77.5°	68.3	68.3	76.7	96.2	119.9	147.8	185.5	*200.8*	225.9	253.8	277.5
80°	34.9	36.3	43.2	53.0	66.9	85.1	108.8	*115.8*	128.3	143.6	153.4
82.5°	16.7	18.1	20.9	26.5	34.9	44.6	60.0	*66.9*	75.3	85.1	92.0
85°	4.2	4.2	5.6	8.4	11.2	16.7	22.3	*26.5*	33.5	40.4	44.6
87.5°	0.0	0.0	0.0	0.0	0.0	1.4	4.2	*5.6*	7.0	8.4	11.2
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: P637998
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0	2594.0
2.5°	2642.8	2564.7	2464.3	2379.2	2301.1	2241.2	2189.6	2164.5	2140.7	2124.0	2129.6
5°	2715.3	2581.4	2394.6	2264.9	2185.4	2144.9	2117.0	2103.1	2100.3	2089.1	2085.0
7.5°	2821.3	2630.3	2380.6	2249.5	2196.5	2175.6	2160.3	2151.9	2156.1	2144.9	2140.7
10°	2952.4	2711.1	2415.5	2299.7	2253.7	2238.4	2221.6	2210.5	2204.9	2188.2	2185.4
12.5°	3115.6	2811.6	2478.2	2363.9	2317.9	2291.4	2269.1	2249.5	2237.0	2216.1	2210.5
15°	3291.3	2923.1	2552.2	2426.6	2372.3	2333.2	2296.9	2267.7	2245.3	2217.4	2213.3
17.5°	3482.4	3040.3	2613.5	2469.9	2400.1	2348.5	2295.5	2252.3	2221.6	2185.4	2181.2
20°	3681.8	3158.8	2659.5	2490.8	2401.5	2331.8	2260.7	2203.5	2164.5	2128.2	2125.4
22.5°	3888.2	3267.6	2687.4	2485.2	2379.2	2292.8	2207.7	2143.5	2097.5	2054.3	2051.5
25°	4096.0	3372.2	2694.4	2462.9	2334.6	2234.2	2149.1	2073.8	2022.2	1973.4	1967.8
27.5°	4306.6	3460.1	2677.7	2418.3	2274.6	2165.8	2080.8	2006.9	1953.9	1905.1	1896.7
30°	4531.1	3535.4	2641.4	2359.7	2204.9	2093.3	2009.7	1953.9	1903.7	1854.8	1846.5
32.5°	4771.0	3600.9	2589.8	2288.6	2124.0	2020.8	1959.4	1909.2	1859.0	1815.8	1807.4
35°	5056.9	3644.1	2513.1	2196.5	2048.7	1967.8	1926.0	1867.4	1806.0	1758.6	1754.4
37.5°	5352.6	3677.6	2421.1	2108.7	1983.2	1937.1	1902.3	1822.8	1746.1	1688.9	1681.9
40°	5638.5	3705.5	2306.7	2026.4	1923.2	1914.8	1867.4	1768.4	1635.9	1571.7	1566.2
42.5°	5904.8	3713.9	2186.8	1938.5	1868.8	1864.6	1811.6	1658.2	1556.4	1516.0	1510.4
45°	6087.5	3706.9	2062.6	1856.2	1814.4	1792.1	1736.3	1578.7	1516.0	1479.7	1472.7
47.5°	6222.8	3670.6	1923.2	1769.8	1753.0	1722.4	1602.4	1528.5	1469.9	1433.7	1426.7
50°	*6199.1*	*3520.0*	*1782.3*	*1686.1*	*1679.1*	*1652.6*	*1504.8*	*1465.7*	*1414.1*	*1375.1*	*1369.5*
52.5°	6076.4	3234.1	1638.7	1594.1	1608.0	1556.4	1435.1	1390.4	1345.8	1301.2	1291.4
55°	6107.1	3027.7	1529.9	1504.8	1529.9	1412.8	1357.0	1309.6	1267.7	1224.5	1216.1
57.5°	6240.9	2824.1	1414.1	1408.6	1435.1	1302.6	1256.6	1196.6	1136.6	1101.8	1101.8
60°	5241.0	2058.5	1210.5	1224.5	1284.4	1213.3	1172.9	1111.5	1046.0	1015.3	1015.3
62.5°	3098.9	1291.4	1004.1	988.8	1026.4	1071.1	1093.4	1043.2	965.1	924.6	926.0
65°	1365.3	940.0	885.6	873.0	861.9	892.6	953.9	958.1	875.8	828.4	829.8
67.5°	841.0	850.7	828.4	818.6	808.9	803.3	797.7	800.5	778.2	735.0	733.6
70°	758.7	785.2	769.8	761.5	748.9	739.1	705.7	651.3	613.6	602.5	615.0
72.5°	652.7	688.9	680.6	676.4	661.1	637.3	592.7	539.7	495.1	467.2	472.8
75°	492.3	521.6	525.8	527.2	510.4	488.1	442.1	397.5	358.4	329.1	336.1
77.5°	283.1	299.8	304.0	308.2	295.7	287.3	256.6	224.5	203.6	172.9	181.3
80°	157.6	164.6	164.6	166.0	159.0	149.2	128.3	110.2	100.4	86.5	87.9
82.5°	94.8	97.6	99.0	100.4	96.2	86.5	71.1	58.6	53.0	46.0	44.6
85°	46.0	48.8	48.8	50.2	43.2	37.7	29.3	22.3	19.5	13.9	15.3
87.5°	11.2	12.6	12.6	11.2	9.8	7.0	4.2	1.4	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

