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: P637512

Luminaire Tested: GWS-SA4C-830-U-T3R-W-HSS

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:	P637512
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-18)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4C-830-U-T3R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	12071.4 lumens
Efficiency:	N/A
Efficacy:	93.9 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B1 - U0 - G2

Input Watts (W):	128.5
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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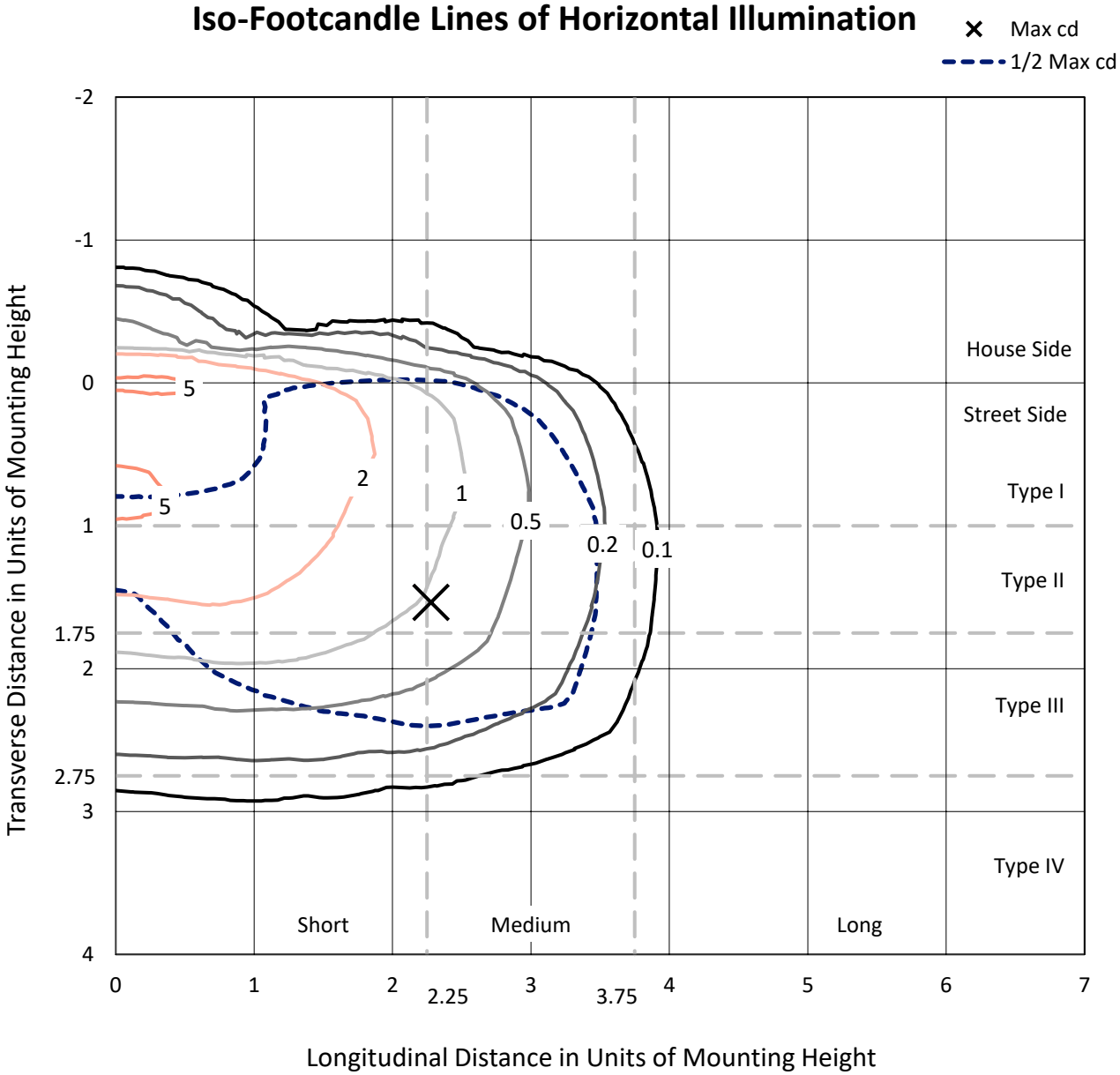
REPORT NUMBER: P637512
CATALOG NUMBER: GWS-SA4C-830-U-T3R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 5.7 fc
Type III - Medium - N/A

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REPORT NUMBER: P637512
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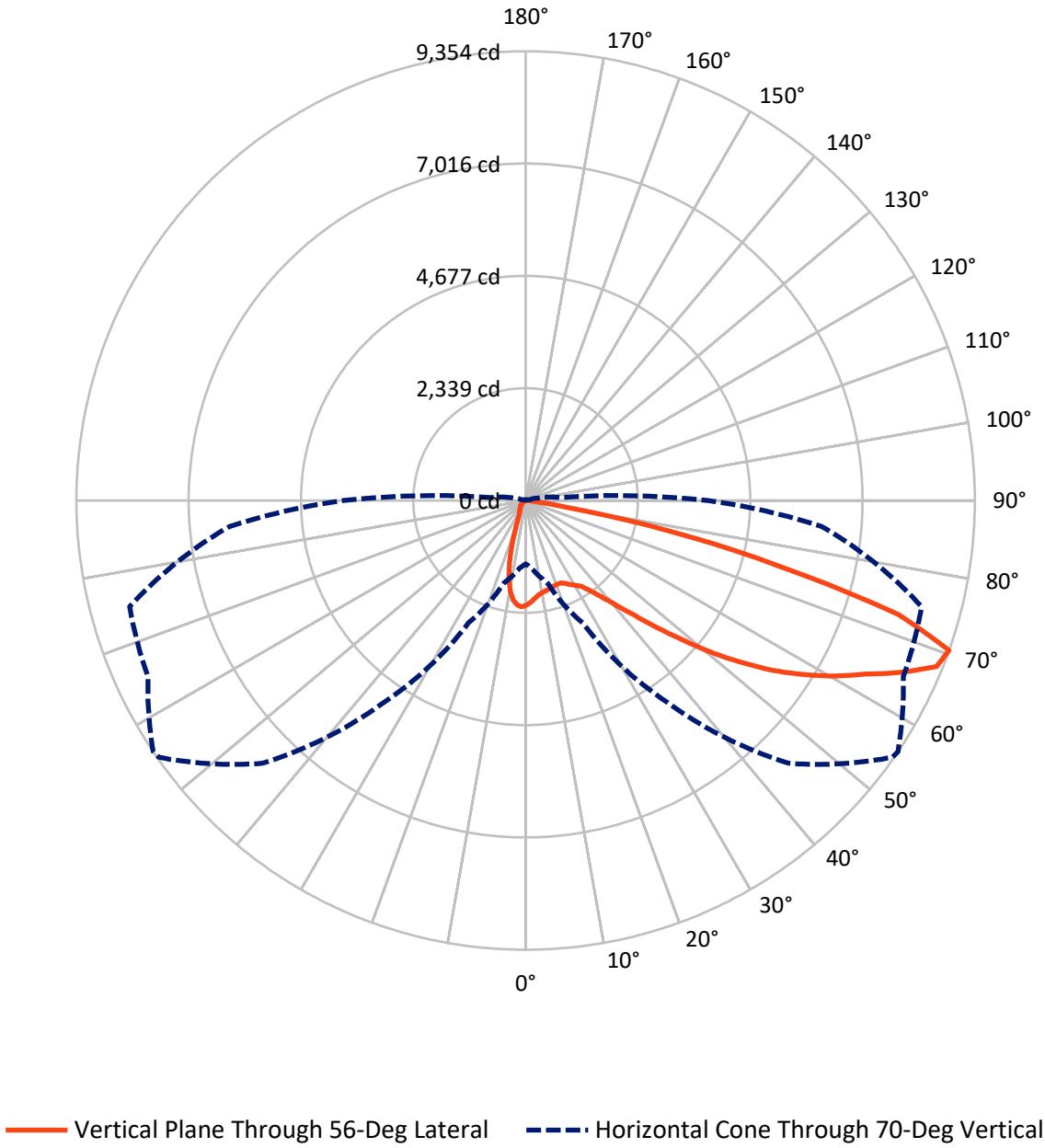
Luminous Intensity Polar Plot



