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: P635015

Luminaire Tested: GWS-SA3C-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:	P635015
	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-SA3C-830-U-SLL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8625.5 lumens
Efficiency:	N/A
Efficacy:	92.7 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B2 - U0 - G2

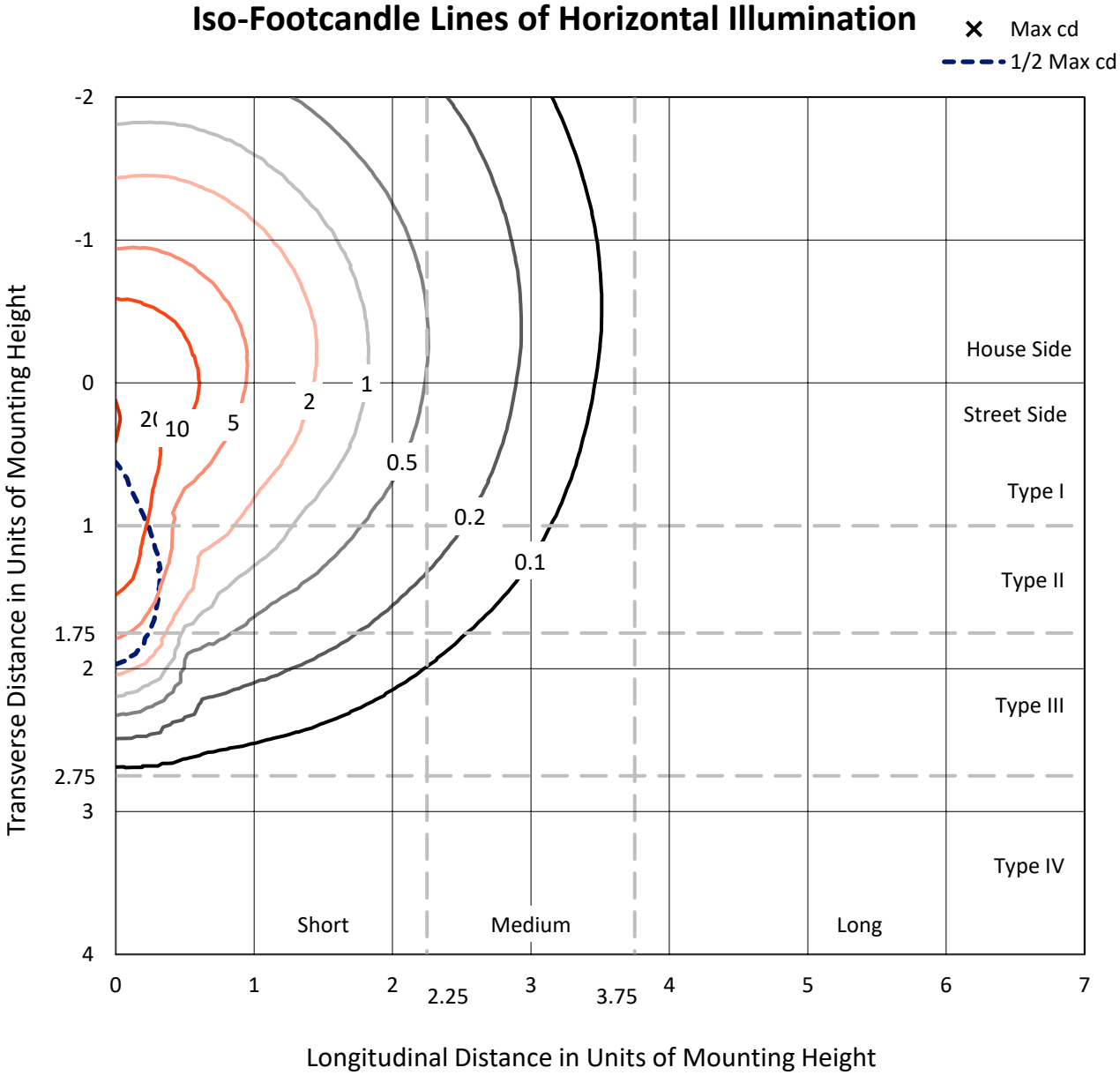
Input Watts (W):	93
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P635015
CATALOG NUMBER: GWS-SA3C-830-U-SLL-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



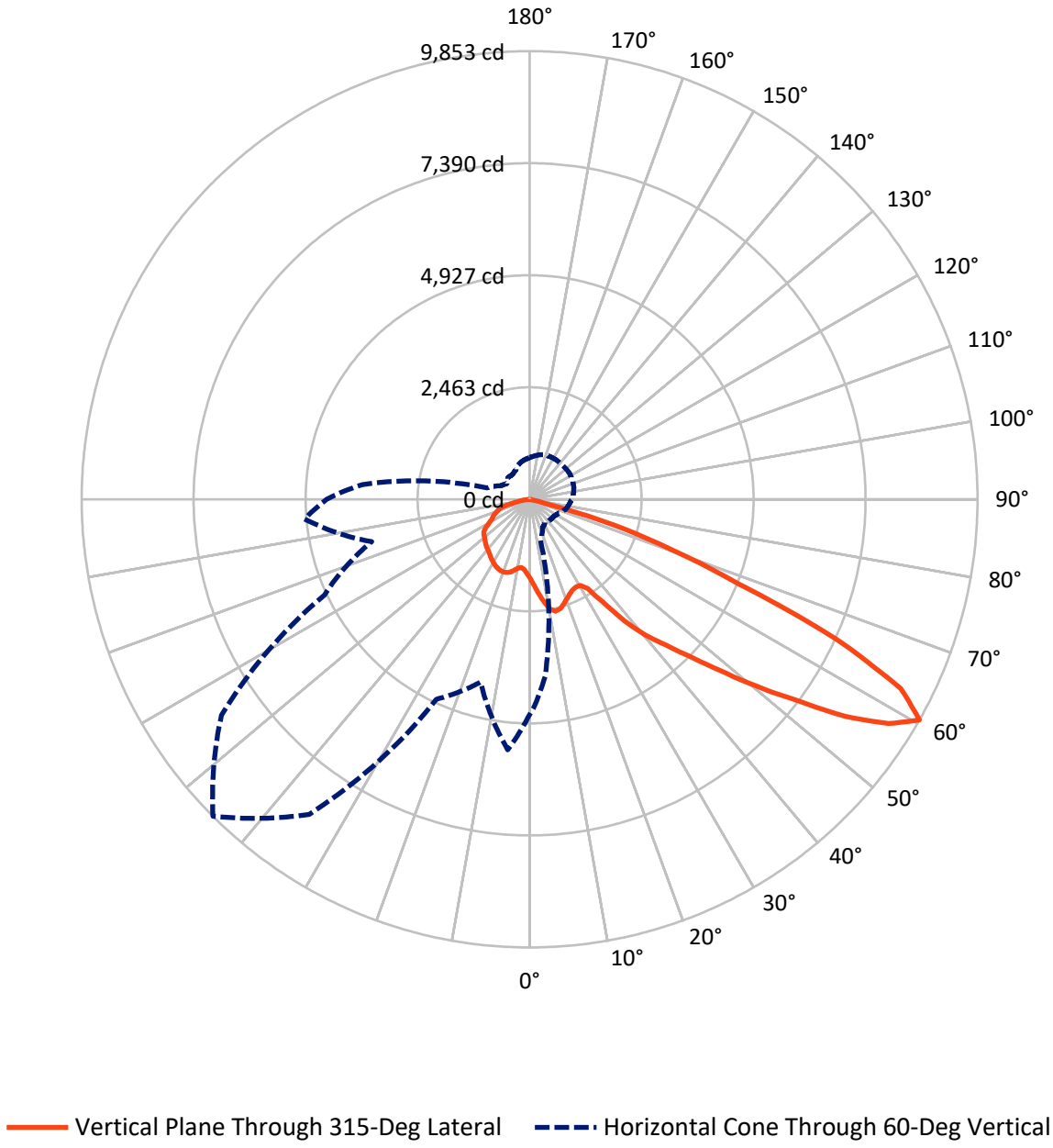
Based on 10 foot mounting height. Maximum calculated value = 21 fc
Type III - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P635015
CATALOG NUMBER: GWS-SA3C-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

