

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P386056

Luminaire Tested: **GPC-SA1C-830-U-SLR-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P386056
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-28)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GPC-SA1C-830-U-SLR-HSS
Description: GALLEON PEDESTRIAN LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4451 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G1

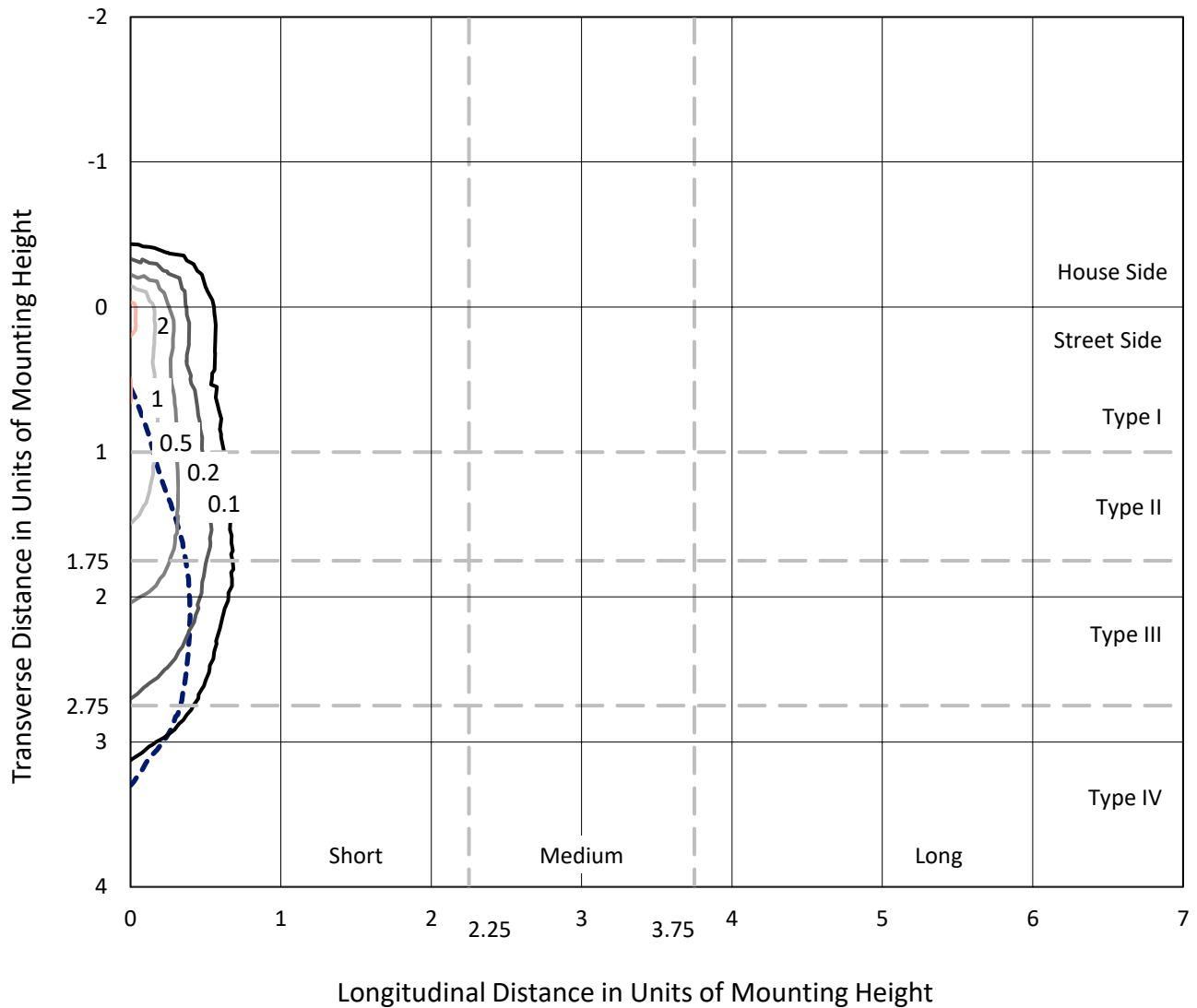
Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P386056
 CATALOG NUMBER: GPC-SA1C-830-U-SLR-HSS

