

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: P634027

Luminaire Tested: GWS-SA2F-830-U-SLL-W

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P634027  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-37)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA2F-830-U-SLL-W  
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS  
Light Source: (32) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

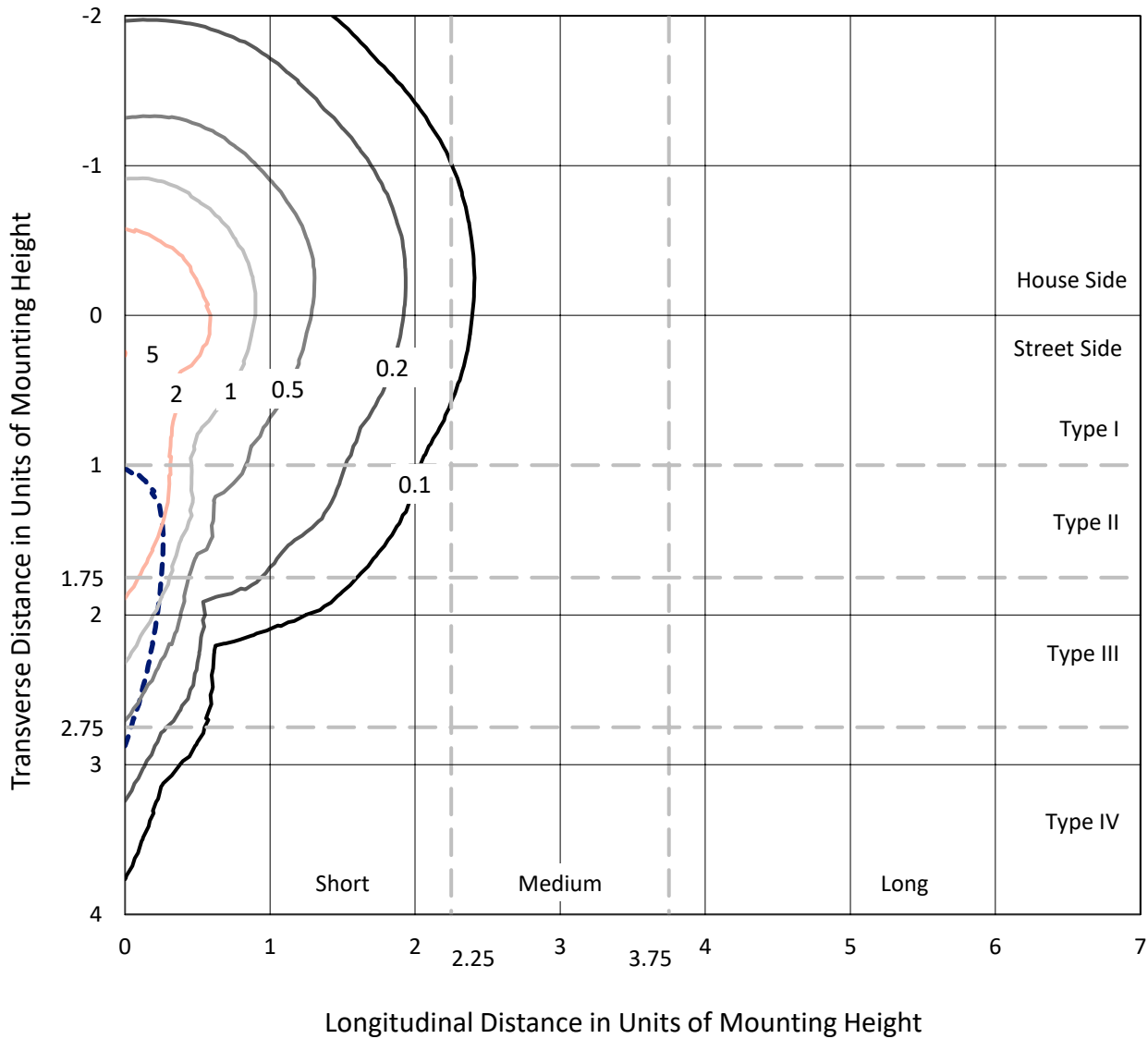
Lumens per Lamp: N/A  
Luminaire Lumens: 12078.2 lumens  
Efficiency: N/A  
Efficacy: 97.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 124.5  
Input Voltage (V): 120  
Input Current (Ain): 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

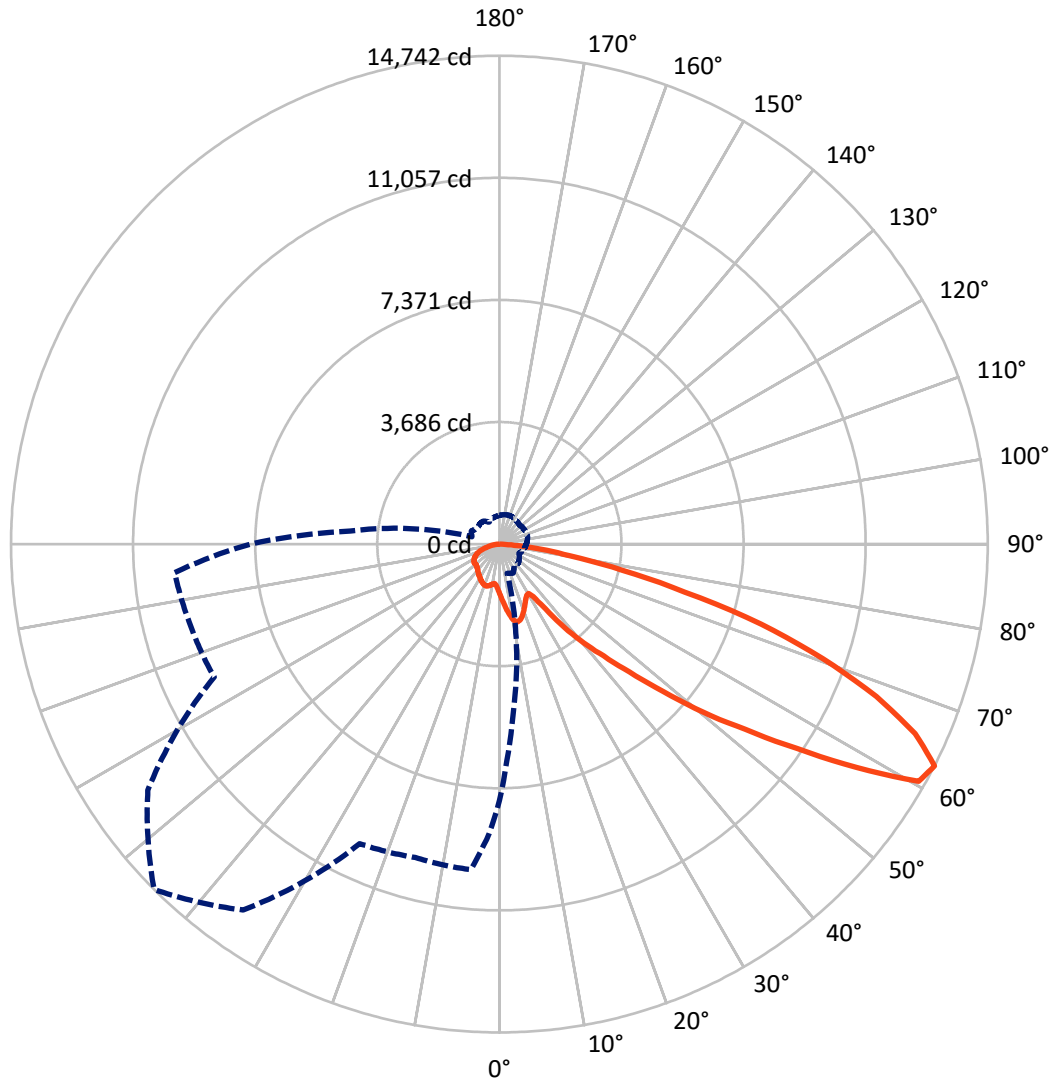
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2887.9	0.0	2887.9
	% Fixture	23.9	0.0	23.9
<b>Street Side</b>	Lumens	9190.3	0.0	9190.3
	% Fixture	76.1	0.0	76.1
<b>Total</b>	Lumens	12078.2	0.0	12078.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.4	1.2
10°-20°	482.1	4.0
20°-30°	759.0	6.3
30°-40°	1040.4	8.6
40°-50°	1623.3	13.4
50°-60°	2798.9	23.2
60°-70°	3243.6	26.9
70°-80°	1712.1	14.2
80°-90°	270.5	2.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	12078.2	100.0
0°-180°	12078.2	100.0

**Coefficient of Utilization**



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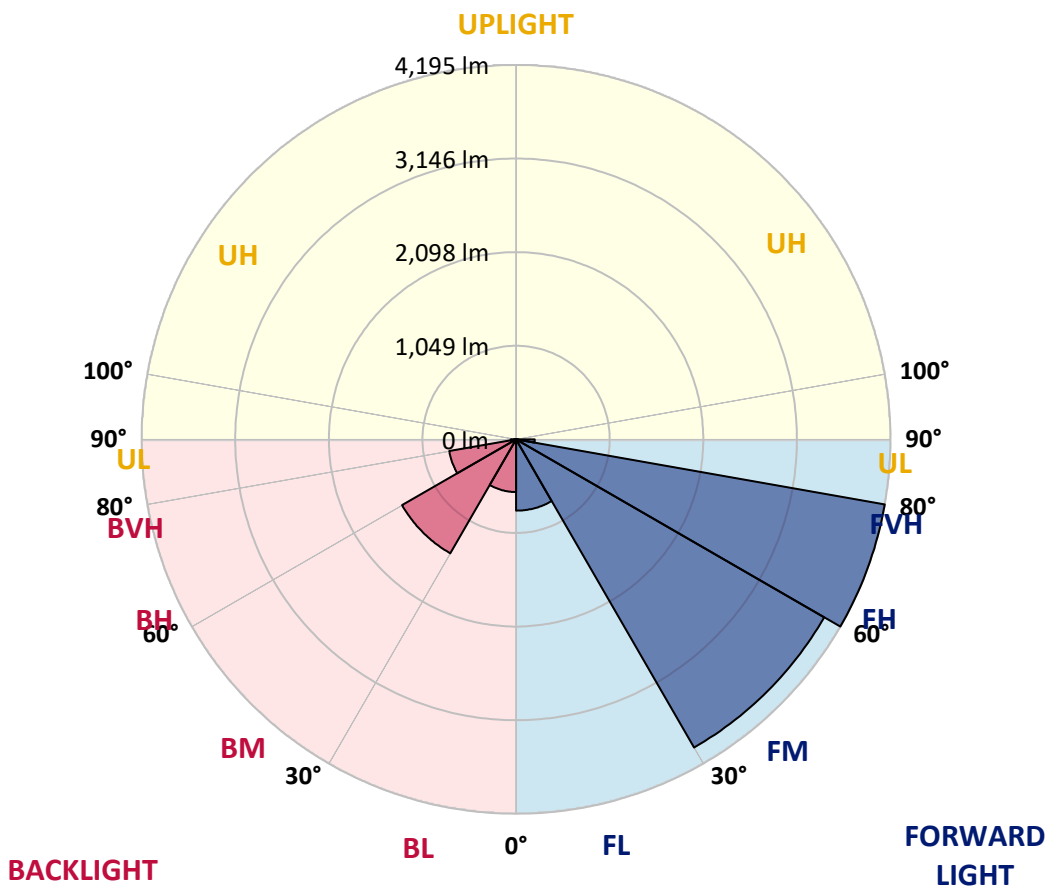
CATALOG NUMBER: GWS-SA2F-830-U-SLL-W

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	798.8	6.6			
FM (30°-60°)	3987.4	33.0			
FH (60°-80°)	4195.3	34.7			G2/5000
FVH (80°-90°)	208.8	1.7			G2/225
BL (0°-30°)	590.7	4.9	B2/1000		
BM (30°-60°)	1475.1	12.2	B2/2500		
