

Signify Classified - Internal
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: P631549

Luminaire Tested: GWS-SA1F-830-U-SLL-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P631549
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-38)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1F-830-U-SLL-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3588.7 lumens
Efficiency: N/A
Efficacy: 53.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G0

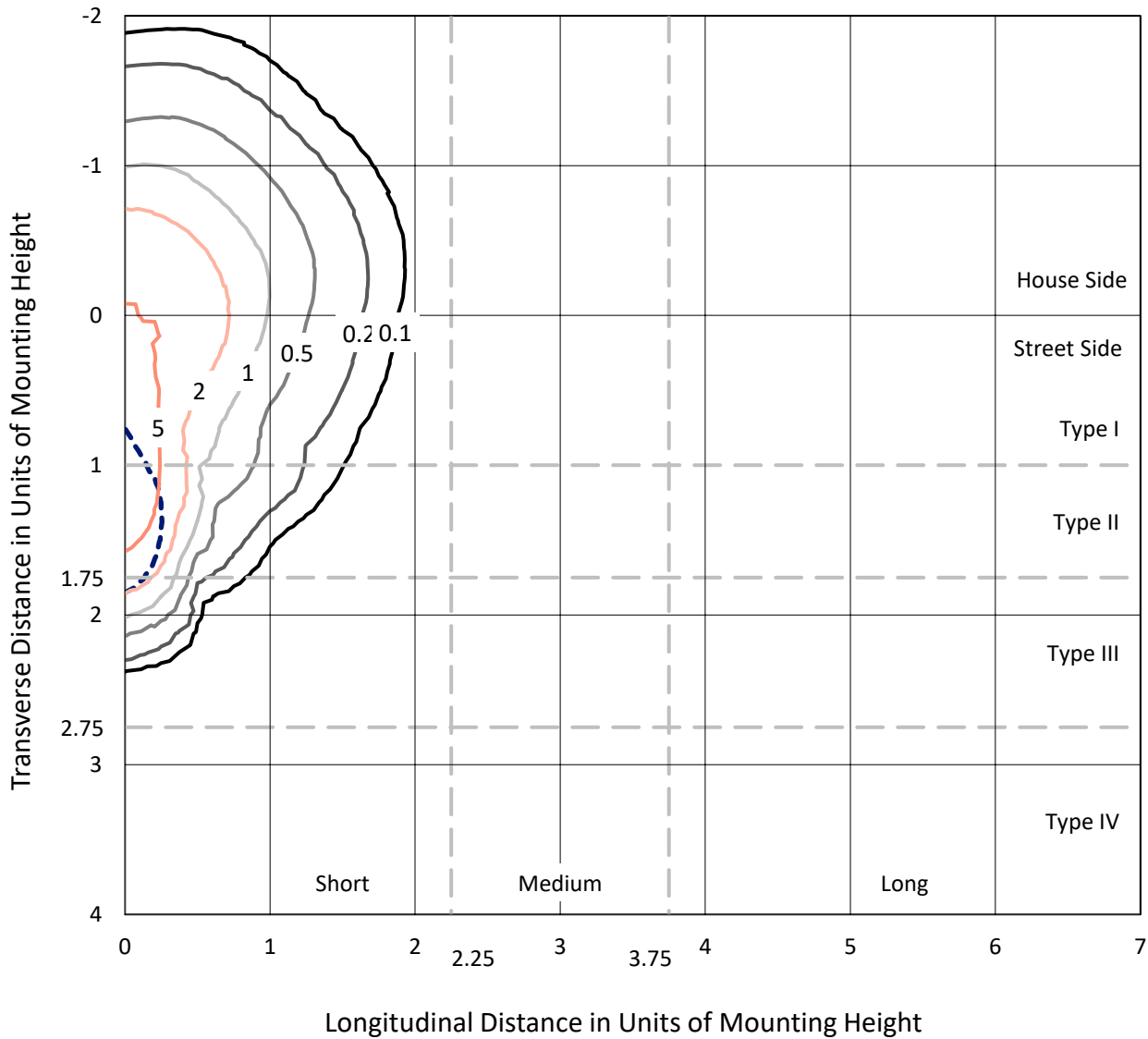
Input Watts (W): 67.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