Iso-Footcandle Lines of Horizontal Illumination

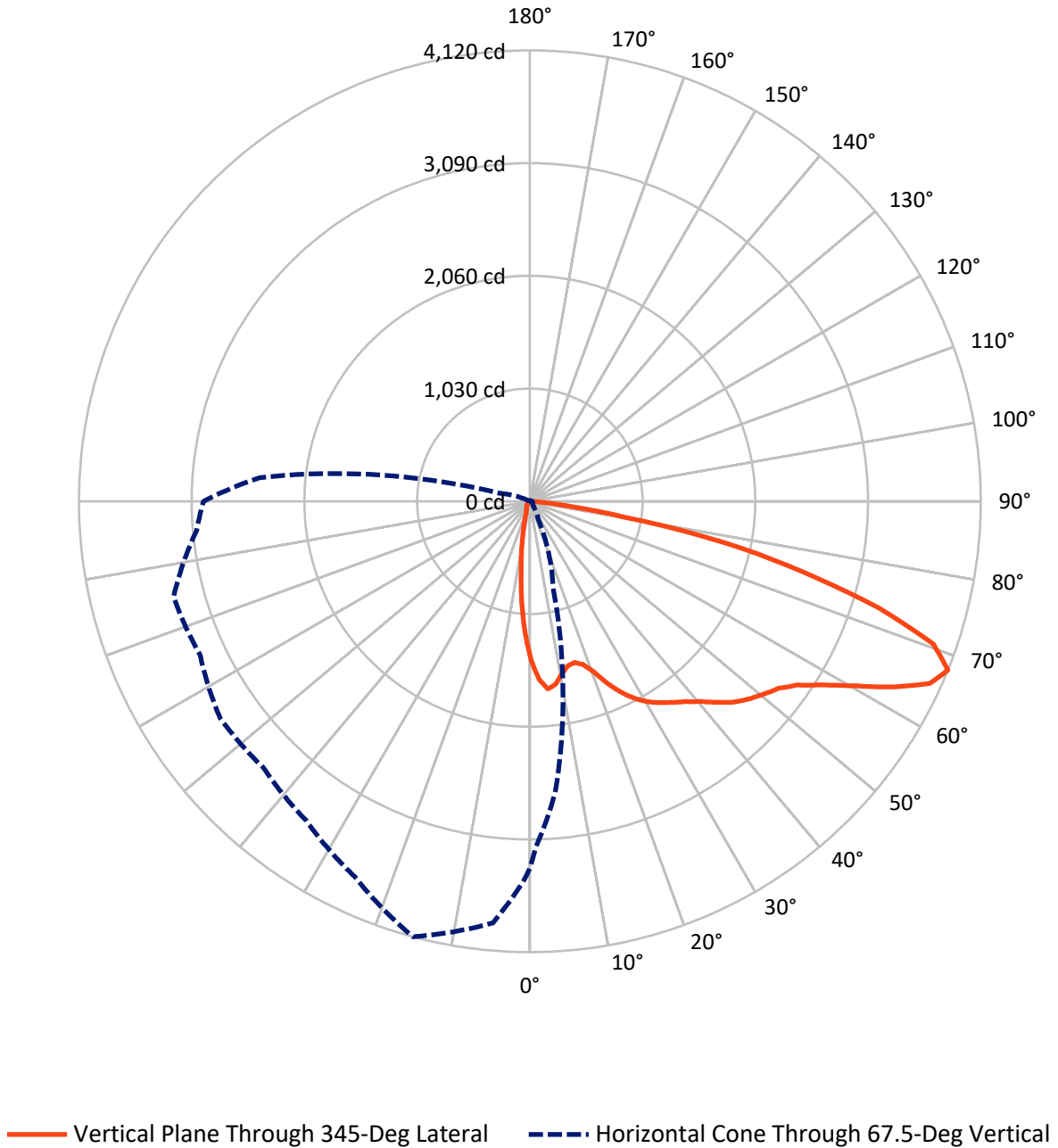
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Medium - N/A

REPORT NUMBER: P386056
CATALOG NUMBER: GPC-SA1C-830-U-SLR-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P386056
 CATALOG NUMBER: GPC-SA1C-830-U-SLR-HSS