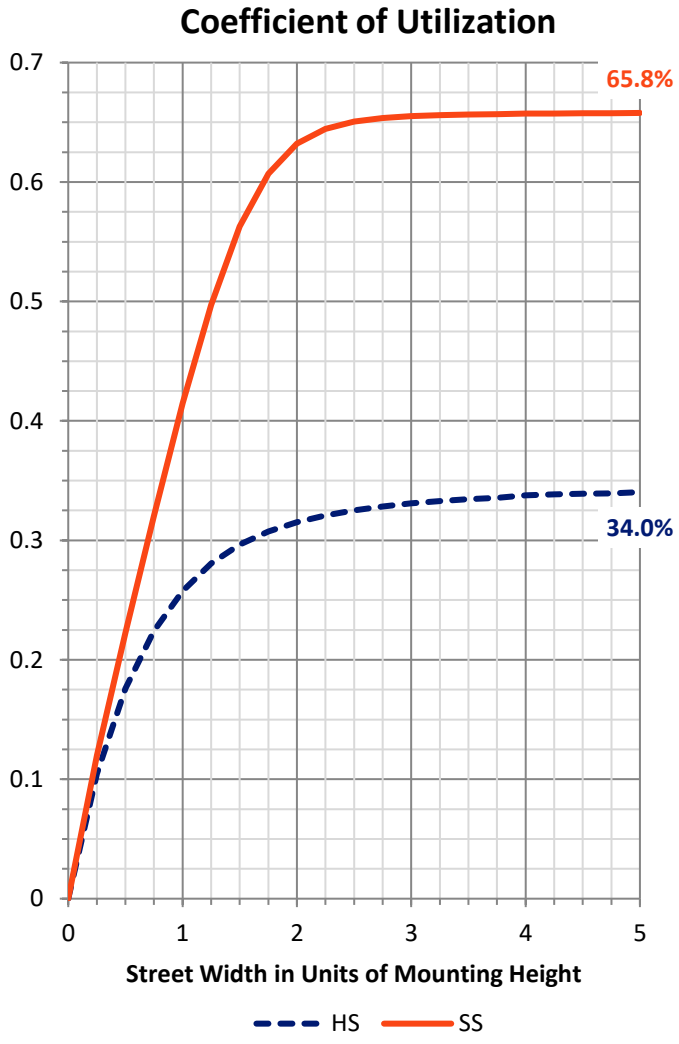
REPORT NUMBER: P635015
CATALOG NUMBER: GWS-SA3C-830-U-SLL-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2950.7	0.0	2950.7
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	5674.8	0.0	5674.8
	% Fixture	65.8	0.0	65.8
Total	Lumens	8625.5	0.0	8625.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.0	2.0
10°-20°	545.2	6.3
20°-30°	887.8	10.3
30°-40°	1247.2	14.5
40°-50°	1706.7	19.8
50°-60°	2189.6	25.4
60°-70°	1474.4	17.1
70°-80°	368.6	4.3
80°-90°	35.9	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°	8625.5	100.0
0°-180°	8625.5	100.0



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

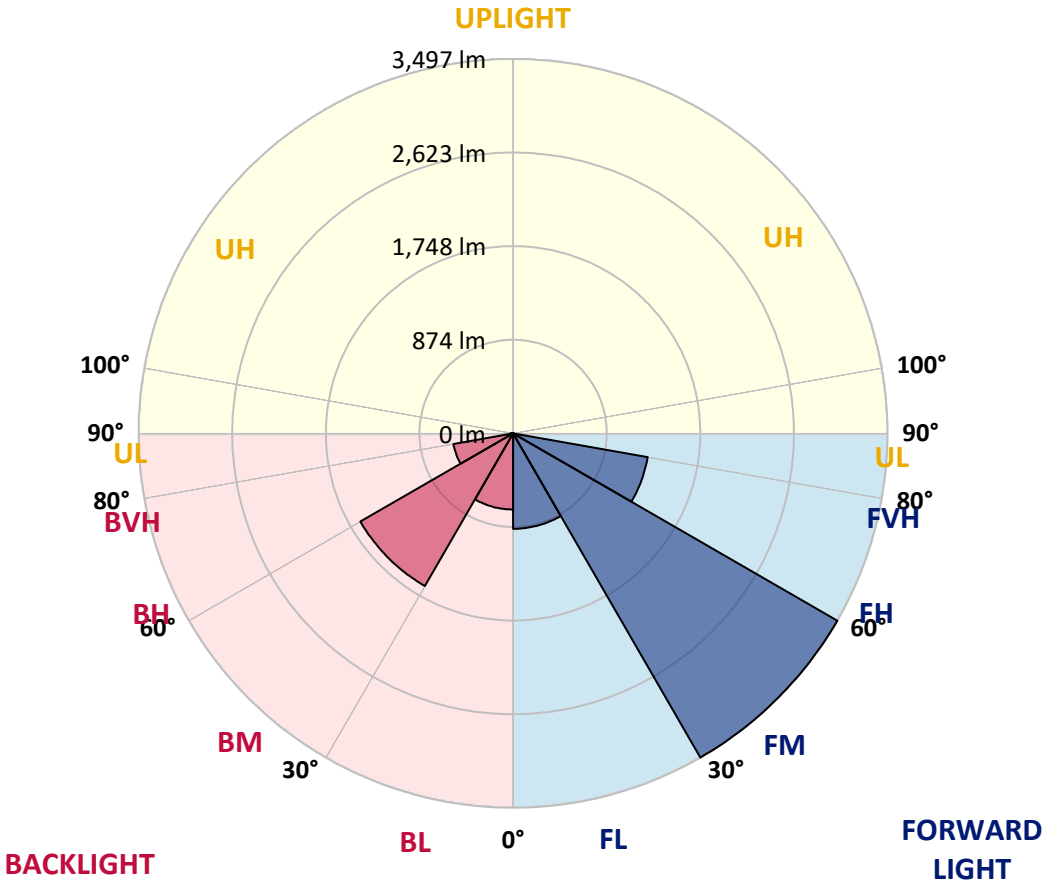
Scaled Data Report

REPORT NUMBER: P635015
CATALOG NUMBER: GWS-SA3C-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°)	891.7	10.3			
FM	(30°-60°)	3496.9	40.5			
FH	(60°-80°)	1276.9	14.8			G1/1800
FVH	(80°-90°)	9.3	0.1			G0/10
BL	(0°-30°)	711.3	8.2	B2/1000		
BM	(30°-60°)	1646.7	19.1	B2/2500		
BH	(60°-80°)	566.1	6.6	B2/1000		G2/1000
BVH	(80°-90°)	26.6	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-G2
Type III Short



