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: P631538

Luminaire Tested: GWS-SA1F-830-U-RW-W

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:	P631538
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1F-830-U-RW-W
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	6889.6 lumens
Efficiency:	N/A
Efficacy:	102.5 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G3

Input Watts (W):	67.2
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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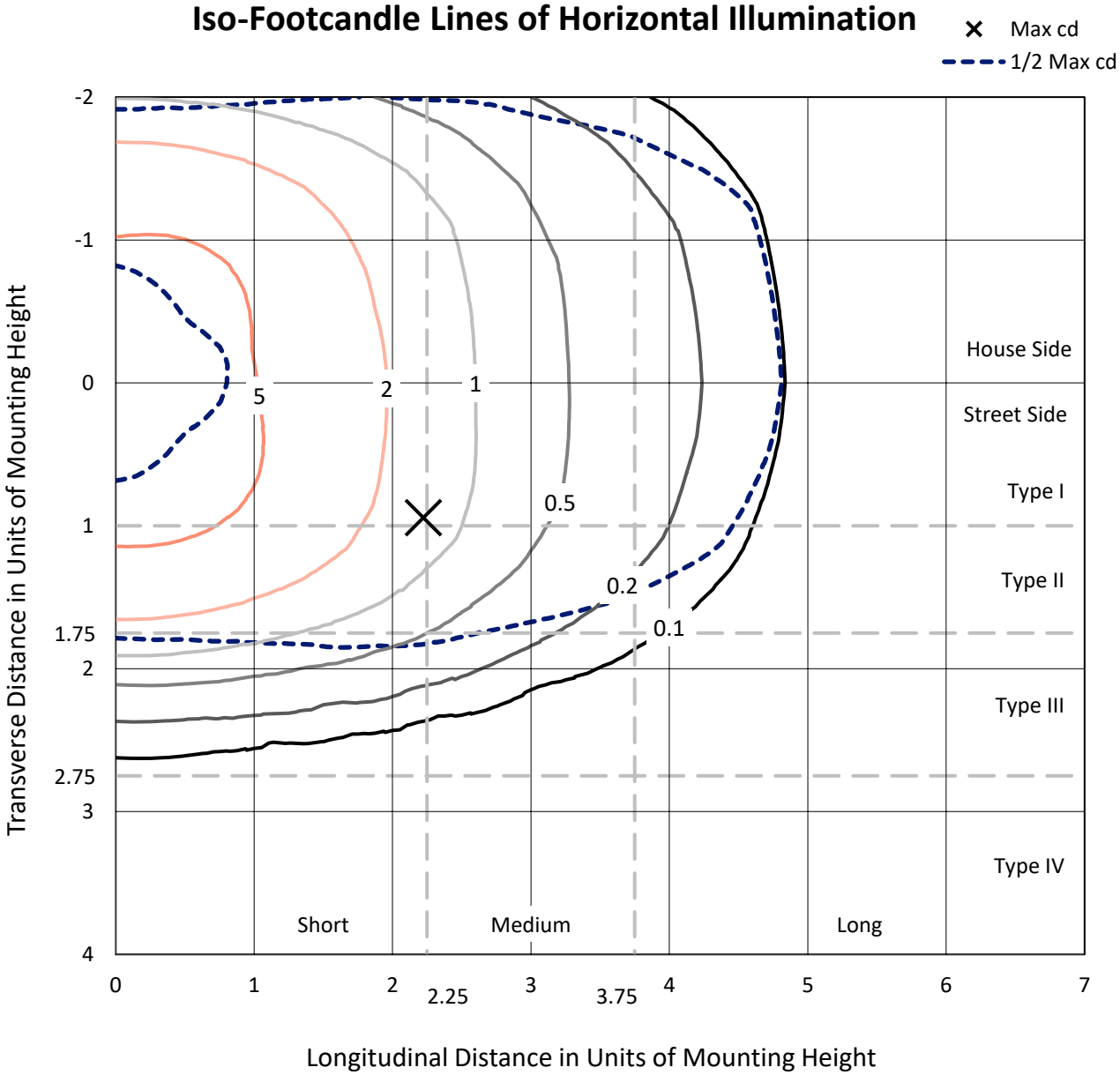
Scaled Data Report

REPORT NUMBER: P631538
CATALOG NUMBER: GWS-SA1F-830-U-RW-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 8.1 fc
Type III - Short - N/A

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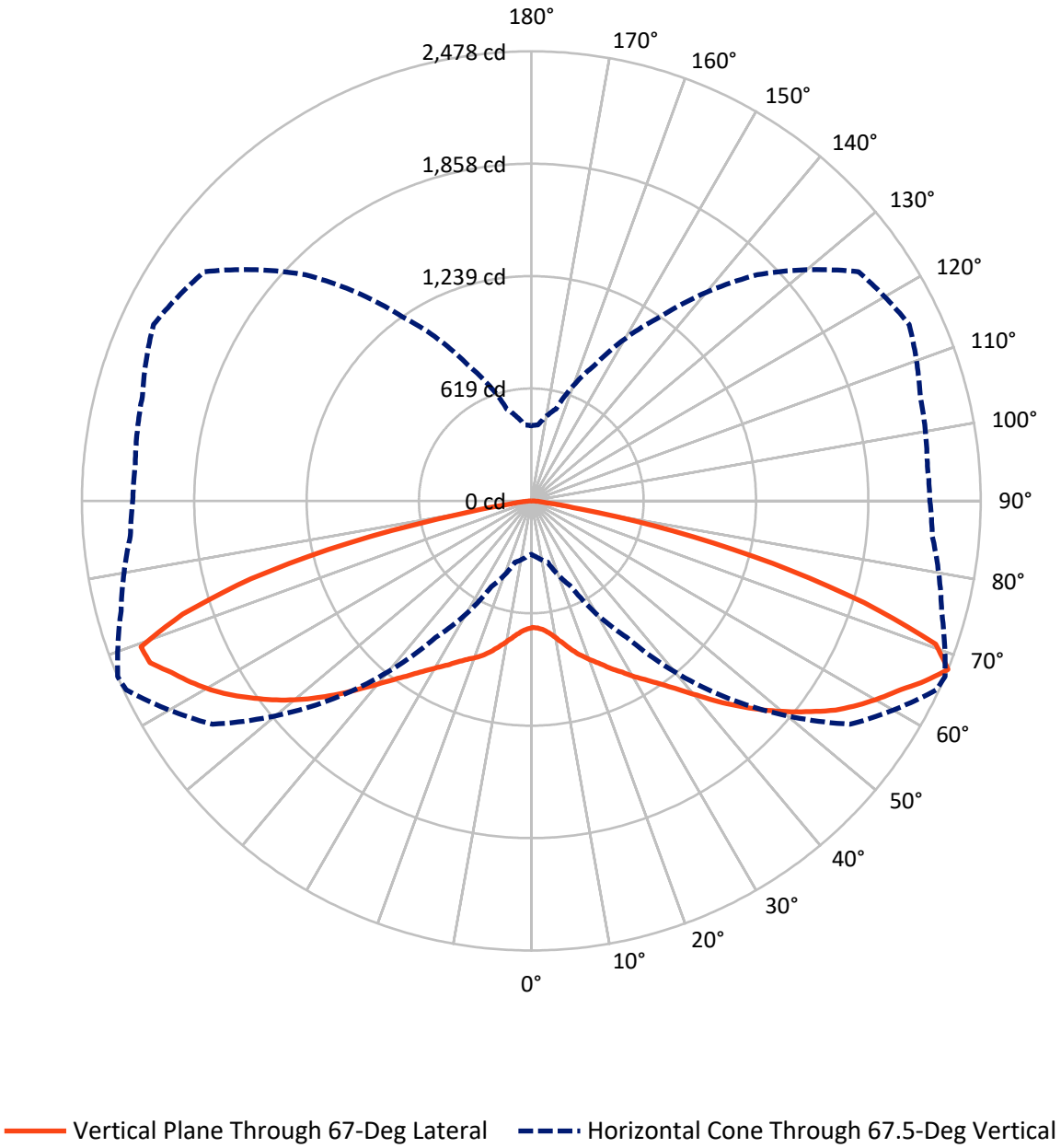
Luminous Intensity Polar Plot