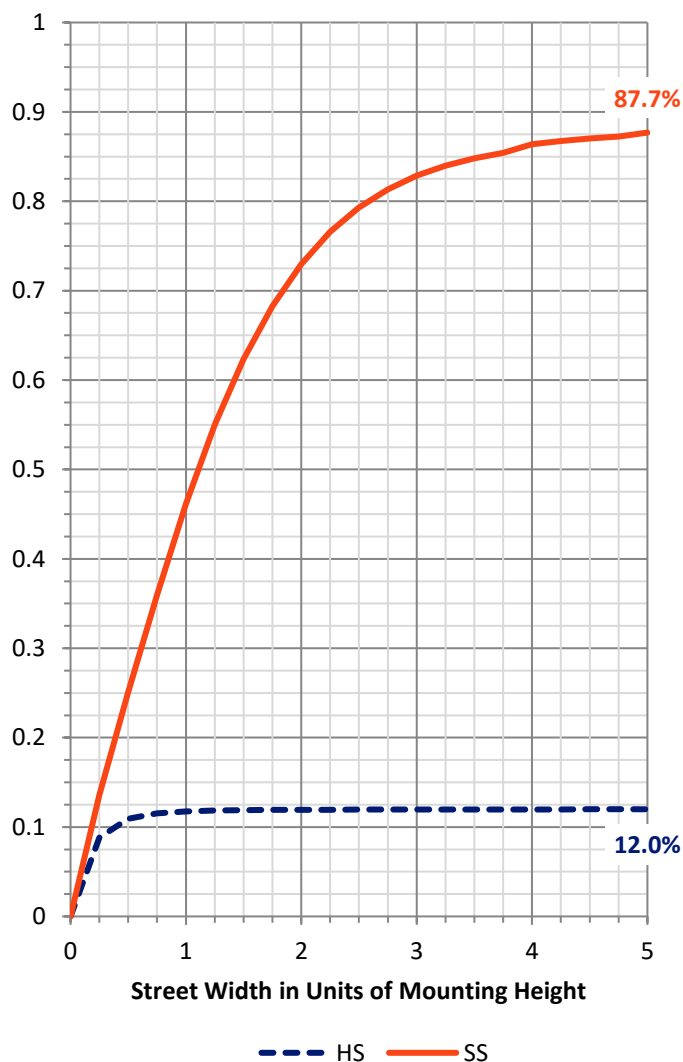
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	538.7	0.0	538.7
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	3912.3	0.0	3912.3
	% Fixture	87.9	0.0	87.9
Total	Lumens	4451.0	0.0	4451.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.3	2.5
10°-20°	221.5	5.0
20°-30°	314.5	7.1
30°-40°	464.6	10.4
40°-50°	670.0	15.1
50°-60°	940.6	21.1
60°-70°	1096.4	24.6
70°-80°	560.5	12.6
80°-90°	71.6	1.6
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°	4451.0	100.0
0°-180°	4451.0	100.0

