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: P632540

Luminaire Tested: GWS-SA2C-830-U-SLL-W-GRSWH

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:	P632540
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-39)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA2C-830-U-SLL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5722.9 lumens
Efficiency:	N/A
Efficacy:	90.6 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B2 - U0 - G1

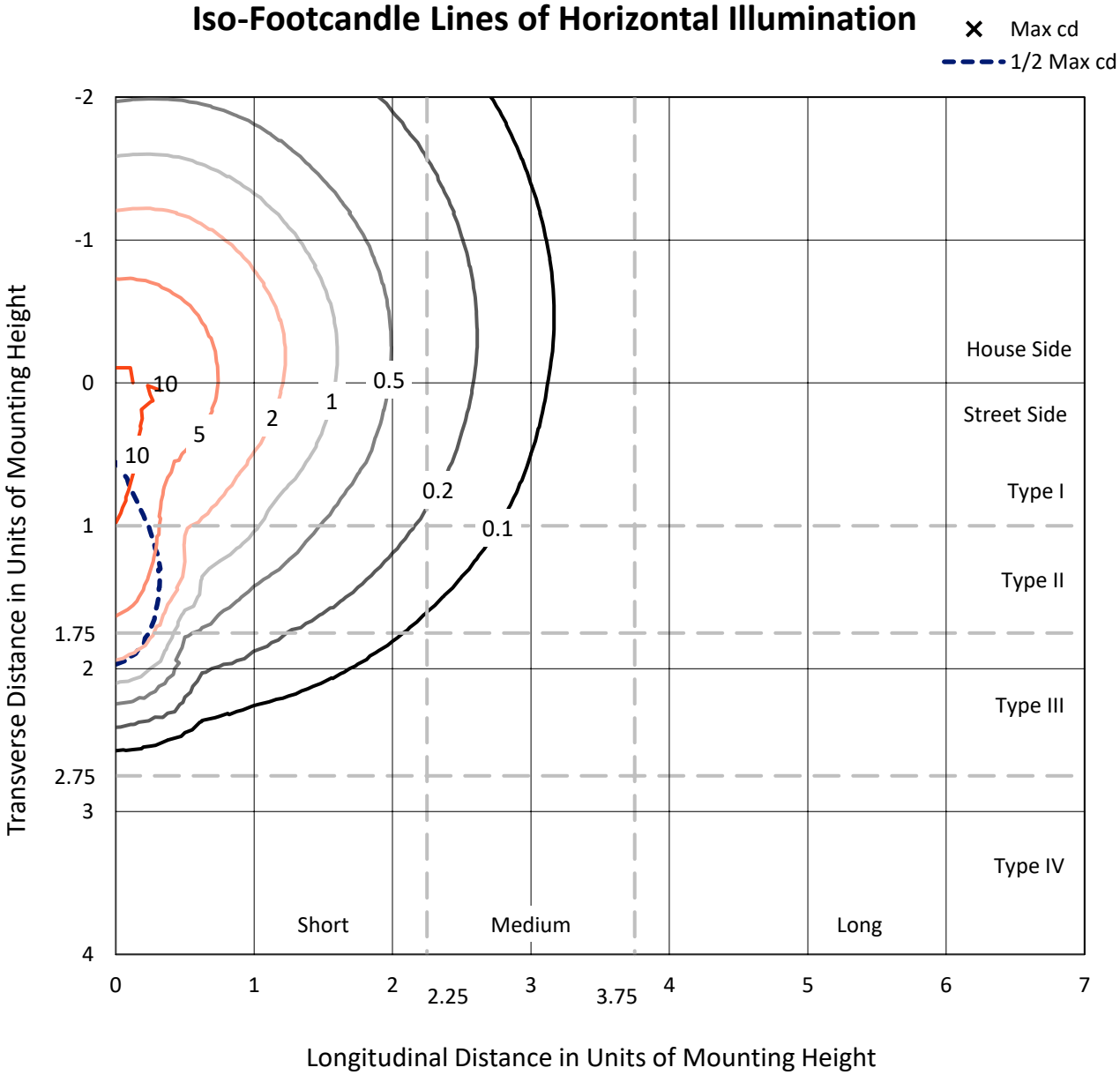
Input Watts (W):	63.2
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P632540
CATALOG NUMBER: GWS-SA2C-830-U-SLL-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



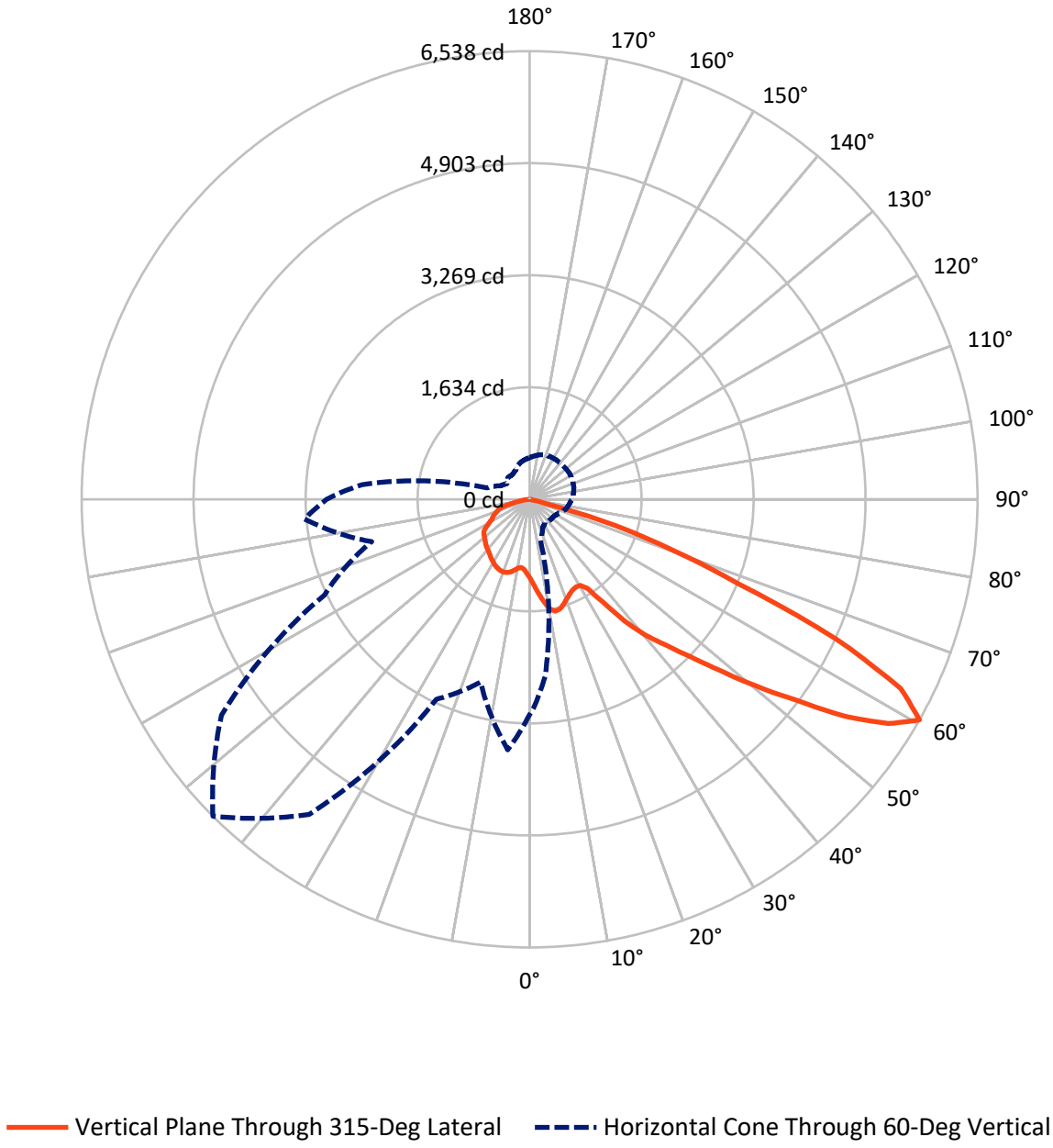
Based on 10 foot mounting height. Maximum calculated value = 13.9 fc
Type III - Short - N/A