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REPORT NUMBER: P631538
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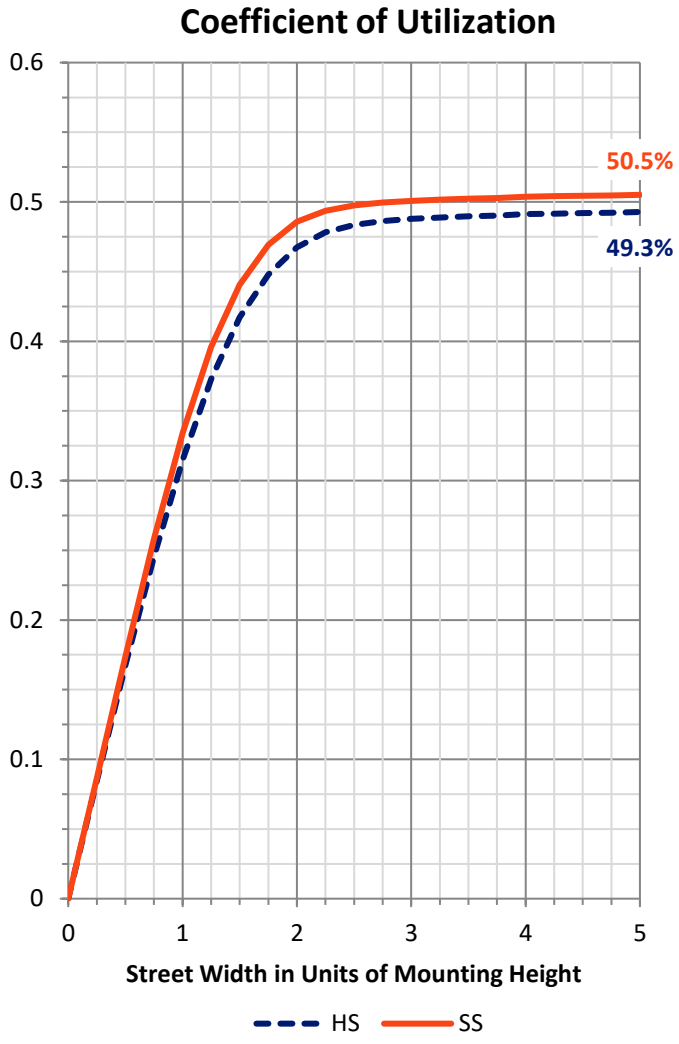
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3406.8	0.0	3406.8
	% Fixture	49.4	0.0	49.4
Street Side	Lumens	3482.8	0.0	3482.8
	% Fixture	50.6	0.0	50.6
Total	Lumens	6889.6	0.0	6889.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.4	1.0
10°-20°	231.2	3.4
20°-30°	453.7	6.6
30°-40°	772.9	11.2
40°-50°	1241.1	18.0
50°-60°	1686.4	24.5
60°-70°	1613.2	23.4
70°-80°	767.0	11.1
80°-90°	55.6	0.8
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°	6889.6	100.0
0°-180°	6889.6	100.0



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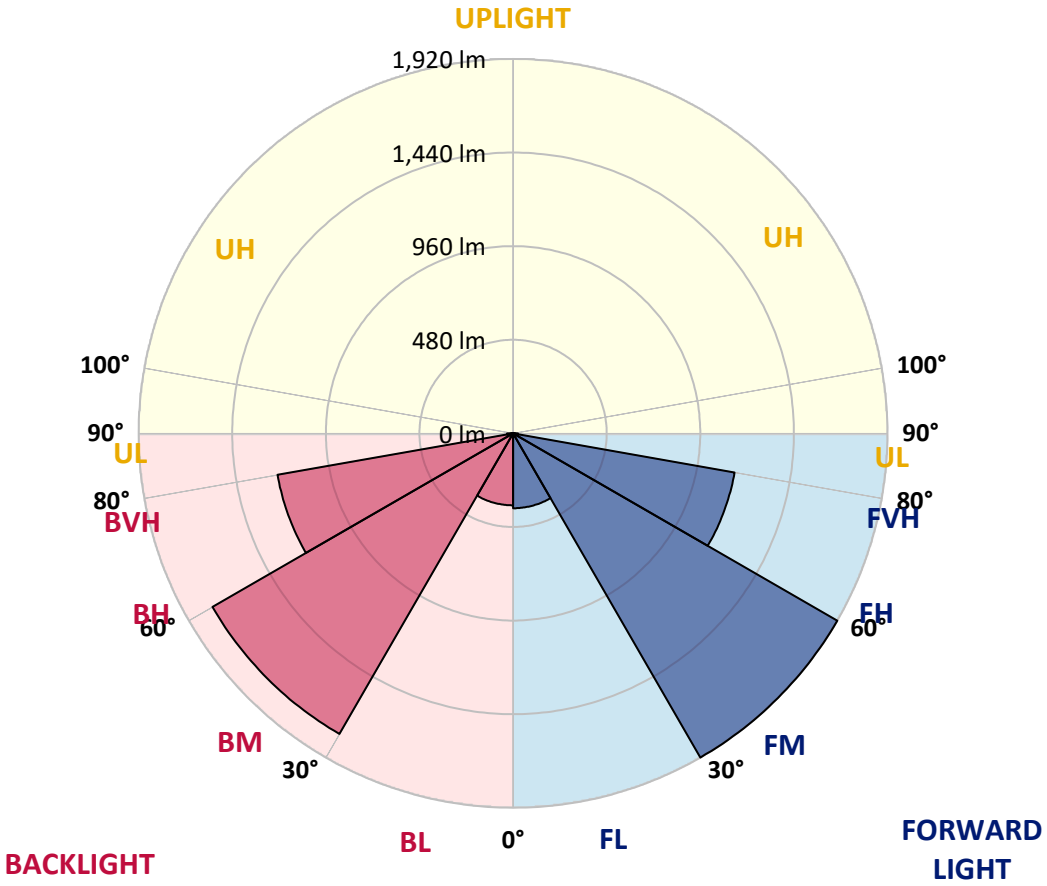
Scaled Data Report