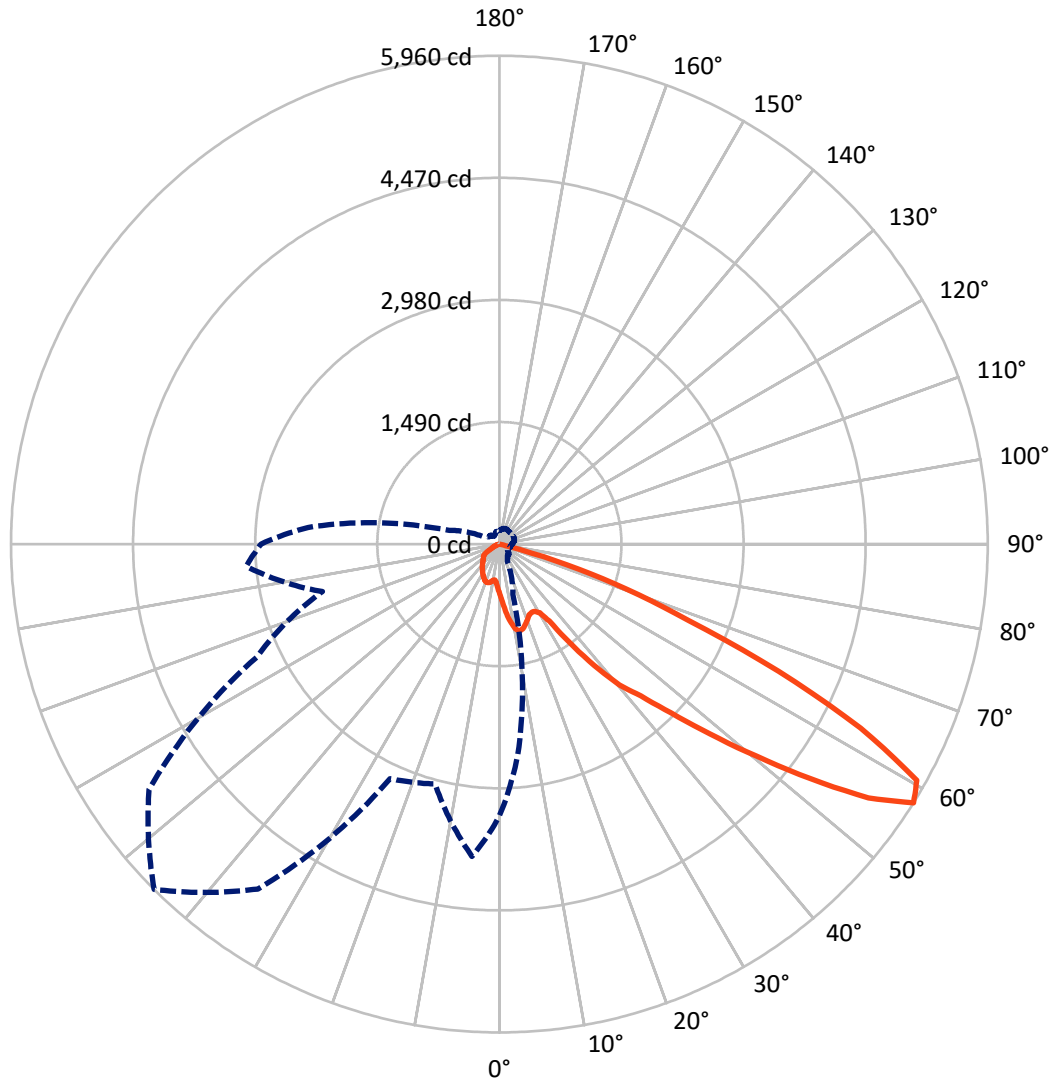
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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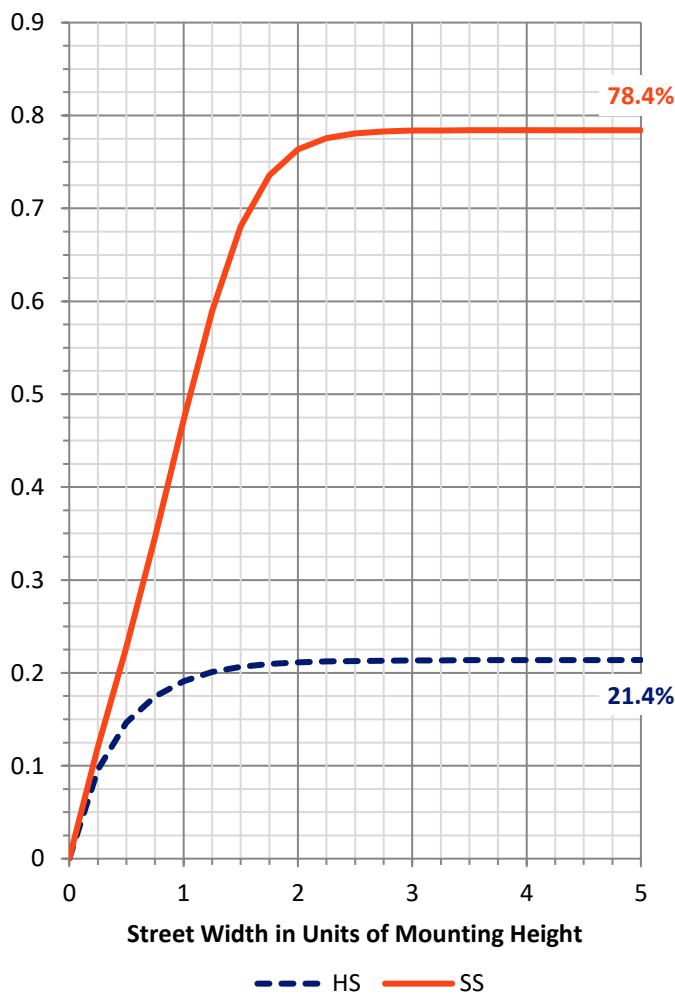
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	773.1	0.0	773.1
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	2815.6	0.0	2815.6
	% Fixture	78.5	0.0	78.5
Total	Lumens	3588.7	0.0	3588.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	1.7
10°-20°	198.3	5.5
20°-30°	321.8	9.0
30°-40°	494.0	13.8
40°-50°	788.9	22.0
50°-60°	1104.6	30.8
60°-70°	566.3	15.8
70°-80°	54.5	1.5
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°	3588.7	100.0
0°-180°	3588.7	100.0