Coefficient of Utilization

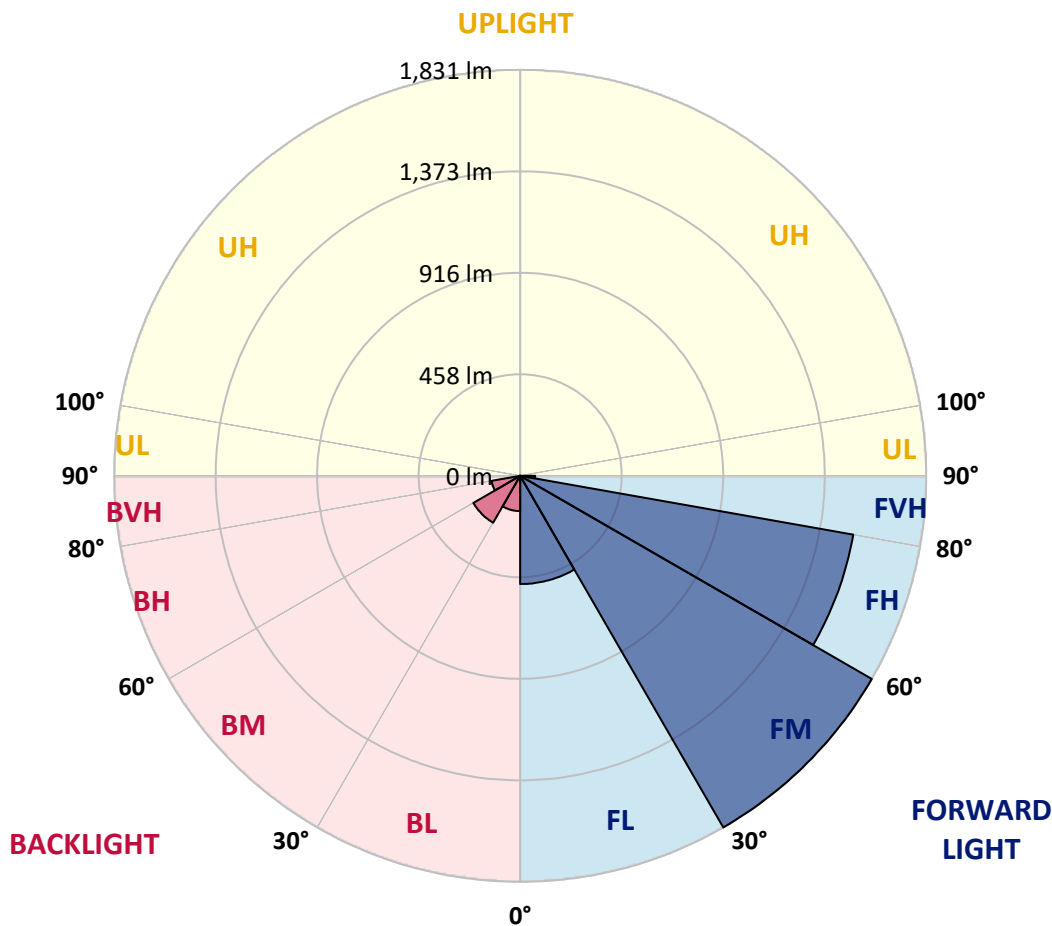


REPORT NUMBER: P386056
 CATALOG NUMBER: GPC-SA1C-830-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	488.2	11.0			
FM (30°-60°)	1831.2	41.1			
FH (60°-80°)	1525.6	34.3			G1/1800
FVH (80°-90°)	67.2	1.5			G1/100
BL (0°-30°)	159.1	3.6	B1/500		
BM (30°-60°)	244.0	5.5	B1/1000		
BH (60°-80°)	131.3	2.9	B1/500		G1/500
BVH (80°-90°)	4.3	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type IV Medium