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

Scaled Data Report

REPORT NUMBER: P635015
CATALOG NUMBER: GWS-SA3C-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7
2.5°	1840.6	1836.6	1832.6	1801.6	1793.7	1771.4	1755.6	1735.7	1707.1	1691.2	1677.7
5°	1955.7	1949.4	1927.9	1864.4	1823.1	1777.8	1740.5	1699.2	1655.5	1626.9	1604.6
7.5°	2064.6	2063.0	2026.4	1921.6	1854.9	1789.7	1738.9	1678.5	1615.7	1572.9	1544.3
10°	2165.5	2153.5	2109.8	1973.2	1885.8	1811.2	1756.4	1689.6	1616.5	1558.6	1520.4
12.5°	2254.4	2239.3	2179.0	2020.9	1912.8	1820.7	1761.1	1706.3	1657.9	1609.4	1565.7
15°	2327.5	2309.2	2248.1	2065.4	1936.7	1815.1	1731.7	1688.8	1705.5	1727.0	1678.5
17.5°	2395.8	2376.8	2302.1	2097.9	1943.8	1781.0	1659.4	1641.2	1725.4	1823.1	1800.8
20°	2453.0	2431.6	2345.0	2113.8	1931.1	1715.8	1565.7	1597.5	1708.7	1825.5	1861.2
22.5°	2515.0	2497.5	2393.4	2136.9	1915.2	1626.1	1487.1	1564.9	1680.1	1782.6	1836.6
25°	2614.3	2592.8	2468.9	2177.4	1907.3	1541.9	1430.7	1533.1	1640.4	1733.3	1775.4
27.5°	2758.1	2718.3	2572.2	2248.1	1916.0	1462.4	1394.9	1494.2	1594.3	1673.7	1707.9
30°	2914.5	2866.9	2686.6	2321.2	1928.7	1414.0	1375.8	1449.7	1523.6	1603.0	1640.4
32.5°	3099.6	3057.5	2808.9	2376.0	1901.7	1391.7	1361.6	1401.3	1460.1	1523.6	1554.6
35°	3320.5	3245.0	2942.3	2420.4	1814.3	1359.2	1348.8	1348.0	1379.0	1441.0	1475.9
37.5°	3558.0	3477.0	3106.8	2468.1	1678.5	1307.5	1318.7	1285.3	1313.9	1363.1	1402.9
40°	3752.6	3667.6	3272.8	2533.2	1508.5	1226.5	1251.9	1216.2	1233.7	1284.5	1329.0
42.5°	3943.3	3852.7	3427.7	2607.1	1344.1	1147.1	1159.8	1146.3	1151.8	1205.1	1267.0
45°	4193.5	4091.8	3618.4	2659.6	1196.3	1084.3	1072.4	1049.4	1078.8	1147.9	1213.8
47.5°	4611.3	4489.8	3930.5	2693.7	1089.1	1048.6	993.8	980.3	1016.8	1093.8	1162.2
50°	5099.9	4995.0	4429.4	2692.1	1008.9	1018.4	917.5	905.6	966.0	1043.8	1116.1
52.5°	5500.2	5393.8	4856.0	2612.7	942.9	954.0	873.0	839.6	922.3	994.6	1066.8
55°	5823.5	5703.6	5052.2	2280.6	859.5	851.6	824.6	763.4	867.5	945.3	1012.8
57.5°	5649.6	5506.6	4814.7	1734.1	773.7	723.7	741.1	695.9	792.8	890.5	955.6
60°	*4736.8*	*4608.1*	*3911.5*	*923.1*	*680.8*	*604.5*	*641.1*	*648.2*	*711.0*	*824.6*	*891.3*
62.5°	3253.7	3160.0	2650.8	560.0	537.0	485.4	542.6	594.2	641.1	737.2	795.2
65°	1591.9	1564.1	1325.8	359.1	375.7	392.4	449.6	512.4	581.5	665.7	726.8
67.5°	438.5	441.7	402.0	280.4	296.3	342.4	387.7	437.7	506.8	584.7	646.6
70°	193.0	196.2	202.6	216.1	246.3	288.4	335.2	386.9	450.4	515.5	575.1
72.5°	134.2	137.4	147.0	164.4	191.4	231.2	275.6	324.9	390.8	445.6	494.9
75°	82.6	85.0	93.7	108.8	127.1	157.3	201.0	246.3	304.2	354.3	398.0
77.5°	43.7	42.1	47.7	58.0	73.9	89.8	119.2	147.8	189.1	229.6	266.1
80°	23.8	23.0	26.2	31.8	36.5	49.3	69.1	88.2	112.0	135.0	154.9
82.5°	10.3	9.5	10.3	13.5	16.7	23.8	35.0	48.5	62.0	77.8	90.6
85°	0.0	0.0	0.0	0.8	4.0	6.4	11.9	17.5	25.4	35.0	42.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	7.1
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: P635015
CATALOG NUMBER: GWS-SA3C-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7
2.5°	1669.8	1649.9	1648.3	1632.4	1634.0	1634.8	1618.9	1612.6	1618.1	1624.5	1621.3
5°	1596.7	1576.0	1567.3	1552.2	1550.6	1543.5	1537.1	1529.2	1534.7	1540.3	1543.5
7.5°	1533.1	1519.6	1514.1	1510.1	1511.7	1508.5	1495.8	1488.7	1487.9	1490.2	1493.4
10°	1512.5	1501.4	1508.5	1519.6	1527.6	1533.1	1519.6	1507.7	1496.6	1491.8	1491.8
12.5°	1557.0	1542.7	1557.0	1568.9	1584.8	1588.7	1573.6	1560.9	1557.0	1561.7	1571.3
15°	1655.5	1622.1	1621.3	1628.5	1641.2	1647.5	1633.2	1626.9	1626.9	1657.1	1680.9
17.5°	1754.0	1699.2	1676.1	1672.2	1680.1	1682.5	1670.6	1665.0	1679.3	1738.1	1782.6
20°	1823.1	1756.4	1706.3	1696.8	1699.2	1700.0	1690.4	1686.4	1707.1	1778.6	1815.9
22.5°	1815.9	1766.7	1705.5	1693.6	1697.6	1696.0	1687.2	1685.7	1702.3	1764.3	1781.8
25°	1766.7	1728.6	1676.9	1669.0	1675.3	1674.5	1665.8	1661.8	1669.0	1710.3	1711.9
27.5°	1710.3	1676.9	1632.4	1630.0	1640.4	1645.9	1630.8	1618.9	1616.5	1644.3	1638.0
30°	1642.8	1618.1	1582.4	1584.0	1603.0	1606.2	1587.9	1570.5	1565.7	1580.8	1572.1
32.5°	1562.5	1554.6	1535.5	1539.5	1557.8	1564.1	1545.1	1526.8	1521.2	1526.0	1507.7
35°	1494.2	1491.0	1492.6	1499.8	1515.7	1520.4	1504.5	1490.2	1482.3	1465.6	1441.8
37.5°	1423.5	1432.3	1455.3	1468.8	1477.5	1475.9	1467.2	1456.9	1444.2	1413.2	1383.8
40°	1357.6	1379.8	1421.1	1436.2	1439.4	1440.2	1433.8	1425.1	1409.2	1367.9	1334.5
42.5°	1306.7	1331.4	1386.2	1409.2	1410.8	1412.4	1406.0	1398.9	1376.6	1321.8	1289.3
45°	1253.5	1286.1	1350.4	1378.2	1376.6	1375.8	1370.3	1367.1	1340.9	1277.3	1241.6
47.5°	1208.2	1246.4	1315.5	1339.3	1338.5	1337.7	1333.7	1333.7	1307.5	1238.4	1197.9
50°	1163.8	1207.4	1279.7	1299.6	1301.2	1299.6	1298.0	1300.4	1269.4	1195.5	1155.8
52.5°	1115.3	1164.5	1240.0	1258.3	1267.8	1271.8	1271.8	1266.2	1229.7	1152.6	1108.9
55°	1062.1	1108.9	1196.3	1220.9	1228.9	1236.0	1236.0	1224.9	1190.8	1112.9	1066.0
57.5°	996.1	1037.4	1106.6	1131.2	1150.2	1155.0	1155.0	1136.7	1108.9	1034.3	996.1
60°	*924.6*	*960.4*	*1007.3*	*1033.5*	*1047.8*	*1038.2*	*1045.4*	*1040.6*	*1018.4*	*949.3*	*917.5*
62.5°	829.3	865.9	917.5	944.5	950.9	941.3	950.9	950.1	919.9	857.9	819.8
65°	761.0	796.8	847.6	882.5	892.9	890.5	896.8	887.3	850.0	791.2	754.7
67.5°	680.0	718.1	776.9	815.8	837.3	839.6	848.4	828.5	790.4	726.1	680.0
70°	602.9	635.5	680.8	717.3	747.5	762.6	764.2	735.6	687.9	634.7	601.3
72.5°	521.9	555.3	610.1	649.8	687.9	705.4	705.4	670.4	618.8	560.0	524.3
75°	423.4	454.4	504.4	547.3	591.0	613.3	612.5	582.3	525.1	469.5	432.1
77.5°	286.8	309.8	341.6	374.1	380.5	398.0	406.7	368.6	336.8	306.6	273.3
80°	166.8	181.1	198.6	216.9	220.8	226.4	212.1	197.8	181.1	161.3	146.2
82.5°	97.7	107.2	116.0	130.3	132.7	134.2	121.5	115.2	101.7	89.8	80.2