Coefficient of Utilization



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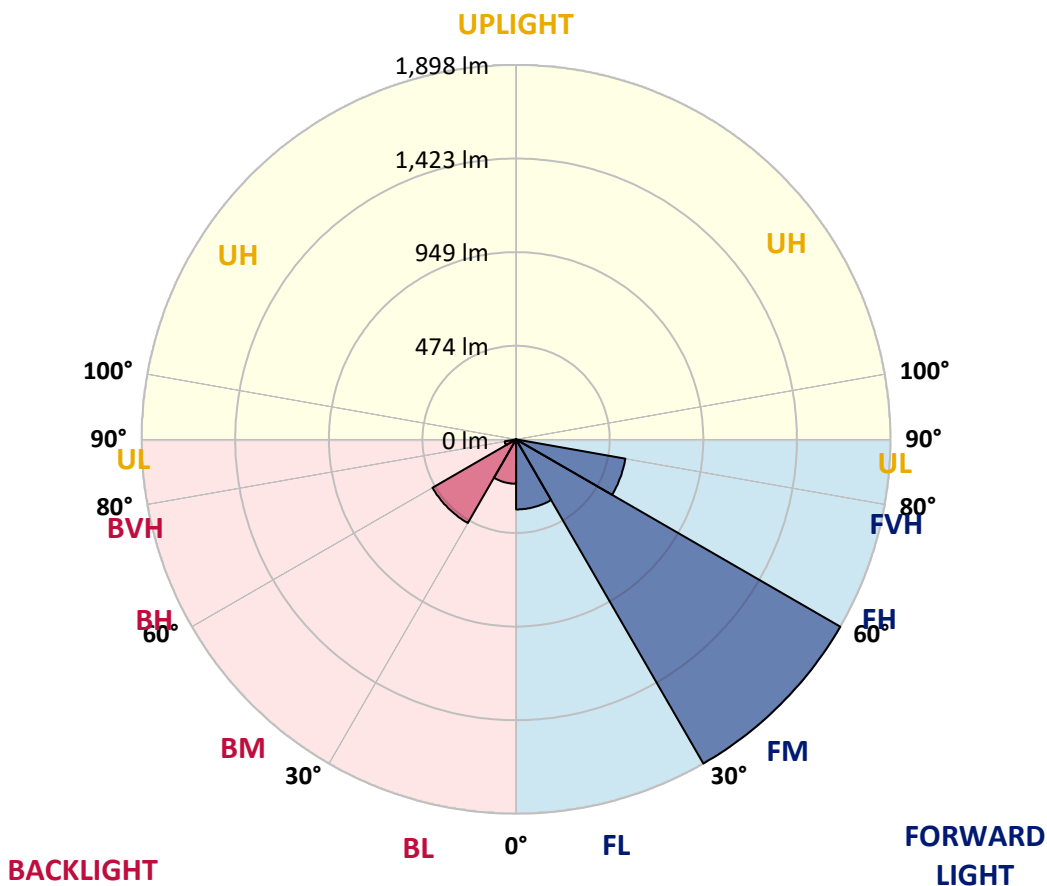
CATALOG NUMBER: GWS-SA1F-830-U-SLL-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	355.3	9.9			
FM (30°-60°)	1897.8	52.9			
FH (60°-80°)	562.5	15.7			G0/660
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	225.1	6.3	B1/500		
BM (30°-60°)	489.6	13.6	B1/1000		
BH (60°-80°)	58.4	1.6	B0/110		G0/110
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: B1-U0-G0

