

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: P437599

Luminaire Tested: **ISC-SA1D-830-U-SLR**

Issue Date: 12/9/2020

Test Information

Test Method: LM-79-08
Report Number: P437599
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-22)
Test Lab: INNOVATION CENTER
Issue Date: 12/9/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISC-SA1D-830-U-SLR
Description: IMPACT ELITE LED CYLINDER LUMINAIRE
(1) 80 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4010 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

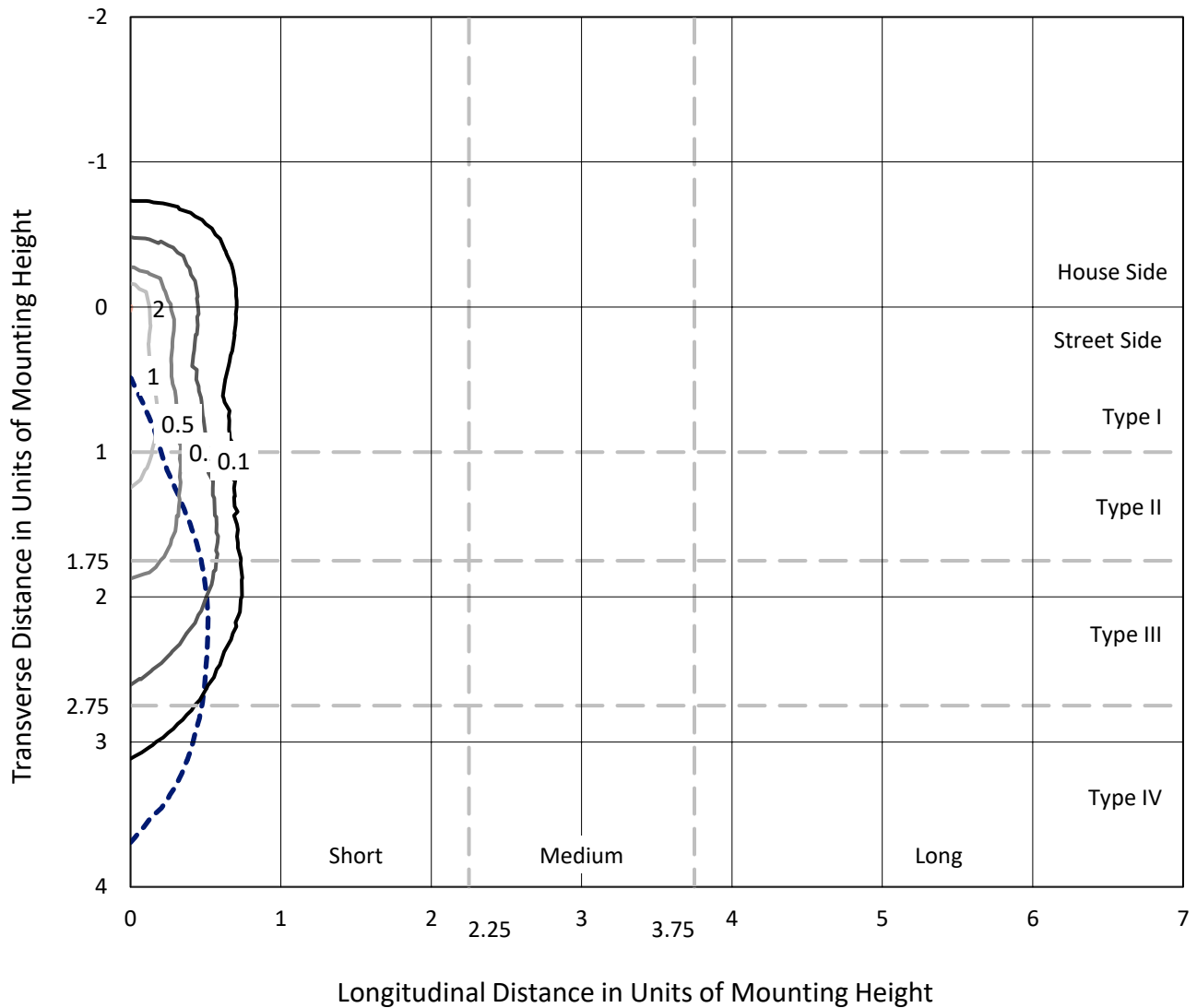
Input Watts (W): 45.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