REPORT NUMBER: P386056

CATALOG NUMBER: GPC-SA1C-830-U-SLR-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9
2.5°	1587.6	1575.4	1561.9	1517.8	1476.9	1430.1	1391.9	1365.3	1332.0	1288.8	1277.8
5°	1576.2	1563.1	1520.8	1422.7	1336.9	1253.4	1172.8	1125.6	1067.0	1007.5	992.8
7.5°	1461.7	1448.0	1386.9	1252.5	1137.0	1016.4	911.8	847.0	780.8	726.4	697.5
10°	1342.6	1327.6	1258.9	1095.9	953.5	844.5	767.8	706.0	643.3	585.1	538.8
12.5°	1260.5	1240.9	1166.3	981.6	857.6	783.6	711.9	637.9	553.1	490.7	439.7
15°	1226.2	1203.8	1125.0	937.5	823.6	736.8	643.3	552.5	453.1	381.7	334.9
17.5°	1252.7	1223.6	1139.1	934.6	781.0	662.7	544.7	438.0	330.2	257.9	224.6
20°	1343.0	1304.8	1197.5	933.7	729.4	574.8	425.1	304.5	217.6	175.0	157.5
22.5°	1485.1	1434.7	1281.4	940.5	676.0	482.5	307.0	206.9	163.4	141.3	130.9
25°	1656.8	1598.4	1402.2	964.3	629.2	392.6	223.1	163.4	137.9	121.7	113.0
27.5°	1820.0	1772.5	1554.9	998.7	593.0	320.1	181.1	138.5	117.9	107.1	100.2
30°	1983.0	1923.3	1711.6	1039.6	549.3	271.0	159.2	126.3	105.6	94.3	89.8
32.5°	2101.5	2051.9	1834.3	1069.1	502.7	238.9	142.3	115.6	98.7	87.1	80.6
35°	2240.9	2184.8	1939.5	1075.6	472.8	218.7	128.0	104.0	85.6	75.3	68.3
37.5°	2391.4	2321.6	2061.0	1061.3	449.4	208.8	117.2	98.7	79.9	69.4	62.0
40°	2558.0	2479.1	2177.6	1040.6	426.4	205.4	109.0	94.7	75.5	64.7	57.1
42.5°	2733.4	2640.4	2278.6	1018.9	411.8	193.8	108.2	90.7	72.1	60.5	52.9
45°	2880.8	2786.6	2382.3	1011.7	401.5	181.1	111.8	87.9	69.8	57.1	49.8
47.5°	2998.3	2909.1	2488.6	1027.8	395.6	169.5	101.8	91.5	68.5	54.2	47.0
50°	3138.5	3037.5	2638.3	1075.6	386.9	157.9	92.1	104.8	68.5	52.3	44.7
52.5°	3314.4	3214.4	2805.3	1149.8	369.6	141.9	82.9	105.0	69.2	49.8	41.8
55°	3535.6	3463.0	3043.8	1231.2	342.0	118.3	71.7	90.3	66.6	45.1	39.0
57.5°	3747.7	3688.4	3261.2	1286.9	305.1	92.4	62.4	72.7	60.9	39.6	34.8
59°	3805.7	3740.9	3340.9	1289.4	277.5	80.6	57.8	60.1	59.7	37.1	32.3
60°	3805.7	3736.9	3363.9	1275.9	257.5	74.0	54.8	53.6	62.2	35.4	30.8
62.5°	3736.7	3640.2	3289.3	1184.6	210.0	63.0	47.9	44.3	55.9	31.8	27.2
65°	3593.3	3452.7	3035.0	1019.5	187.2	57.8	41.3	36.3	38.8	28.0	23.8
67.5°	3354.2	3163.6	2668.3	823.6	178.2	56.3	35.6	30.8	29.3	24.0	20.9
70°	2933.1	2721.6	2223.1	647.6	170.4	55.7	29.9	25.9	23.6	20.2	17.7
72.5°	2134.8	1914.2	1578.3	506.3	165.7	56.9	24.0	21.7	19.4	15.8	13.7
75°	1221.1	1076.7	887.1	334.4	141.3	54.4	18.6	18.1	13.9	11.4	9.5
77.5°	630.9	611.7	531.6	128.4	67.7	23.8	12.2	10.5	8.2	7.0	5.7