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8
2.5°	677.4	676.0	671.2	654.9	644.8	629.0	617.4	602.6	586.3	576.2	566.1
5°	749.4	745.5	732.6	695.2	666.4	635.2	610.3	582.9	553.6	534.5	516.7
7.5°	818.5	812.7	795.4	732.1	688.5	643.8	608.3	568.5	527.3	498.5	476.4
10°	886.1	873.2	845.8	768.1	709.1	655.4	613.6	568.0	519.6	483.1	458.6
12.5°	941.8	932.2	894.7	802.2	726.4	657.7	606.4	564.2	531.6	507.1	484.6
15°	989.7	979.2	943.7	832.9	741.2	648.2	576.2	539.2	544.5	554.1	534.9
17.5°	1033.9	1022.8	984.5	858.3	747.0	624.6	534.0	516.2	545.5	581.5	574.3
20°	1079.5	1067.0	1020.0	878.9	745.1	587.7	491.3	496.6	537.8	579.1	582.9
22.5°	1132.7	1119.8	1065.1	905.3	743.6	543.6	454.3	479.3	523.4	558.4	565.2
25°	1203.2	1187.9	1127.9	944.2	747.5	503.3	427.9	462.5	498.9	530.6	534.5
27.5°	1296.3	1276.6	1200.4	992.1	755.6	471.6	416.4	439.5	467.8	496.1	499.4
30°	1417.7	1392.7	1283.4	1033.9	751.8	449.5	408.8	416.4	433.2	456.3	456.7
32.5°	1559.7	1525.6	1376.4	1069.9	718.7	433.2	398.2	392.9	396.8	414.5	417.9
35°	1726.7	1682.5	1479.1	1103.9	658.2	401.6	379.0	361.3	359.8	368.5	376.6
37.5°	1918.1	1865.3	1608.6	1147.6	586.7	368.5	350.7	333.0	325.3	329.6	342.1
40°	2094.6	2036.1	1743.9	1200.4	513.8	338.7	317.6	299.4	290.3	291.7	307.0
42.5°	2301.9	2241.4	1909.4	1269.4	453.4	318.6	283.1	264.3	252.4	259.1	276.8
45°	2616.6	2548.0	2150.8	1329.4	405.4	313.8	252.8	226.4	220.7	232.2	253.3
47.5°	3046.5	2962.5	2482.3	1365.9	364.6	318.1	231.7	195.7	197.2	210.1	231.2
50°	3473.0	3382.3	2865.6	1317.9	331.0	309.4	221.2	171.8	180.9	192.4	211.6
52.5°	3766.1	3648.1	3052.2	1179.2	300.3	276.8	220.2	149.2	166.5	170.3	186.6
55°	3777.6	3632.3	2956.8	929.8	258.6	233.6	210.1	130.5	150.6	152.1	166.0
57.5°	3311.3	3179.8	2584.0	638.6	229.8	171.3	167.4	114.2	123.8	135.8	144.4
60°	2519.2	2407.4	1932.5	292.7	174.6	108.9	114.7	98.4	92.6	110.3	119.0
62.5°	1542.9	1471.4	1159.1	129.5	111.3	58.1	69.6	78.2	69.6	76.3	83.5
65°	612.7	581.0	439.9	55.2	45.6	29.3	31.7	45.6	48.9	53.7	60.4
67.5°	106.5	100.7	73.9	24.5	18.7	17.8	15.4	21.1	29.7	33.1	38.4
70°	13.9	13.4	12.0	10.1	9.6	8.6	6.7	13.4	20.1	21.1	24.5
72.5°	3.4	2.9	2.9	2.4	2.9	1.0	1.0	7.2	14.4	14.9	17.3
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	9.1	10.1	12.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8
2.5°	558.0	548.4	545.0	540.2	534.0	535.9	527.3	524.4	528.7	534.5	533.0
5°	507.1	496.6	489.4	478.3	476.4	472.1	469.2	465.4	470.2	476.9	478.3
7.5°	466.8	457.7	450.5	447.1	444.7	442.8	437.1	434.2	434.2	437.1	439.5
10°	449.5	442.8	441.4	442.3	446.2	445.7	440.4	436.6	431.8	429.4	432.3
12.5°	473.5	462.5	460.6	461.0	465.8	465.4	459.6	454.8	453.9	454.8	463.9
15°	514.3	497.5	485.0	482.6	485.0	484.1	479.8	476.9	478.3	492.2	507.6
17.5°	550.8	524.9	502.3	493.7	493.2	491.8	487.4	486.5	493.7	519.6	542.1
20°	561.3	535.9	503.7	492.7	490.3	488.9	484.1	485.5	494.6	525.8	545.0
22.5°	547.4	522.9	489.4	478.3	476.4	475.9	471.1	473.0	480.7	508.1	523.9
25°	521.0	500.4	465.4	455.8	455.8	454.8	450.5	451.5	456.3	480.2	495.6
27.5°	488.9	469.2	439.9	430.3	431.8	433.2	427.9	426.5	430.3	452.9	462.0
30°	451.9	438.0	415.0	406.4	405.9	411.6	404.4	402.5	407.8	425.5	427.5
32.5°	416.0	409.2	392.9	386.2	386.7	387.6	383.8	383.8	388.6	398.2	397.7
35°	380.9	376.6	373.7	368.9	368.5	366.5	366.5	367.5	372.8	376.1	369.9
37.5°	347.3	351.7	355.0	350.2	346.4	346.4	346.4	350.7	355.5	354.1	343.5
40°	317.6	326.7	337.3	332.0	322.9	322.4	324.3	331.5	338.7	330.1	320.5