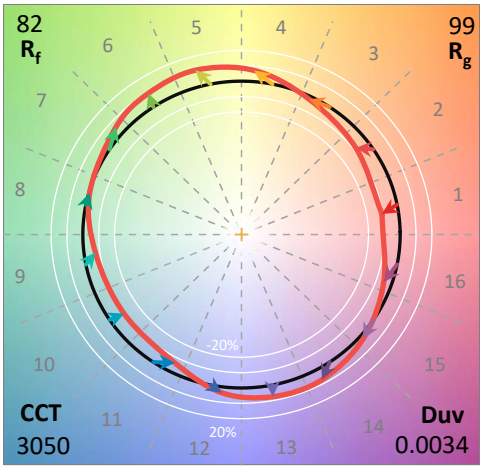
Test Information

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

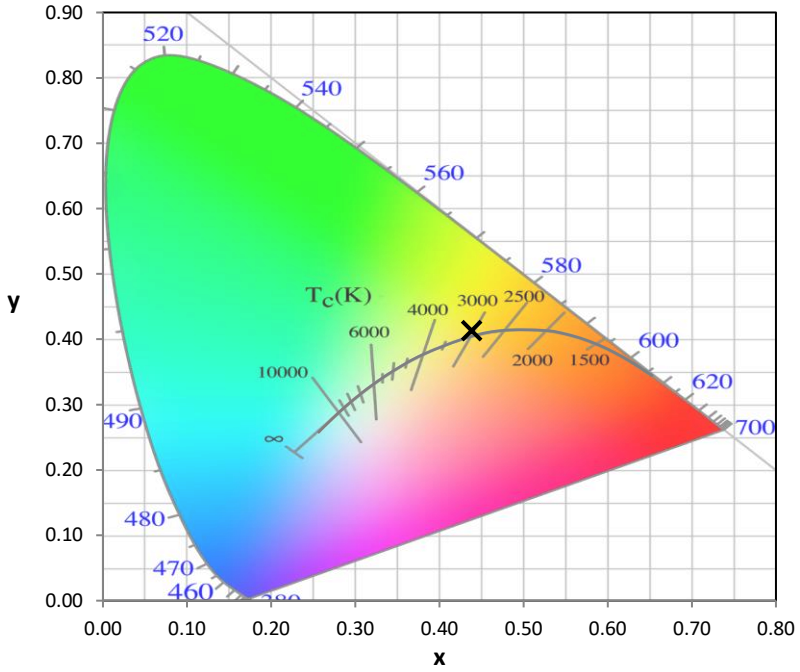
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