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P632540
CATALOG NUMBER: GWS-SA2C-830-U-SLL-W-GRSWH

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

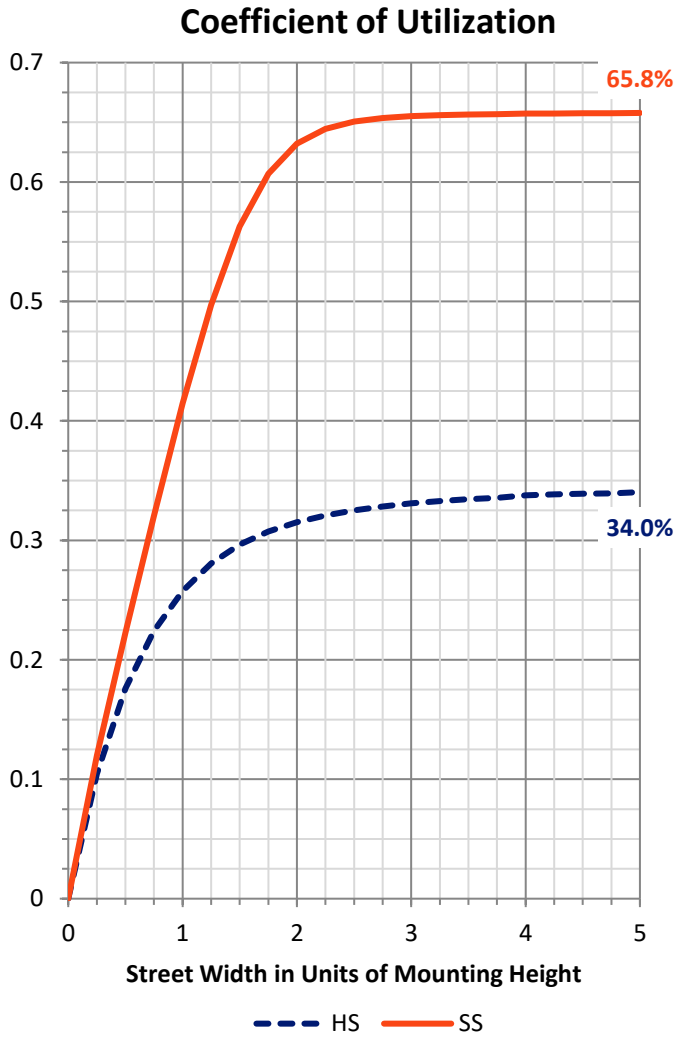
REPORT NUMBER: P632540
CATALOG NUMBER: GWS-SA2C-830-U-SLL-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1957.8	0.0	1957.8
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	3765.2	0.0	3765.2
	% Fixture	65.8	0.0	65.8
Total	Lumens	5722.9	0.0	5722.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.8	2.0
10°-20°	361.7	6.3
20°-30°	589.1	10.3
30°-40°	827.5	14.5
40°-50°	1132.4	19.8
50°-60°	1452.8	25.4
60°-70°	978.2	17.1
70°-80°	244.6	4.3
80°-90°	23.8	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5722.9	100.0
0°-180°	5722.9	100.0



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

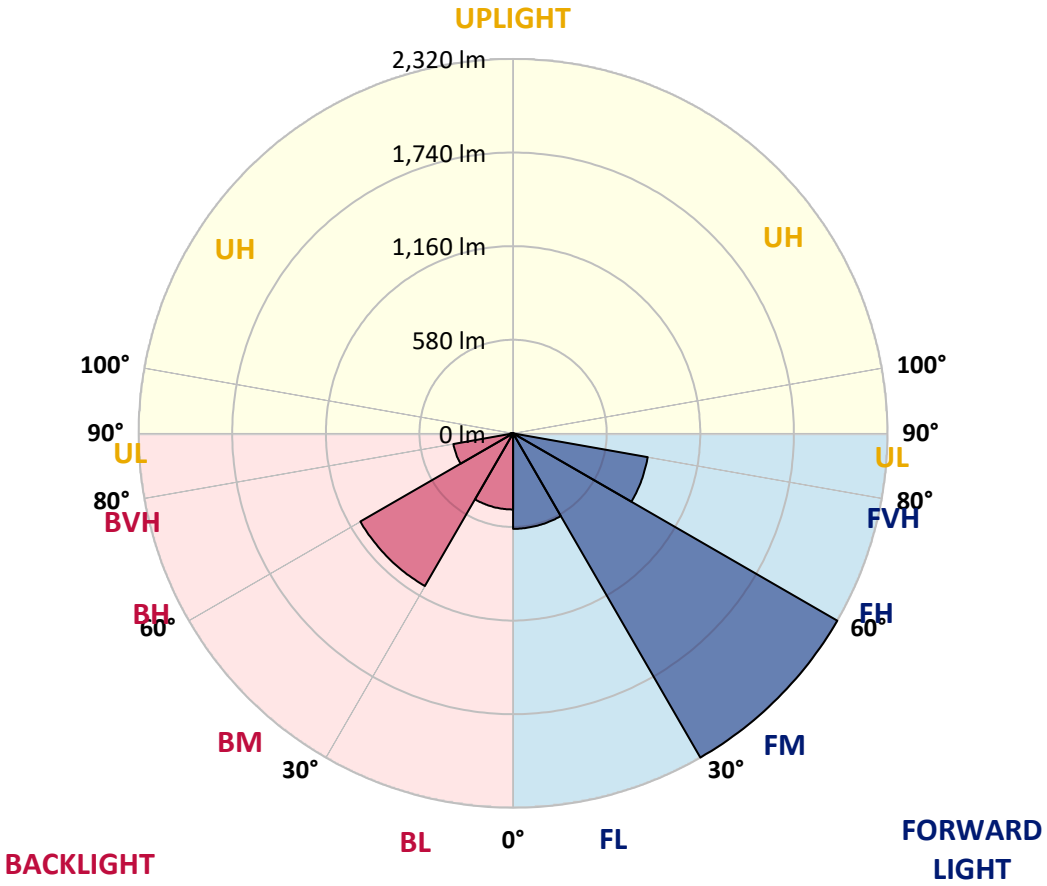
Scaled Data Report

REPORT NUMBER: P632540
CATALOG NUMBER: GWS-SA2C-830-U-SLL-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	591.6	10.3			
FM	(30°-60°)	2320.1	40.5			
FH	(60°-80°)	847.2	14.8			G1/1800
FVH	(80°-90°)	6.2	0.1			G0/10
BL	(0°-30°)	471.9	8.2	B1/500		
BM	(30°-60°)	1092.6	19.1	B2/2500		
BH	(60°-80°)	375.6	6.6	B1/500		G1/500
BVH	(80°-90°)	17.6	0.3			G1/100
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



