

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: P639964

Luminaire Tested: GWS-SA5C-830-U-SLL-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639964
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-SA5C-830-U-SLL-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10143.3 lumens
Efficiency: N/A
Efficacy: 64.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G1

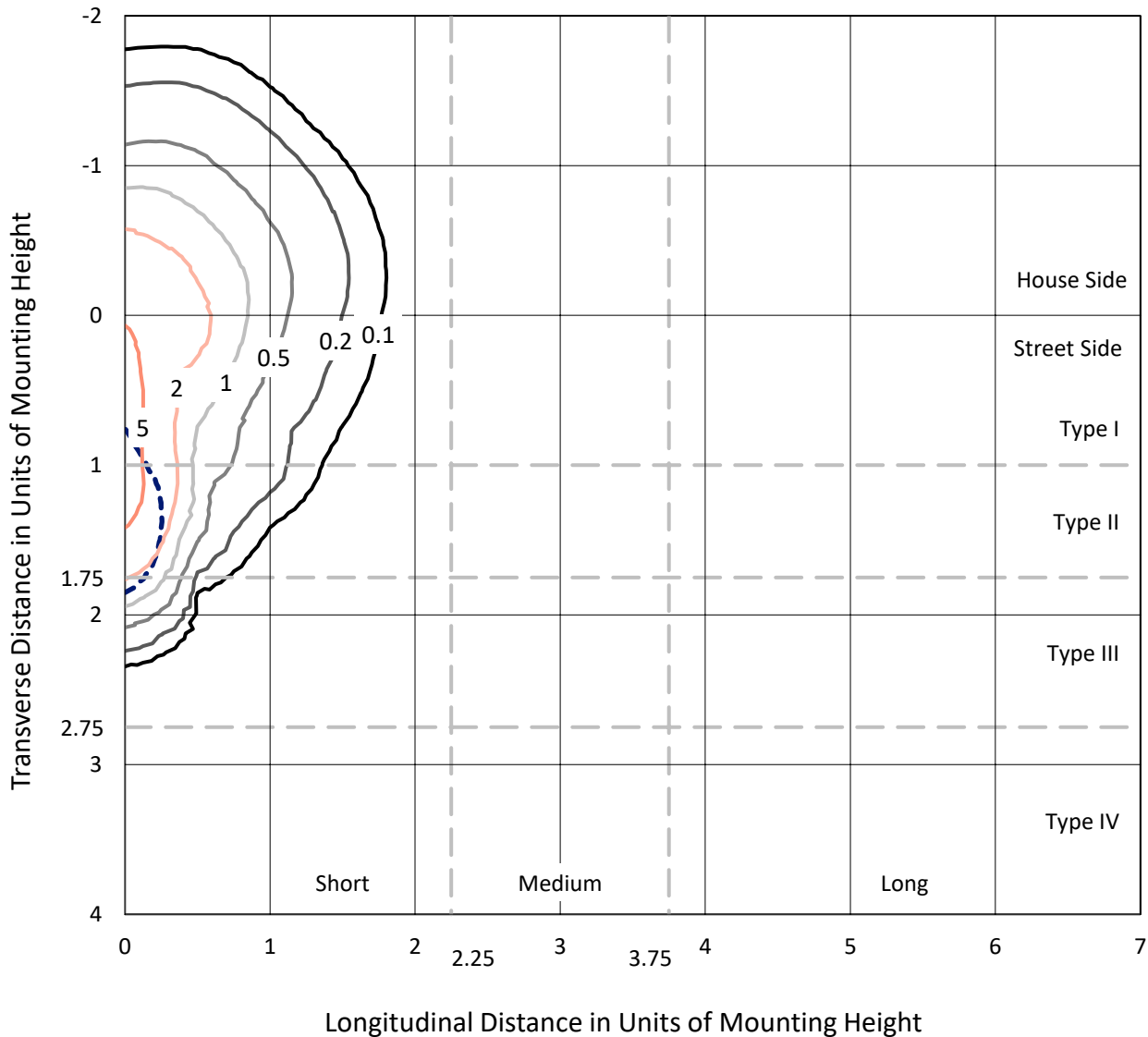
Input Watts (W): 157.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

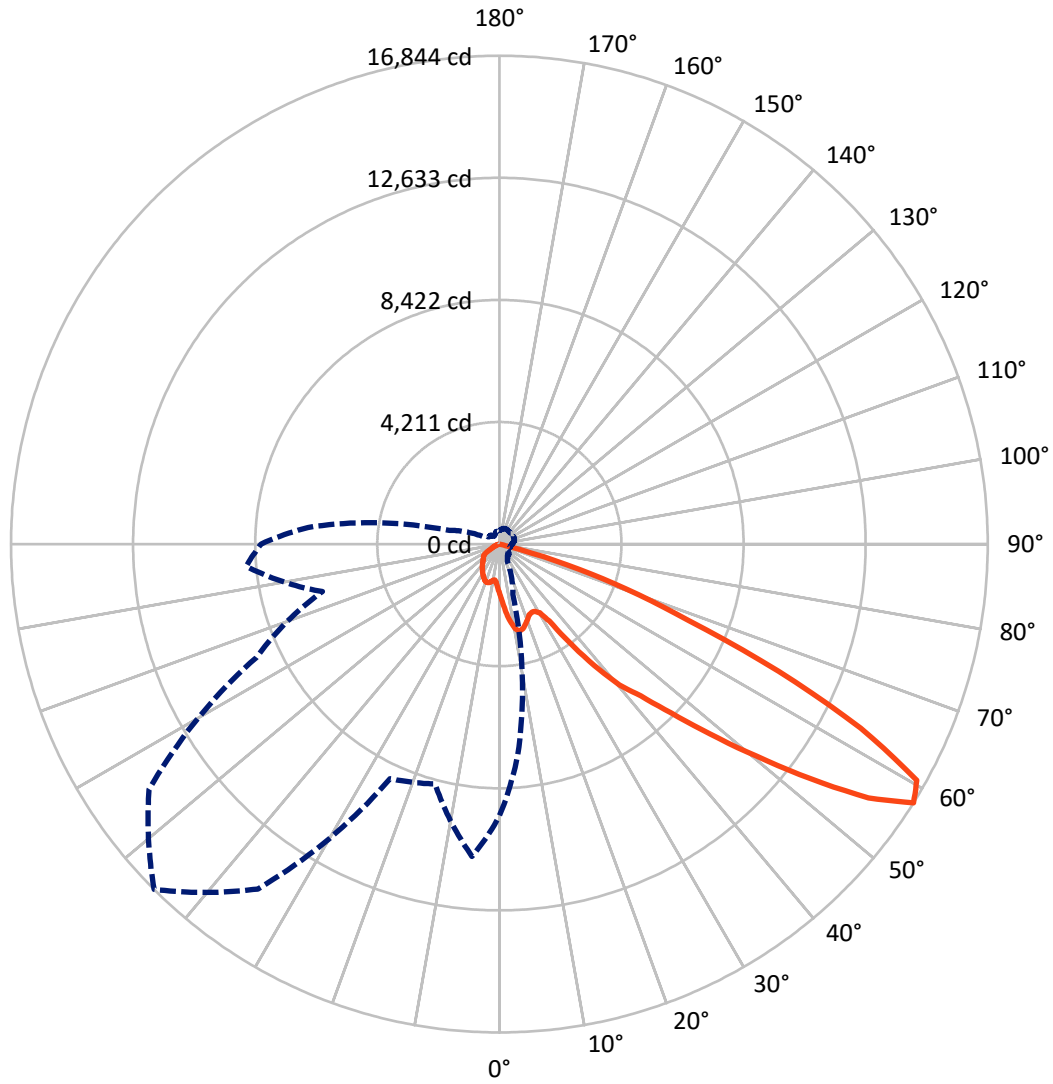
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.8 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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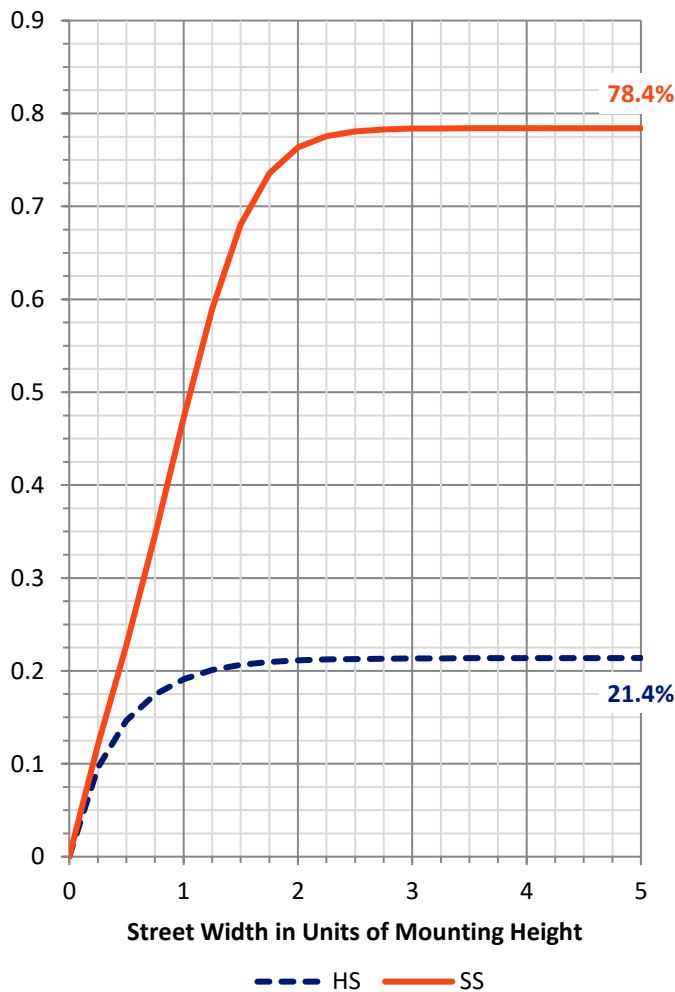
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2185.2	0.0	2185.2
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	7958.1	0.0	7958.1
	% Fixture	78.5	0.0	78.5
Total	Lumens	10143.3	0.0	10143.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.3	1.7
10°-20°	560.5	5.5
20°-30°	909.7	9.0
30°-40°	1396.1	13.8
40°-50°	2229.7	22.0
50°-60°	3122.0	30.8
60°-70°	1600.7	15.8
70°-80°	154.1	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°	10143.3	100.0
0°-180°	10143.3	100.0

Coefficient of Utilization



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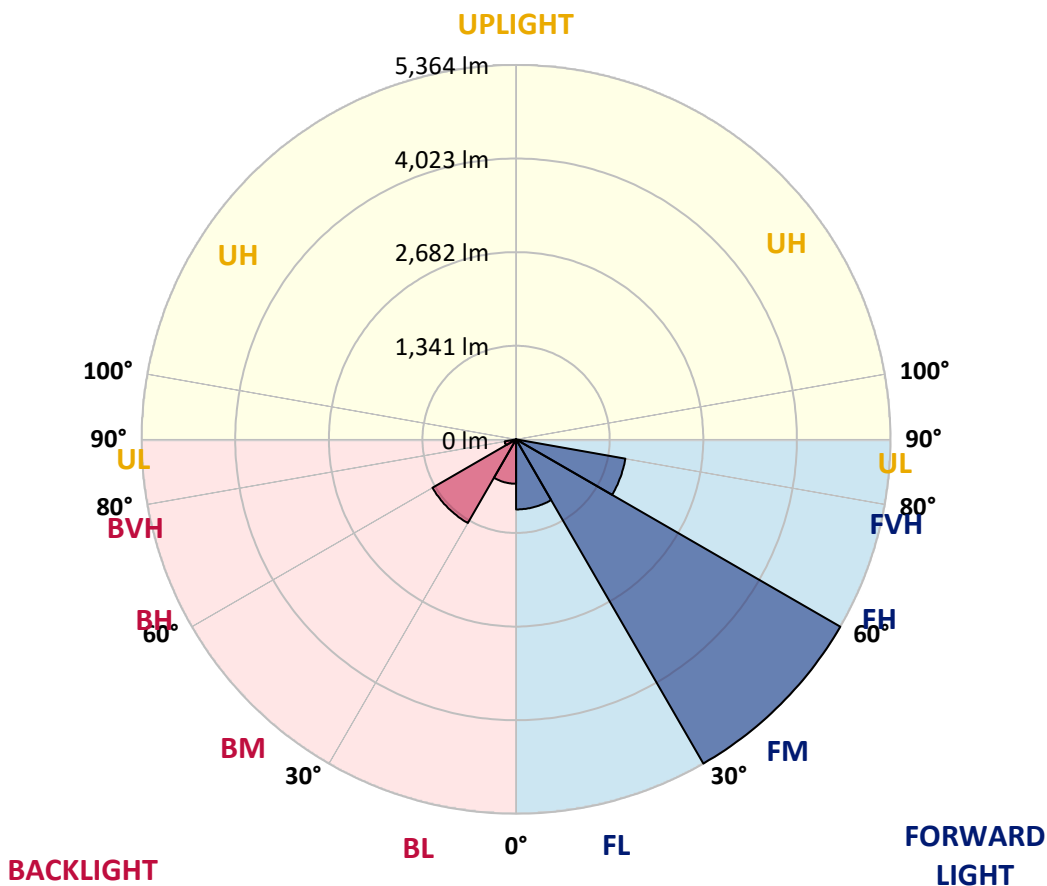
CATALOG NUMBER: GWS-SA5C-830-U-SLL-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1004.3	9.9			