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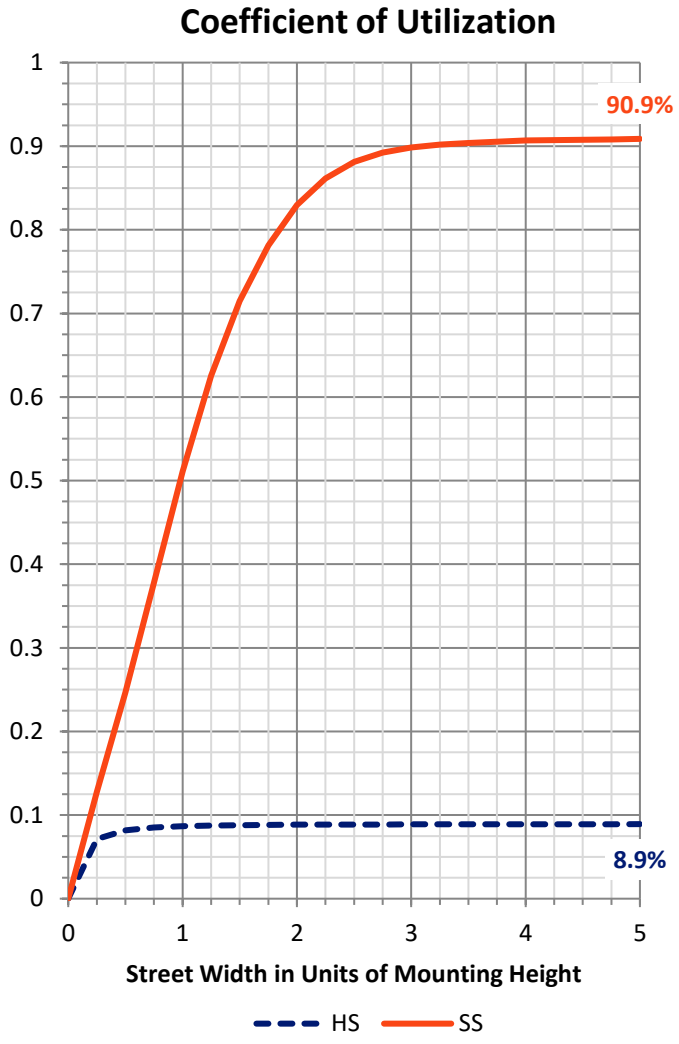
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1084.2	0.0	1084.2
	% Fixture	9.0	0.0	9.0
Street Side	Lumens	10987.1	0.0	10987.1
	% Fixture	91.0	0.0	91.0
Total	Lumens	12071.4	0.0	12071.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	1.5
10°-20°	420.3	3.5
20°-30°	665.8	5.5
30°-40°	1148.1	9.5
40°-50°	1938.8	16.1
50°-60°	2848.7	23.6
60°-70°	3377.3	28.0
70°-80°	1440.2	11.9
80°-90°	45.2	0.4
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°	12071.4	100.0
0°-180°	12071.4	100.0