85°	47.7	50.8	58.8	65.9	62.8	61.2	55.6	49.3	43.7	38.9	34.2
87.5°	9.5	9.5	14.3	13.5	11.1	9.5	5.6	7.1	1.6	1.6	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: P635015
CATALOG NUMBER: GWS-SA3C-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7
2.5°	1631.6	1645.1	1661.8	1684.1	1709.5	1736.5	1762.7	1782.6	1802.4	1831.8	1827.1
5°	1548.2	1571.3	1597.5	1631.6	1672.9	1719.8	1772.2	1824.7	1881.1	1928.7	1949.4
7.5°	1499.8	1525.2	1556.2	1600.7	1653.9	1711.1	1785.0	1869.9	1961.3	2024.1	2063.0
10°	1499.8	1532.3	1572.9	1615.7	1662.6	1721.4	1812.8	1919.2	2036.8	2119.4	2164.7
12.5°	1586.4	1618.9	1627.7	1626.1	1652.3	1717.4	1835.0	1970.8	2111.4	2198.8	2254.4
15°	1721.4	1732.5	1666.6	1606.2	1610.2	1688.8	1845.3	2012.1	2175.8	2280.6	2341.0
17.5°	1812.0	1782.6	1665.0	1559.3	1537.1	1640.4	1845.3	2051.9	2244.1	2362.5	2418.9
20°	1819.1	1746.0	1624.5	1514.1	1456.9	1576.0	1832.6	2082.0	2310.0	2441.1	2501.5
22.5°	1756.4	1684.1	1581.6	1475.1	1390.9	1498.2	1812.0	2105.1	2366.4	2515.0	2589.6
25°	1684.9	1624.5	1537.9	1435.4	1345.7	1419.5	1792.9	2144.0	2445.1	2615.1	2690.5
27.5°	1615.0	1564.1	1485.5	1402.1	1320.2	1351.2	1781.0	2201.2	2538.8	2757.3	2822.4
30°	1546.6	1500.6	1429.1	1370.3	1306.7	1306.7	1770.7	2267.1	2662.7	2916.9	2982.1
32.5°	1477.5	1433.8	1375.8	1339.3	1298.8	1289.3	1742.1	2329.1	2790.6	3091.7	3158.4
35°	1413.2	1369.5	1325.0	1309.9	1294.8	1275.8	1671.4	2377.6	2915.3	3295.8	3353.0
37.5°	1352.8	1310.7	1277.3	1273.4	1275.0	1239.2	1560.1	2418.1	3071.0	3504.8	3534.9
40°	1300.4	1253.5	1227.3	1226.5	1234.5	1180.4	1419.5	2476.1	3249.0	3681.9	3669.2
42.5°	1253.5	1204.3	1172.5	1179.6	1174.9	1121.7	1282.1	2529.3	3403.9	3847.9	3822.5
45°	1207.4	1159.8	1115.3	1125.6	1120.1	1085.1	1165.3	2568.2	3575.5	4047.3	4050.5
47.5°	1163.0	1116.1	1071.6	1058.9	1058.1	1074.0	1075.6	2580.9	3855.1	4368.2	4296.0
50°	1121.7	1074.8	1028.7	985.8	1002.5	1051.7	1008.9	2571.4	4273.7	4722.5	4520.8
52.5°	1078.8	1034.3	983.4	906.4	950.1	998.5	949.3	2537.2	4529.5	5035.5	4914.8
55°	1029.5	987.4	918.3	824.6	877.8	888.1	888.1	2206.8	4638.3	5345.3	5420.0
57.5°	963.6	908.0	798.3	722.9	770.5	730.8	823.0	1544.3	4458.8	5247.6	5537.6
60°	*888.9*	*829.3*	*713.3*	*659.3*	*673.6*	*603.7*	*701.4*	*968.3*	*3695.4*	*4465.2*	*4967.2*
62.5°	790.4	735.6	639.5	597.4	568.0	492.5	564.8	612.5	2533.2	3315.7	3658.1
65°	724.5	664.1	578.3	522.7	462.3	396.4	374.9	402.0	1362.3	1855.6	2086.8
67.5°	646.6	587.0	506.0	436.1	387.7	340.0	302.7	293.1	467.1	618.0	668.9
70°	572.7	515.5	448.0	382.9	334.4	287.6	251.0	224.8	216.1	214.5	211.3
72.5°	497.3	444.1	387.7	327.3	274.1	231.2	198.6	168.4	155.7	151.7	147.8
75°	407.5	365.4	309.0	243.9	201.0	161.3	135.8	116.0	104.9	100.9	96.1
77.5°	262.1	243.1	193.8	157.3	121.5	96.1	82.6	69.9	62.8	61.2	57.2
80°	139.8	130.3	107.2	90.6	72.3	58.8	51.6	44.5	40.5	38.9	37.3
82.5°	77.8	70.7	59.6	52.4	42.1	35.7	31.8	28.6	26.2	25.4	24.6
85°	35.0	30.2	23.8	22.2	19.9	18.3	17.5	15.9	15.1	14.3	13.5
87.5°	1.6	3.2	4.0	3.2	3.2	4.8	5.6	5.6	4.8	4.8	4.0
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: P635015
CATALOG NUMBER: GWS-SA3C-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7	1739.7
2.5°	1856.4	1880.3	1882.7	1890.6	1880.3	1877.9	1861.2	1851.7	1842.9	1840.6
5°	2001.0	2048.7	2067.7	2081.3	2068.5	2062.2	2025.6	1987.5	1966.1	1955.7
7.5°	2149.6	2221.1	2258.4	2275.1	2276.7	2248.1	2185.3	2113.8	2078.1	2064.6
10°	2282.2	2370.4	2419.7	2451.4	2440.3	2405.4	2319.6	2222.6	2177.4	2165.5
12.5°	2380.7	2464.9	2503.1	2523.7	2522.9	2503.9	2422.8	2318.0	2266.3	2254.4
15°	2444.3	2494.3	2496.7	2501.5	2515.0	2540.4	2498.3	2401.4	2344.2	2327.5
17.5°	2494.3	2474.5	2437.1	2424.4	2454.6	2525.3	2550.7	2472.1	2410.1	2395.8
20°	2526.1	2426.0	2360.1	2335.4	2370.4	2485.6	2582.5	2535.6	2471.3	2453.0
22.5°	2550.7	2380.7	2274.3	2257.6	2294.1	2442.7	2615.1	2611.1	2540.4	2515.0
25°	2589.6	2350.5	2213.9	2202.0	2236.2	2422.0	2658.8	2713.6	2650.8	2614.3
27.5°	2650.8	2347.4	2182.9	2179.0	2225.8	2440.3	2721.5	2863.7	2785.1	2758.1
30°	2735.8	2377.6	2190.1	2198.0	2255.2	2506.2	2819.2	3035.3	2956.6	2914.5
32.5°	2858.1	2458.6	2298.9	2333.1	2375.2	2611.9	2962.2	3221.2	3161.6	3099.6
35°	3019.4	2681.0	2620.6	2766.0	2726.3	2843.1	3134.6	3446.8	3374.5	3320.5
37.5°	3234.7	3137.0	3192.6	3392.8	3296.6	3280.0	3345.1	3651.7	3612.0	3558.0
40°	3536.5	3556.4	3658.9	3921.8	3782.8	3675.6	3603.3	3805.8	3819.3	3752.6
42.5°	3736.7	3828.1	4075.1	4373.8	4182.4	3925.8	3819.3	4002.8	4003.6	3943.3
45°	3811.4	4050.5	4566.8	4910.8	4590.7	4068.8	3938.5	4270.5	4262.6	4193.5
47.5°	3784.4	4238.0	5077.6	5603.5	5115.0	4170.4	3921.8	4651.8	4716.2	4611.3
50°	3728.0	4426.2	5674.2	6451.9	5758.4	4278.5	3896.4	5074.4	5180.9	5099.9
52.5°	3785.2	4635.9	6379.6	7328.9	6565.5	4450.9	4068.0	5617.0	5597.9	5500.2
55°	3966.3	4883.8	7236.7	8430.7	7452.0	4742.4	4508.8	6134.1	5940.3	5823.5
57.5°	3957.6	5060.9	7988.2	9302.1	8223.3	4981.5	4662.2	6188.9	5797.3	5649.6
60°	3592.1	4979.9	8274.2	9853.4	8456.1	4849.6	4157.7	5528.0	4891.7	4736.8
62.5°	2681.0	4419.1	7719.7	9163.1	7797.5	4188.7	3126.6	3967.9	3515.1	3253.7
65°	1715.0	3457.1	6490.0	7423.4	6427.3	3203.7	1862.0	2127.3	1666.6	1591.9
67.5°	730.0	2440.3	5045.0	4961.6	4808.3	2075.7	718.9	599.0	446.4	438.5
70°	241.5	1660.2	3110.0	3309.3	2871.6	1429.9	237.5	201.0	200.2	193.0
72.5°	158.1	891.3	1750.8	1949.4	1847.7	823.0	143.8	134.2	137.4	134.2
75°	94.5	193.8	294.7	382.9	294.7	138.2	86.6	85.0	86.6	82.6
77.5°	55.6	54.0	52.4	52.4	51.6	47.7	43.7	42.1	42.9	43.7
80°	35.7	34.2	32.6	31.8	27.8	26.2	24.6	23.0	23.0	23.8
82.5°	23.0	21.4	19.9	17.5	14.3	11.9	11.1	9.5	9.5	10.3
85°	11.9	9.5	7.1	5.6	3.2	1.6	0.0	0.0	0.0	0.0
87.5°	2.4	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