FM (30°-60°)	5364.0	52.9			
FH (60°-80°)	1589.8	15.7			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	636.3	6.3	B2/1000		
BM (30°-60°)	1383.9	13.6	B2/2500		
BH (60°-80°)	165.0	1.6	B1/500		G1/500
BVH (80°-90°)	0.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5
2.5°	1914.7	1910.6	1897.1	1851.0	1822.5	1777.7	1745.2	1703.2	1657.1	1628.6	1600.1
5°	2118.1	2107.2	2070.6	1964.9	1883.5	1795.4	1724.9	1647.6	1564.8	1510.6	1460.4
7.5°	2313.4	2297.1	2248.3	2069.3	1945.9	1819.8	1719.4	1606.9	1490.3	1408.9	1346.5
10°	2504.6	2468.0	2390.7	2171.0	2004.2	1852.3	1734.3	1605.5	1468.6	1365.5	1296.4
12.5°	2661.9	2634.7	2529.0	2267.3	2053.0	1859.1	1714.0	1594.7	1502.5	1433.3	1369.6
15°	2797.5	2767.6	2667.3	2354.0	2095.0	1832.0	1628.6	1524.2	1539.1	1566.2	1512.0
17.5°	2922.2	2891.0	2782.5	2425.9	2111.3	1765.5	1509.2	1459.1	1541.8	1643.5	1623.2
20°	3051.0	3015.8	2882.9	2484.2	2105.9	1661.1	1388.6	1403.5	1520.1	1636.7	1647.6
22.5°	3201.6	3164.9	3010.4	2558.8	2101.8	1536.4	1284.1	1354.7	1479.4	1578.4	1597.4
25°	3400.9	3357.5	3188.0	2668.6	2112.7	1422.5	1209.6	1307.2	1410.3	1499.8	1510.6
27.5°	3664.0	3608.4	3392.8	2804.2	2135.7	1333.0	1177.0	1242.1	1322.1	1402.1	1411.6
30°	4007.0	3936.5	3627.3	2922.2	2124.9	1270.6	1155.3	1177.0	1224.5	1289.6	1290.9
32.5°	4408.4	4312.1	3890.4	3023.9	2031.3	1224.5	1125.5	1110.6	1121.4	1171.6	1181.1
35°	4880.3	4755.5	4180.6	3120.2	1860.5	1135.0	1071.3	1021.1	1017.0	1041.4	1064.5