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P632540
CATALOG NUMBER: GWS-SA2C-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2
2.5°	1221.2	1218.5	1215.9	1195.4	1190.1	1175.3	1164.8	1151.6	1132.6	1122.1	1113.1
5°	1297.6	1293.4	1279.2	1237.0	1209.6	1179.5	1154.8	1127.4	1098.4	1079.4	1064.6
7.5°	1369.8	1368.8	1344.5	1274.9	1230.7	1187.5	1153.7	1113.7	1072.0	1043.6	1024.6
10°	1436.7	1428.8	1399.9	1309.2	1251.2	1201.7	1165.3	1121.0	1072.6	1034.1	1008.8
12.5°	1495.8	1485.8	1445.7	1340.8	1269.1	1208.0	1168.5	1132.1	1100.0	1067.8	1038.8
15°	1544.3	1532.1	1491.6	1370.3	1285.0	1204.3	1149.0	1120.5	1131.6	1145.8	1113.7
17.5°	1589.6	1576.9	1527.4	1391.9	1289.7	1181.7	1101.0	1088.9	1144.8	1209.6	1194.8
20°	1627.5	1613.3	1555.9	1402.5	1281.3	1138.4	1038.8	1059.9	1133.7	1211.2	1234.9
22.5°	1668.7	1657.1	1588.0	1417.8	1270.7	1078.9	986.6	1038.3	1114.7	1182.7	1218.5
25°	1734.5	1720.3	1638.1	1444.7	1265.5	1023.0	949.2	1017.2	1088.4	1150.0	1178.0
27.5°	1829.9	1803.6	1706.6	1491.6	1271.3	970.3	925.5	991.4	1057.8	1110.5	1133.2
30°	1933.8	1902.1	1782.5	1540.1	1279.7	938.2	912.9	961.9	1010.9	1063.6	1088.4
32.5°	2056.6	2028.6	1863.7	1576.4	1261.8	923.4	903.4	929.7	968.7	1010.9	1031.4
35°	2203.1	2153.0	1952.2	1605.9	1203.8	901.8	894.9	894.4	915.0	956.1	979.3
37.5°	2360.7	2306.9	2061.3	1637.6	1113.7	867.5	874.9	852.8	871.7	904.4	930.8
40°	2489.8	2433.4	2171.5	1680.8	1000.9	813.8	830.6	806.9	818.5	852.2	881.8
42.5°	2616.3	2556.2	2274.2	1729.8	891.8	761.1	769.5	760.5	764.2	799.5	840.7
45°	2782.3	2714.9	2400.7	1764.6	793.7	719.4	711.5	696.2	715.7	761.6	805.3
47.5°	3059.5	2978.9	2607.9	1787.2	722.6	695.7	659.3	650.4	674.6	725.8	771.1
50°	3383.7	3314.1	2938.9	1786.2	669.4	675.7	608.7	600.8	640.9	692.5	740.5
52.5°	3649.3	3578.7	3221.9	1733.5	625.6	633.0	579.2	557.1	611.9	659.9	707.8
55°	3863.8	3784.2	3352.1	1513.2	570.3	565.0	547.1	506.5	575.5	627.2	672.0
57.5°	3748.4	3653.5	3194.5	1150.6	513.4	480.1	491.7	461.7	526.0	590.8	634.0
60°	*3142.8*	*3057.4*	*2595.2*	*612.4*	*451.7*	*401.1*	*425.3*	*430.1*	*471.7*	*547.1*	*591.4*
62.5°	2158.8	2096.6	1758.8	371.6	356.3	322.0	360.0	394.2	425.3	489.1	527.6
65°	1056.2	1037.8	879.7	238.2	249.3	260.4	298.3	339.9	385.8	441.7	482.3
67.5°	290.9	293.0	266.7	186.1	196.6	227.2	257.2	290.4	336.3	387.9	429.0
70°	128.1	130.2	134.4	143.4	163.4	191.3	222.4	256.7	298.8	342.1	381.6
72.5°	89.1	91.2	97.5	109.1	127.0	153.4	182.9	215.6	259.3	295.7	328.4
75°	54.8	56.4	62.2	72.2	84.3	104.4	133.3	163.4	201.9	235.1	264.1
77.5°	29.0	27.9	31.6	38.5	49.0	59.6	79.1	98.0	125.4	152.3	176.6
80°	15.8	15.3	17.4	21.1	24.2	32.7	45.9	58.5	74.3	89.6	102.8
82.5°	6.9	6.3	6.9	9.0	11.1	15.8	23.2	32.2	41.1	51.7	60.1
85°	0.0	0.0	0.0	0.5	2.6	4.2	7.9	11.6	16.9	23.2	28.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.7
90°	0.0	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

Scaled Data Report

REPORT NUMBER: P632540
CATALOG NUMBER: GWS-SA2C-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2
2.5°	1107.9	1094.7	1093.6	1083.1	1084.1	1084.7	1074.1	1069.9	1073.6	1077.8	1075.7
5°	1059.4	1045.7	1039.9	1029.9	1028.8	1024.1	1019.8	1014.6	1018.3	1022.0	1024.1
7.5°	1017.2	1008.3	1004.6	1001.9	1003.0	1000.9	992.4	987.7	987.2	988.8	990.9
10°	1003.5	996.1	1000.9	1008.3	1013.5	1017.2	1008.3	1000.3	993.0	989.8	989.8
12.5°	1033.0	1023.5	1033.0	1040.9	1051.5	1054.1	1044.1	1035.7	1033.0	1036.2	1042.5
15°	1098.4	1076.2	1075.7	1080.5	1088.9	1093.1	1083.6	1079.4	1079.4	1099.4	1115.2
17.5°	1163.7	1127.4	1112.1	1109.4	1114.7	1116.3	1108.4	1104.7	1114.2	1153.2	1182.7
20°	1209.6	1165.3	1132.1	1125.8	1127.4	1127.9	1121.6	1118.9	1132.6	1180.1	1204.8
22.5°	1204.8	1172.2	1131.6	1123.7	1126.3	1125.3	1119.5	1118.4	1129.5	1170.6	1182.2
25°	1172.2	1146.9	1112.6	1107.3	1111.6	1111.0	1105.2	1102.6	1107.3	1134.7	1135.8
27.5°	1134.7	1112.6	1083.1	1081.5	1088.4	1092.1	1082.0	1074.1	1072.6	1091.0	1086.8
30°	1089.9	1073.6	1049.9	1050.9	1063.6	1065.7	1053.6	1042.0	1038.8	1048.8	1043.0
32.5°	1036.7	1031.4	1018.8	1021.4	1033.6	1037.8	1025.1	1013.0	1009.3	1012.5	1000.3
35°	991.4	989.3	990.3	995.1	1005.6	1008.8	998.2	988.8	983.5	972.4	956.6
37.5°	944.5	950.3	965.6	974.5	980.3	979.3	973.5	966.6	958.2	937.6	918.1
40°	900.7	915.5	942.9	952.9	955.0	955.5	951.3	945.5	935.0	907.6	885.5
42.5°	867.0	883.3	919.7	935.0	936.0	937.1	932.9	928.1	913.4	877.0	855.4
45°	831.7	853.3	896.0	914.4	913.4	912.9	909.2	907.1	889.7	847.5	823.8
47.5°	801.6	826.9	872.8	888.6	888.1	887.6	884.9	884.9	867.5	821.7	794.8
50°	772.1	801.1	849.1	862.3	863.3	862.3	861.2	862.8	842.2	793.2	766.9
52.5°	740.0	772.7	822.7	834.9	841.2	843.8	843.8	840.1	815.9	764.8	735.8
55°	704.7	735.8	793.7	810.1	815.4	820.1	820.1	812.7	790.1	738.4	707.3
57.5°	660.9	688.3	734.2	750.5	763.2	766.3	766.3	754.2	735.8	686.2	660.9
60°	*613.5*	*637.2*	*668.3*	*685.7*	*695.2*	*688.9*	*693.6*	*690.4*	*675.7*	*629.8*	*608.7*
62.5°	550.2	574.5	608.7	626.7	630.9	624.6	630.9	630.4	610.3	569.2	543.9
65°	504.9	528.6	562.4	585.6	592.4	590.8	595.0	588.7	563.9	524.9	500.7
67.5°	451.2	476.5	515.5	541.3	555.5	557.1	562.9	549.7	524.4	481.7	451.2
70°	400.0	421.6	451.7	475.9	496.0	506.0	507.0	488.1	456.4	421.1	399.0
72.5°	346.3	368.4	404.8	431.1	456.4	468.0	468.0	444.8	410.6	371.6	347.9
75°	280.9	301.5	334.7	363.1	392.1	406.9	406.4	386.3	348.4	311.5	286.7
77.5°	190.3	205.6	226.6	248.2	252.5	264.1	269.9	244.6	223.5	203.4	181.3
80°	110.7	120.2	131.8	143.9	146.5	150.2	140.7	131.2	120.2	107.0	97.0
82.5°	64.8	71.2	76.9	86.4	88.0	89.1	80.6	76.4	67.5	59.6	53.2
85°	31.6	33.7	39.0	43.7	41.6	40.6	36.9	32.7	29.0	25.8	22.7
87.5°	6.3	6.3	9.5	9.0	7.4	6.3	3.7	4.7	1.1	1.1	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