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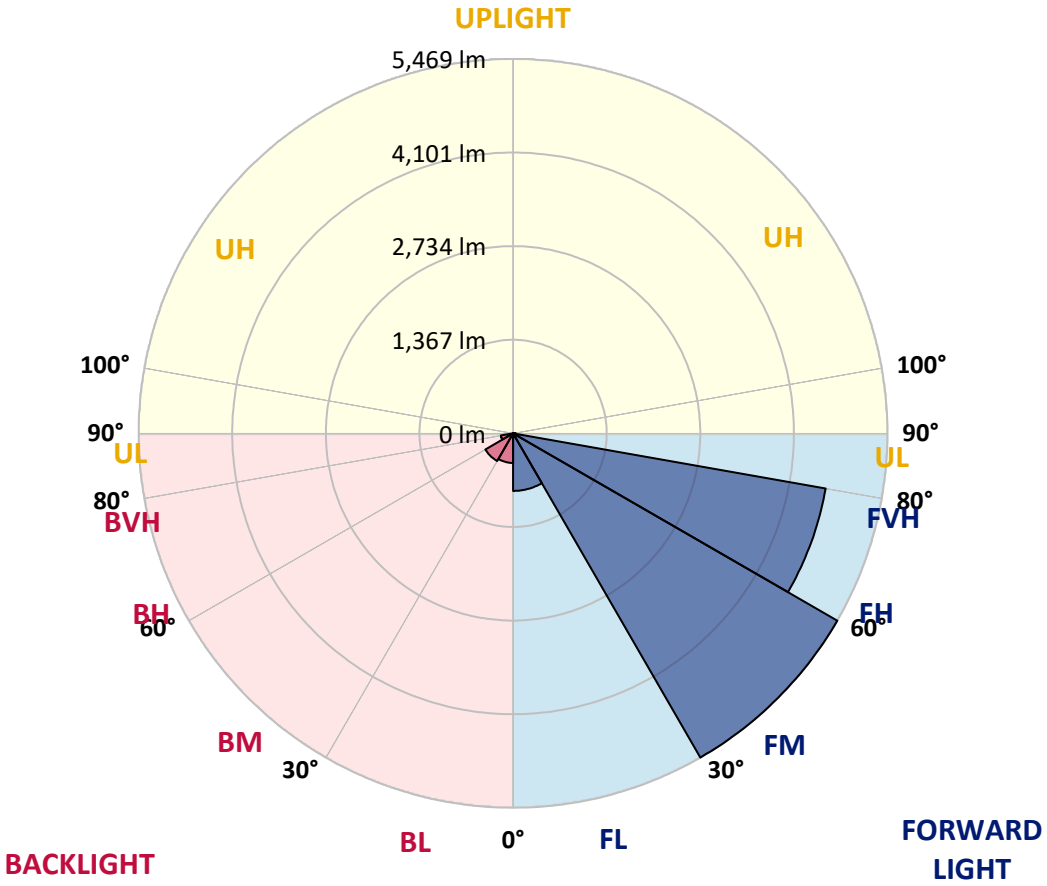
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	841.2	7.0			
FM	(30°-60°)	5468.7	45.3			
FH	(60°-80°)	4636.7	38.4			G2/5000
FVH	(80°-90°)	40.6	0.3			G1/100
BL	(0°-30°)	431.8	3.6	B1/500		
BM	(30°-60°)	467.0	3.9	B1/1000		
BH	(60°-80°)	180.8	1.5	B1/500		G1/500
BVH	(80°-90°)	4.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type III Medium



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Scaled Data Report

REPORT NUMBER: P637512
CATALOG NUMBER: GWS-SA4C-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2176.6	2176.6	2176.6	2176.6	2176.6	2176.6	2176.6	*2176.6*	2176.6	2176.6	2176.6
2.5°	2026.3	2022.9	2025.2	2041.7	2072.7	2087.1	2111.4	*2115.8*	2135.7	2161.1	2171.1
5°	1894.7	1883.7	1889.2	1912.4	1947.8	1987.6	2032.9	*2045.0*	2094.8	2151.2	2193.2
7.5°	1774.2	1762.1	1775.3	1811.8	1861.5	1904.7	1972.1	*1979.8*	2059.4	2158.9	2235.2
10°	1585.2	1588.5	1615.0	1679.2	1755.4	1845.0	1935.6	*1946.7*	2045.0	2184.3	2302.6
12.5°	1440.4	1432.6	1461.4	1534.3	1641.6	1772.0	1908.0	*1922.3*	2046.2	2223.0	2388.8
15°	1372.9	1370.7	1382.9	1436.0	1539.9	1693.5	1882.6	*1901.3*	2060.5	2258.4	2470.6
17.5°	1375.2	1371.8	1370.7	1401.7	1479.1	1634.9	1854.9	*1879.2*	2072.7	2297.1	2556.9
20°	1471.3	1455.9	1428.2	1413.8	1460.3	1597.3	1836.1	*1863.8*	2090.4	2338.0	2648.6
22.5°	1672.5	1678.0	1604.0	1526.6	1504.5	1601.8	1833.9	*1866.0*	2129.1	2402.1	2761.4
25°	2074.9	2066.1	1929.0	1755.4	1634.9	1652.6	1872.6	*1911.3*	2205.3	2493.9	2867.5
27.5°	2579.0	2586.7	2398.8	2122.4	1870.4	1757.6	1943.3	*1982.0*	2293.8	2551.3	2938.2
30°	3128.4	3120.6	2919.4	2613.2	2204.2	1932.3	2014.1	*2048.4*	2338.0	2582.3	3011.2
32.5°	3647.9	3630.2	3431.3	3110.7	2629.8	2207.5	2111.4	*2131.3*	2396.6	2649.7	3109.6
35°	4091.2	4090.1	3916.5	3575.0	3067.6	2552.4	2278.3	*2294.9*	2506.0	2756.9	3254.4
37.5°	4548.9	4533.4	4338.8	4027.1	3517.5	2930.5	2533.6	*2527.0*	2678.5	2915.0	3432.4
40°	4924.7	4914.7	4765.5	4465.9	3985.1	3348.4	2843.2	*2823.3*	2883.0	3133.9	3680.0
42.5°	5203.3	5204.4	5157.9	4975.5	4480.3	3831.4	3232.3	*3201.3*	3200.2	3464.4	4007.2
45°	5414.4	5428.8	5498.4	5470.8	5065.1	4394.1	3730.8	*3698.8*	3644.6	3893.3	4381.9
47.5°	5512.8	5531.6	5741.6	5852.2	5576.9	4952.3	4324.4	*4257.0*	4150.9	4463.7	4800.9
50°	5502.8	5536.0	5828.9	6165.0	6041.2	5518.3	4971.1	*4939.1*	4765.5	5067.3	5215.4
52.5°	5277.3	5348.1	5834.5	6355.1	6398.2	6040.1	5639.9	*5580.2*	5496.2	5697.4	5604.5
55°	4664.9	4751.1	5601.2	6415.9	6676.8	6495.5	6294.3	*6245.7*	6106.4	6292.1	5943.9
57.5°	4332.2	4406.3	5110.4	6386.1	6913.4	6916.7	6876.9	*6837.1*	6722.1	6880.2	6341.9
60°	4132.1	4206.2	4848.4	6276.6	7127.8	7361.1	7424.1	*7419.7*	7253.8	7549.0	6808.4
62.5°	3839.2	3940.9	4575.4	5992.5	7280.4	7798.8	7989.0	*7959.1*	7774.5	8245.4	7270.4
65°	3247.8	3336.2	4016.0	5523.8	7190.8	8161.4	8601.4	*8616.8*	8403.5	8900.9	7635.2
67.5°	2277.2	2342.4	3017.8	4540.0	6582.8	8280.8	9228.1	*9227.0*	8863.4	9237.0	7473.8
70°	*1319.9*	*1409.4*	*1783.1*	*2806.7*	*5121.5*	*7738.0*	*9322.1*	*9354.2*	*8676.5*	*8535.0*	*6184.9*
72.5°	510.7	584.8	1010.4	1491.2	2670.7	5927.3	8018.8	*8112.8*	7261.6	6584.0	4304.6
75°	152.5	170.2	475.3	793.7	1072.3	2863.1	5428.8	*5455.3*	4981.1	4106.7	2206.4
77.5°	113.9	126.0	207.8	401.3	375.8	867.8	2808.9	*3067.6*	2644.2	1466.9	608.0
80°	77.4	91.8	148.1	195.7	139.3	231.0	789.3	*866.7*	807.0	329.4	152.5
82.5°	34.3	44.2	105.0	98.4	50.8	66.3	243.2	*258.7*	166.9	99.5	53.1
85°	3.3	4.4	39.8	43.1	18.8	15.5	50.8	*50.8*	36.5	34.3	22.1
87.5°	0.0	0.0	1.1	2.2	2.2	3.3	4.4	*5.5*	6.6	8.8	11.1
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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Scaled Data Report