37.5°	5421.4	5272.2	4546.7	3243.6	1658.4	1041.4	991.2	941.1	919.4	931.6	966.8
40°	5920.4	5754.9	4929.1	3392.8	1452.3	957.3	897.7	846.2	820.4	824.5	867.9
42.5°	6506.2	6335.3	5396.9	3588.0	1281.4	900.4	800.0	747.2	713.3	732.2	782.4
45°	7395.7	7201.8	6079.0	3757.5	1145.8	886.8	714.6	640.0	623.8	656.3	716.0
47.5°	8610.7	8373.4	7016.0	3860.6	1030.6	899.0	655.0	553.3	557.3	593.9	653.6
50°	9816.2	9559.9	8099.5	3725.0	935.7	874.6	625.1	485.5	511.2	543.8	598.0
52.5°	10644.7	10311.1	8627.0	3333.1	848.9	782.4	622.4	421.7	470.5	481.4	527.5
55°	10677.3	10266.4	8357.1	2628.0	730.9	660.4	593.9	368.8	425.8	429.9	469.2
57.5°	9359.2	8987.7	7303.5	1804.9	649.5	484.1	473.2	322.7	349.9	383.8	408.2
60°	7120.4	6804.5	5462.0	827.2	493.6	307.8	324.1	278.0	261.7	311.9	336.3
62.5°	4360.9	4158.9	3276.1	366.1	314.6	164.1	196.6	221.0	196.6	215.6	235.9
65°	1731.6	1642.1	1243.5	155.9	128.8	82.7	89.5	128.8	138.3	151.9	170.9
67.5°	301.0	284.8	208.8	69.2	52.9	50.2	43.4	59.7	84.1	93.6	108.5
70°	39.3	38.0	33.9	28.5	27.1	24.4	19.0	38.0	57.0	59.7	69.2
72.5°	9.5	8.1	8.1	6.8	8.1	2.7	2.7	20.3	40.7	42.0	48.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	25.8	28.5	33.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5
2.5°	1577.0	1549.9	1540.4	1526.9	1509.2	1514.7	1490.3	1482.1	1494.3	1510.6	1506.5
5°	1433.3	1403.5	1383.1	1351.9	1346.5	1334.3	1326.2	1315.3	1328.9	1347.9	1351.9
7.5°	1319.4	1293.6	1273.3	1263.8	1257.0	1251.6	1235.3	1227.2	1227.2	1235.3	1242.1