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P632540
CATALOG NUMBER: GWS-SA2C-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2
2.5°	1082.6	1091.5	1102.6	1117.4	1134.2	1152.1	1169.5	1182.7	1195.9	1215.4	1212.2
5°	1027.2	1042.5	1059.9	1082.6	1110.0	1141.1	1175.9	1210.6	1248.1	1279.7	1293.4
7.5°	995.1	1011.9	1032.5	1062.0	1097.3	1135.3	1184.3	1240.7	1301.3	1342.9	1368.8
10°	995.1	1016.7	1043.6	1072.0	1103.1	1142.1	1202.7	1273.4	1351.4	1406.2	1436.2
12.5°	1052.5	1074.1	1079.9	1078.9	1096.3	1139.5	1217.5	1307.6	1400.9	1458.9	1495.8
15°	1142.1	1149.5	1105.8	1065.7	1068.3	1120.5	1224.3	1335.0	1443.6	1513.2	1553.2
17.5°	1202.2	1182.7	1104.7	1034.6	1019.8	1088.4	1224.3	1361.4	1488.9	1567.5	1604.9
20°	1207.0	1158.5	1077.8	1004.6	966.6	1045.7	1215.9	1381.4	1532.7	1619.6	1659.7
22.5°	1165.3	1117.4	1049.4	978.7	922.9	994.0	1202.2	1396.7	1570.1	1668.7	1718.2
25°	1117.9	1077.8	1020.4	952.4	892.8	941.8	1189.6	1422.5	1622.3	1735.1	1785.1
27.5°	1071.5	1037.8	985.6	930.3	876.0	896.5	1181.7	1460.5	1684.5	1829.4	1872.6
30°	1026.2	995.6	948.2	909.2	867.0	867.0	1174.8	1504.2	1766.7	1935.3	1978.6
32.5°	980.3	951.3	912.9	888.6	861.7	855.4	1155.8	1545.3	1851.5	2051.3	2095.6
35°	937.6	908.6	879.1	869.1	859.1	846.4	1108.9	1577.5	1934.3	2186.7	2224.7
37.5°	897.6	869.6	847.5	844.9	845.9	822.2	1035.1	1604.4	2037.6	2325.4	2345.4
40°	862.8	831.7	814.3	813.8	819.0	783.2	941.8	1642.8	2155.7	2442.9	2434.5
42.5°	831.7	799.0	777.9	782.7	779.5	744.2	850.7	1678.1	2258.4	2553.0	2536.2
45°	801.1	769.5	740.0	746.8	743.1	720.0	773.2	1704.0	2372.3	2685.3	2687.4
47.5°	771.6	740.5	711.0	702.6	702.0	712.6	713.6	1712.4	2557.8	2898.3	2850.3
50°	744.2	713.1	682.5	654.1	665.1	697.8	669.4	1706.1	2835.6	3133.3	2999.5
52.5°	715.7	686.2	652.5	601.4	630.4	662.5	629.8	1683.4	3005.3	3341.0	3260.9
55°	683.1	655.1	609.3	547.1	582.4	589.2	589.2	1464.2	3077.5	3546.5	3596.1
57.5°	639.3	602.4	529.7	479.6	511.2	484.9	546.0	1024.6	2958.4	3481.7	3674.1
60°	*589.8*	*550.2*	*473.3*	*437.5*	*446.9*	*400.6*	*465.4*	*642.5*	*2451.9*	*2962.6*	*3295.7*
62.5°	524.4	488.1	424.3	396.3	376.8	326.8	374.7	406.4	1680.8	2199.9	2427.1
65°	480.7	440.6	383.7	346.8	306.7	263.0	248.8	266.7	903.9	1231.2	1384.6
67.5°	429.0	389.5	335.7	289.4	257.2	225.6	200.8	194.5	309.9	410.0	443.8
70°	380.0	342.1	297.3	254.0	221.9	190.8	166.5	149.2	143.4	142.3	140.2
72.5°	329.9	294.6	257.2	217.1	181.8	153.4	131.8	111.7	103.3	100.7	98.0
75°	270.4	242.4	205.0	161.8	133.3	107.0	90.1	76.9	69.6	66.9	63.8
77.5°	173.9	161.3	128.6	104.4	80.6	63.8	54.8	46.4	41.6	40.6	37.9
80°	92.8	86.4	71.2	60.1	48.0	39.0	34.3	29.5	26.9	25.8	24.8
82.5°	51.7	46.9	39.5	34.8	27.9	23.7	21.1	19.0	17.4	16.9	16.3
85°	23.2	20.0	15.8	14.8	13.2	12.1	11.6	10.5	10.0	9.5	9.0
87.5°	1.1	2.1	2.6	2.1	2.1	3.2	3.7	3.7	3.2	3.2	2.6
90°	0.0	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