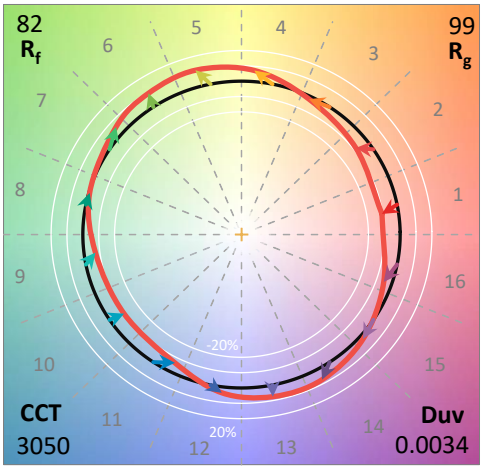
Test Information

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

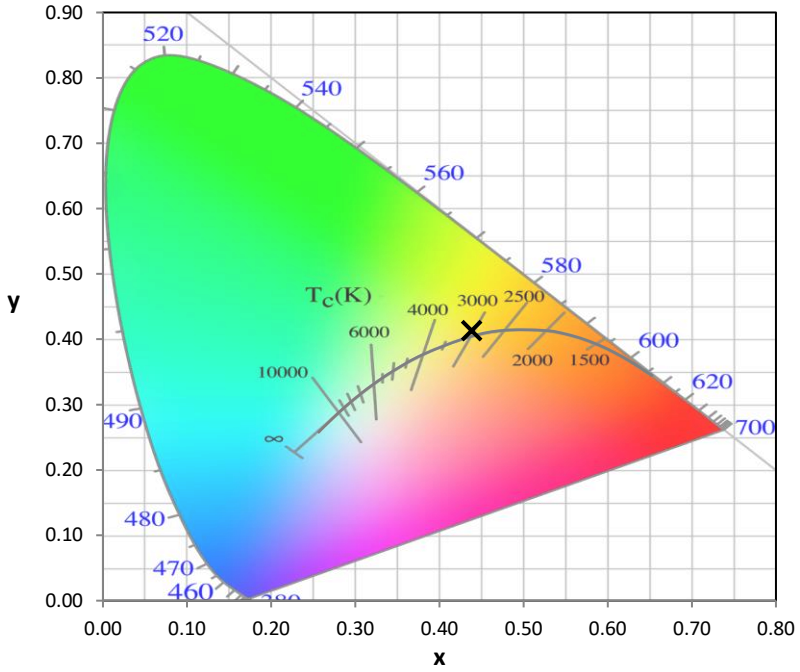
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

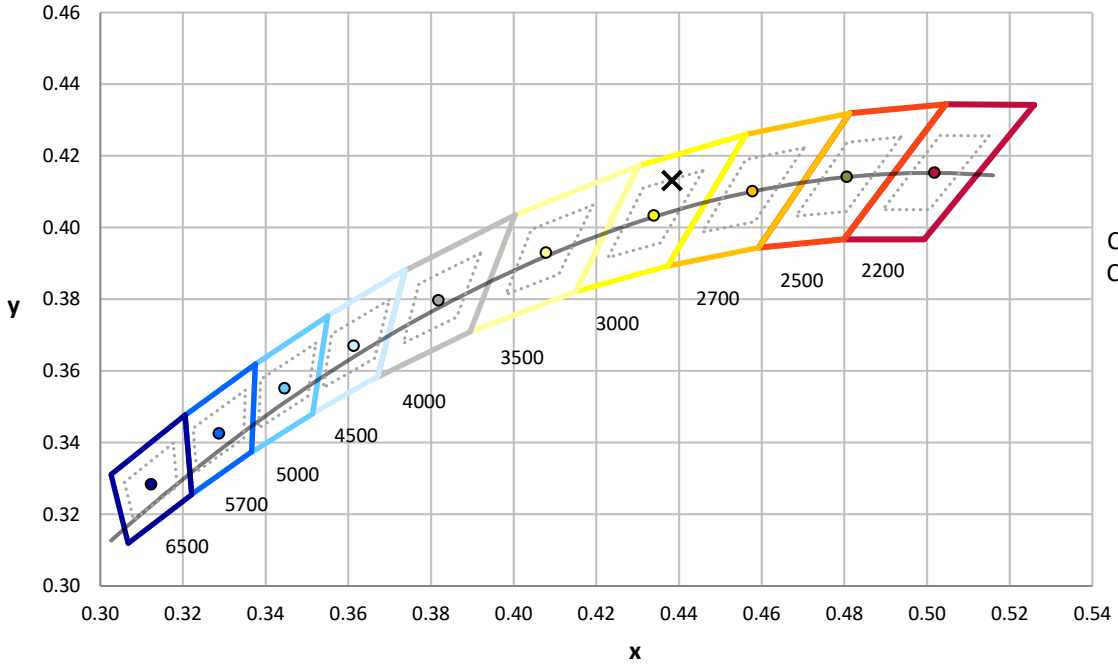
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