BH (60°-80°)	760.4	6.3	B2/1000		G2/1000
BVH (80°-90°)	61.7	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9
2.5°	1636.2	1629.7	1620.5	1589.0	1569.6	1547.5	1524.4	1497.6	1467.1	1445.9	1424.6
5°	1774.7	1764.6	1742.4	1667.6	1615.8	1559.5	1512.4	1458.8	1406.1	1370.1	1334.1
7.5°	1907.8	1894.8	1860.7	1746.1	1662.0	1580.7	1509.6	1432.0	1353.5	1299.9	1257.4
10°	2040.8	2014.0	1970.6	1820.9	1710.1	1615.8	1534.5	1439.4	1335.0	1262.0	1216.7
12.5°	2142.4	2117.5	2070.4	1889.3	1758.1	1639.9	1548.4	1460.6	1371.9	1294.3	1248.1
15°	2237.6	2205.3	2151.7	1953.1	1797.8	1638.9	1520.7	1444.0	1431.1	1411.7	1351.6
17.5°	2306.0	2276.4	2221.0	2004.8	1820.0	1610.3	1444.0	1398.7	1456.9	1516.1	1458.8
20°	2366.0	2331.8	2275.5	2040.8	1824.6	1546.6	1350.7	1351.6	1443.1	1524.4	1510.5
22.5°	2416.8	2379.0	2329.1	2081.5	1822.8	1457.9	1269.4	1324.8	1416.3	1480.0	1481.9
25°	2479.7	2448.2	2406.7	2141.5	1822.8	1367.3	1210.3	1292.5	1371.0	1424.6	1422.8
27.5°	2556.3	2535.1	2500.9	2233.0	1839.4	1291.6	1177.0	1250.9	1312.8	1359.0	1358.1
30°	2642.3	2622.9	2597.0	2330.0	1868.1	1235.2	1158.5	1199.2	1244.4	1281.4	1281.4
32.5°	2730.0	2722.6	2694.9	2407.6	1845.9	1217.7	1142.8	1147.4	1171.5	1201.9	1199.2
35°	2852.0	2844.6	2809.5	2467.6	1749.8	1192.7	1117.9	1094.8	1097.6	1117.0	1123.4
37.5°	3030.3	3019.2	2967.5	2537.9	1604.8	1129.9	1077.2	1039.3	1031.0	1039.3	1051.4
40°	3245.5	3228.9	3158.7	2633.0	1437.5	1044.9	1013.5	982.1	968.2	971.0	984.8
42.5°	3515.3	3480.2	3379.5	2733.7	1272.2	970.1	942.3	922.9	907.2	905.4	932.2
45°	3953.2	3857.1	3697.3	2823.3	1132.7	930.3	878.6	864.7	851.8	859.2	890.6
47.5°	4718.2	4540.8	4229.5	2900.0	1047.7	931.3	827.8	813.0	812.1	826.9	862.0