REPORT NUMBER: P631538
CATALOG NUMBER: GWS-SA1F-830-U-RW-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	384.1	5.6			
FM	(30°-60°)	1920.2	27.9			
FH	(60°-80°)	1153.5	16.7			G1/1800
FVH	(80°-90°)	25.0	0.4			G1/100
BL	(0°-30°)	369.2	5.4	B1/500		
BM	(30°-60°)	1780.3	25.8	B2/2500		
BH	(60°-80°)	1226.7	17.8	B3/2500		G3/2500
BVH	(80°-90°)	30.6	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type III Short



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Scaled Data Report

REPORT NUMBER: P631538
CATALOG NUMBER: GWS-SA1F-830-U-RW-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	697.6	697.6	697.6	697.6	697.6	697.6	697.6	697.6	*697.6*	697.6	697.6
2.5°	683.2	684.2	685.6	688.5	691.4	695.7	700.0	699.5	*701.4*	702.9	704.3
5°	679.4	680.3	682.7	686.6	690.9	698.1	707.2	711.0	*713.9*	719.2	724.0
7.5°	687.5	689.5	692.8	698.1	704.8	713.9	726.4	733.1	*737.4*	747.0	755.2
10°	698.6	701.0	707.7	717.8	727.8	741.8	757.6	767.7	*770.5*	783.0	798.4
12.5°	709.1	712.0	723.0	741.3	759.5	778.2	796.9	809.4	*810.4*	827.2	844.4
15°	725.9	728.3	743.2	766.7	794.5	820.4	843.5	852.1	*855.9*	867.9	889.5
17.5°	762.9	765.7	784.9	810.4	839.6	867.0	890.0	897.2	*897.2*	907.3	925.0
20°	802.7	805.6	831.0	863.6	899.1	926.9	944.7	938.0	*935.6*	938.5	950.9
22.5°	847.3	852.6	877.1	915.0	958.6	992.7	1001.8	981.6	*974.9*	968.2	971.1
25°	904.4	910.6	934.6	974.9	1017.6	1053.6	1058.9	1027.7	*1023.9*	1000.4	991.7
27.5°	970.1	974.9	1004.7	1044.5	1084.3	1114.5	1120.3	1081.9	*1069.0*	1036.3	1016.2
30°	1055.1	1059.4	1085.3	1124.6	1159.2	1180.3	1187.5	1134.7	*1124.6*	1074.7	1043.5
32.5°	1147.7	1149.6	1176.0	1213.9	1244.6	1264.7	1254.6	1193.2	*1178.4*	1122.2	1079.5
35°	1253.7	1253.7	1287.7	1318.5	1342.9	1348.7	1329.5	1259.4	*1242.2*	1181.2	1128.0
37.5°	1357.8	1360.7	1392.3	1428.8	1450.4	1449.4	1414.4	1337.6	*1318.0*	1251.8	1192.8
40°	1470.5	1476.8	1508.5	1549.2	1569.9	1567.0	1513.2	1427.8	*1407.7*	1329.5	1271.9
42.5°	1574.2	1584.3	1621.2	1662.9	1685.5	1683.6	1627.4	1531.5	*1511.8*	1423.5	1366.0
45°	1656.7	1667.3	1713.3	1771.4	1807.4	1804.0	1747.4	1639.0	*1615.0*	1522.4	1459.0
47.5°	1729.2	1740.2	1791.5	1852.9	1910.0	1915.8	1864.0	1747.4	*1722.0*	1628.4	1556.9
50°	1784.8	1790.1	1847.7	1914.8	1981.0	2013.2	1968.1	1856.3	*1825.6*	1733.0	1652.4
52.5°	1780.5	1787.7	1858.7	1949.9	2038.6	2091.4	2060.2	1959.0	*1929.2*	1828.5	1749.8
55°	1692.7	1699.9	1784.3	1917.2	2070.8	2148.5	2145.1	2056.8	*2035.3*	1925.9	1851.0
57.5°	1564.6	1580.4	1664.4	1807.8	2028.5	2194.1	2207.5	2146.1	*2123.5*	2021.3	1951.3
60°	1335.2	1356.4	1453.3	1639.4	1893.2	2178.7	2274.2	2221.4	*2207.5*	2110.1	2042.0
62.5°	970.1	985.5	1114.5	1358.8	1692.7	2069.3	2330.3	2299.1	*2288.6*	2189.7	2124.0
65°	581.0	616.0	719.7	961.0	1365.5	1863.0	2299.6	2400.9	*2389.8*	2271.8	2194.1
67.5°	*294.1*	*309.9*	*350.7*	*521.0*	*918.3*	*1541.6*	*2145.6*	*2464.2*	*2477.6*	*2341.8*	*2219.0*
70°	182.3	186.6	198.2	257.2	458.7	1012.8	1754.6	2299.1	*2364.9*	2330.8	2154.2
72.5°	146.3	147.3	149.2	160.2	220.2	473.5	1109.3	1800.6	*1919.1*	2176.8	2061.6
75°	121.4	121.9	122.3	125.7	137.2	193.4	539.8	1237.4	*1376.0*	1850.1	1911.5
77.5°	97.4	95.0	96.9	98.4	101.2	108.0	186.2	660.2	*800.8*	1214.3	1478.2