REPORT NUMBER: P637512
CATALOG NUMBER: GWS-SA4C-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2176.6	2176.6	2176.6	2176.6	2176.6	2176.6	2176.6	2176.6	2176.6	2176.6	2176.6
2.5°	2196.5	2183.2	2199.8	2213.1	2216.4	2192.1	2177.7	2156.7	2152.3	2153.4	2147.9
5°	2226.3	2219.7	2231.9	2217.5	2179.9	2109.2	2048.4	1980.9	1944.5	1923.5	1921.2
7.5°	2281.6	2278.3	2265.0	2199.8	2082.6	1925.7	1774.2	1626.1	1534.3	1501.2	1495.6
10°	2363.4	2356.8	2302.6	2147.9	1898.0	1596.2	1342.0	1129.8	1000.4	962.8	916.4
12.5°	2457.4	2444.1	2325.8	2036.2	1619.5	1201.6	884.3	646.7	535.0	501.9	501.9
15°	2548.0	2519.3	2312.6	1851.6	1276.8	781.5	494.1	373.6	339.4	330.5	330.5
17.5°	2640.9	2585.6	2260.6	1599.6	882.1	462.1	329.4	306.2	301.8	302.9	304.0
20°	2728.2	2642.0	2168.9	1296.7	562.7	322.8	295.2	289.6	287.4	289.6	288.5
22.5°	2823.3	2693.9	2029.6	966.1	365.9	290.7	280.8	276.4	274.1	277.5	277.5
25°	2917.2	2731.5	1845.0	650.0	290.7	270.8	265.3	260.9	258.7	259.8	259.8
27.5°	2965.9	2717.2	1602.9	414.5	260.9	250.9	245.4	239.9	236.6	235.5	236.6
30°	2999.0	2672.9	1306.6	295.2	236.6	224.4	218.9	214.5	205.6	200.1	202.3
32.5°	3051.0	2628.7	984.9	247.6	216.7	197.9	189.0	178.0	165.8	160.3	160.3
35°	3112.9	2567.9	690.9	223.3	195.7	175.8	159.2	140.4	126.0	121.6	121.6
37.5°	3194.7	2510.4	459.9	206.7	178.0	157.0	133.8	111.6	96.2	94.0	92.9
40°	3317.4	2461.8	323.9	194.6	162.5	137.1	109.4	86.2	75.2	71.9	71.9
42.5°	3476.6	2412.1	256.5	182.4	149.2	118.3	87.3	68.5	59.7	57.5	56.4
45°	3673.3	2353.5	223.3	171.3	136.0	98.4	69.6	57.5	50.8	48.6	48.6
47.5°	3886.7	2273.9	207.8	157.0	120.5	79.6	58.6	49.7	46.4	45.3	44.2
50°	4096.7	2166.6	194.6	143.7	102.8	65.2	50.8	45.3	43.1	42.0	42.0
52.5°	4280.2	2041.7	178.0	128.2	84.0	56.4	45.3	42.0	39.8	37.6	36.5
55°	4437.2	1905.8	157.0	110.5	68.5	49.7	42.0	38.7	36.5	34.3	33.2
57.5°	4639.5	1828.4	126.0	89.5	56.4	44.2	38.7	35.4	33.2	29.8	29.8
60°	4863.9	1772.0	94.0	70.7	48.6	40.9	35.4	32.1	29.8	26.5	26.5
62.5°	5044.1	1688.0	74.1	57.5	42.0	36.5	32.1	28.7	26.5	23.2	23.2
65°	5112.6	1514.4	60.8	45.3	34.3	32.1	28.7	26.5	23.2	19.9	19.9
67.5°	4803.1	1167.3	50.8	36.5	28.7	27.6	25.4	24.3	19.9	17.7	16.6
70°	*3803.8*	*711.9*	*42.0*	*29.8*	*24.3*	*23.2*	*23.2*	*21.0*	*17.7*	*16.6*	*15.5*
72.5°	2606.6	367.0	34.3	24.3	21.0	21.0	19.9	18.8	16.6	15.5	15.5
75°	1354.2	122.7	26.5	18.8	16.6	17.7	17.7	16.6	15.5	15.5	14.4
77.5°	388.0	55.3	19.9	14.4	13.3	13.3	14.4	14.4	14.4	13.3	13.3
80°	100.6	32.1	14.4	11.1	11.1	11.1	11.1	12.2	13.3	12.2	12.2
82.5°	40.9	17.7	9.9	8.8	8.8	8.8	8.8	9.9	11.1	11.1	11.1
85°	25.4	8.8	7.7	7.7	7.7	6.6	6.6	7.7	7.7	8.8	8.8
87.5°	15.5	6.6	6.6	6.6	6.6	5.5	5.5	5.5	5.5	5.5	5.5
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