50°	5769.5	5513.6	5033.2	2951.8	1003.3	942.3	797.3	773.3	790.8	805.6	838.9
52.5°	6776.6	6385.8	5813.9	2950.8	983.9	944.2	805.6	736.3	790.8	794.5	825.9
55°	7636.7	6929.0	6024.5	2647.8	956.2	936.8	837.9	707.7	780.7	794.5	819.5
57.5°	8320.3	7274.5	6008.8	2138.7	1040.3	896.1	857.3	701.2	751.1	796.4	825.0
60°	8244.6	7116.5	5621.7	1312.8	1032.0	824.1	854.6	713.2	701.2	771.4	818.5
62.5°	7741.1	6550.2	4955.6	910.9	969.1	782.5	809.3	734.5	655.0	735.4	787.1
65°	7036.2	5819.4	4129.7	698.4	802.8	784.4	732.6	719.7	614.4	678.1	733.5
67.5°	6104.0	4913.1	3260.3	553.4	559.9	679.0	665.2	639.3	576.5	627.3	677.2
70°	4588.8	3585.5	2243.1	445.3	424.1	567.3	597.7	574.6	539.5	554.3	607.0
72.5°	3233.5	2341.1	1228.7	352.9	327.0	436.1	519.2	515.5	476.7	487.8	539.5
75°	2403.0	1656.5	767.7	279.0	266.1	312.3	435.1	446.2	413.9	426.8	466.6
77.5°	1599.2	1072.6	426.8	206.9	206.9	228.2	324.3	376.0	352.0	362.2	389.9
80°	882.3	546.0	213.4	135.8	139.5	157.1	236.5	270.7	271.6	296.6	304.0
82.5°	279.0	173.7	95.2	79.5	74.8	89.6	152.4	194.0	181.1	231.0	212.5
85°	63.7	40.7	17.6	17.6	19.4	29.6	58.2	103.5	132.1	158.9	115.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	40.7	60.1	53.6
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°	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9
2.5°	1411.7	1393.2	1387.6	1371.9	1370.1	1355.3	1349.8	1349.8	1356.2	1356.2	1362.7
5°	1319.3	1296.2	1283.2	1264.8	1260.2	1249.1	1241.7	1242.6	1250.9	1256.5	1267.5
7.5°	1238.0	1222.3	1213.0	1204.7	1202.9	1201.0	1192.7	1191.8	1194.6	1202.9	1211.2
10°	1203.8	1192.7	1195.5	1201.9	1212.1	1217.7	1210.3	1206.6	1203.8	1209.3	1216.7
12.5°	1237.1	1226.0	1231.5	1242.6	1256.5	1262.0	1259.2	1258.3	1261.1	1282.3	1298.0