80°	272.2	269.3	233.0	37.1	17.9	13.3	7.0	4.4	3.8	3.0	2.3
82.5°	94.0	94.0	82.9	12.4	8.0	6.5	0.8	0.0	0.0	0.0	0.0
85°	19.0	21.3	15.0	0.0	2.7	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: P386056
 CATALOG NUMBER: GPC-SA1C-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9
2.5°	1264.6	1239.0	1237.4	1221.3	1201.3	1192.2	1187.0	1196.2	1207.6	1208.9	1226.0
5°	981.6	954.8	966.0	937.5	943.2	937.5	928.2	929.9	935.0	919.2	938.8
7.5°	689.3	669.1	681.9	674.3	684.5	688.5	682.8	674.3	649.5	646.5	663.6
10°	519.6	496.6	482.9	468.5	471.7	478.2	476.1	470.0	454.2	455.0	471.5
12.5°	417.5	391.8	364.6	329.4	320.7	325.6	320.7	317.1	302.0	303.2	317.8
15°	316.7	295.6	267.2	238.9	223.5	225.0	211.5	202.0	192.5	181.1	190.0
17.5°	213.8	201.0	192.5	184.1	165.7	161.5	144.4	126.1	118.9	113.7	117.5
20°	151.4	144.4	141.1	140.6	130.1	124.8	108.2	96.8	93.2	92.1	94.5
22.5°	126.5	121.5	116.6	113.9	108.6	102.5	89.8	84.1	81.6	80.3	82.0
25°	110.1	106.3	101.2	96.6	94.5	87.9	78.9	74.6	73.0	71.7	72.5
27.5°	97.8	94.5	88.6	85.6	83.9	78.2	70.4	67.1	65.6	65.2	64.9
30°	88.1	85.0	79.5	76.1	73.2	68.1	63.5	60.1	58.6	58.2	57.8
32.5°	78.4	75.9	72.3	69.0	65.8	61.2	57.1	54.4	52.1	51.7	51.5
35°	66.2	63.7	61.8	61.6	58.6	54.2	51.2	47.7	45.8	45.1	45.3
37.5°	58.8	55.5	51.2	52.7	51.9	48.7	44.7	41.1	39.2	38.8	38.8
40°	54.2	50.6	45.8	43.2	45.8	45.1	38.8	35.2	33.3	33.1	32.7
42.5°	49.8	46.2	40.7	36.5	37.7	39.6	33.5	30.2	28.3	27.8	27.2
45°	46.6	42.8	36.7	31.8	29.3	33.3	28.7	24.5	23.4	22.6	22.1
47.5°	43.6	40.1	33.1	27.6	23.4	24.0	23.0	20.0	18.8	17.9	17.7
50°	41.1	37.3	29.9	23.6	19.4	17.7	18.6	15.8	14.8	13.9	13.5
52.5°	38.2	34.6	26.6	20.5	16.2	13.9	14.1	12.4	11.4	10.8	10.5
55°	35.8	32.3	23.8	17.9	14.3	11.4	10.1	9.7	9.1	8.6	8.4
57.5°	32.7	29.3	21.1	15.2	12.2	9.3	7.8	7.8	7.6	7.2	7.0
59°	30.8	27.8	19.4	13.7	11.2	8.0	7.0	7.2	7.0	6.5	6.3
60°	29.3	26.6	18.1	12.7	10.5	7.4	6.3	6.7	6.5	6.1	5.9
62.5°	25.9	24.0	15.6	10.5	9.3	5.9	5.3	5.7	5.7	5.5	5.3
65°	22.8	20.7	13.3	8.9	8.6	5.1	4.2	5.1	5.3	4.8	4.4
67.5°	19.8	17.7	11.6	7.2	8.0	4.0	3.2	4.2	5.7	4.4	4.0
70°	16.9	14.8	9.1	5.7	8.4	2.7	2.5	3.8	6.7	4.8	3.8
72.5°	13.1	11.4	6.3	4.2	9.1	1.9	1.9	3.2	7.6	5.3	3.6
75°	9.1	7.4	3.8	2.5	7.4	1.3	1.3	3.0	7.2	4.8	3.4
77.5°	5.3	4.0	1.3	0.2	3.8	0.0	0.2	2.1	5.1	3.0	1.5
80°	1.9	0.8	0.0	0.0	2.3	0.0	0.0	0.0	0.4	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: P386056
 CATALOG NUMBER: GPC-SA1C-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9