10°	1270.6	1251.6	1247.5	1250.2	1261.1	1259.7	1244.8	1234.0	1220.4	1213.6	1221.8
12.5°	1338.4	1307.2	1301.8	1303.1	1316.7	1315.3	1299.1	1285.5	1282.8	1285.5	1311.3
15°	1453.6	1406.2	1370.9	1364.2	1370.9	1368.2	1356.0	1347.9	1351.9	1391.3	1434.7
17.5°	1556.7	1483.5	1419.7	1395.3	1394.0	1389.9	1377.7	1375.0	1395.3	1468.6	1532.3
20°	1586.5	1514.7	1423.8	1392.6	1385.8	1381.8	1368.2	1372.3	1398.1	1486.2	1540.4
22.5°	1547.2	1478.1	1383.1	1351.9	1346.5	1345.2	1331.6	1337.0	1358.7	1436.0	1480.8
25°	1472.6	1414.3	1315.3	1288.2	1288.2	1285.5	1273.3	1276.0	1289.6	1357.4	1400.8
27.5°	1381.8	1326.2	1243.5	1216.3	1220.4	1224.5	1209.6	1205.5	1216.3	1280.1	1305.8
30°	1277.4	1238.0	1173.0	1148.5	1147.2	1163.5	1143.1	1137.7	1152.6	1202.8	1208.2
32.5°	1175.7	1156.7	1110.6	1091.6	1092.9	1095.7	1084.8	1084.8	1098.4	1125.5	1124.1
35°	1076.7	1064.5	1056.3	1042.8	1041.4	1036.0	1036.0	1038.7	1053.6	1063.1	1045.5
37.5°	981.8	994.0	1003.5	989.9	979.0	979.0	979.0	991.2	1004.8	1000.7	970.9
40°	897.7	923.4	953.3	938.4	912.6	911.2	916.7	937.0	957.3	932.9	905.8
42.5°	825.8	858.4	900.4	892.3	863.8	859.7	863.8	889.5	905.8	874.6	844.8
45°	755.3	796.0	846.2	846.2	815.0	810.9	812.3	846.2	855.6	819.0	781.1
47.5°	695.6	740.4	793.3	793.3	767.5	759.4	766.1	801.4	808.2	756.7	721.4
50°	638.7	687.5	745.8	741.7	724.1	717.3	729.5	767.5	759.4	702.4	665.8
52.5°	566.8	618.3	698.3	702.4	692.9	694.3	709.2	733.6	710.6	641.4	610.2
55°	501.7	554.6	634.6	656.3	656.3	655.0	661.7	680.7	661.7	579.0	541.1