15°	1310.0	1288.8	1281.4	1286.0	1297.1	1302.7	1299.9	1303.6	1321.1	1376.6	1416.3
17.5°	1400.6	1348.8	1319.3	1311.0	1315.6	1320.2	1320.2	1329.4	1359.9	1441.2	1491.1
20°	1449.5	1382.1	1332.2	1311.9	1313.7	1318.4	1318.4	1331.3	1365.5	1452.3	1484.7
22.5°	1436.6	1374.7	1313.7	1291.6	1292.5	1296.2	1296.2	1307.3	1337.8	1414.4	1429.2
25°	1385.8	1331.3	1271.2	1251.8	1253.7	1260.2	1258.3	1264.8	1287.9	1350.7	1359.0
27.5°	1324.8	1276.8	1217.7	1202.9	1211.2	1224.1	1213.0	1214.0	1235.2	1287.9	1288.8
30°	1259.2	1219.5	1166.8	1155.8	1171.5	1177.9	1167.8	1167.8	1189.0	1225.0	1224.1
32.5°	1188.1	1163.1	1125.3	1113.3	1130.8	1141.0	1128.0	1129.9	1146.5	1170.5	1161.3
35°	1121.6	1108.6	1091.1	1082.8	1093.9	1103.1	1094.8	1098.5	1114.2	1120.6	1107.7
37.5°	1057.8	1056.0	1057.8	1057.8	1060.6	1063.4	1057.8	1067.1	1080.9	1072.6	1057.8
40°	1002.4	1009.8	1027.3	1022.7	1019.9	1022.7	1019.0	1034.7	1048.6	1033.8	1016.3
42.5°	956.2	970.1	996.9	996.9	991.3	993.2	991.3	1010.7	1020.9	1000.5	981.1
45°	916.5	936.8	971.0	975.6	966.4	966.4	970.1	994.1	997.8	970.1	949.7
47.5°	888.8	913.7	952.5	960.8	947.0	946.0	956.2	982.1	982.1	949.7	926.6
50°	869.4	897.1	943.3	954.4	940.5	936.8	953.4	978.4	972.8	934.0	910.9
52.5°	856.4	885.1	942.3	958.0	948.8	945.1	961.7	979.3	965.4	923.9	899.8
55°	848.1	879.5	945.1	958.0	947.9	941.4	958.0	973.8	966.4	918.3	895.2
57.5°	852.7	884.1	941.4	947.9	935.9	924.8	944.2	966.4	963.6	920.2	897.1
60°	845.3	874.0	921.1	922.9	902.6	885.1	913.7	947.0	947.0	913.7	893.4
62.5°	811.2	839.8	881.4	883.2	860.1	840.7	874.0	913.7	912.8	886.0	864.7
65°	754.8	781.6	828.7	833.3	810.2	789.9	824.1	861.0	863.8	839.8	821.3
67.5°	692.9	716.9	752.0	770.5	751.1	729.9	761.3	796.4	795.4	766.8	747.4