80°	63.3	62.4	66.2	67.6	70.5	74.8	99.3	224.1	*272.0*	441.9	470.2
82.5°	34.1	32.1	40.3	38.9	40.3	43.7	58.5	82.0	*92.1*	133.4	112.7
85°	10.6	10.6	11.0	13.0	15.8	15.4	25.4	40.3	*44.6*	57.1	42.2
87.5°	1.9	1.9	1.9	1.9	1.9	2.4	5.3	8.2	*11.0*	19.7	14.9
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: P631538
CATALOG NUMBER: GWS-SA1F-830-U-RW-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	697.6	697.6	697.6	697.6	697.6	697.6	697.6	697.6	697.6	697.6	697.6
2.5°	707.2	702.9	705.3	706.7	706.2	705.3	700.5	699.5	697.1	693.3	692.3
5°	728.3	723.5	724.0	722.6	717.8	711.5	701.0	695.7	691.4	686.6	686.1
7.5°	761.4	756.1	754.7	748.0	734.6	720.2	703.4	693.8	686.6	680.3	679.4
10°	803.6	798.4	793.6	777.7	755.7	736.5	714.4	700.5	689.9	682.3	680.8
12.5°	850.7	846.3	834.3	811.3	784.9	762.4	739.8	722.6	707.2	695.7	694.3
15°	903.0	893.4	875.1	845.4	820.4	802.2	774.9	751.3	726.9	711.5	708.2
17.5°	939.4	931.3	909.7	880.9	861.2	845.4	813.2	779.7	746.5	724.0	719.2
20°	965.3	956.7	932.2	911.1	904.9	891.4	854.0	815.2	776.8	748.9	742.7
22.5°	984.0	974.9	950.0	939.4	948.1	945.7	909.2	865.1	819.5	786.4	778.7
25°	1001.8	993.2	971.1	974.9	998.0	1005.2	965.8	914.5	862.7	823.8	814.7
27.5°	1018.6	1007.6	997.5	1018.6	1051.2	1064.6	1022.9	964.9	908.7	868.9	861.7
30°	1044.5	1031.5	1030.1	1060.8	1112.6	1124.1	1078.1	1020.0	964.4	924.1	915.0
32.5°	1077.1	1065.1	1066.1	1112.1	1172.1	1181.7	1142.4	1088.2	1032.5	992.2	979.7
35°	1121.3	1106.4	1114.5	1171.2	1231.6	1249.4	1217.7	1172.6	1118.4	1077.1	1063.2
37.5°	1182.2	1160.6	1177.4	1236.9	1297.8	1324.2	1299.7	1266.2	1212.4	1170.7	1157.7
40°	1259.9	1242.2	1248.9	1314.6	1377.5	1409.1	1393.8	1360.7	1307.4	1263.8	1248.9
42.5°	1352.0	1334.3	1331.9	1401.9	1464.8	1512.8	1497.9	1467.7	1412.5	1362.6	1348.2
45°	1442.2	1425.9	1429.3	1500.8	1571.3	1623.6	1608.7	1573.2	1513.2	1455.7	1444.2
47.5°	1536.3	1522.8	1525.7	1601.5	1679.3	1731.6	1712.8	1669.7	1599.6	1538.2	1524.3
50°	1632.7	1617.4	1621.7	1701.3	1785.3	1834.7	1805.9	1742.1	1664.9	1604.9	1592.9
52.5°	1728.7	1710.4	1721.5	1796.8	1883.6	1923.0	1869.7	1792.5	1717.6	1658.1	1644.7
55°	1839.0	1819.8	1807.8	1888.4	1974.3	1990.6	1917.7	1827.5	1738.7	1671.1	1662.9
57.5°	1939.8	1923.5	1900.9	1981.5	2044.9	2032.9	1954.7	1817.9	1687.4	1600.6	1589.1
60°	2030.0	2016.1	1996.4	2065.0	2093.8	2066.9	1924.9	1704.2	1560.7	1470.1	1464.8
62.5°	2113.0	2098.1	2079.9	2138.4	2134.6	2072.2	1789.6	1529.6	1337.6	1240.2	1231.6
65°	2178.7	2165.3	2160.0	2206.1	2199.8	1969.0	1579.0	1243.6	977.3	867.5	864.1
67.5°	*2197.4*	*2192.1*	*2220.5*	*2298.7*	*2201.3*	*1761.8*	*1238.3*	*824.8*	*524.9*	*420.8*	*414.5*
70°	2127.4	2126.9	2208.0	2319.8	2001.7	1345.8	730.7	371.8	263.9	234.1	230.3
72.5°	2036.2	2034.8	2099.1	2001.2	1484.5	736.5	307.5	199.1	165.0	156.9	156.9
75°	1886.5	1882.7	1931.1	1522.4	834.8	277.3	163.1	136.7	129.5	128.1	128.1
77.5°	1537.7	1505.6	1429.3	940.9	291.2	136.3	108.0	107.5	103.2	102.7	102.7
80°	505.7	505.7	587.7	358.9	128.6	84.0	76.3	80.1	75.8	72.9	72.4
82.5°	82.5	113.7	161.7	102.7	69.6	52.3	47.0	49.9	52.3	41.7	41.7
85°	32.6	42.7	62.4	48.0	32.1	21.1	22.5	24.9	22.1	19.2	18.7
87.5°	12.5	15.4	22.1	11.5	6.7	3.8	2.4	2.4	1.9	1.9	1.9
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