Scaled Data Report

REPORT NUMBER: P632540
CATALOG NUMBER: GWS-SA2C-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2	1154.2
2.5°	1231.7	1247.5	1249.1	1254.4	1247.5	1246.0	1234.9	1228.6	1222.8	1221.2
5°	1327.6	1359.3	1371.9	1380.9	1372.4	1368.2	1344.0	1318.7	1304.5	1297.6
7.5°	1426.2	1473.6	1498.4	1509.5	1510.5	1491.6	1449.9	1402.5	1378.8	1369.8
10°	1514.2	1572.7	1605.4	1626.5	1619.1	1595.9	1539.0	1474.7	1444.7	1436.7
12.5°	1579.6	1635.4	1660.7	1674.5	1673.9	1661.3	1607.5	1537.9	1503.7	1495.8
15°	1621.7	1654.9	1656.5	1659.7	1668.7	1685.5	1657.6	1593.3	1555.3	1544.3
17.5°	1654.9	1641.8	1617.0	1608.6	1628.6	1675.5	1692.4	1640.2	1599.1	1589.6
20°	1676.0	1609.6	1565.9	1549.5	1572.7	1649.2	1713.5	1682.4	1639.7	1627.5
22.5°	1692.4	1579.6	1509.0	1497.9	1522.1	1620.7	1735.1	1732.4	1685.5	1668.7
25°	1718.2	1559.6	1468.9	1461.0	1483.7	1607.0	1764.0	1800.4	1758.8	1734.5
27.5°	1758.8	1557.4	1448.3	1445.7	1476.8	1619.1	1805.7	1900.0	1847.9	1829.9
30°	1815.2	1577.5	1453.1	1458.4	1496.3	1662.9	1870.5	2013.9	1961.7	1933.8
32.5°	1896.3	1631.2	1525.3	1548.0	1575.9	1733.0	1965.4	2137.2	2097.7	2056.6
35°	2003.3	1778.8	1738.8	1835.2	1808.8	1886.3	2079.8	2286.9	2238.9	2203.1
37.5°	2146.2	2081.3	2118.2	2251.0	2187.3	2176.2	2219.4	2422.9	2396.5	2360.7
40°	2346.4	2359.6	2427.6	2602.1	2509.8	2438.7	2390.7	2525.1	2534.1	2489.8
42.5°	2479.3	2539.9	2703.8	2902.0	2774.9	2604.7	2534.1	2655.8	2656.4	2616.3
45°	2528.8	2687.4	3030.0	3258.2	3045.8	2699.6	2613.1	2833.4	2828.2	2782.3
47.5°	2510.9	2811.8	3368.9	3717.8	3393.7	2767.0	2602.1	3086.4	3129.1	3059.5
50°	2473.5	2936.7	3764.7	4280.7	3820.6	2838.7	2585.2	3366.8	3437.4	3383.7
52.5°	2511.4	3075.9	4232.8	4862.6	4356.1	2953.1	2699.0	3726.8	3714.1	3649.3
55°	2631.6	3240.3	4801.5	5593.6	4944.3	3146.5	2991.6	4069.9	3941.3	3863.8
57.5°	2625.8	3357.9	5300.1	6171.8	5456.1	3305.2	3093.3	4106.3	3846.4	3748.4
60°	2383.3	3304.1	5489.8	6537.6	5610.5	3217.7	2758.6	3667.8	3245.6	3142.8
62.5°	1778.8	2932.0	5121.9	6079.6	5173.6	2779.2	2074.5	2632.6	2332.2	2158.8
65°	1137.9	2293.7	4306.0	4925.3	4264.4	2125.6	1235.4	1411.5	1105.8	1056.2
67.5°	484.4	1619.1	3347.3	3292.0	3190.3	1377.2	477.0	397.4	296.2	290.9
70°	160.2	1101.5	2063.4	2195.7	1905.3	948.7	157.6	133.3	132.8	128.1
72.5°	104.9	591.4	1161.6	1293.4	1225.9	546.0	95.4	89.1	91.2	89.1
75°	62.7	128.6	195.5	254.0	195.5	91.7	57.4	56.4	57.4	54.8
77.5°	36.9	35.8	34.8	34.8	34.3	31.6	29.0	27.9	28.5	29.0
80°	23.7	22.7	21.6	21.1	18.4	17.4	16.3	15.3	15.3	15.8
82.5°	15.3	14.2	13.2	11.6	9.5	7.9	7.4	6.3	6.3	6.9
85°	7.9	6.3	4.7	3.7	2.1	1.1	0.0	0.0	0.0	0.0
87.5°	1.6	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.

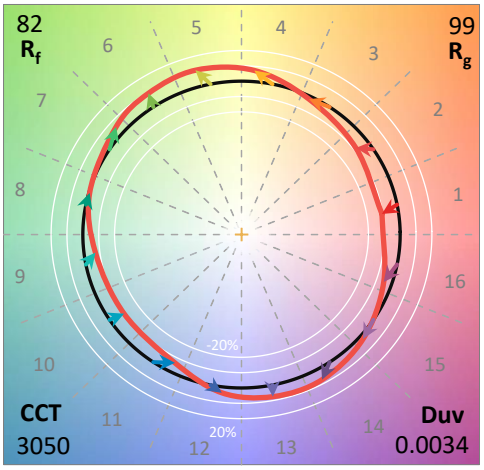
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

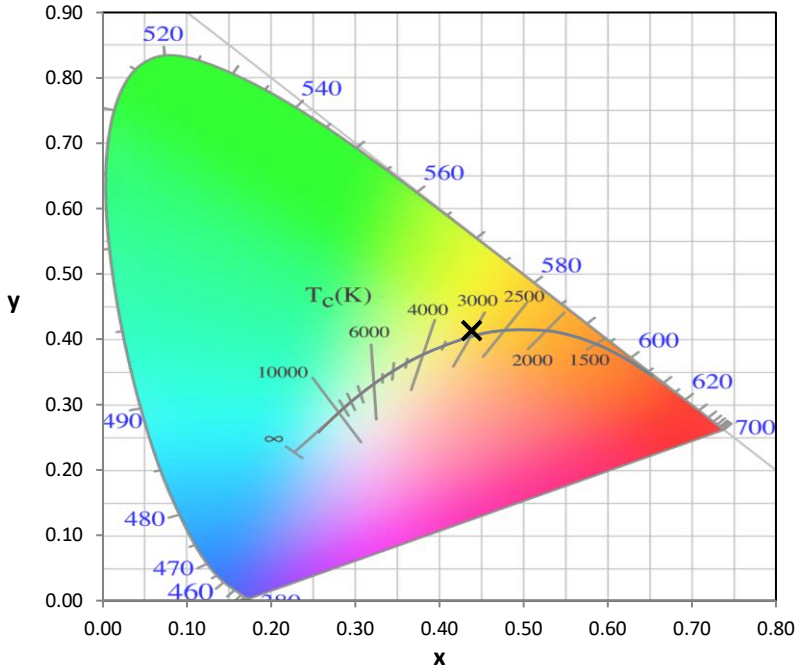
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

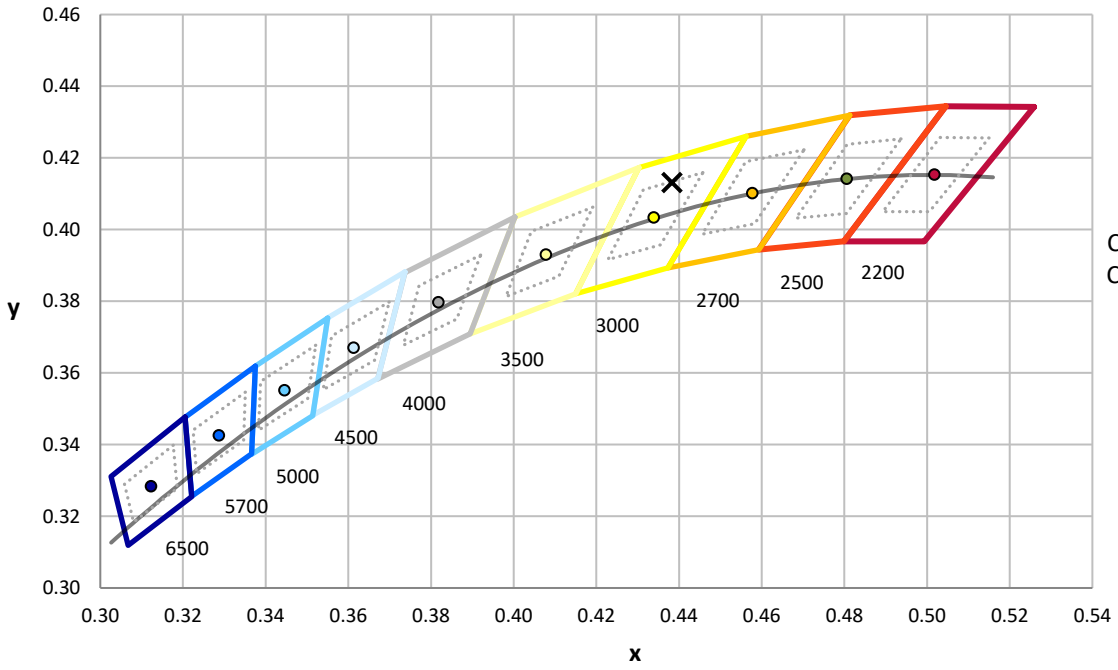
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