57.5°	431.2	476.0	542.4	547.8	551.9	537.0	546.5	572.2	562.7	492.2	470.5
60°	353.9	391.9	429.9	433.9	416.3	385.1	402.7	432.6	439.3	386.5	362.1
62.5°	250.9	287.5	332.2	332.2	314.6	283.4	306.5	332.2	322.7	268.5	253.6
65°	187.1	221.0	254.9	269.8	254.9	233.2	250.9	269.8	254.9	210.2	188.5
67.5°	120.7	143.7	164.1	176.3	179.0	176.3	184.4	179.0	161.4	131.5	119.3
70°	73.2	85.4	96.3	107.1	115.3	119.3	123.4	111.2	93.6	77.3	73.2
72.5°	52.9	63.7	73.2	81.4	90.9	93.6	93.6	85.4	69.2	54.2	50.2
75°	36.6	46.1	54.2	59.7	67.8	70.5	70.5	63.7	51.5	39.3	35.3
77.5°	1.4	9.5	9.5	8.1	10.8	13.6	13.6	16.3	14.9	10.8	9.5
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5
2.5°	1514.7	1563.5	1577.0	1627.2	1672.0	1716.7	1771.0	1803.5	1852.3	1886.2	1905.2
5°	1365.5	1406.2	1455.0	1529.6	1606.9	1692.3	1795.4	1884.9	1997.4	2080.1	2107.2
7.5°	1257.0	1309.9	1366.9	1460.4	1566.2	1680.1	1825.2	1971.6	2143.9	2256.4	2328.3
10°	1236.7	1290.9	1366.9	1459.1	1570.3	1700.4	1878.1	2067.9	2283.5	2420.5	2501.9
12.5°	1334.3	1392.6	1425.2	1467.2	1551.3	1696.4	1924.2	2165.6	2419.1	2568.3	2655.1
15°	1478.1	1529.6	1476.7	1423.8	1478.1	1653.0	1950.0	2246.9	2538.5	2710.7	2800.2
17.5°	1577.0	1581.1	1465.9	1353.3	1368.2	1574.3	1959.4	2328.3	2665.9	2846.3	2939.8
20°	1567.6	1535.0	1418.4	1293.6	1247.5	1472.6	1948.6	2400.1	2794.7	2983.2	3075.4
22.5°	1494.3	1456.4	1357.4	1235.3	1145.8	1351.9	1929.6	2465.2	2912.7	3127.0	3213.8
25°	1406.2	1365.5	1284.1	1177.0	1080.7	1235.3	1914.7	2554.7	3061.9	3314.1	3381.9