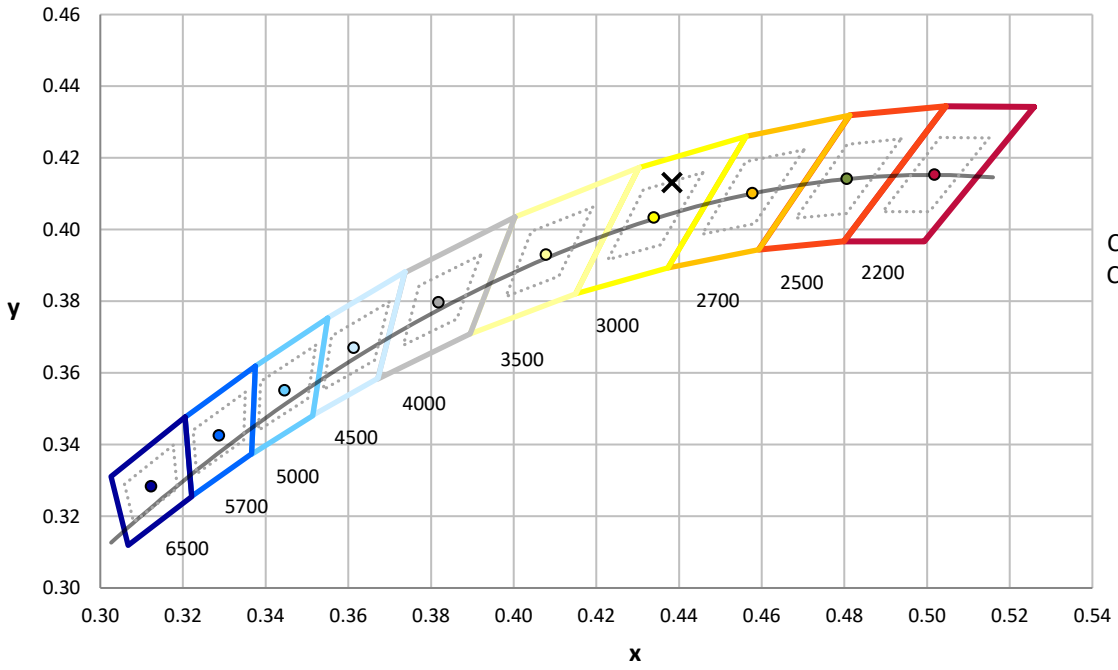
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