42.5°	292.2	303.7	318.6	315.7	305.6	304.2	305.6	314.7	320.5	309.4	298.9
45°	267.2	281.6	299.4	299.4	288.3	286.9	287.4	299.4	302.7	289.8	276.3
47.5°	246.1	261.9	280.7	280.7	271.5	268.7	271.1	283.5	285.9	267.7	255.2
50°	226.0	243.2	263.9	262.4	256.2	253.8	258.1	271.5	268.7	248.5	235.6
52.5°	200.5	218.8	247.1	248.5	245.2	245.6	250.9	259.5	251.4	226.9	215.9
55°	177.5	196.2	224.5	232.2	232.2	231.7	234.1	240.8	234.1	204.9	191.4
57.5°	152.6	168.4	191.9	193.8	195.3	190.0	193.3	202.5	199.1	174.2	166.5
60°	125.2	138.7	152.1	153.5	147.3	136.3	142.5	153.0	155.4	136.7	128.1
62.5°	88.8	101.7	117.5	117.5	111.3	100.3	108.4	117.5	114.2	95.0	89.7
65°	66.2	78.2	90.2	95.5	90.2	82.5	88.8	95.5	90.2	74.4	66.7
67.5°	42.7	50.9	58.1	62.4	63.3	62.4	65.2	63.3	57.1	46.5	42.2
70°	25.9	30.2	34.1	37.9	40.8	42.2	43.7	39.3	33.1	27.3	25.9
72.5°	18.7	22.5	25.9	28.8	32.1	33.1	33.1	30.2	24.5	19.2	17.8
75°	13.0	16.3	19.2	21.1	24.0	24.9	24.9	22.5	18.2	13.9	12.5
77.5°	0.5	3.4	3.4	2.9	3.8	4.8	4.8	5.8	5.3	3.8	3.4
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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8
2.5°	535.9	553.2	558.0	575.7	591.5	607.4	626.6	638.1	655.4	667.3	674.1
5°	483.1	497.5	514.8	541.2	568.5	598.7	635.2	666.9	706.7	735.9	745.5
7.5°	444.7	463.4	483.6	516.7	554.1	594.4	645.8	697.6	758.5	798.3	823.7
10°	437.5	456.7	483.6	516.2	555.6	601.6	664.5	731.6	807.9	856.4	885.2
12.5°	472.1	492.7	504.2	519.1	548.8	600.2	680.8	766.2	855.9	908.7	939.4
15°	522.9	541.2	522.5	503.7	522.9	584.8	689.9	795.0	898.1	959.0	990.7
17.5°	558.0	559.4	518.6	478.8	484.1	557.0	693.3	823.7	943.2	1007.0	1040.1
20°	554.6	543.1	501.8	457.7	441.4	521.0	689.4	849.2	988.8	1055.5	1088.1
22.5°	528.7	515.3	480.2	437.1	405.4	478.3	682.7	872.2	1030.5	1106.3	1137.0
25°	497.5	483.1	454.3	416.4	382.4	437.1	677.4	903.9	1083.3	1172.5	1196.5
27.5°	461.0	448.6	424.1	396.8	372.8	405.9	676.0	945.6	1147.1	1253.1	1269.9
30°	425.5	414.0	394.8	379.0	368.9	387.6	671.2	990.2	1223.4	1345.7	1364.0
32.5°	391.5	380.0	368.0	365.6	366.1	380.9	654.9	1034.4	1314.1	1480.1	1493.5
35°	362.2	348.8	344.0	349.7	360.3	369.4	608.8	1070.8	1411.5	1626.4	1637.4
37.5°	334.4	321.0	320.5	334.4	345.9	351.7	554.6	1106.8	1542.9	1775.1	1789.0
40°	309.0	295.5	300.3	317.1	326.2	329.1	488.9	1161.5	1682.0	1932.0	1924.3
42.5°	287.4	273.5	276.3	297.9	306.1	313.8	428.4	1207.1	1815.9	2080.7	2078.3
45°	266.3	255.7	253.8	277.3	284.5	315.2	384.3	1242.1	1988.1	2270.2	2274.1
47.5°	245.6	237.5	238.0	248.0	265.8	322.4	346.9	1265.1	2238.1	2570.5	2503.9
50°	226.9	220.7	226.0	214.5	253.8	313.3	314.7	1260.3	2517.3	2858.4	2724.5
52.5°	206.3	204.9	207.3	179.4	234.6	276.3	284.5	1196.5	2648.3	3055.1	2978.8
55°	185.2	184.7	165.5	143.4	196.2	220.7	243.7	998.4	2644.0	3159.7	3252.3
57.5°	160.2	156.4	125.7	117.1	152.6	153.5	222.1	653.9	2343.1	2909.3	3101.2
60°	121.4	118.5	92.1	95.0	106.5	98.4	177.0	325.8	1751.1	2266.4	2482.8
62.5°	84.0	80.1	68.6	73.4	68.6	56.1	108.4	161.2	1060.7	1431.1	1627.3
65°	61.4	57.1	47.0	40.3	32.1	32.1	41.3	61.9	410.7	608.3	733.6
67.5°	37.9	36.0	27.8	20.1	19.7	21.1	21.6	30.7	66.2	105.5	129.1
70°	24.5	22.5	18.7	13.0	12.0	12.5	13.0	14.4	16.8	18.2	22.1
72.5°	16.8	15.8	13.4	7.2	5.8	6.2	6.7	6.7	8.2	7.7	9.1
75°	12.0	11.0	9.6	3.4	1.9	2.4	2.9	2.4	2.9	1.9	2.4
77.5°	3.4	3.4	2.4	0.5	0.0	0.5	1.0	1.0	0.5	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	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