27.5°	1303.1	1267.9	1198.7	1121.4	1053.6	1147.2	1910.6	2672.7	3242.2	3541.9	3589.4
30°	1202.8	1170.2	1116.0	1071.3	1042.8	1095.7	1897.1	2798.8	3457.8	3803.6	3855.2
32.5°	1106.5	1074.0	1040.1	1033.3	1034.6	1076.7	1851.0	2923.6	3714.1	4183.3	4221.3
35°	1023.8	985.8	972.3	988.5	1018.4	1044.1	1720.8	3026.6	3989.4	4596.9	4628.1
37.5°	945.1	907.2	905.8	945.1	977.7	994.0	1567.6	3128.3	4360.9	5017.3	5056.6
40°	873.3	835.3	848.9	896.3	922.1	930.2	1381.8	3282.9	4754.2	5460.7	5439.0
42.5°	812.3	772.9	781.1	842.1	865.1	886.8	1210.9	3411.7	5132.5	5881.0	5874.3
45°	752.6	722.8	717.3	783.8	804.1	890.9	1086.2	3510.7	5619.3	6416.7	6427.5
47.5°	694.3	671.2	672.6	701.1	751.2	911.2	980.4	3575.8	6325.8	7265.5	7077.1
50°	641.4	623.8	638.7	606.1	717.3	885.5	889.5	3562.3	7115.0	8079.1	7700.8
52.5°	583.1	579.0	585.8	507.2	663.1	781.1	804.1	3381.9	7485.2	8635.1	8419.5
55°	523.4	522.1	467.8	405.4	554.6	623.8	688.9	2821.9	7473.0	8930.7	9192.4
57.5°	452.9	442.1	355.3	330.9	431.2	433.9	627.8	1848.3	6622.8	8222.9	8765.3
60°	343.1	334.9	260.4	268.5	301.0	278.0	500.4	920.7	4949.5	6405.8	7017.4
62.5°	237.3	226.5	193.9	207.5	193.9	158.7	306.5	455.6	2998.2	4045.0	4599.6
65°	173.6	161.4	132.9	113.9	90.9	90.9	116.6	174.9	1160.8	1719.4	2073.3
67.5°	107.1	101.7	78.6	57.0	55.6	59.7	61.0	86.8	187.1	298.3	364.8
70°	69.2	63.7	52.9	36.6	33.9	35.3	36.6	40.7	47.5	51.5	62.4
72.5°	47.5	44.7	38.0	20.3	16.3	17.6	19.0	19.0	23.1	21.7	25.8