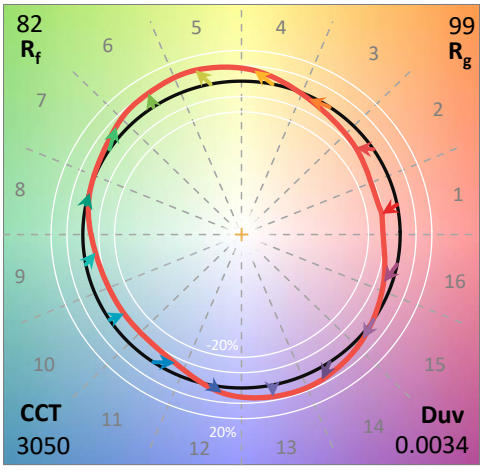
Test Information

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

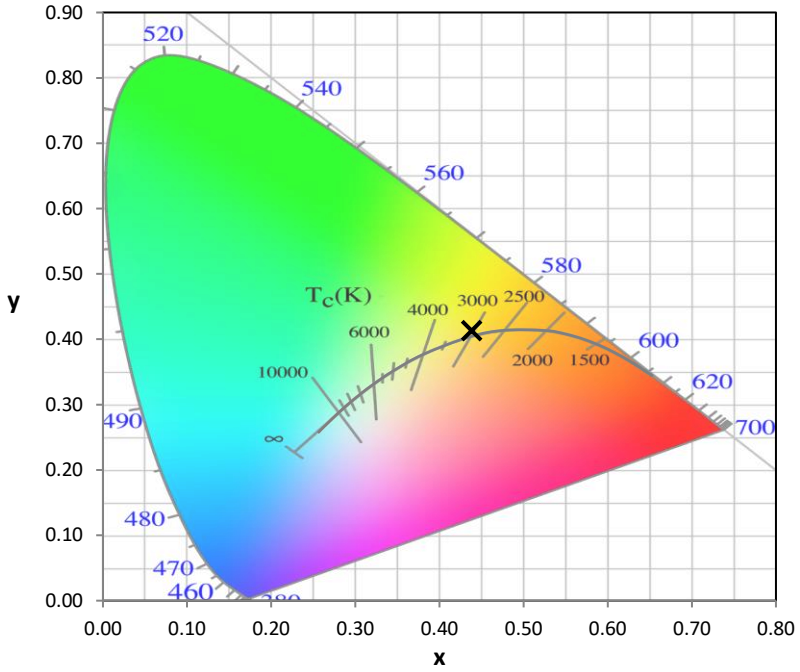
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

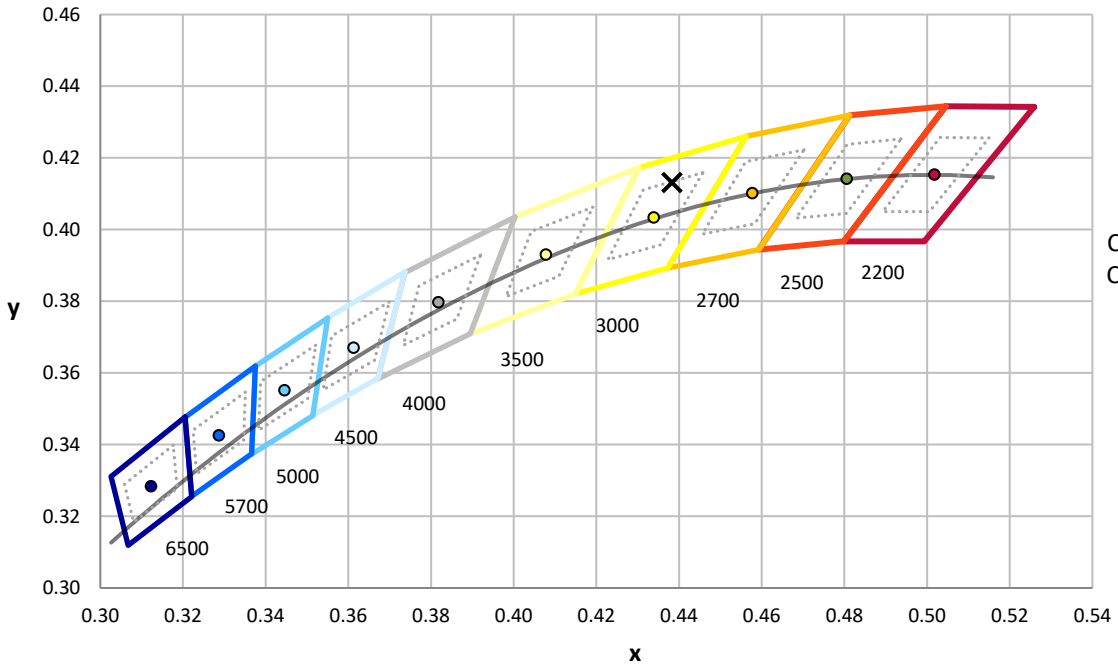
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