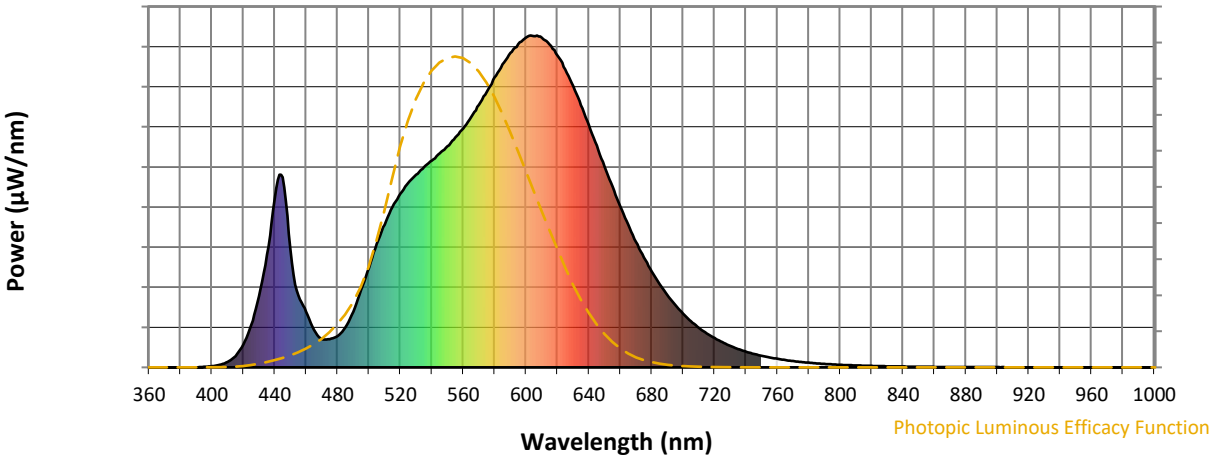


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

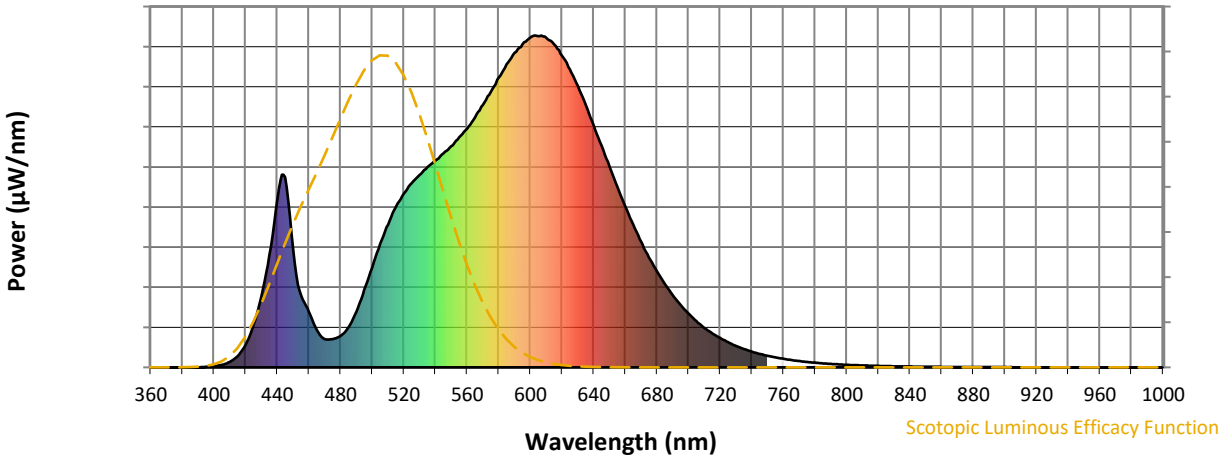


Photopic Lumens: NR

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

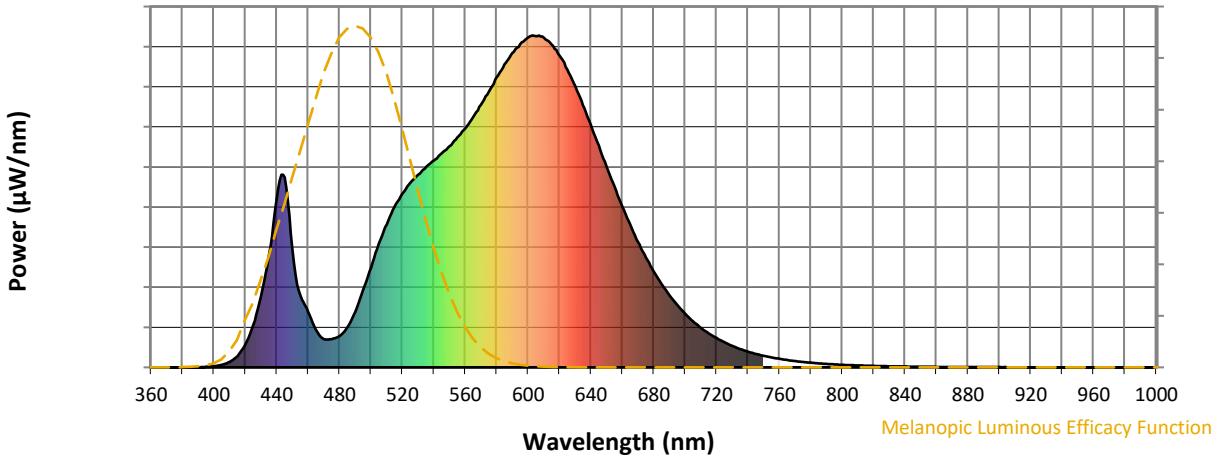


Scotopic Lumens: NR **S/P: 1.27**

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			

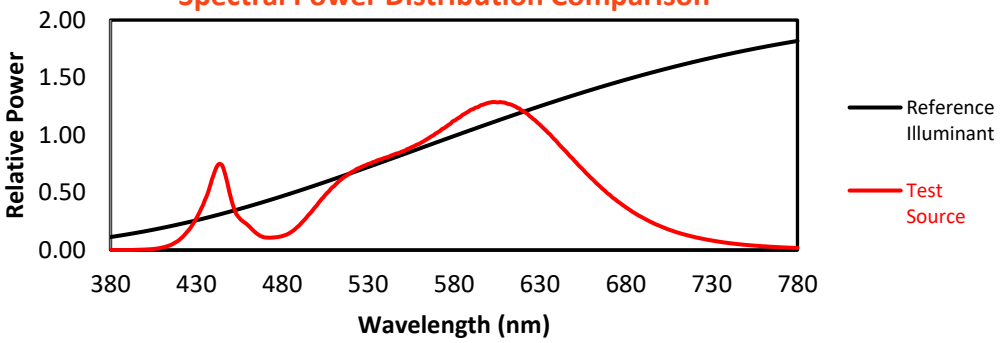
REPORT NUMBER: SP1-2408-195-9

TM-30-18

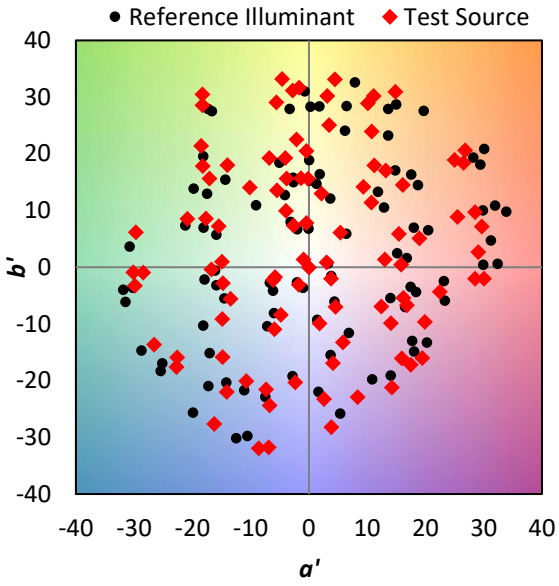