70°	619.0	641.2	673.5	689.2	677.2	656.9	685.5	704.0	695.7	681.8	668.9
72.5°	546.0	567.3	597.7	597.7	584.8	565.4	573.7	607.0	617.1	607.0	598.7
75°	469.3	487.8	509.1	513.7	485.0	449.9	488.7	517.4	529.4	524.8	514.6
77.5°	390.8	404.7	436.1	427.7	374.2	355.7	387.1	429.6	437.9	435.1	421.3
80°	301.2	309.5	342.8	326.1	284.6	272.5	286.4	319.7	321.5	312.3	294.7
82.5°	202.3	213.4	235.6	203.3	202.3	191.2	180.2	183.8	200.5	198.6	186.6
85°	103.5	109.0	130.3	122.0	104.4	90.5	85.9	91.5	82.2	74.8	64.7
87.5°	43.4	47.1	64.7	36.0	11.1	0.0	0.0	5.5	8.3	12.0	12.9
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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**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9
2.5°	1377.5	1387.6	1412.6	1444.0	1474.5	1505.9	1540.1	1561.3	1587.2	1620.5	1621.4
5°	1281.4	1304.5	1340.5	1388.6	1438.5	1495.7	1562.3	1617.7	1684.2	1736.9	1758.1
7.5°	1222.3	1255.5	1300.8	1361.8	1427.4	1498.5	1585.4	1678.7	1787.7	1857.9	1899.5
10°	1227.8	1278.6	1323.9	1375.6	1434.8	1511.4	1623.2	1747.0	1881.0	1973.4	2025.1
12.5°	1326.7	1380.3	1371.9	1369.2	1408.9	1502.2	1653.7	1816.3	1979.8	2072.2	2134.1
15°	1451.4	1471.7	1393.2	1334.1	1358.1	1468.9	1670.3	1878.2	2062.1	2174.8	2235.8
17.5°	1515.1	1474.5	1379.3	1290.6	1284.2	1418.1	1678.7	1941.0	2154.5	2267.2	2331.8
20°	1485.6	1426.4	1346.1	1262.0	1215.8	1348.8	1674.0	1990.9	2238.5	2364.2	2416.8
22.5°	1421.8	1370.1	1307.3	1226.9	1160.4	1273.1	1662.0	2040.8	2313.4	2439.9	2486.1
25°	1352.5	1313.7	1262.0	1191.8	1129.0	1206.6	1653.7	2107.3	2399.3	2520.3	2549.9
27.5°	1283.2	1254.6	1212.1	1157.6	1121.6	1160.4	1656.5	2194.2	2510.1	2624.7	2612.7