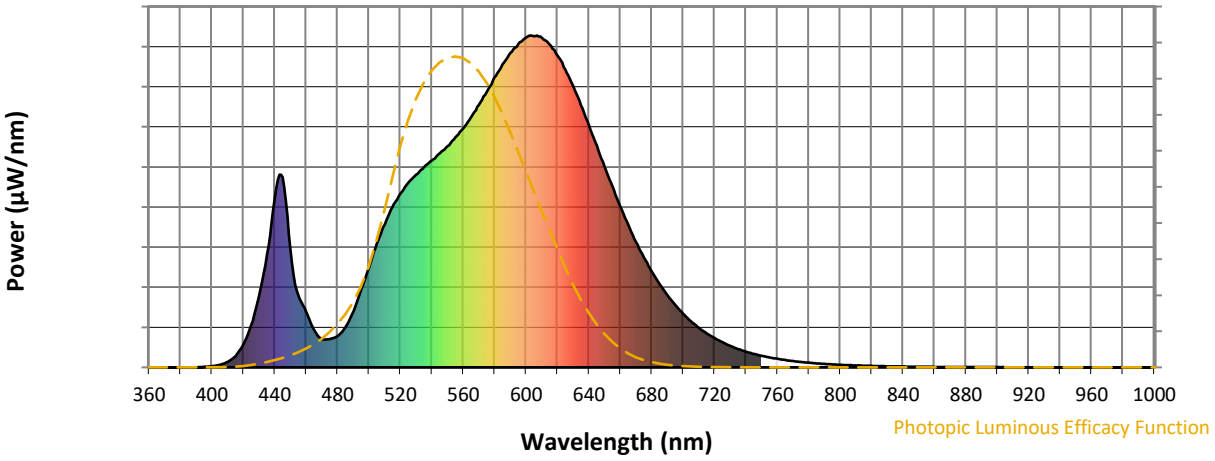


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

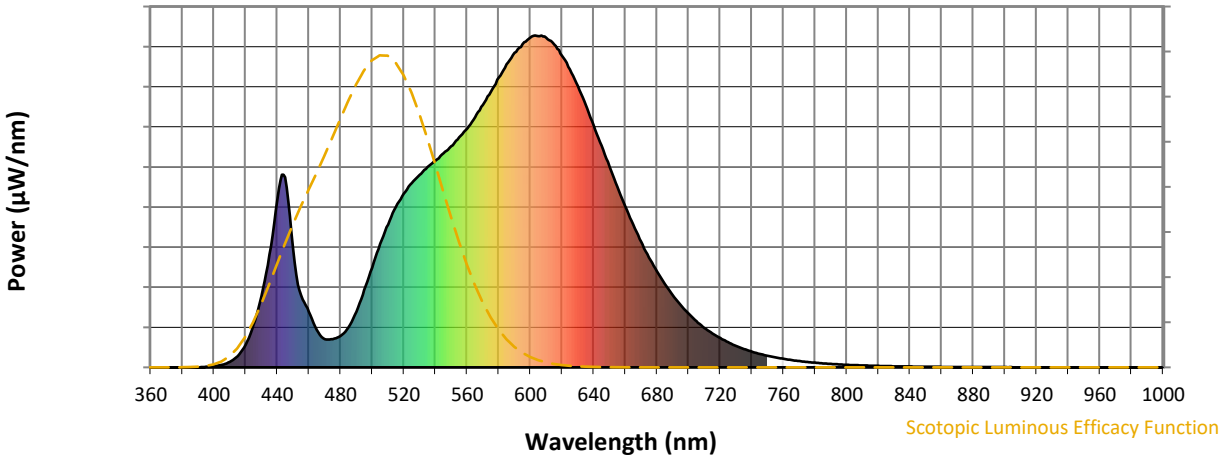


Photopic Lumens: NR

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

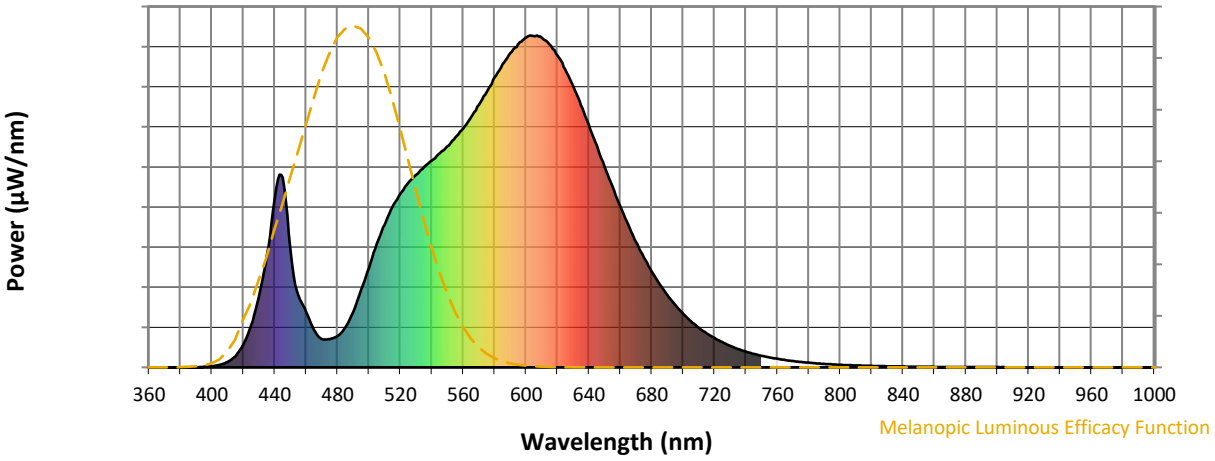


Scotopic Lumens: NR **S/P: 1.27**