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CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8	609.8
2.5°	691.3	702.4	706.7	700.4	705.7	697.1	693.7	680.8	679.8	677.4
5°	784.4	809.4	824.2	833.3	822.8	811.3	794.0	764.3	755.1	749.4
7.5°	876.0	914.9	940.3	952.3	949.4	925.9	894.7	844.9	827.1	818.5
10°	955.7	1003.2	1033.9	1048.8	1042.5	1021.9	977.3	914.9	891.4	886.1
12.5°	1011.3	1055.0	1076.1	1089.1	1089.5	1081.4	1039.2	976.3	948.5	941.8
15°	1046.4	1065.1	1065.5	1073.2	1086.7	1104.9	1085.2	1029.6	999.8	989.7
17.5°	1068.4	1047.8	1026.7	1028.6	1050.7	1099.1	1119.3	1076.6	1044.9	1033.9
20°	1084.3	1019.0	979.7	980.1	1002.7	1076.1	1142.8	1122.2	1089.5	1079.5
22.5°	1094.3	993.6	937.4	936.0	960.0	1048.8	1164.4	1176.4	1144.2	1132.7
25°	1115.0	981.6	912.0	920.2	941.3	1040.1	1193.6	1248.3	1218.6	1203.2
27.5°	1151.9	993.6	909.6	928.3	952.3	1065.5	1244.5	1344.3	1313.6	1296.3
30°	1215.7	1038.7	946.6	972.5	1001.3	1132.2	1329.9	1478.1	1434.0	1417.7
32.5°	1318.4	1132.2	1060.7	1116.4	1144.2	1241.6	1458.0	1628.3	1592.3	1559.7
35°	1459.9	1345.7	1337.6	1467.1	1460.4	1448.9	1615.3	1812.5	1758.3	1726.7
37.5°	1654.7	1689.2	1749.7	1878.3	1873.9	1786.1	1822.1	1986.7	1958.9	1918.1
40°	1897.9	1971.3	2074.0	2258.2	2200.7	2090.3	2075.9	2165.2	2142.6	2094.6
42.5°	2041.4	2168.0	2363.8	2529.3	2483.2	2290.4	2274.1	2403.6	2354.2	2301.9
45°	2108.1	2328.3	2712.1	2936.1	2796.5	2423.3	2417.0	2714.5	2686.6	2616.6
47.5°	2138.8	2489.9	3119.9	3459.1	3198.1	2539.8	2517.3	3165.4	3129.0	3046.5
50°	2172.8	2713.0	3611.1	4065.0	3683.1	2671.8	2688.1	3585.7	3570.4	3473.0
52.5°	2247.7	2949.1	4216.1	4757.8	4271.3	2878.6	2981.2	3982.0	3878.4	3766.1
55°	2359.9	3206.2	4845.6	5465.4	4871.5	3156.3	3298.3	4192.6	3901.9	3777.6
57.5°	2235.7	3270.5	5218.3	5959.6	5137.7	3157.3	3030.2	3827.5	3431.7	3311.3
60°	1774.1	3042.6	5074.9	5852.6	4910.8	2803.7	2320.1	2988.4	2599.8	2519.2
62.5°	1199.4	2551.8	4467.5	4949.7	4203.2	2205.5	1507.9	1943.5	1609.6	1542.9
65°	657.3	1903.7	3609.7	3744.5	3289.7	1540.5	775.8	843.4	642.4	612.7
67.5°	181.3	1325.1	2655.9	2484.2	2308.1	1003.2	200.5	150.6	107.5	106.5
70°	45.6	876.5	1591.4	1640.3	1415.3	642.4	38.4	18.2	14.4	13.9
72.5°	19.2	377.1	755.1	867.9	724.4	297.5	13.9	5.3	4.3	3.4
75°	2.4	30.2	64.3	97.4	66.7	32.1	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	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
85°	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
90°	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.