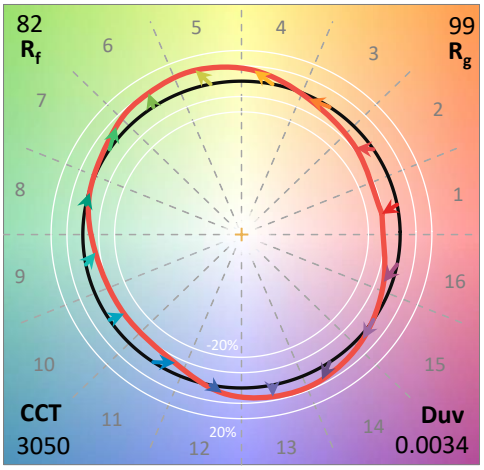
Test Information

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

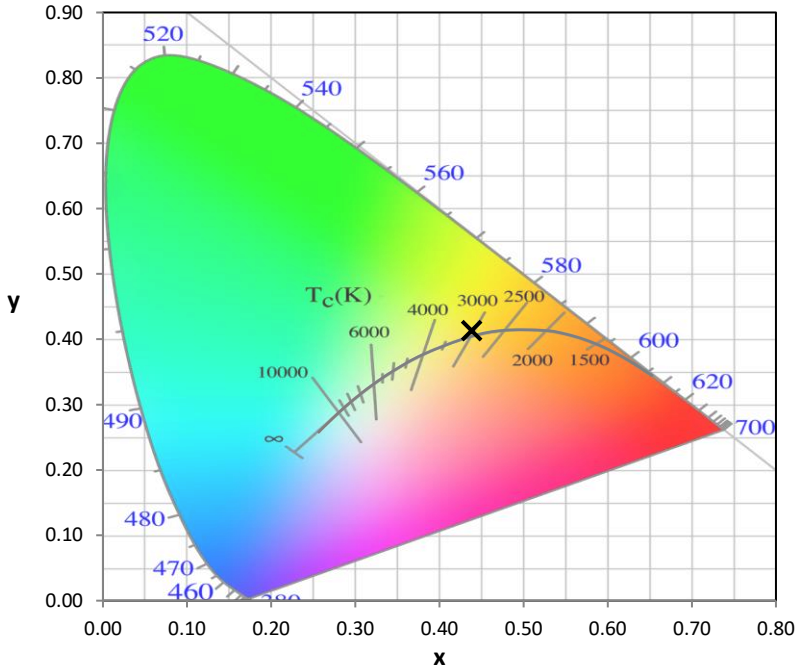
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

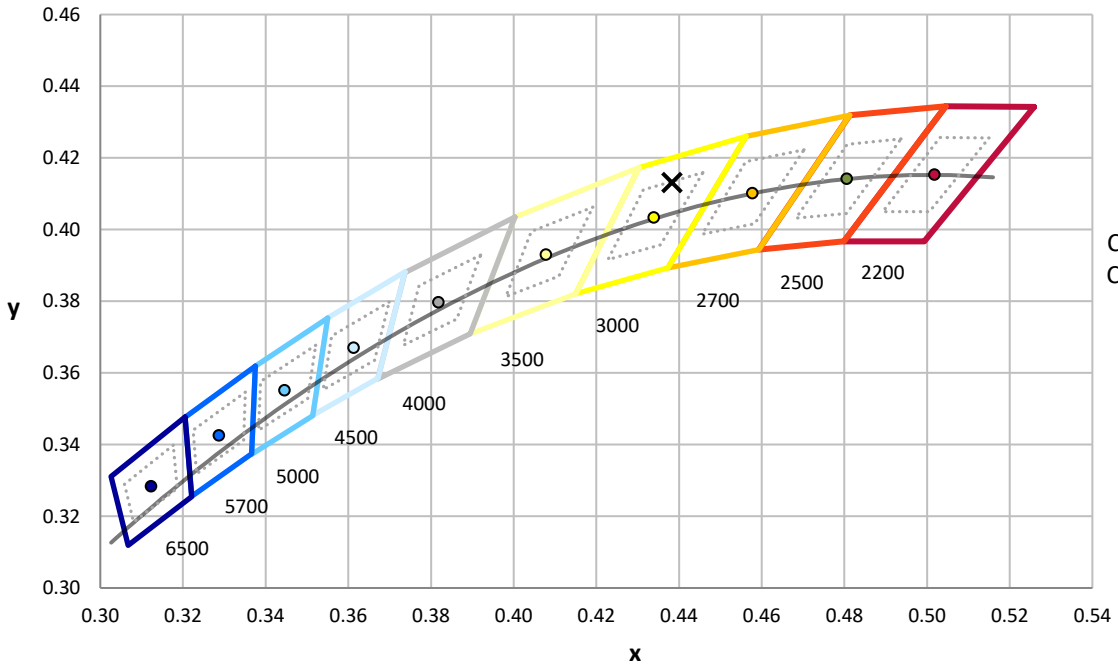
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