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			

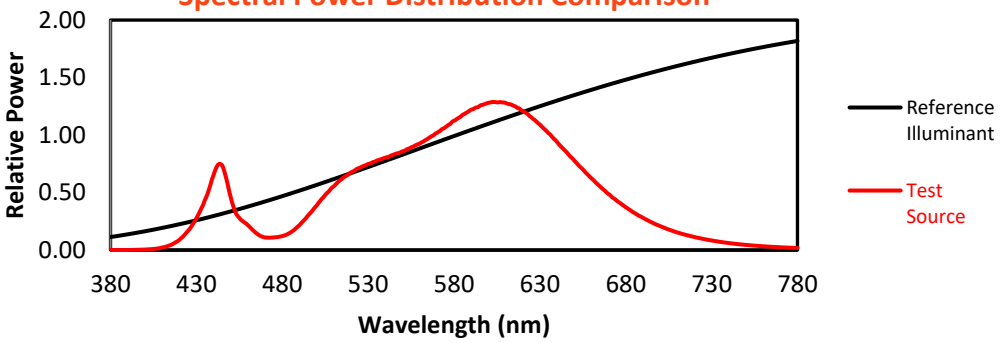
REPORT NUMBER: SP1-2408-195-9

TM-30-18

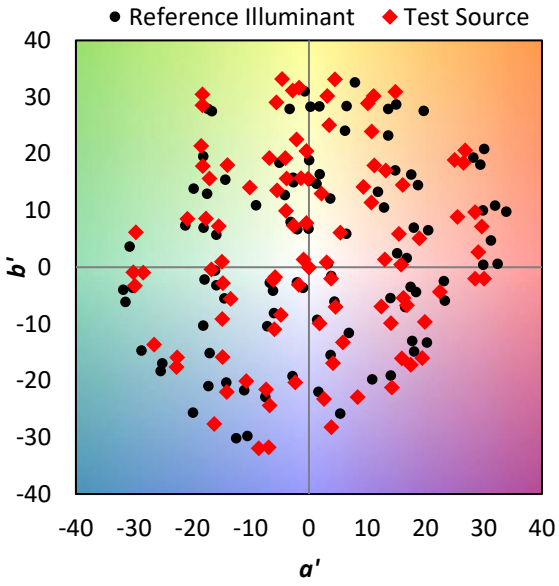
Summary

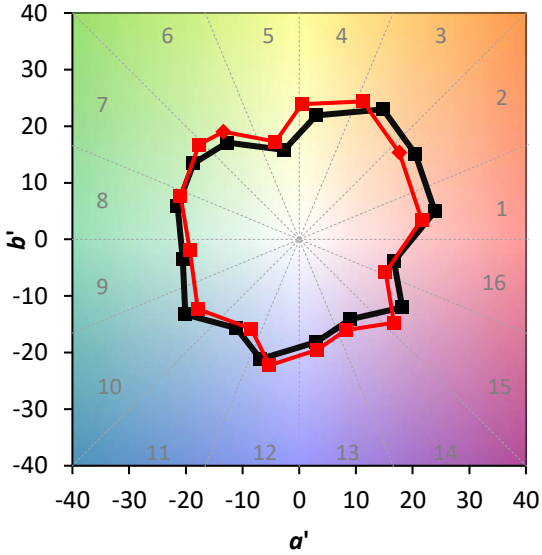
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