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
 CIE u': 0.2476
 CIE v': 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 Rf: 81.5
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



Test Conditions

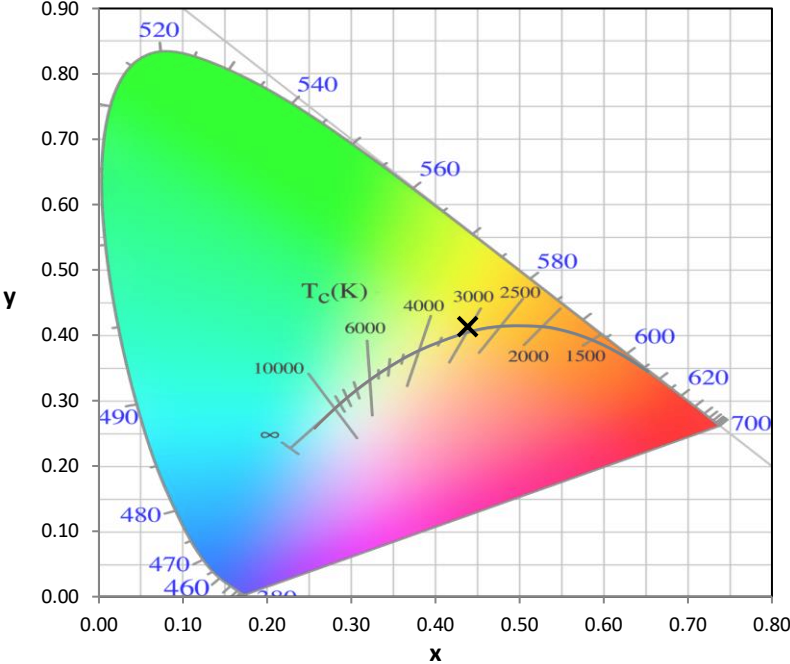
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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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

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CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