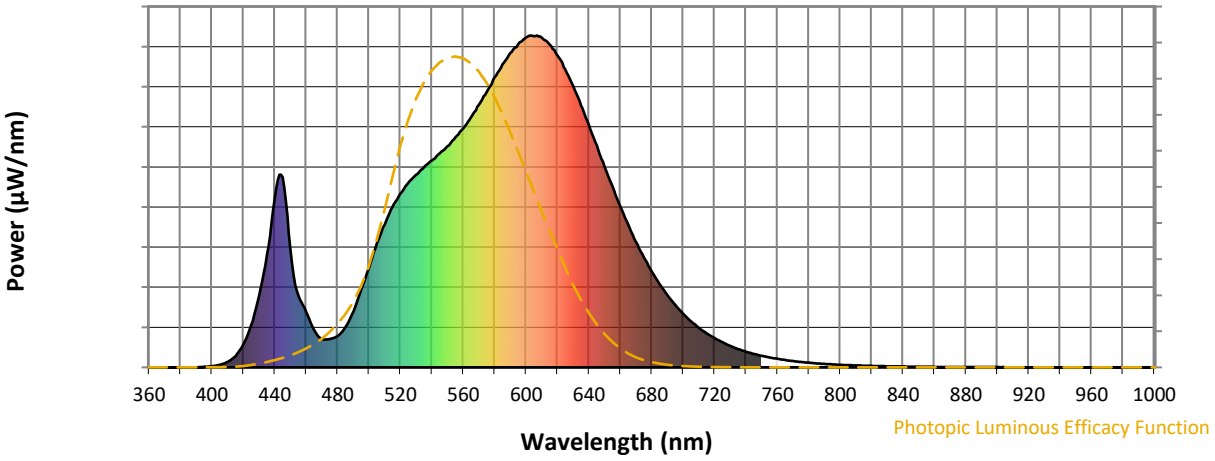


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

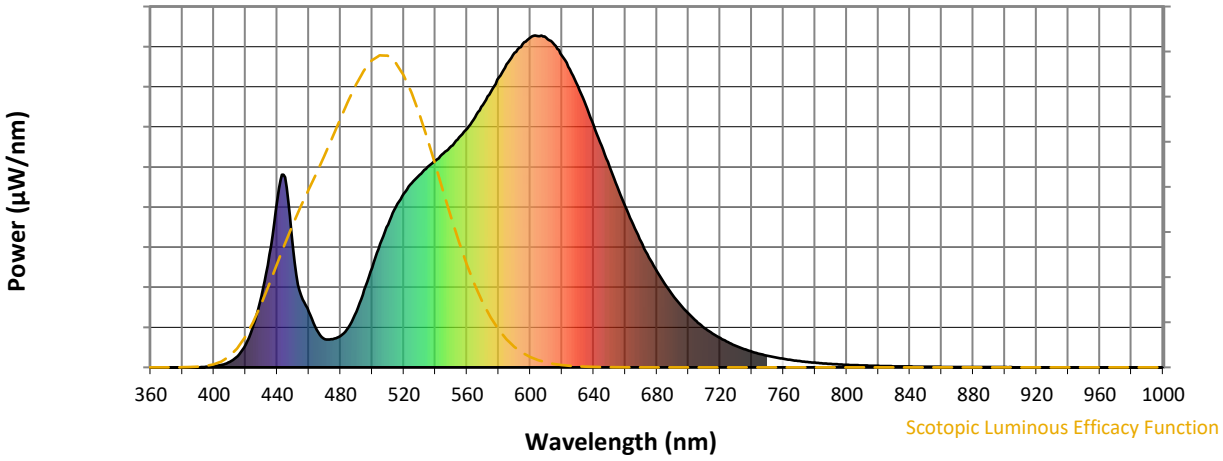


Photopic Lumens: NR

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

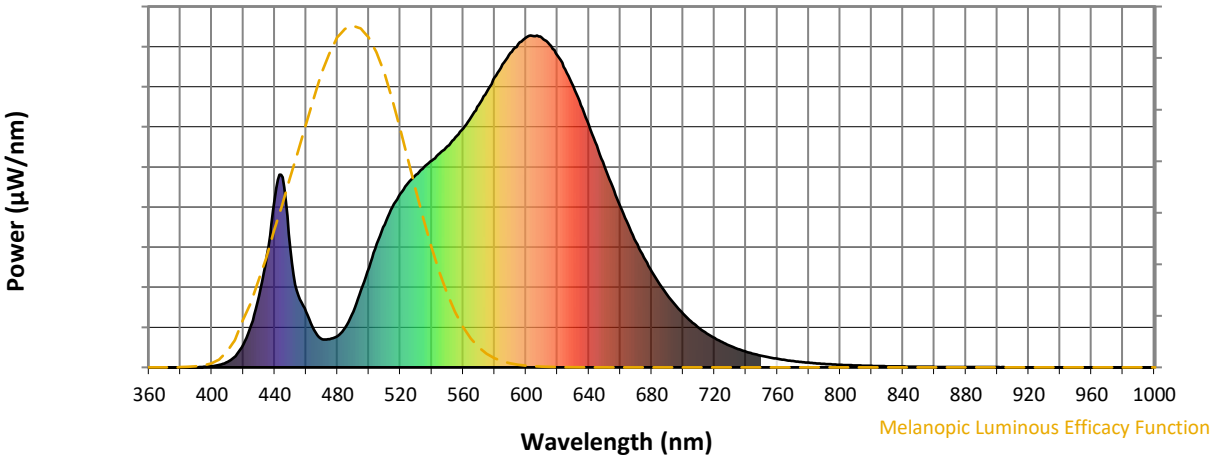


Scotopic Lumens: NR **S/P: 1.27**

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			

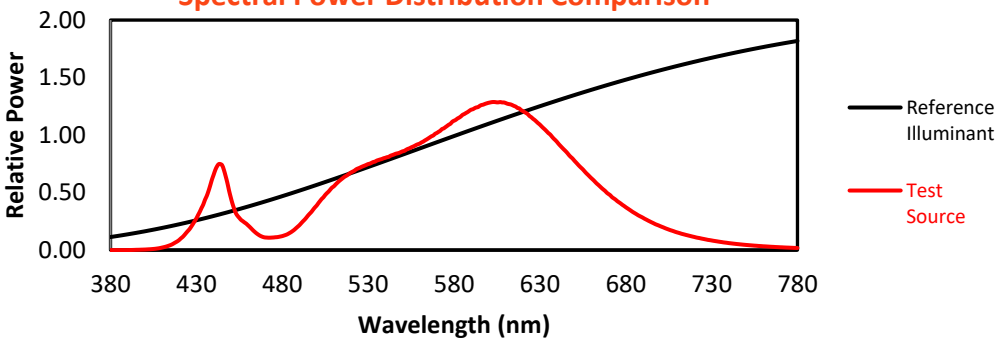
REPORT NUMBER: SP1-2408-195-9

TM-30-18

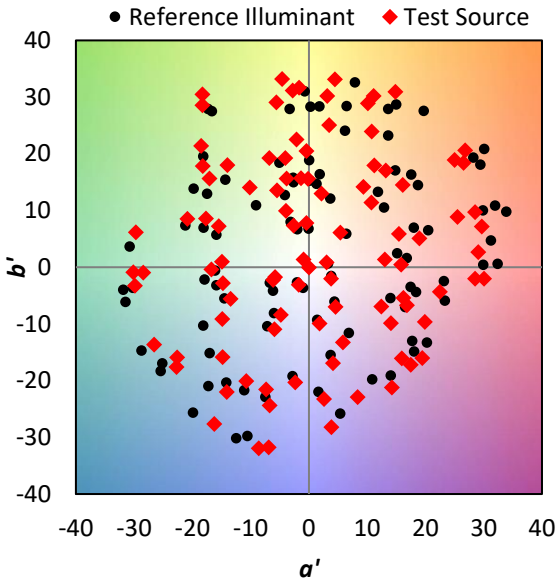
Summary

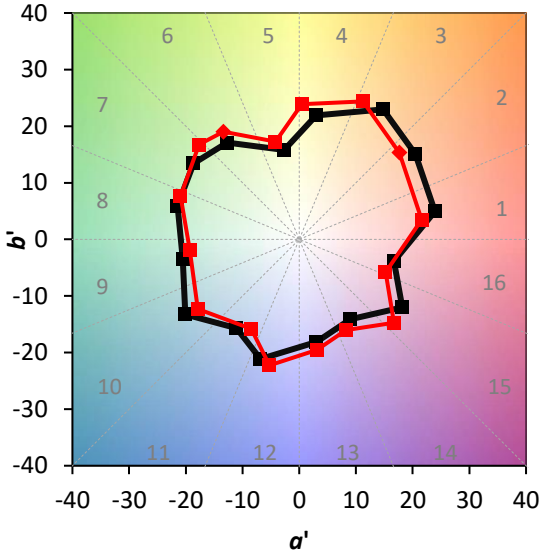
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