30°	1214.9	1189.9	1160.4	1136.4	1120.6	1149.3	1649.1	2286.6	2632.1	2738.3	2667.2
32.5°	1150.2	1127.1	1108.6	1112.3	1121.6	1153.9	1611.2	2370.6	2743.9	2834.4	2726.3
35°	1094.8	1070.8	1070.8	1083.7	1117.9	1138.2	1513.3	2436.2	2867.7	2958.2	2810.4
37.5°	1043.0	1021.8	1035.7	1056.9	1089.2	1095.7	1387.6	2500.0	3047.8	3132.8	2940.7
40°	997.8	976.5	1001.5	1028.3	1044.9	1042.1	1260.2	2588.7	3260.3	3348.1	3113.4
42.5°	961.7	942.3	964.5	998.7	1001.5	1004.2	1166.8	2673.7	3507.0	3618.8	3410.9
45°	932.2	918.3	929.4	963.6	963.6	1006.1	1108.6	2744.8	3878.4	4076.1	3956.9
47.5°	909.1	900.8	906.3	917.4	935.9	1039.3	1071.7	2799.3	4554.7	4942.7	4822.6
50°	896.1	887.8	895.2	872.1	927.6	1056.0	1059.7	2840.9	5446.2	6054.1	5905.4
52.5°	885.1	882.3	886.9	833.3	946.0	1044.9	1050.4	2785.5	6043.9	7148.0	7294.8
55°	881.4	883.2	861.0	804.7	968.2	1007.9	1022.7	2389.1	6206.5	8091.2	9003.1
57.5°	883.2	877.7	821.3	807.5	969.1	934.0	1062.4	1704.5	5970.0	8501.4	10674.3
60°	876.7	849.0	773.3	832.4	926.6	847.2	1033.8	1111.4	5346.4	8186.4	10771.4
62.5°	848.1	807.5	731.7	846.3	850.9	795.4	938.6	856.4	4514.9	7512.0	9836.4
65°	806.5	752.0	696.6	817.6	774.2	771.4	705.8	686.4	3630.8	6709.1	8949.5
67.5°	738.2	683.7	670.7	752.0	696.6	683.7	567.3	569.1	2897.2	5853.6	8058.0
70°	660.6	606.1	616.2	680.0	619.9	568.2	459.2	473.9	2197.9	4877.1	6856.0
72.5°	609.8	536.8	537.7	598.7	545.1	460.1	377.9	390.8	1395.0	3676.1	5450.8
75°	514.6	473.0	452.7	485.0	462.9	358.5	317.8	315.0	826.9	2634.9	4081.6
77.5°	429.6	397.3	387.1	400.0	345.5	265.1	255.9	251.3	468.4	1687.9	2674.6
80°	311.3	303.0	302.1	308.6	266.1	194.9	194.9	195.9	252.2	916.5	1507.7
82.5°	197.7	216.2	191.2	212.5	181.1	138.6	129.3	146.9	145.0	390.8	635.6