75°	33.9	31.2	27.1	9.5	5.4	6.8	8.1	6.8	8.1	5.4	6.8
77.5°	9.5	9.5	6.8	1.4	0.0	1.4	2.7	2.7	1.4	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	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



REPORT NUMBER: P639964

CATALOG NUMBER: GWS-SA5C-830-U-SLL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5
2.5°	1954.0	1985.2	1997.4	1979.8	1994.7	1970.3	1960.8	1924.2	1921.5	1914.7
5°	2217.1	2287.6	2329.6	2355.4	2325.6	2293.0	2244.2	2160.1	2134.4	2118.1
7.5°	2476.1	2585.9	2657.8	2691.7	2683.6	2617.1	2529.0	2387.9	2337.8	2313.4
10°	2701.2	2835.4	2922.2	2964.3	2946.6	2888.3	2762.2	2585.9	2519.5	2504.6
12.5°	2858.5	2981.9	3041.5	3078.2	3079.5	3056.5	2937.1	2759.5	2680.8	2661.9
15°	2957.5	3010.4	3011.7	3033.4	3071.4	3122.9	3067.3	2910.0	2825.9	2797.5
17.5°	3019.8	2961.5	2901.9	2907.3	2969.7	3106.6	3163.6	3042.9	2953.4	2922.2
20°	3064.6	2880.2	2769.0	2770.3	2834.1	3041.5	3230.0	3171.7	3079.5	3051.0
22.5°	3093.1	2808.3	2649.7	2645.6	2713.4	2964.3	3291.1	3325.0	3234.1	3201.6
25°	3151.4	2774.4	2577.8	2600.8	2660.5	2939.8	3373.8	3528.4	3444.3	3400.9
27.5°	3255.8	2808.3	2571.0	2623.9	2691.7	3011.7	3517.5	3799.6	3712.8	3664.0
30°	3436.1	2935.8	2675.4	2748.6	2830.0	3200.2	3758.9	4177.9	4053.1	4007.0
32.5°	3726.3	3200.2	2998.2	3155.5	3234.1	3509.4	4120.9	4602.3	4500.6	4408.4
35°	4126.4	3803.6	3780.6	4146.7	4127.7	4095.2	4565.7	5123.0	4969.8	4880.3
37.5°	4676.9	4774.5	4945.4	5308.8	5296.6	5048.4	5150.2	5615.3	5536.6	5421.4