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



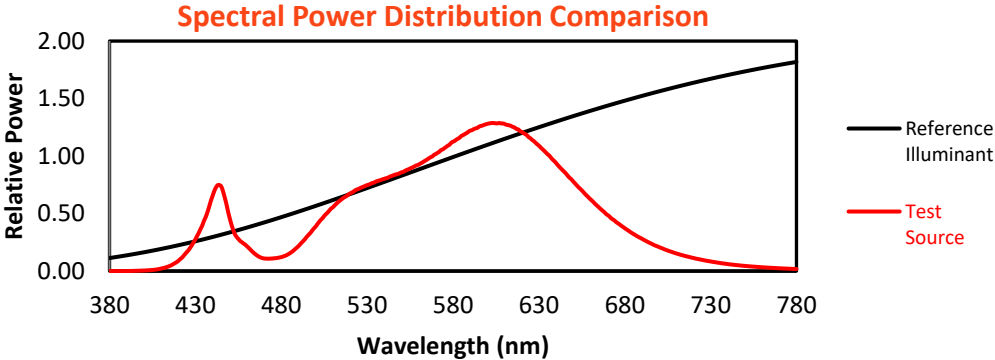
Melanopic Lumens: NR

M/P: 2.32

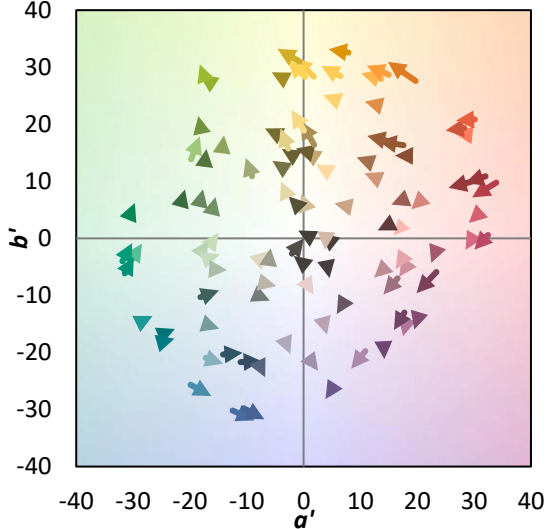
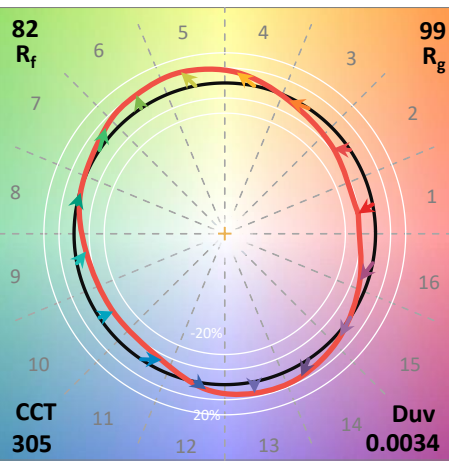
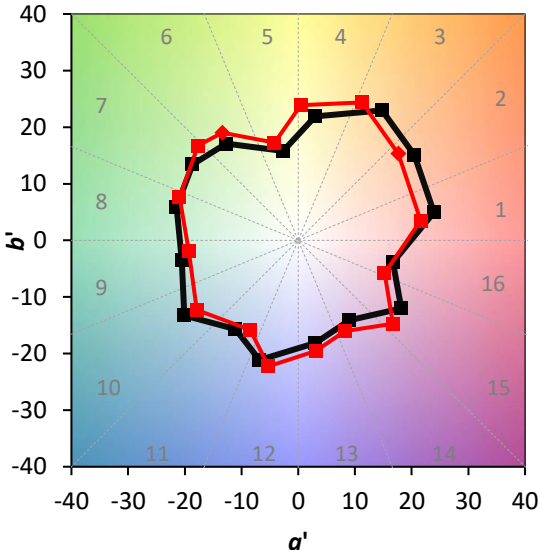
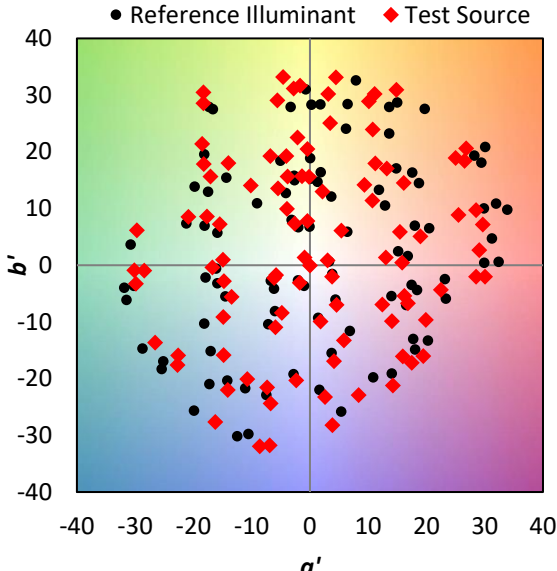
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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			

Summary

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



Color Vector Graphics



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

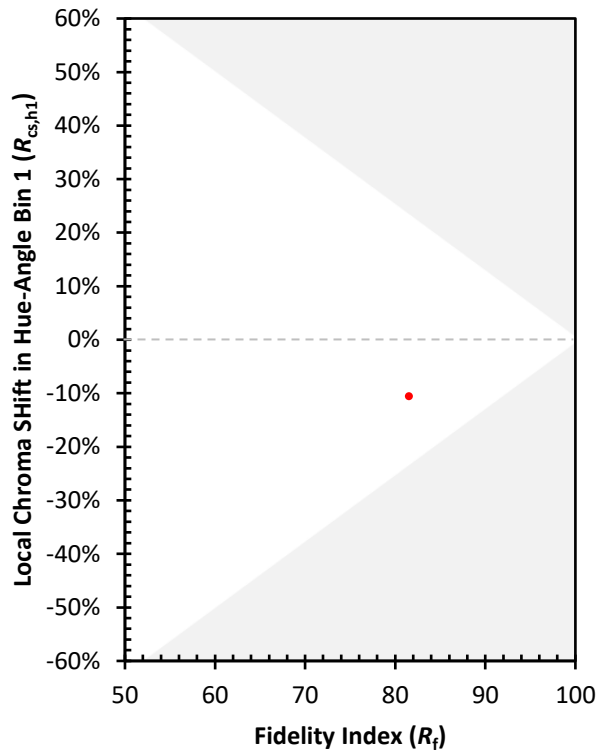
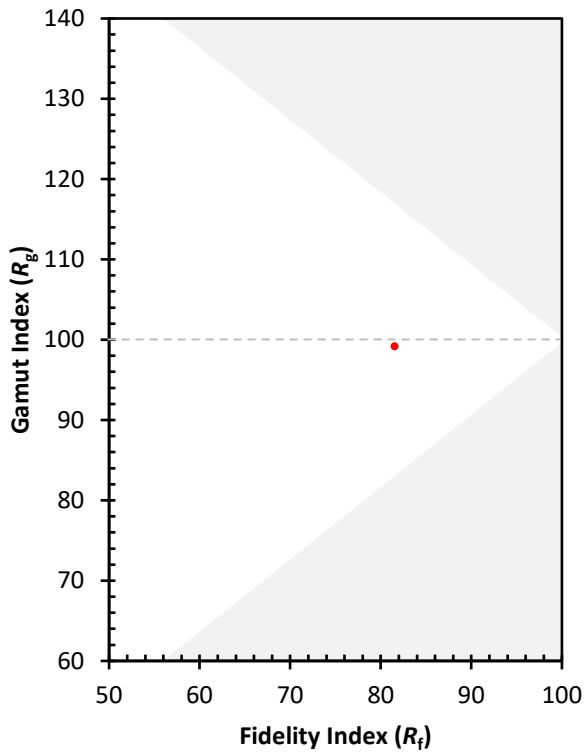
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CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57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



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)