85°	82.2	112.7	105.3	111.8	85.9	75.8	81.3	87.8	84.1	150.6	247.6
87.5°	15.7	18.5	20.3	19.4	19.4	24.0	26.8	32.3	32.3	43.4	74.8
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: P634027  
 CATALOG NUMBER: GWS-SA2F-830-U-SLL-W

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9	1505.9
2.5°	1656.5	1683.3	1677.7	1689.8	1674.0	1679.6	1648.2	1639.9	1634.3	1636.2
5°	1826.5	1881.0	1891.2	1911.5	1897.6	1897.6	1842.2	1800.6	1785.8	1774.7
7.5°	1999.2	2077.8	2129.5	2135.1	2127.7	2112.9	2032.5	1957.7	1930.9	1907.8
10°	2152.6	2246.8	2305.0	2332.8	2318.9	2295.8	2196.0	2093.5	2061.1	2040.8
12.5°	2269.9	2353.1	2391.9	2410.4	2408.5	2400.2	2318.9	2208.0	2173.9	2142.4
15°	2345.7	2387.3	2372.5	2371.6	2384.5	2417.8	2392.8	2306.0	2266.2	2237.6
17.5°	2394.7	2354.9	2289.3	2258.9	2286.6	2365.1	2422.4	2373.4	2337.4	2306.0
20°	2412.2	2270.9	2175.7	2119.3	2151.7	2265.3	2406.7	2422.4	2391.9	2366.0
22.5°	2391.9	2168.3	2039.0	1972.5	2003.9	2139.7	2360.5	2462.1	2441.8	2416.8
25°	2342.0	2061.1	1905.9	1845.9	1880.1	2018.6	2278.3	2499.1	2500.0	2479.7
27.5°	2280.1	1962.3	1812.6	1756.3	1789.5	1918.9	2197.9	2531.4	2563.7	2556.3
30°	2217.3	1903.2	1768.3	1728.6	1753.5	1868.1	2115.7	2564.7	2629.3	2642.3
32.5°	2188.6	1931.8	1872.7	1890.2	1857.9	1897.6	2086.1	2611.8	2708.8	2730.0
35°	2226.5	2185.9	2335.5	2404.8	2290.3	2139.7	2124.0	2682.9	2820.6	2852.0
37.5°	2410.4	2730.0	2953.6	3197.5	2998.9	2667.2	2311.5	2803.9	2980.4	3030.3
40°	2810.4	3204.9	3608.6	3923.7	3623.4	3177.2	2668.1	2984.1	3200.3	3245.5
42.5°	3187.3	3650.2	4206.4	4613.8	4223.9	3593.8	3052.5	3287.1	3490.4	3515.3
45°	3556.9	4087.2	4929.7	5496.1	4966.7	3990.2	3445.1	3798.9	3952.3	3953.2