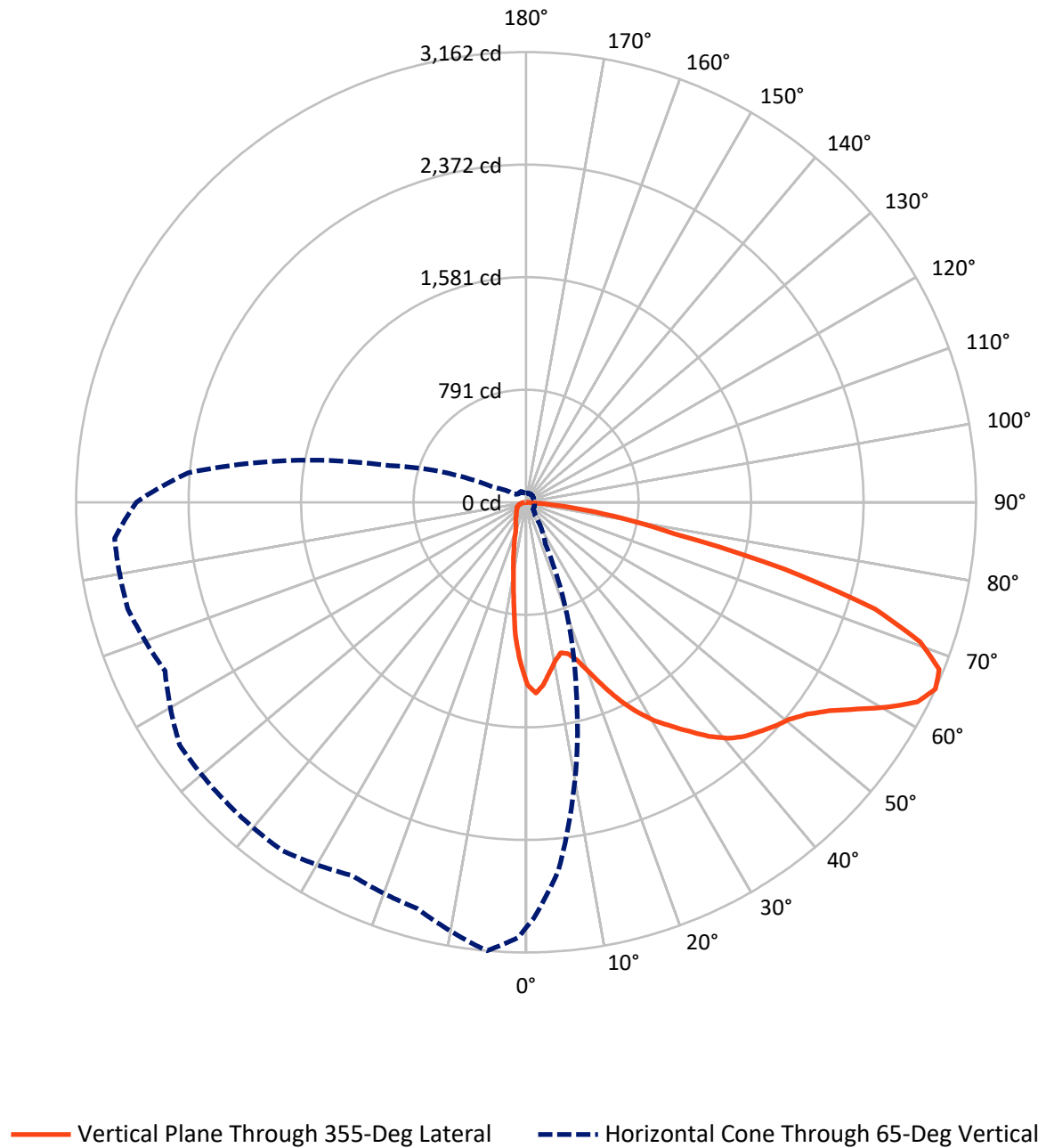
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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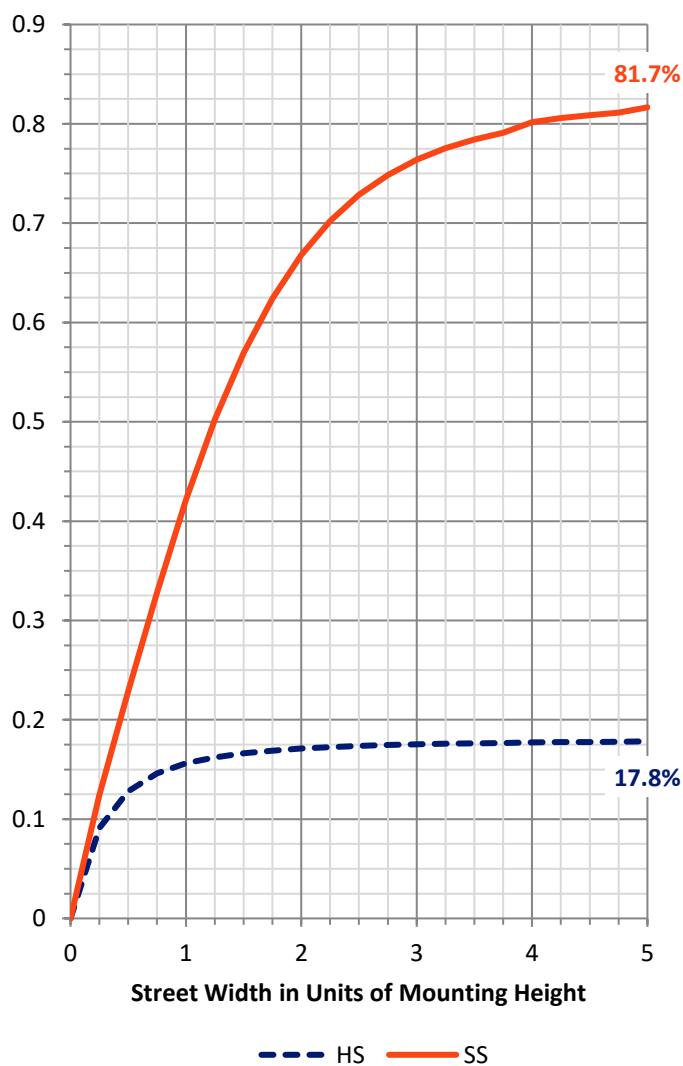
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	722.9	0.0	722.9
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	3287.1	0.0	3287.1
	% Fixture	82.0	0.0	82.0
Total	Lumens	4010.0	0.0	4010.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.9	2.4
10°-20°	200.0	5.0
20°-30°	285.1	7.1
30°-40°	407.5	10.2
40°-50°	569.0	14.2
50°-60°	791.5	19.7
60°-70°	964.2	24.0
70°-80°	593.8	14.8
80°-90°	102.0	2.5
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°	4010.0	100.0
0°-180°	4010.0	100.0