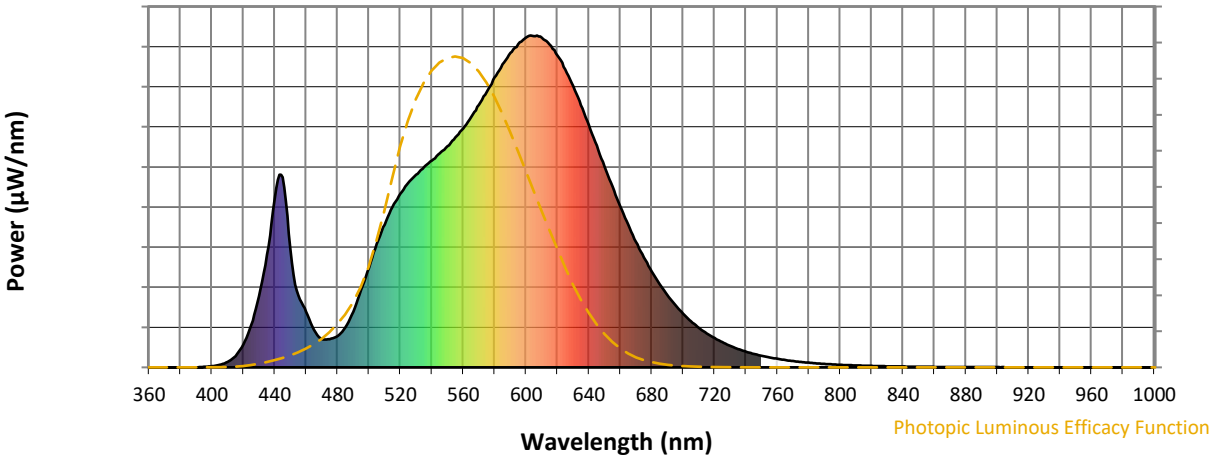


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

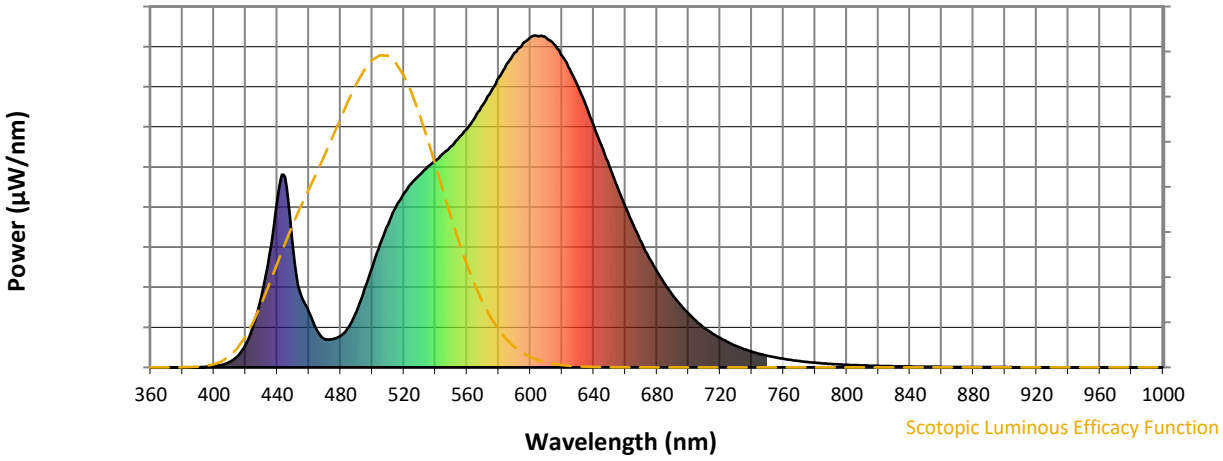


Photopic Lumens: NR

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

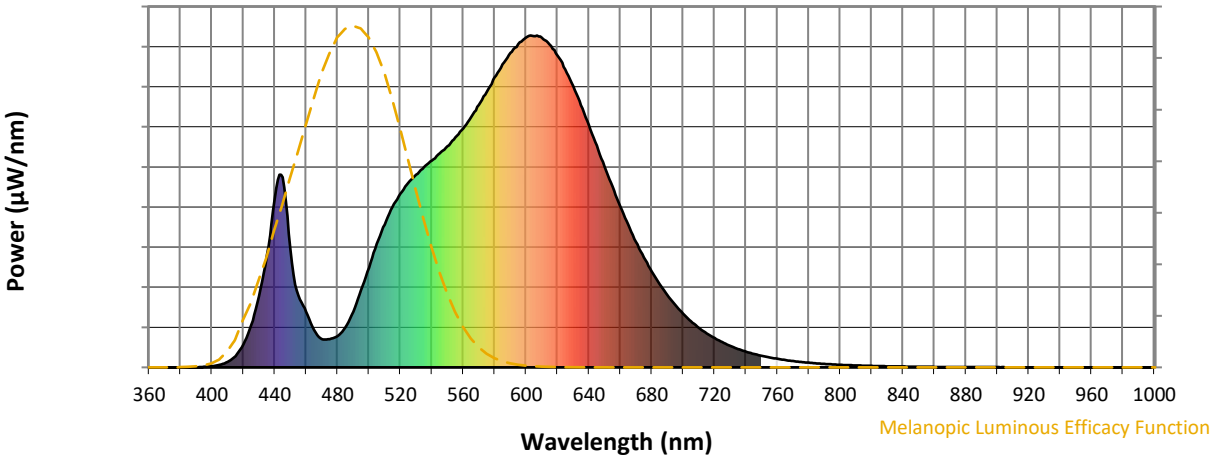


Scotopic Lumens: NR **S/P: 1.27**

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			

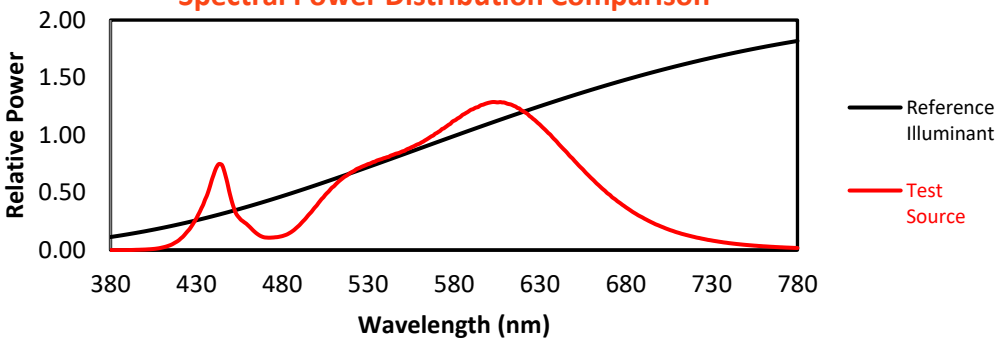
REPORT NUMBER: SP1-2408-195-9

TM-30-18

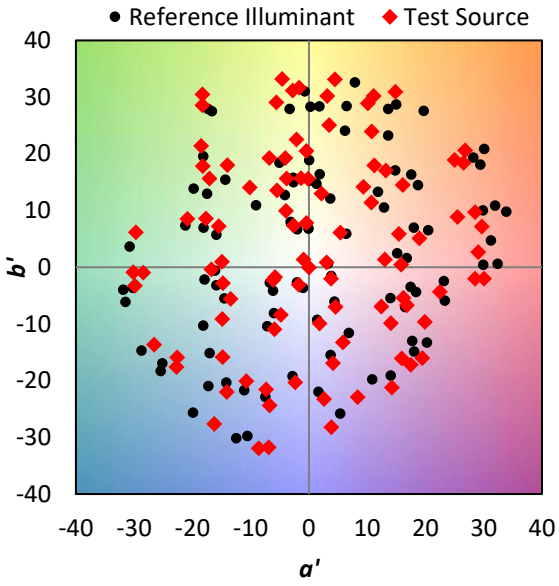
Summary

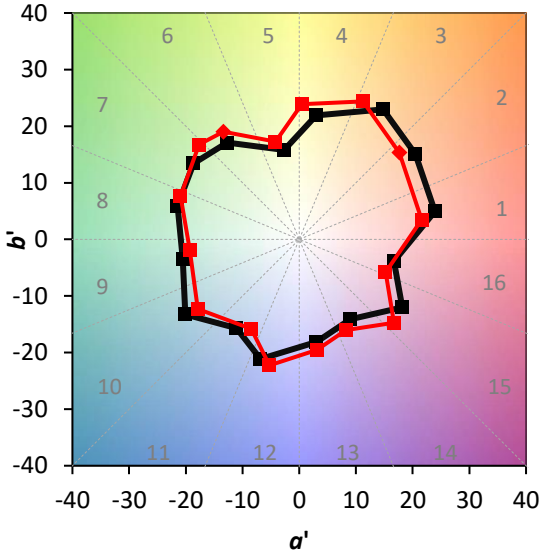
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