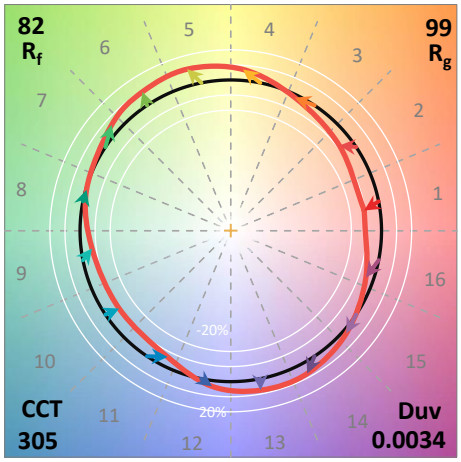
Spectral Power Distribution Comparison

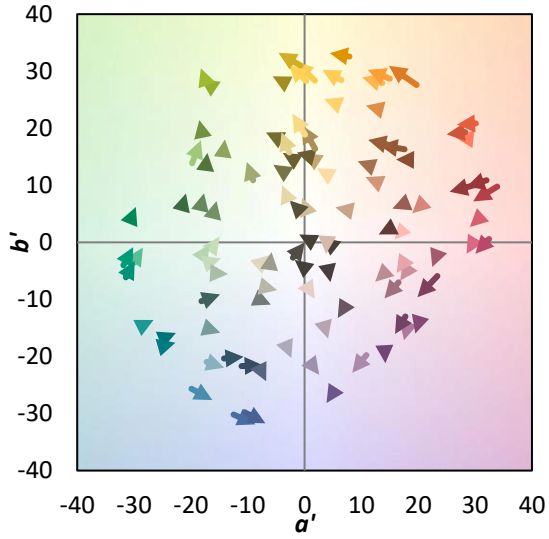


Color Vector Graphics







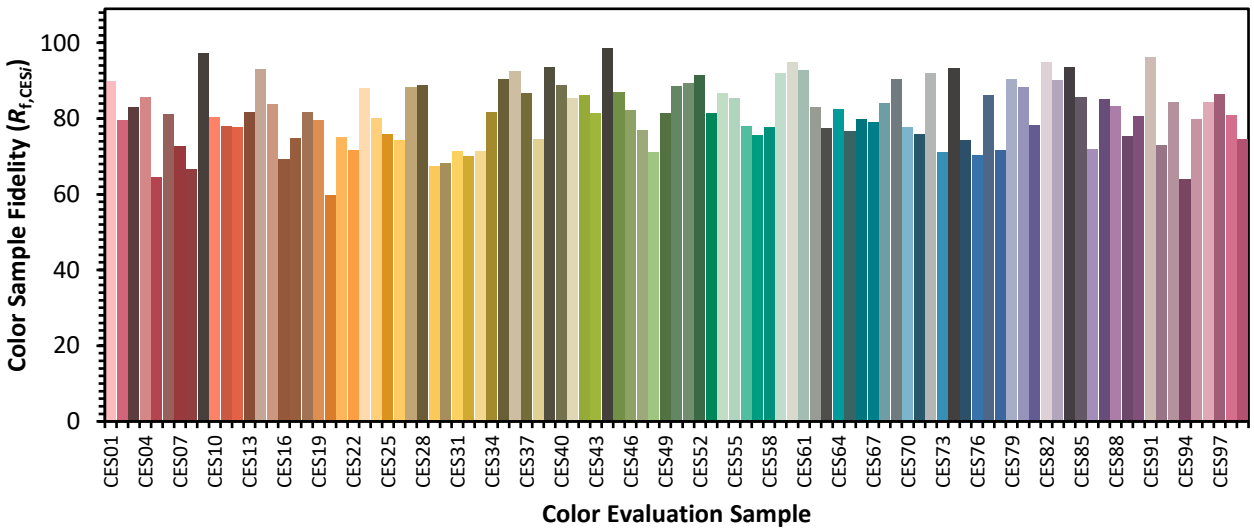


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

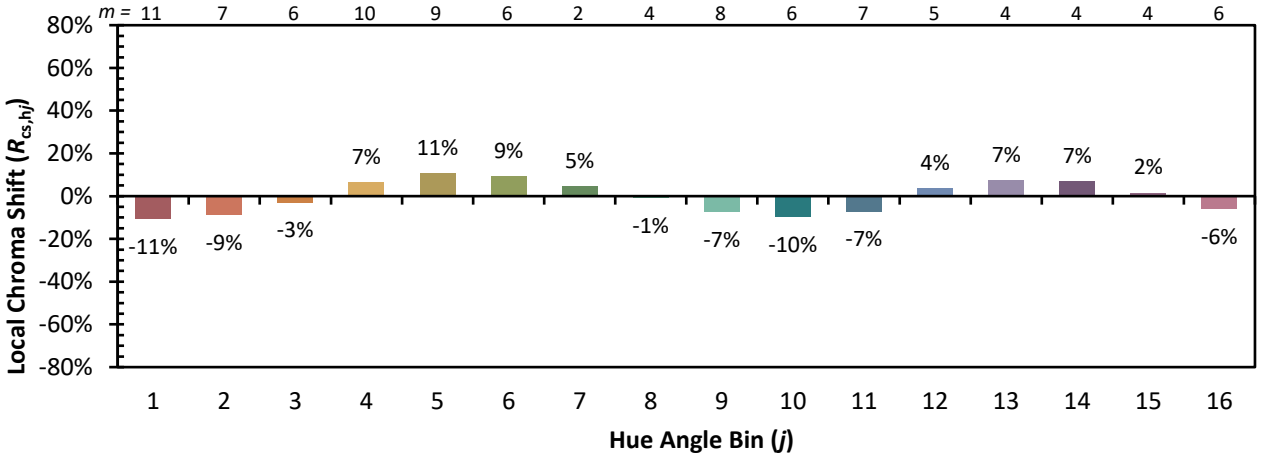
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