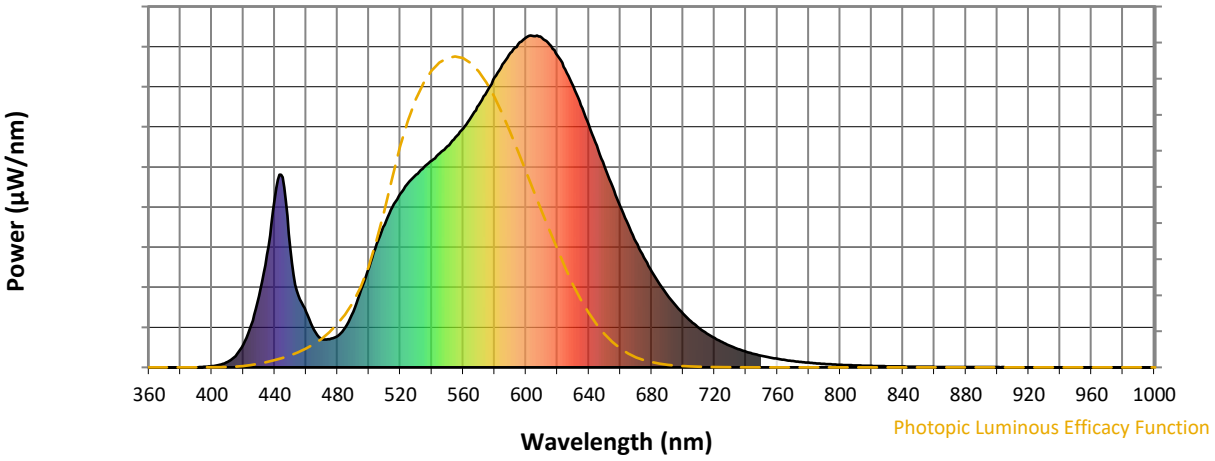


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

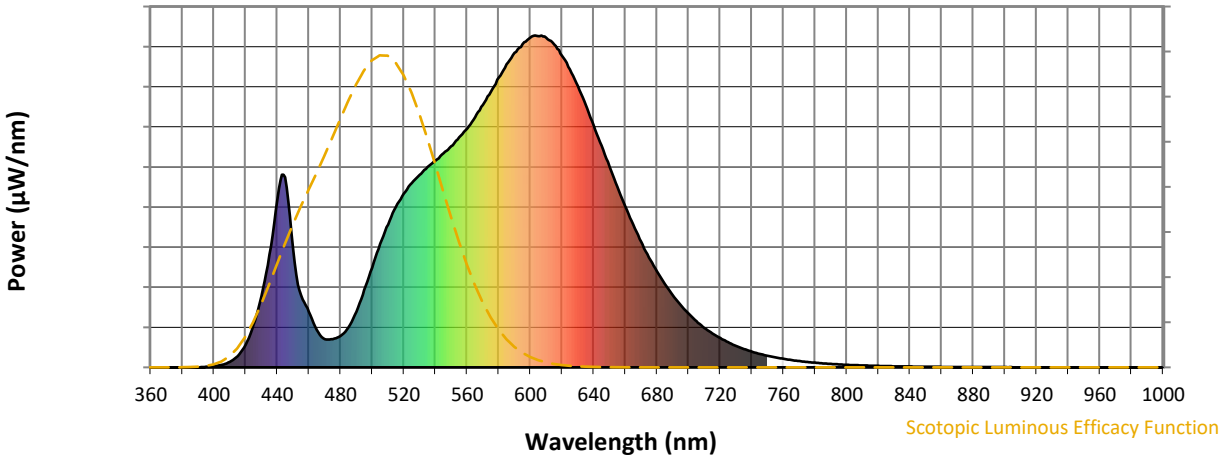


Photopic Lumens: NR

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

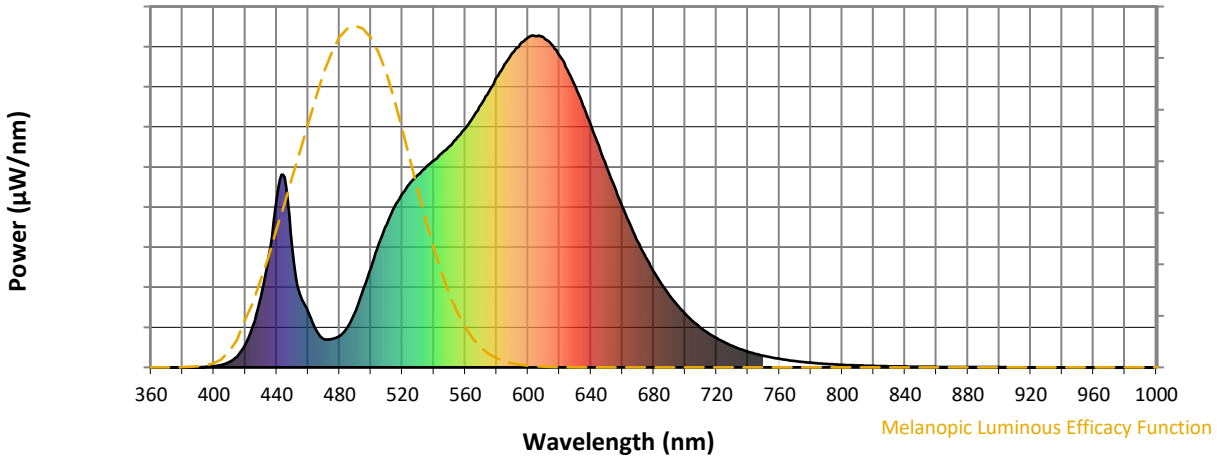


Scotopic Lumens: NR **S/P: 1.27**

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			

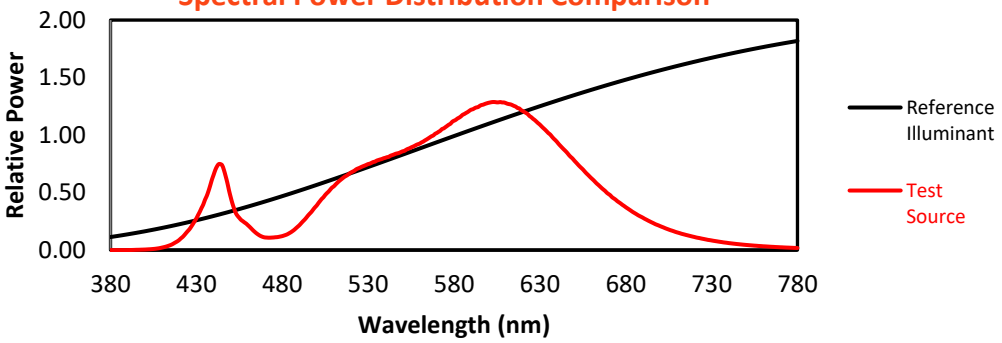
REPORT NUMBER: SP1-2408-195-9

TM-30-18

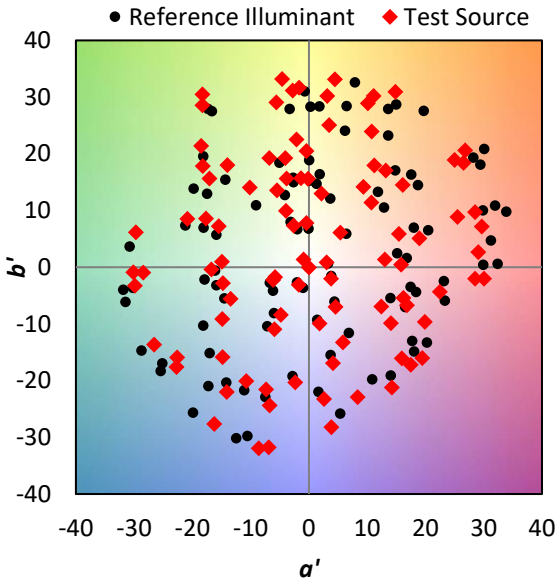