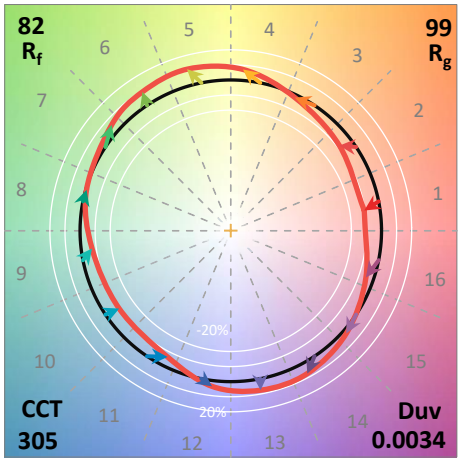
Spectral Power Distribution Comparison

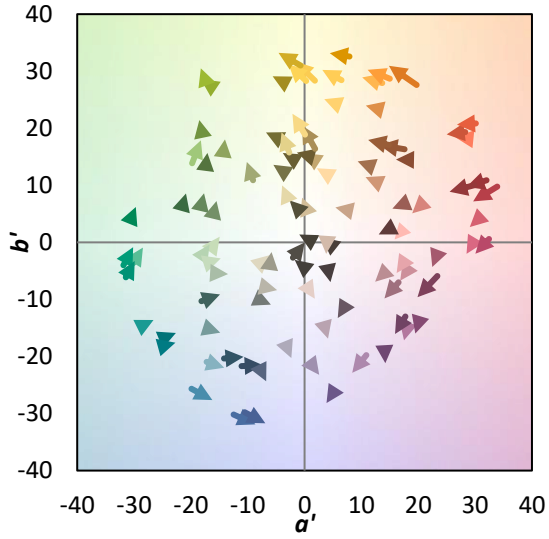


Color Vector Graphics







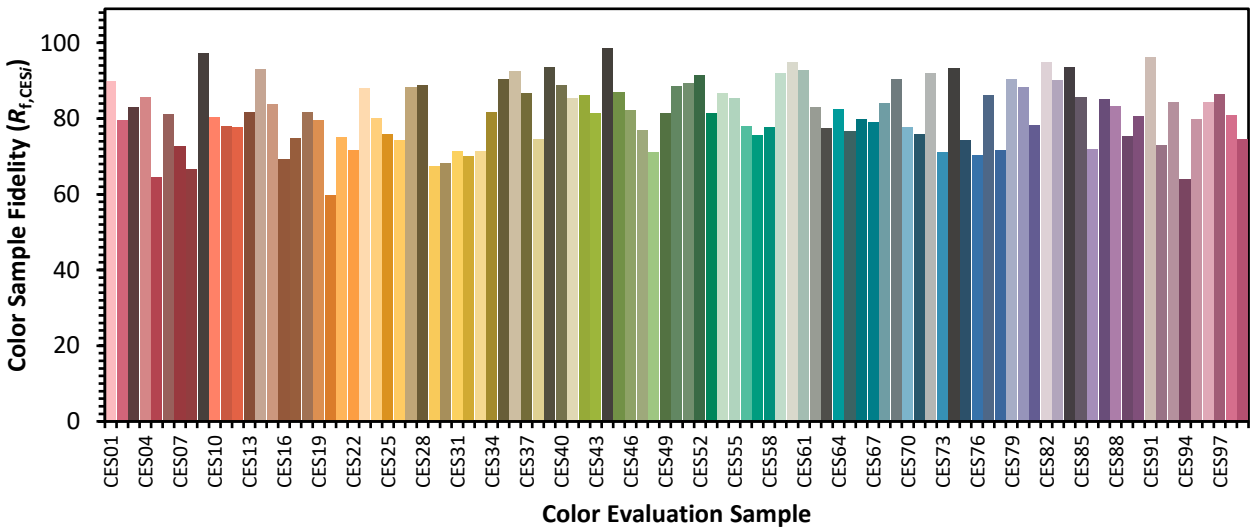


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

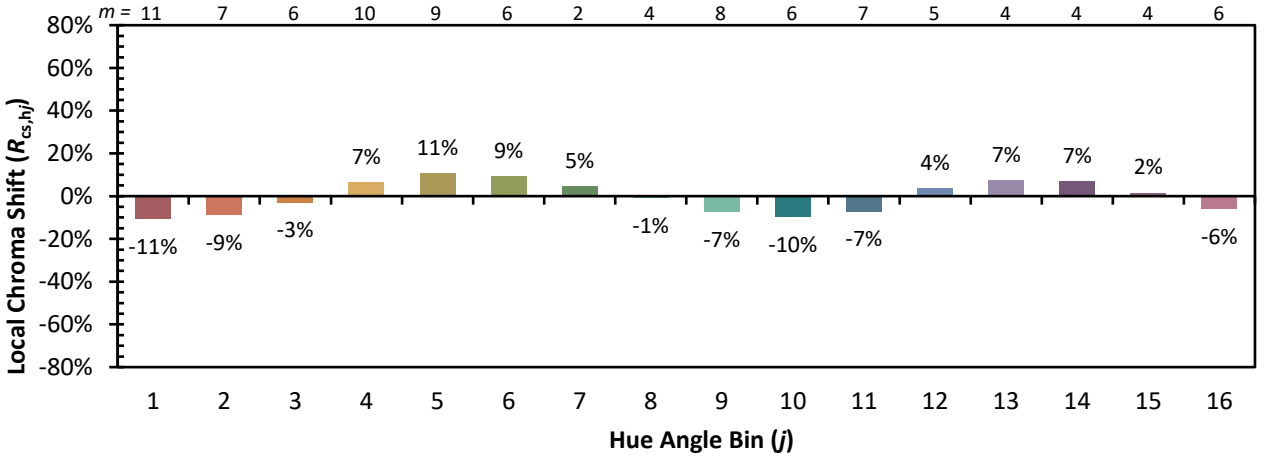
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