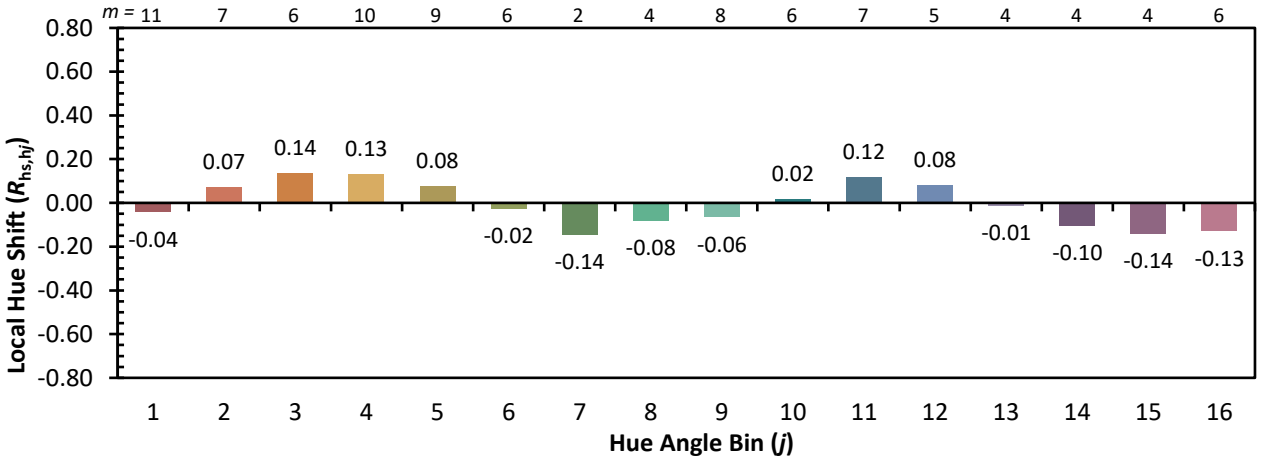


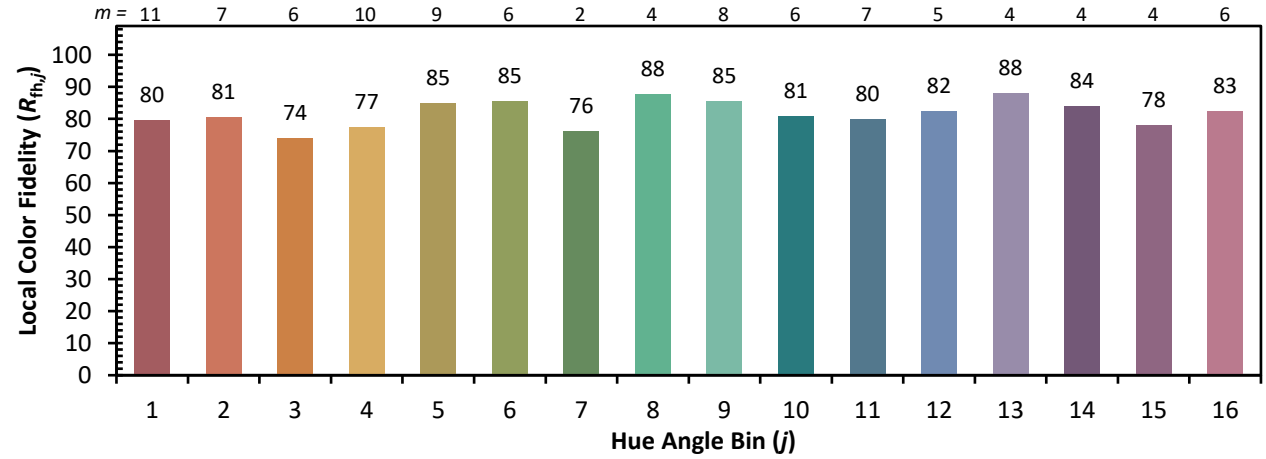
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