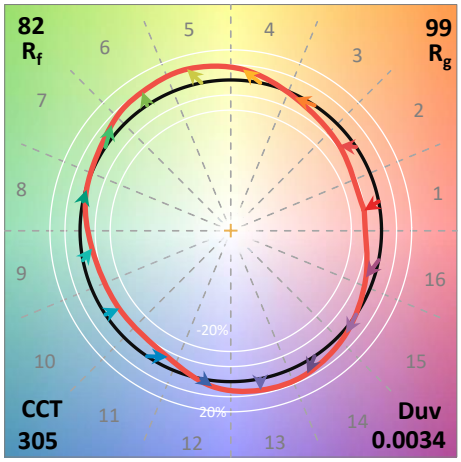
Spectral Power Distribution Comparison

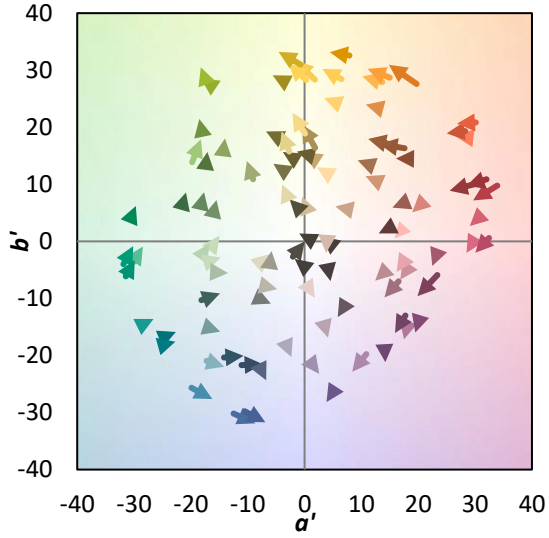


Color Vector Graphics







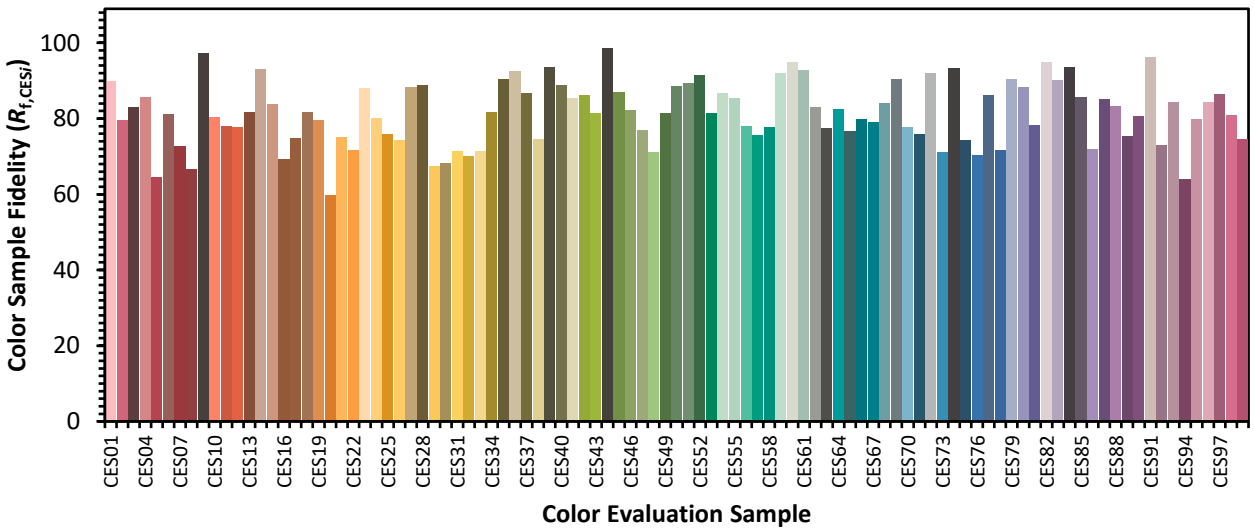


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

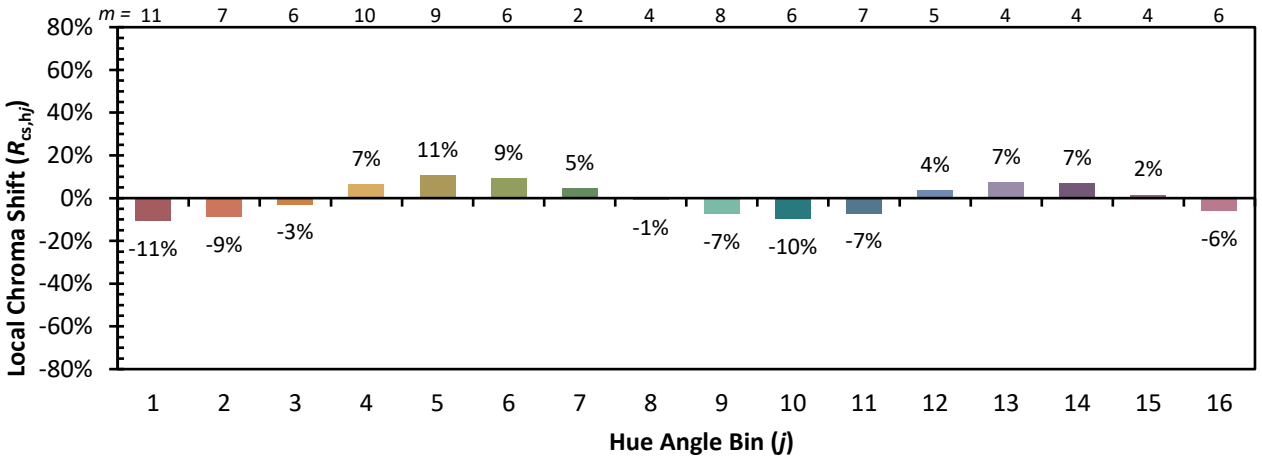
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