40°	5364.4	5571.9	5862.1	6382.8	6220.0	5908.2	5867.5	6119.7	6056.0	5920.4
42.5°	5769.9	6127.8	6681.1	7148.9	7018.7	6473.6	6427.5	6793.6	6654.0	6506.2
45°	5958.3	6580.7	7665.6	8298.8	7904.2	6849.2	6831.6	7672.3	7593.7	7395.7
47.5°	6045.1	7037.7	8818.2	9776.9	9039.2	7178.8	7115.0	8947.0	8843.9	8610.7
50°	6141.4	7668.3	10206.7	11489.5	10410.1	7551.7	7597.8	10134.9	10091.5	9816.2
52.5°	6352.9	8335.4	11916.7	13447.6	12072.6	8136.1	8426.3	11254.9	10962.0	10644.7
55°	6670.2	9062.3	13695.8	15447.7	13769.0	8921.2	9322.6	11850.2	11028.5	10677.3
57.5°	6319.0	9244.0	14749.4	16844.4	14521.6	8923.9	8564.6	10818.3	9699.6	9359.2
60°	5014.5	8599.9	14343.9	16542.0	13880.2	7924.6	6557.7	8446.6	7348.3	7120.4
62.5°	3390.0	7212.7	12627.2	13990.0	11880.1	6233.6	4262.0	5493.2	4549.4	4360.9
65°	1857.7	5380.7	10202.7	10583.7	9298.2	4354.2	2192.7	2383.9	1815.7	1731.6
67.5°	512.6	3745.3	7506.9	7021.5	6523.8	2835.4	566.8	425.8	303.7	301.0
70°	128.8	2477.4	4497.9	4636.2	4000.2	1815.7	108.5	51.5	40.7	39.3
72.5°	54.2	1065.8	2134.4	2453.0	2047.6	840.7	39.3	14.9	12.2	9.5
75°	6.8	85.4	181.7	275.3	188.5	90.9	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

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

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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 ($R_{f,i}$)

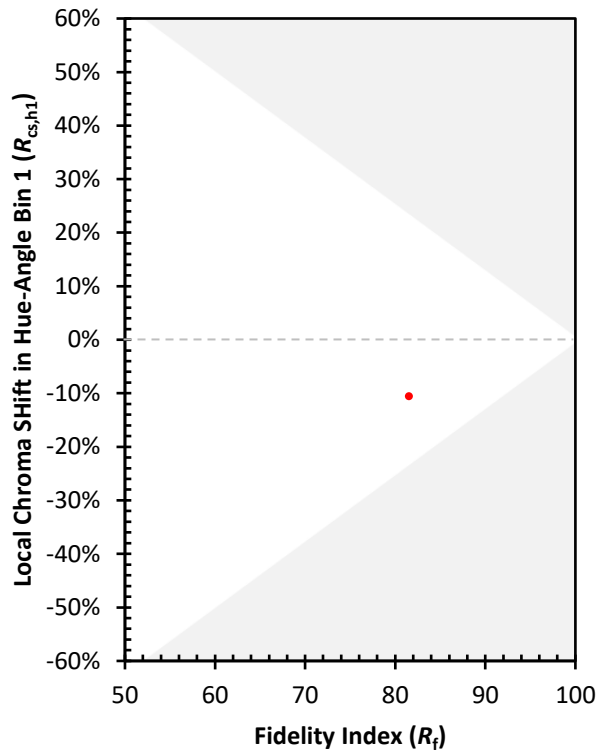
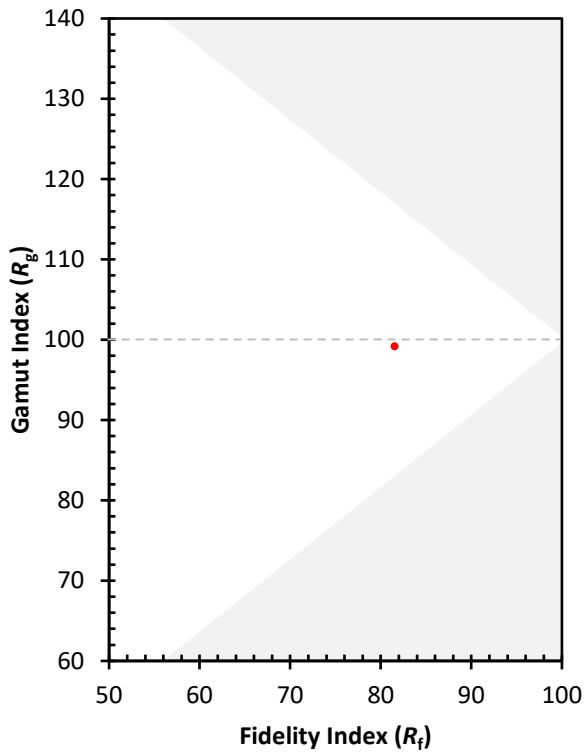
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)