Summary

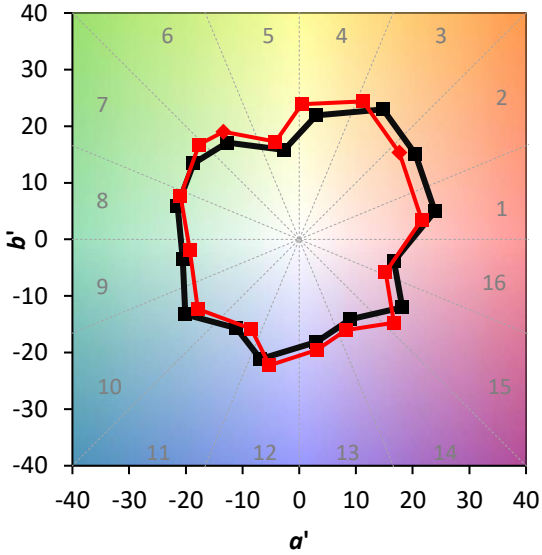
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

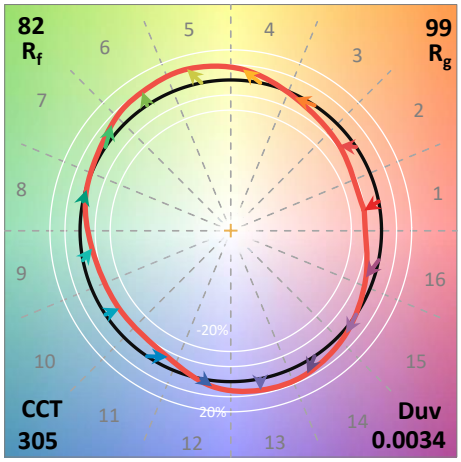
Spectral Power Distribution Comparison

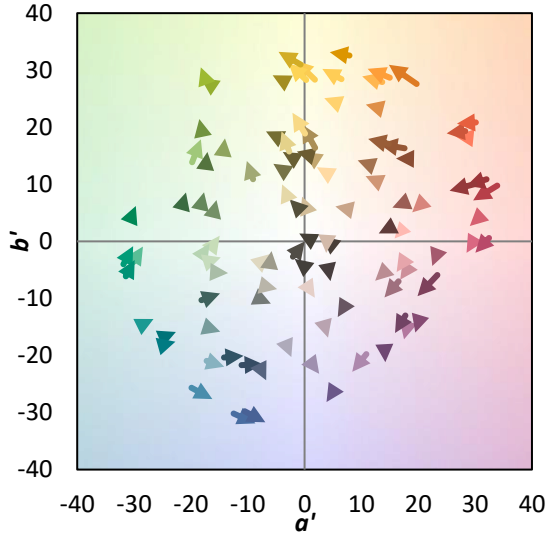


Color Vector Graphics







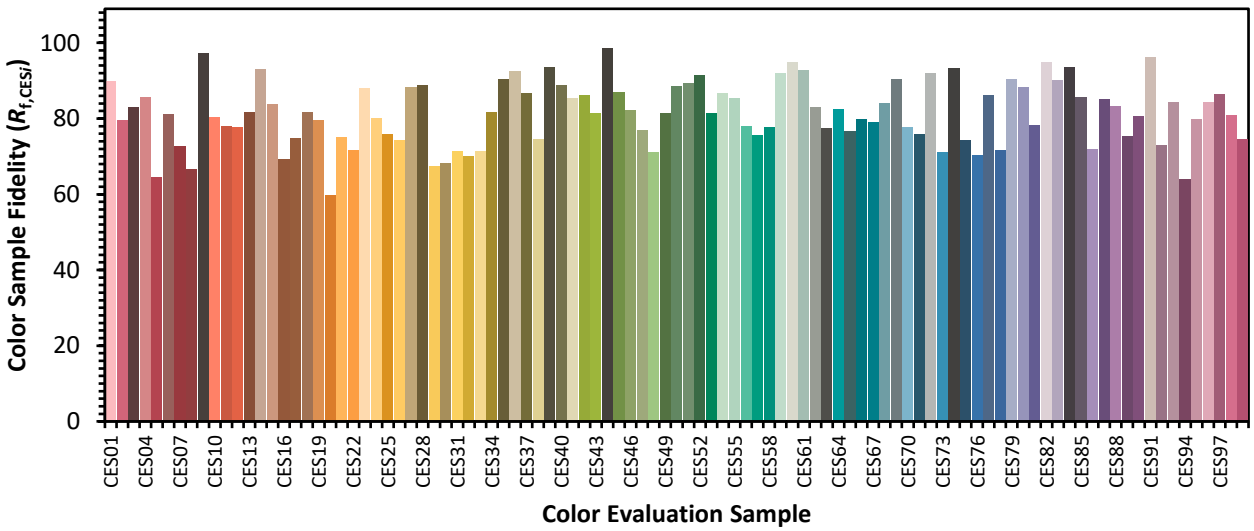


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

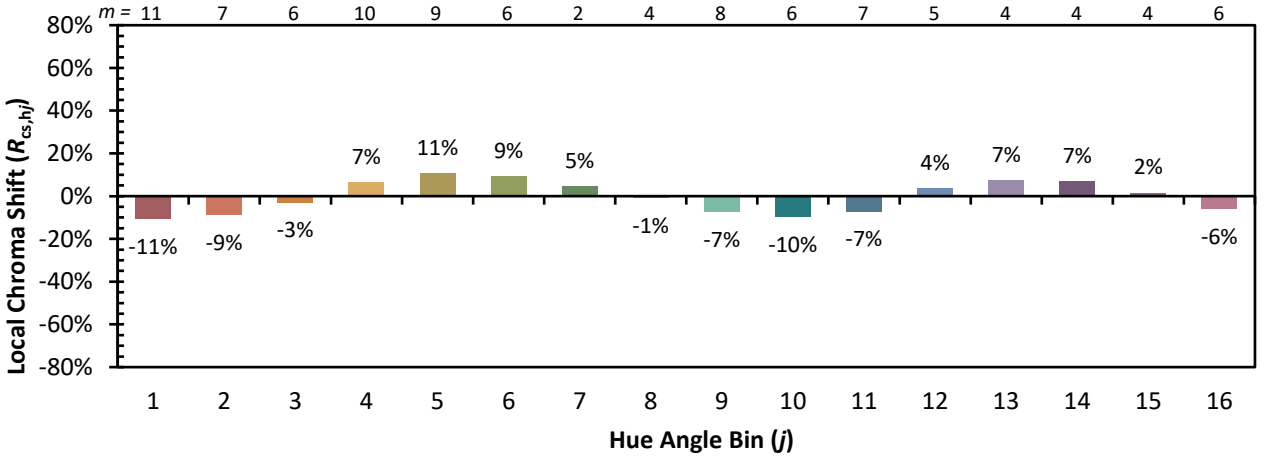
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