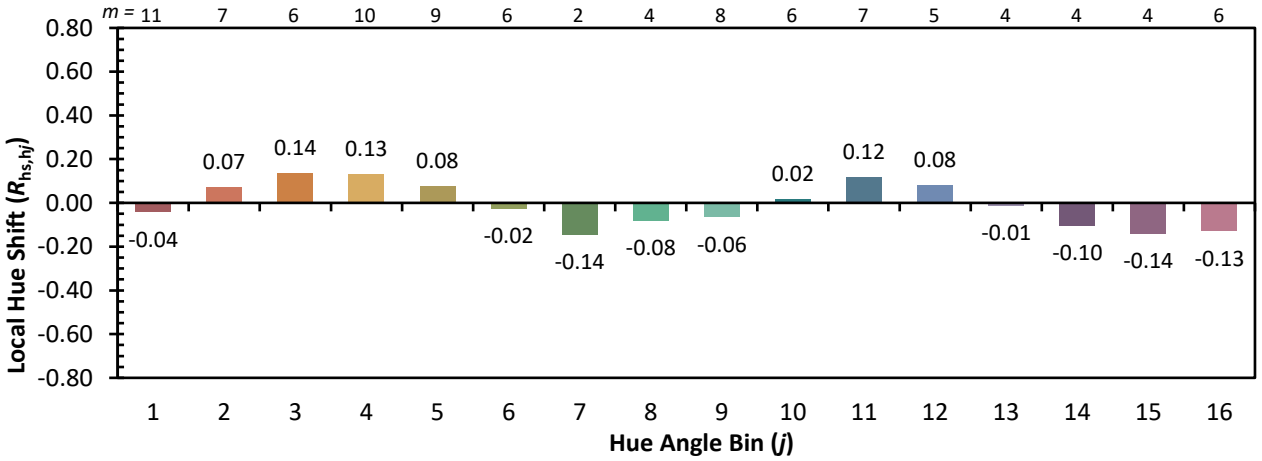


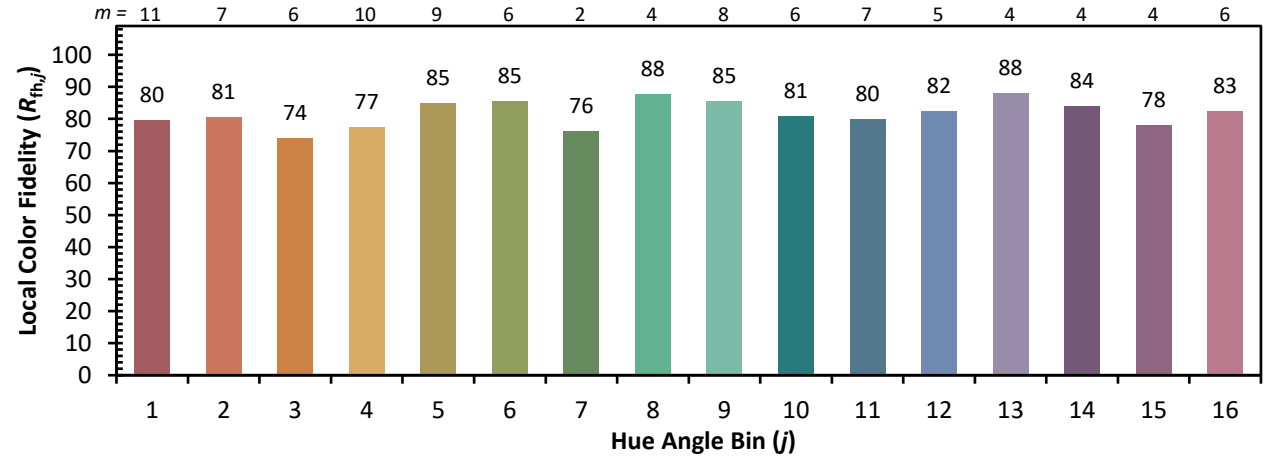
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



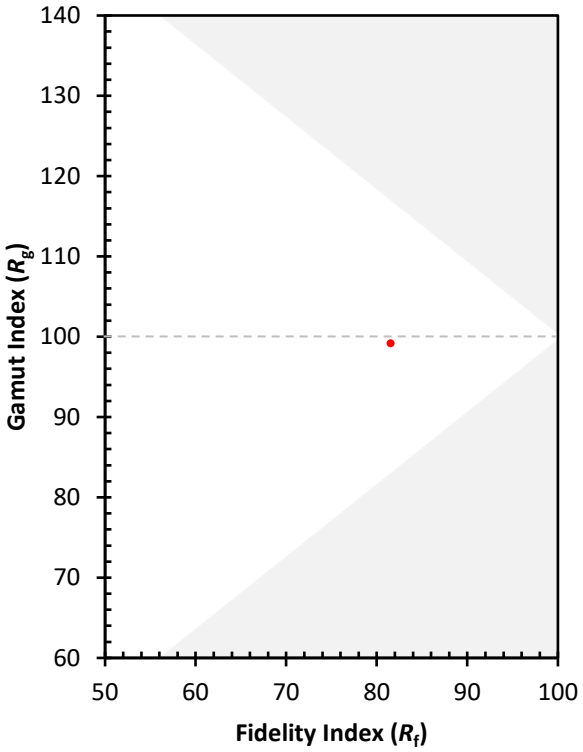


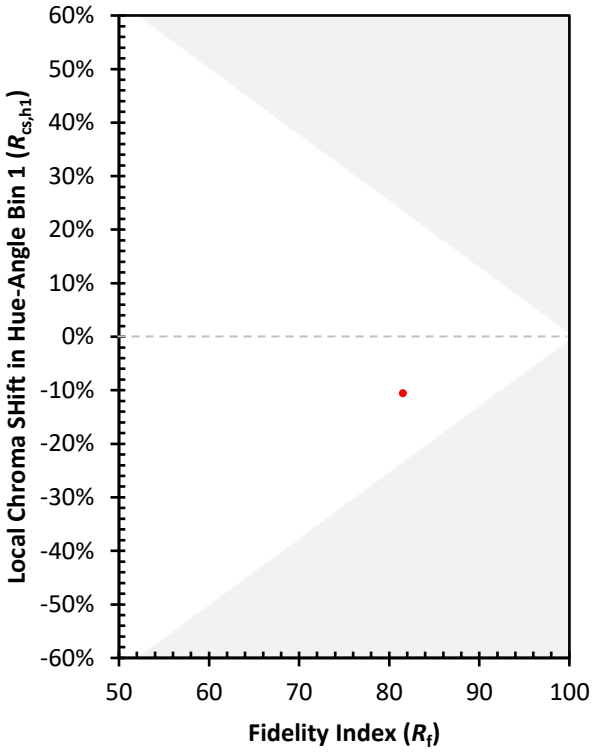


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





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