2.5°	1230.4	1258.9	1284.4	1323.0	1368.7	1421.4	1466.8	1515.5	1561.2	1580.2	1593.3
5°	942.8	978.0	1019.1	1075.8	1151.3	1244.3	1331.4	1429.9	1535.7	1588.7	1638.4
7.5°	666.5	702.4	753.4	813.7	905.0	1015.7	1129.6	1265.6	1409.0	1492.7	1575.2
10°	479.3	523.4	571.0	653.5	746.2	851.3	968.5	1120.3	1280.2	1372.9	1472.3
12.5°	326.2	376.4	448.5	540.9	649.9	752.8	854.6	999.5	1185.1	1277.0	1383.5
15°	195.7	223.5	299.8	406.8	540.4	668.7	780.2	925.5	1123.3	1235.9	1346.6
17.5°	120.6	133.5	175.0	262.7	403.2	565.3	718.2	900.4	1132.1	1269.2	1387.7
20°	96.2	101.2	114.5	155.2	267.2	451.5	648.4	895.3	1204.5	1373.2	1500.3
22.5°	83.5	88.4	97.2	112.8	168.1	338.0	582.2	900.0	1308.2	1529.0	1677.4
25°	73.6	77.8	86.2	99.1	123.1	238.1	511.3	920.6	1443.4	1722.3	1880.1
27.5°	65.8	69.4	77.2	89.0	105.6	166.2	431.0	945.7	1603.6	1920.1	2075.8
30°	58.6	61.8	68.7	79.7	91.7	127.8	342.9	962.8	1764.1	2075.8	2215.6
32.5°	52.5	54.8	61.2	70.4	79.7	101.8	260.6	960.1	1883.2	2205.2	2316.1
35°	46.2	48.5	54.0	62.0	69.4	84.1	205.0	908.8	1987.0	2339.5	2431.3
37.5°	39.2	42.2	47.4	54.6	59.7	74.0	165.7	847.0	2092.2	2493.1	2559.7
40°	33.3	36.3	40.9	48.7	51.9	70.2	127.4	771.8	2210.5	2664.7	2700.5
42.5°	27.6	30.4	35.2	42.0	48.9	60.5	94.3	685.7	2324.1	2811.5	2829.0
45°	22.4	25.1	30.2	36.9	52.3	50.2	73.0	593.6	2415.9	2933.5	2939.2
47.5°	17.7	20.2	25.5	34.8	48.7	40.1	52.1	521.3	2492.8	3028.9	3013.9
50°	13.7	15.8	21.3	39.9	42.6	33.1	39.4	497.2	2561.8	3087.9	3049.1
52.5°	10.8	12.7	17.5	37.3	33.1	27.4	33.1	519.8	2656.3	3136.8	3068.9
55°	8.6	10.5	13.7	21.3	22.6	23.2	28.3	540.9	2819.3	3251.5	3186.0
57.5°	7.2	9.1	11.2	15.0	17.1	19.6	25.1	543.2	3011.4	3442.2	3380.2
59°	6.5	8.2	10.1	13.3	15.0	17.9	23.6	530.5	3079.0	3511.5	3480.5
60°	6.1	7.8	9.5	12.2	13.9	16.9	22.8	518.5	3082.0	3509.0	3523.3
62.5°	5.3	7.0	8.4	10.3	11.8	14.3	20.5	474.0	2957.2	3394.1	3497.6
65°	4.6	6.1	7.6	8.9	10.1	12.9	18.6	392.8	2744.0	3208.7	3321.5
67.5°	4.2	5.3	7.0	7.8	9.1	11.4	16.4	280.0	2477.7	2982.0	3055.2
70°	3.8	5.1	6.3	7.2	8.2	9.9	14.1	160.9	2092.2	2650.1	2702.2
72.5°	3.6	4.8	5.7	6.7	7.4	8.9	12.9	75.7	1531.9	2123.0	2259.0
75°	3.2	4.4	5.3	6.3	7.0	8.0	11.0	36.3	1018.9	1536.4	1690.9
77.5°	1.9	3.6	4.8	5.7	6.1	7.0	9.1	20.9	650.3	1063.4	1252.5
80°	0.0	1.3	3.6	4.8	5.3	5.9	7.0	16.4	347.9	607.5	729.2
82.5°	0.0	0.0	2.5	3.8	3.6	4.0	5.3	10.3	156.9	397.1	447.5
85°	0.0	0.0	0.8	3.0	2.5	1.9	3.6	3.6	34.4	201.0	250.7
87.5°	0.0	0.0	0.0	0.2	1.3	0.8	1.5	0.4	0.2	15.0	60.7
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: P386056