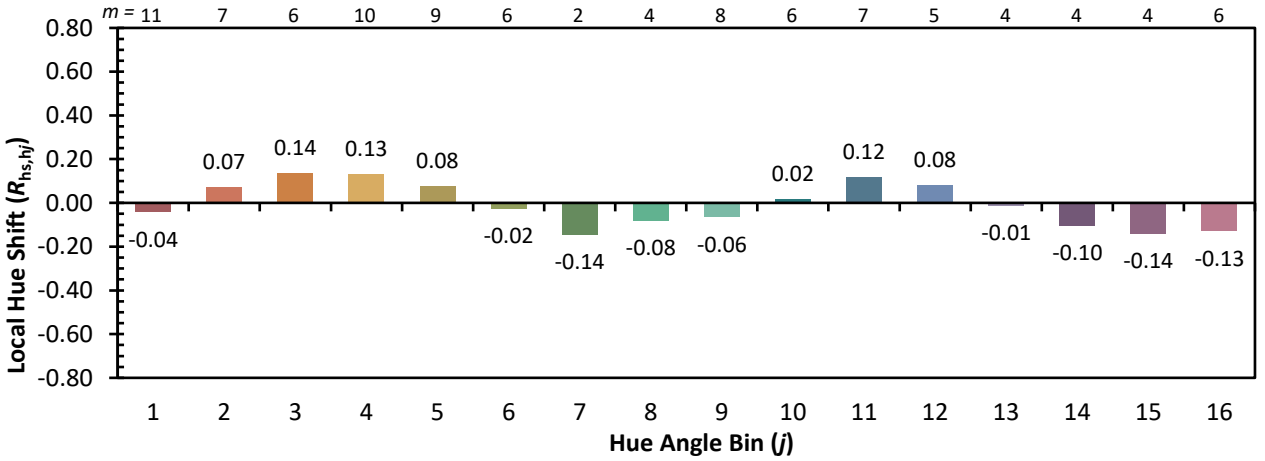


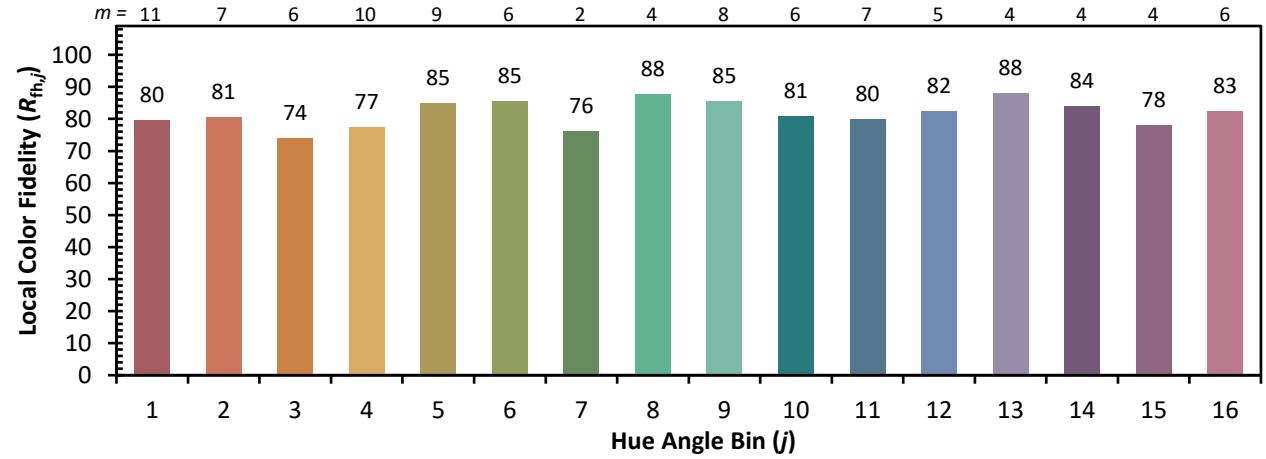
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



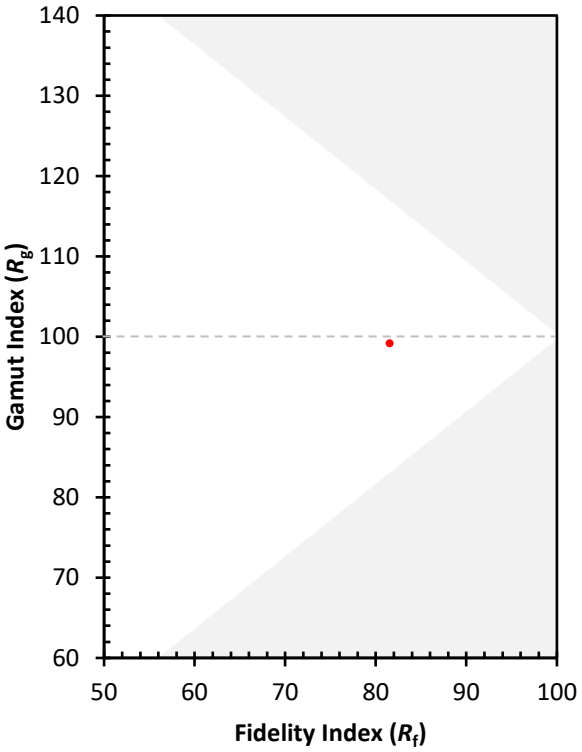


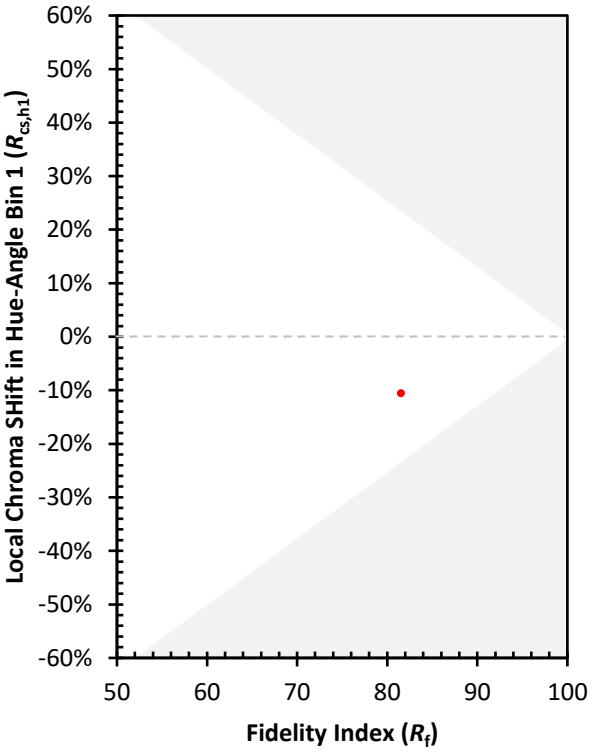


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)