Summary

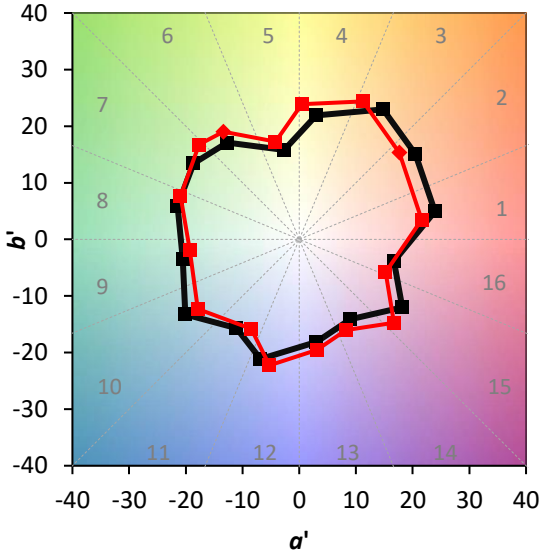
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

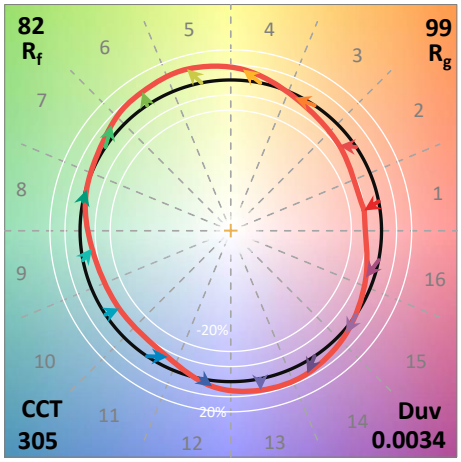
Spectral Power Distribution Comparison

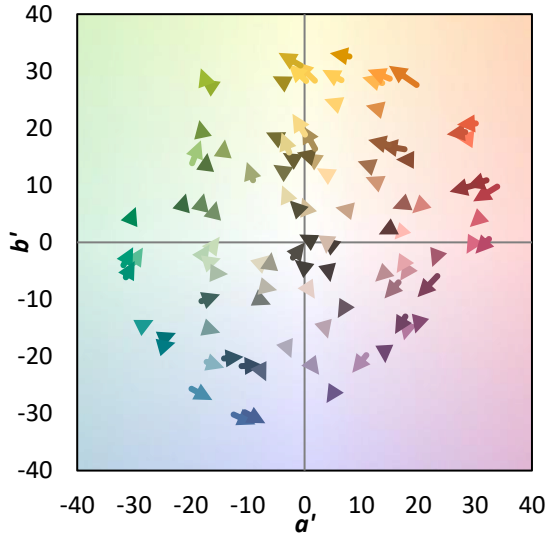


Color Vector Graphics







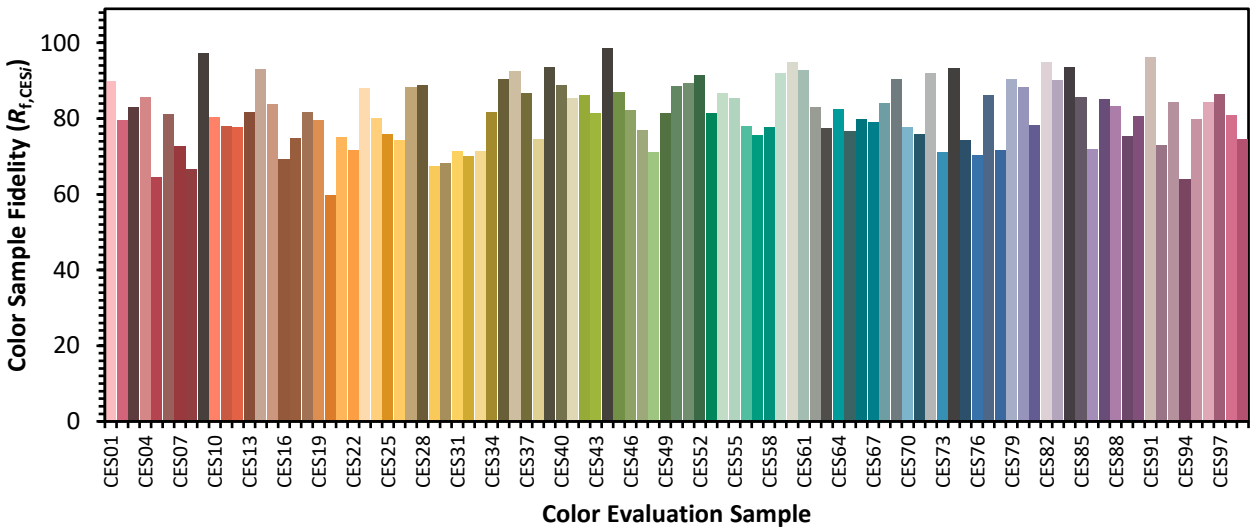


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

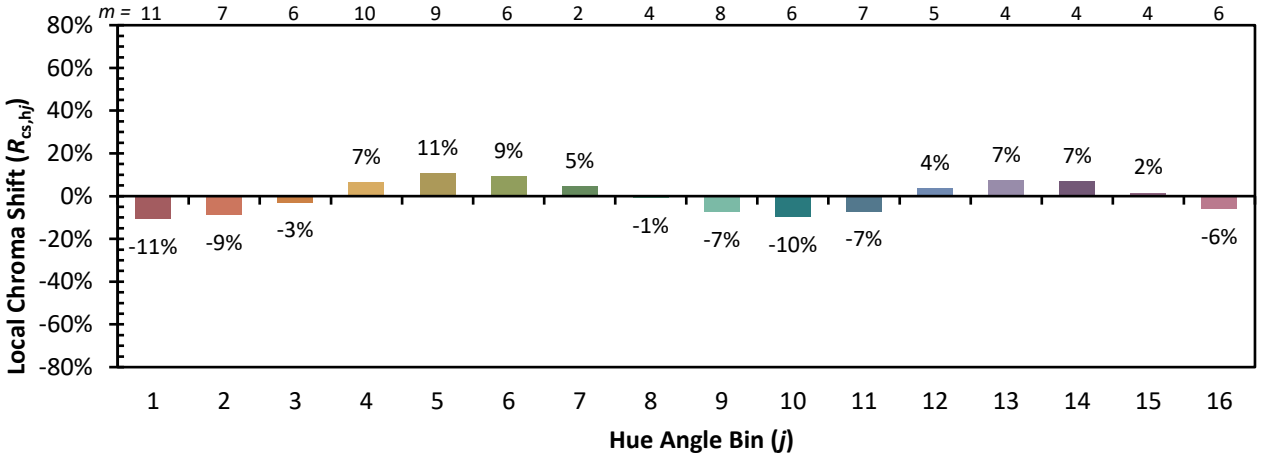
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