CATALOG NUMBER: GPC-SA1C-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9	1449.9
2.5°	1639.1	1654.7	1681.0	1693.5	1687.3	1661.4	1630.4	1598.8	1580.2	1587.6
5°	1739.8	1820.2	1866.6	1882.0	1856.2	1798.0	1721.9	1621.5	1585.9	1576.2
7.5°	1739.8	1891.0	1986.8	2003.6	1946.3	1832.2	1689.4	1532.8	1480.7	1461.7
10°	1678.7	1884.5	2018.0	2044.8	1964.6	1794.0	1602.8	1424.0	1362.2	1342.6
12.5°	1609.7	1831.4	1972.0	2008.9	1943.1	1756.1	1542.7	1350.4	1277.6	1260.5
15°	1567.4	1766.0	1882.4	1909.2	1881.3	1733.9	1528.3	1328.2	1242.6	1226.2
17.5°	1582.5	1715.4	1757.3	1772.9	1791.7	1726.1	1567.4	1376.7	1268.4	1252.7
20°	1639.7	1662.0	1640.3	1659.9	1710.5	1733.7	1660.3	1494.0	1363.9	1343.0
22.5°	1736.7	1634.4	1573.5	1581.3	1642.8	1758.8	1802.5	1661.4	1511.3	1485.1
25°	1849.7	1656.8	1536.4	1529.4	1592.7	1791.9	1932.4	1843.6	1685.7	1656.8
27.5°	1991.8	1706.9	1528.8	1521.8	1575.2	1822.9	2040.3	2023.7	1869.3	1820.0
30°	2101.5	1756.3	1551.3	1535.3	1592.7	1844.4	2127.0	2176.5	2015.7	1983.0
32.5°	2180.1	1814.5	1588.0	1564.8	1642.0	1881.5	2193.8	2316.6	2151.0	2101.5
35°	2240.0	1877.7	1647.3	1609.1	1709.9	1937.8	2256.5	2465.6	2295.1	2240.9
37.5°	2296.1	1966.5	1739.8	1694.3	1816.4	2028.5	2322.7	2634.8	2456.2	2391.4
40°	2374.3	2067.1	1882.6	1842.1	1995.4	2152.1	2405.3	2811.0	2639.4	2558.0
42.5°	2452.6	2175.1	2028.7	2039.7	2218.7	2302.2	2512.0	2997.4	2820.3	2733.4
45°	2524.0	2286.4	2236.9	2287.5	2426.0	2466.9	2618.1	3105.2	2964.8	2880.8
47.5°	2587.7	2425.6	2443.7	2578.5	2661.7	2616.0	2697.4	3198.2	3072.3	2998.3
50°	2661.7	2605.7	2716.4	2907.0	2933.1	2750.9	2769.5	3308.3	3198.0	3138.5
52.5°	2742.7	2795.4	3018.3	3186.4	3177.9	2897.5	2842.0	3431.6	3370.2	3314.4
55°	2834.7	2948.7	3284.2	3447.8	3440.7	3061.1	2962.2	3584.1	3586.2	3535.6
57.5°	2971.1	3080.7	3464.7	3659.3	3671.4	3250.1	3165.9	3754.9	3781.4	3747.7
59°	3068.9	3166.3	3536.2	3747.7	3796.6	3396.2	3314.8	3854.0	3836.5	3805.7
60°	3141.5	3220.7	3571.6	3793.9	3869.4	3495.3	3424.7	3912.2	3843.0	3805.7
62.5°	3320.9	3339.3	3635.5	3846.2	3953.1	3715.4	3733.8	4011.3	3797.7	3736.7
65°	3404.6	3414.1	3634.7	3752.5	3872.1	3886.9	4014.2	4014.2	3687.0	3593.3
67.5°	3369.6	3323.9	3454.4	3442.2	3561.5	3785.0	4119.7	3867.0	3475.3	3354.2
70°	3084.9	2908.9	2850.9	2856.2	2947.5	3292.2	3910.9	3433.9	3074.6	2933.1
72.5°	2566.9	2144.5	2001.3	2164.7	2188.6	2530.2	3332.9	2586.0	2267.4	2134.8
75°	2064.6	1511.7	1278.9	1451.4	1491.9	1851.6	2578.2	1610.6	1324.4	1221.1
77.5°	1483.2	1085.1	917.7	905.7	958.0	1174.3	1829.5	810.6	676.0	630.9
80°	842.6	714.2	769.0	725.6	751.9	734.2	869.2	355.5	291.2	272.2
82.5°	508.6	422.2	457.2	380.6	481.6	419.4	334.9	113.9	98.9	94.0
85°	330.8	230.7	120.2	80.6	166.0	268.0	74.9	31.0	23.8	19.0
87.5°	114.1	58.8	5.9	2.5	17.7	50.0	2.7	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

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			

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)