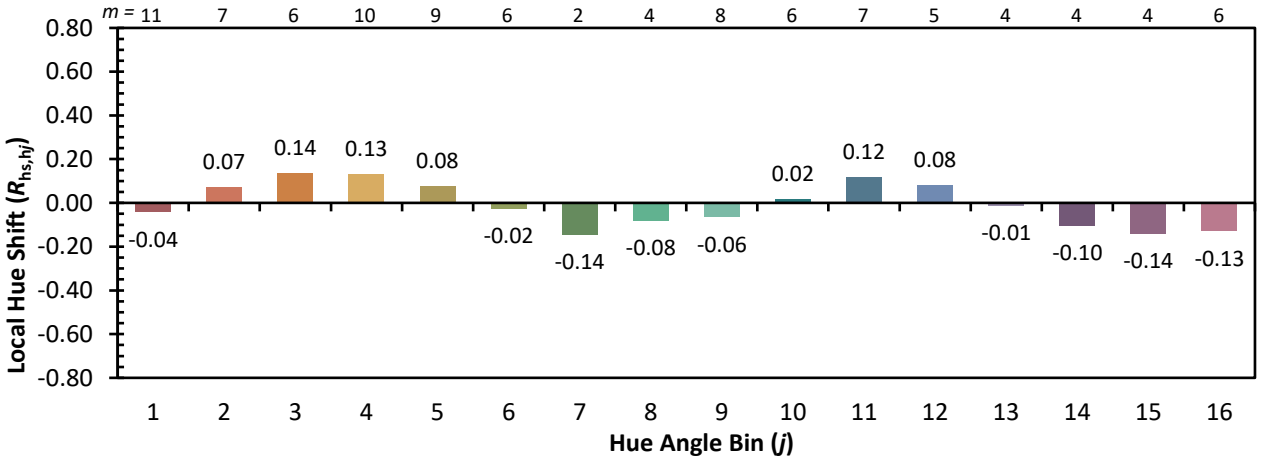


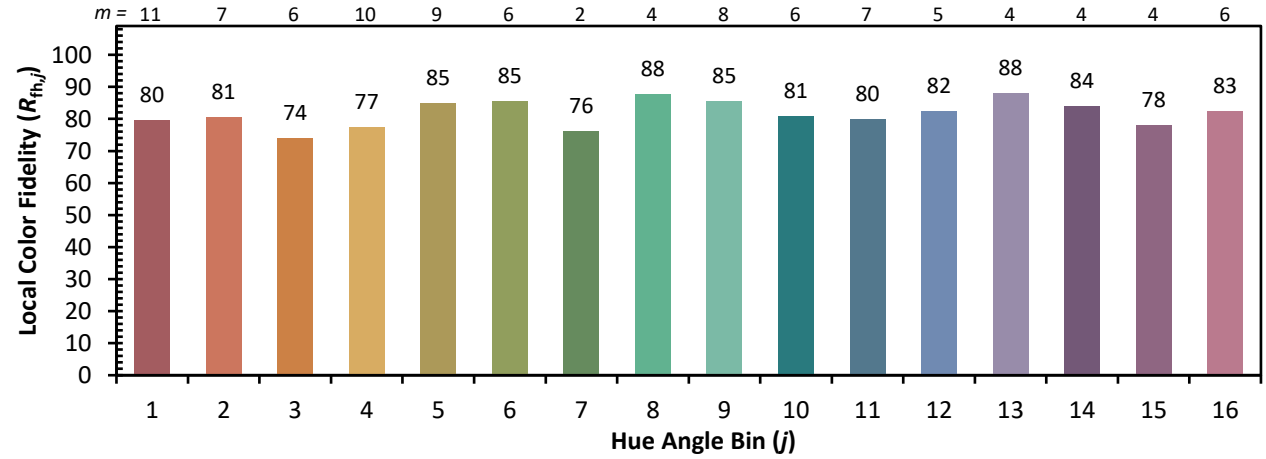
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



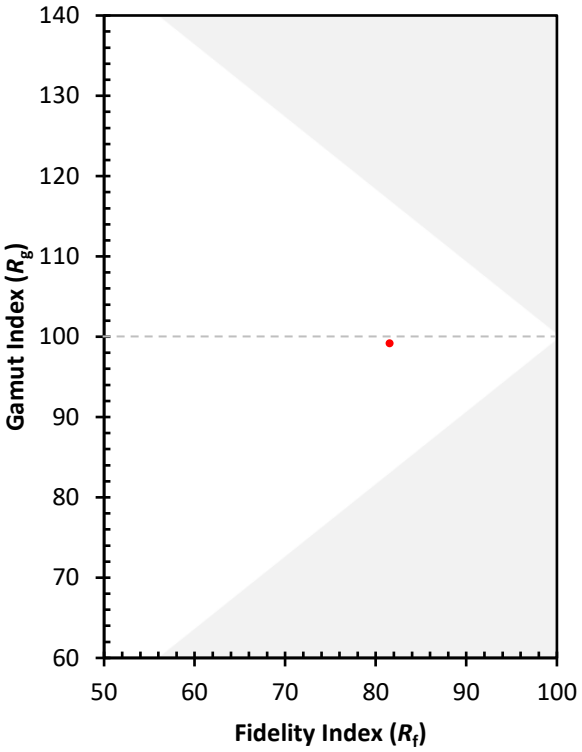


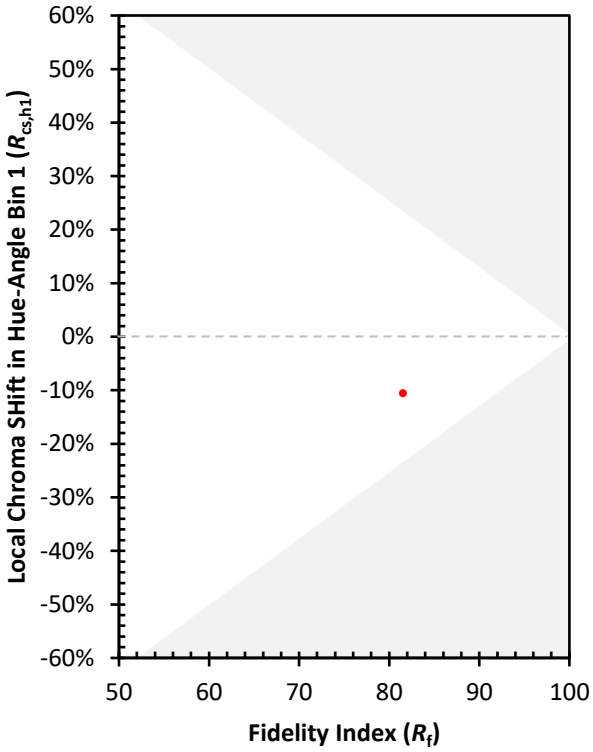


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)