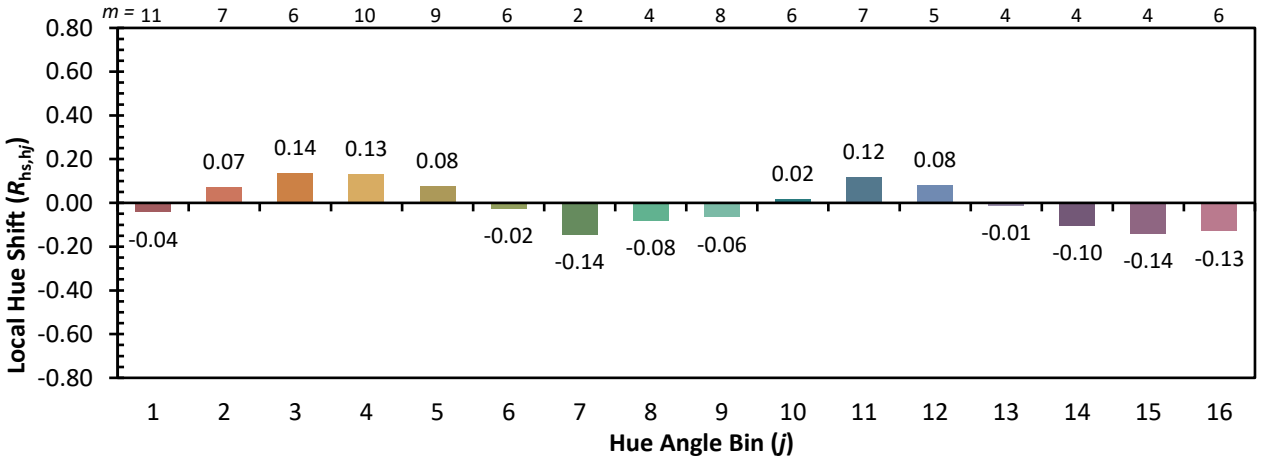


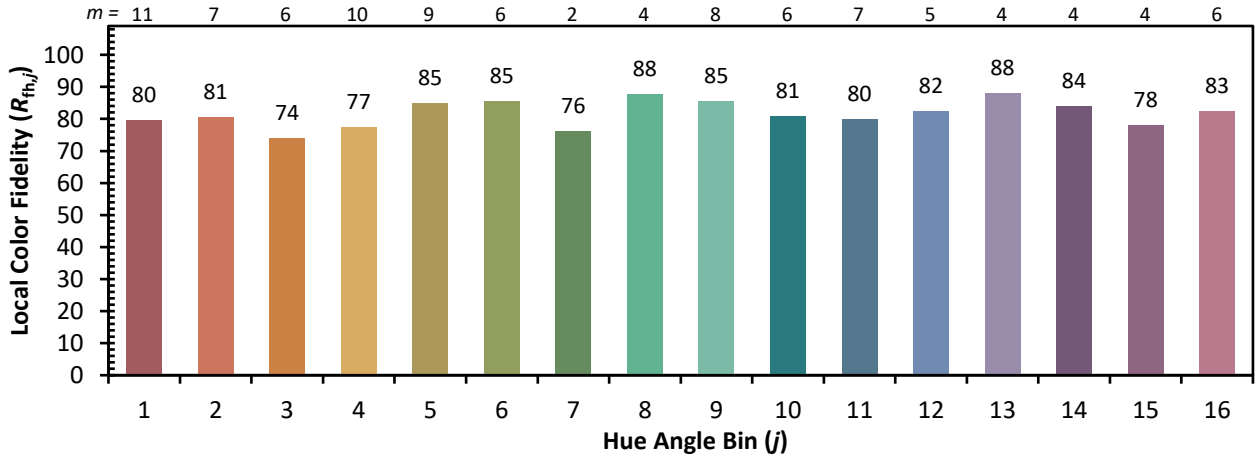
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



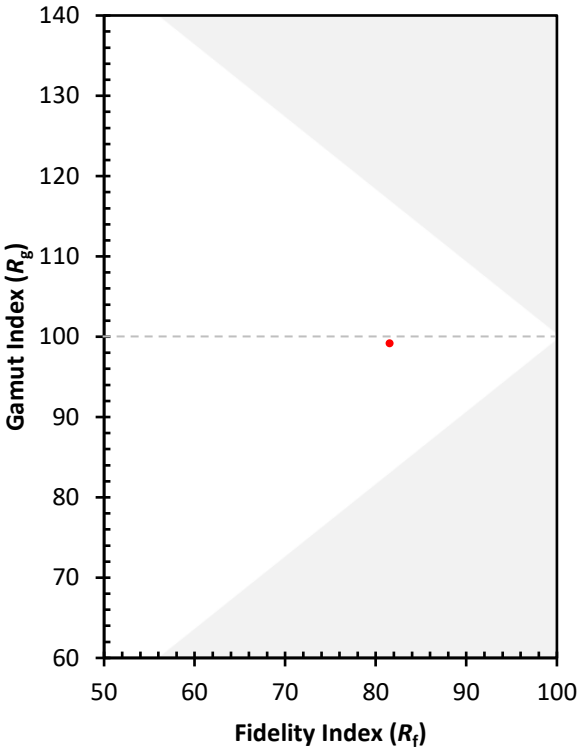


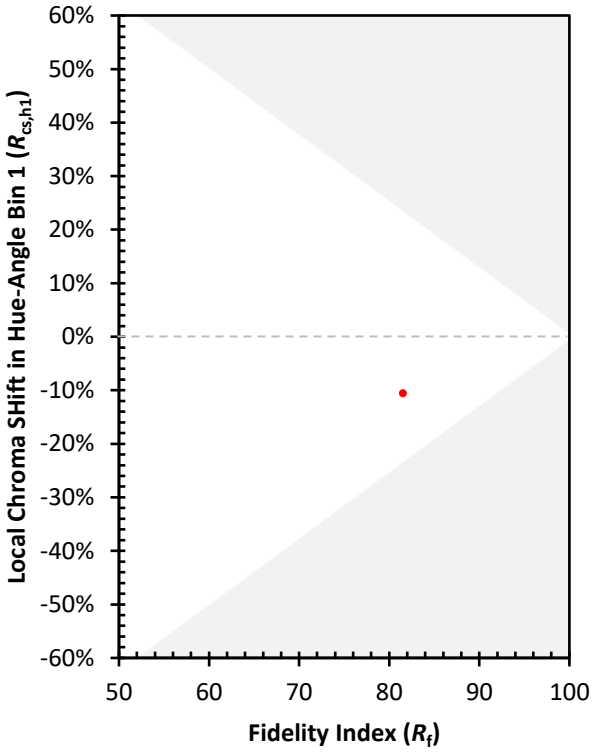


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)