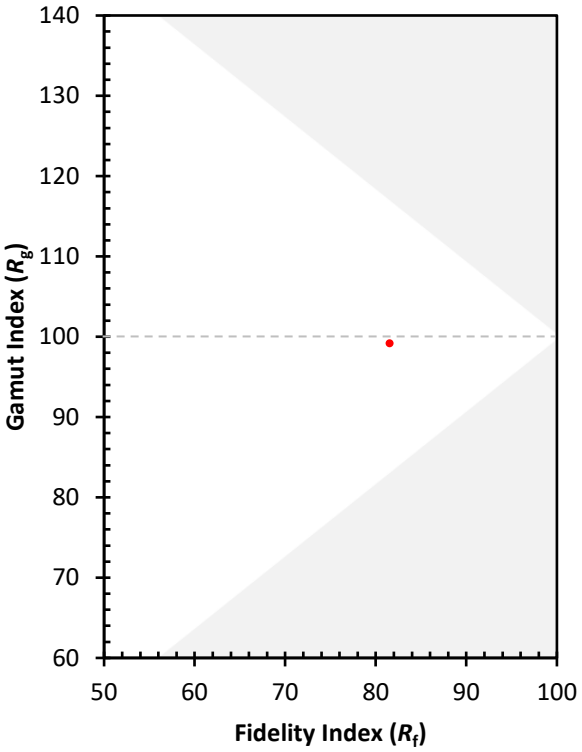


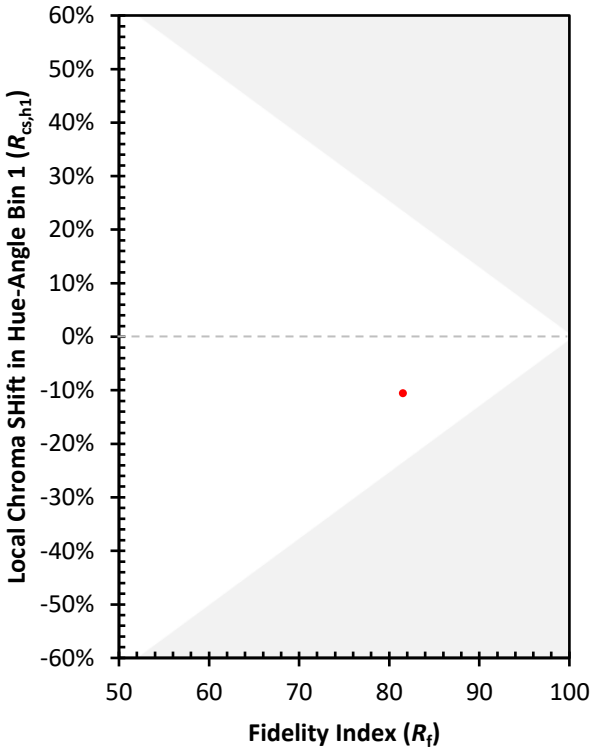


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)