47.5°	3990.2	4579.6	5837.0	6643.5	5952.5	4429.0	3813.7	4609.2	4822.6	4718.2
50°	4508.5	5069.3	6771.0	7978.5	7154.4	4968.6	4282.1	5596.8	5887.8	5769.5
52.5°	5202.3	5608.8	7800.2	9280.2	8464.5	5582.9	4961.2	6901.3	6997.4	6776.6
55°	6178.8	6387.6	9121.3	10887.8	9926.9	6339.6	5954.3	8538.4	8269.5	7636.7
57.5°	8402.6	7620.0	10817.5	12721.6	11581.6	7714.3	8130.9	10343.6	9387.4	8320.3
60°	10263.2	9116.7	12387.2	14541.6	12999.7	9229.4	10174.5	10657.7	9345.8	8244.6
62.5°	9635.9	9498.3	12953.5	14742.1	13483.8	9975.0	9794.8	9866.0	8736.1	7741.1
65°	8454.3	8761.9	12448.2	13791.5	12947.1	9307.0	8859.9	9134.3	8038.6	7036.2
67.5°	7756.8	7983.1	11549.2	12269.9	11971.5	8584.6	8132.8	7934.2	6955.8	6104.0
70°	7043.6	7231.1	10287.2	10360.2	10449.8	7383.5	6650.0	6058.7	5184.7	4588.8
72.5°	6086.4	6096.6	8691.7	8268.6	8438.6	5777.9	5352.9	4529.7	3774.0	3233.5
75°	5106.2	4827.2	6880.0	5779.7	6120.6	4494.6	4444.7	3413.7	2846.4	2403.0
77.5°	3893.2	3567.0	5025.8	3800.8	4298.7	2993.3	3341.6	2315.2	2002.9	1599.2
80°	2613.6	2410.4	2777.1	2145.2	2812.2	2063.0	2179.4	1311.9	1137.3	882.3
82.5°	1378.4	1177.0	1716.5	1272.2	1696.2	1133.6	817.6	405.6	345.5	279.0
85°	534.0	618.1	841.6	452.7	657.8	404.7	236.5	100.7	84.1	63.7
87.5°	103.5	159.8	87.8	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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**

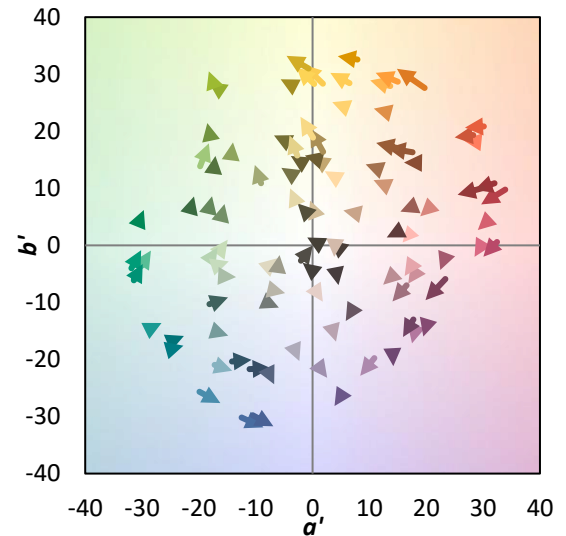
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	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 ( $R_{f,i}$ )**

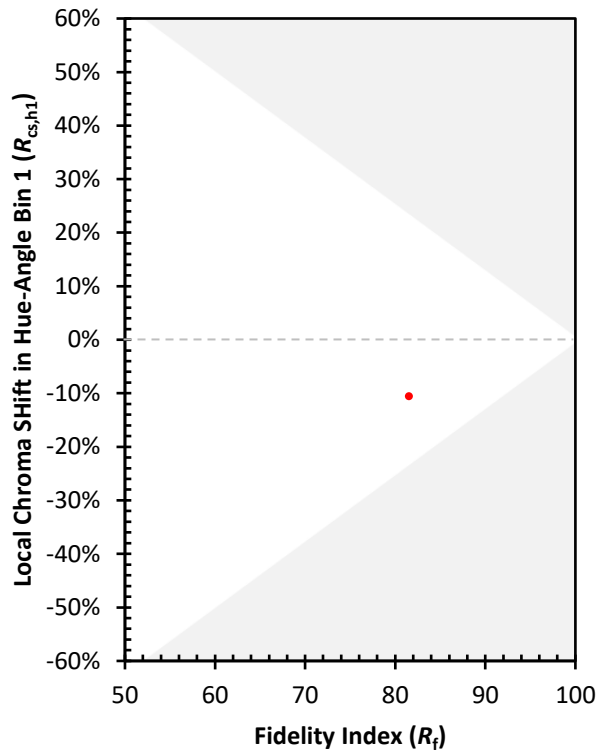
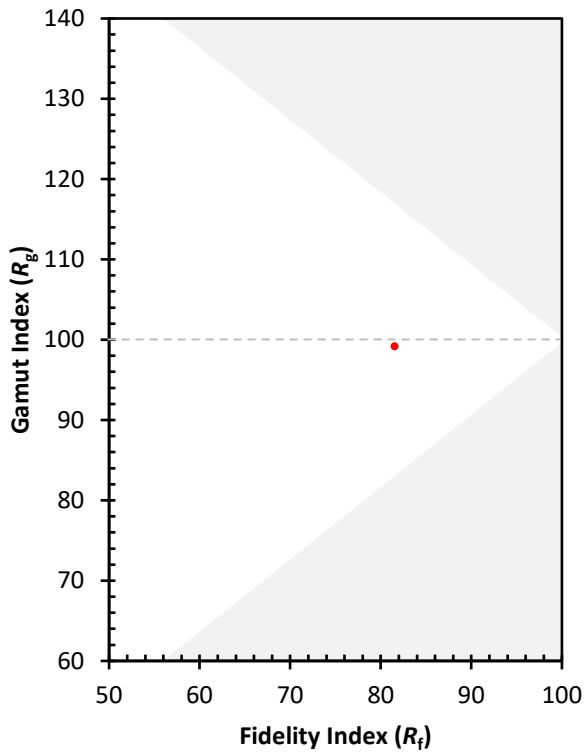
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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