Coefficient of Utilization

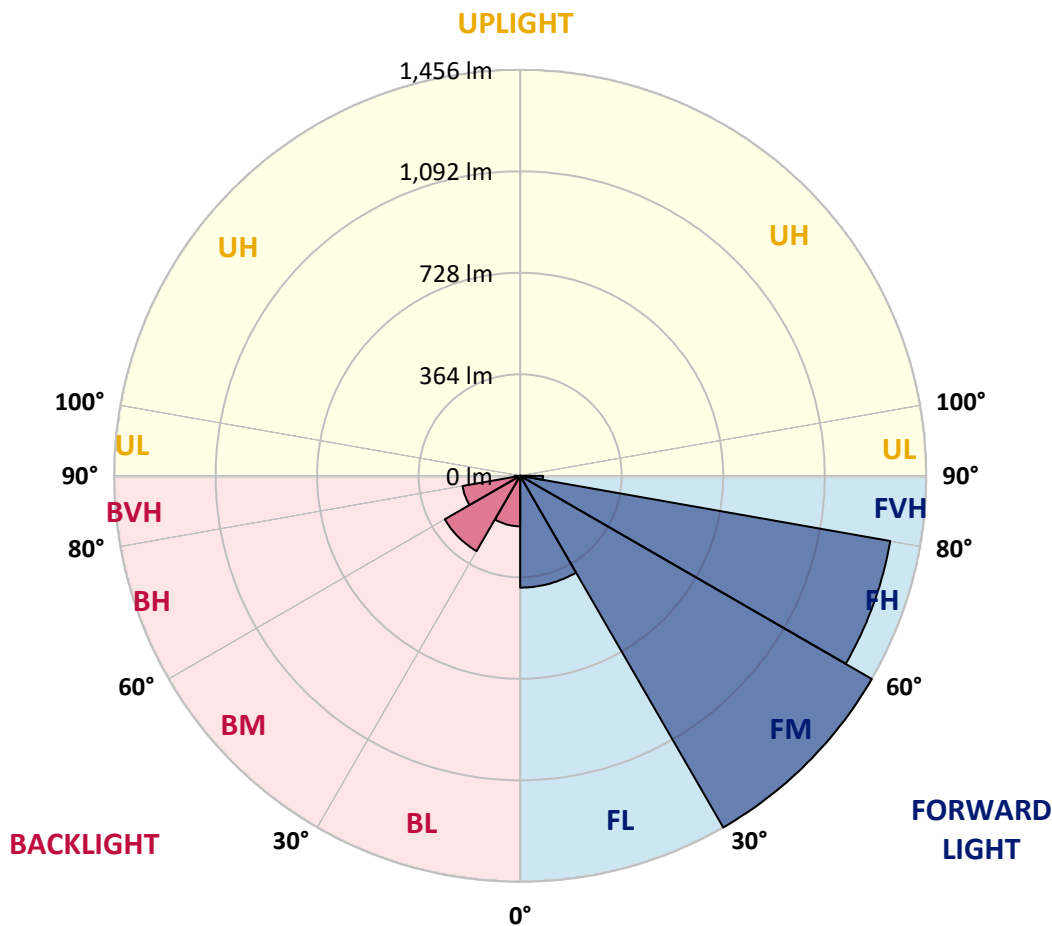


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	400.9	10.0			
FM (30°-60°)	1456.1	36.3			
FH (60°-80°)	1348.1	33.6			G1/1800
FVH (80°-90°)	82.0	2.0			G1/100
BL (0°-30°)	181.0	4.5	B1/500		
BM (30°-60°)	311.9	7.8	B1/1000		
BH (60°-80°)	209.9	5.2	B1/500		G1/500
BVH (80°-90°)	20.0	0.5			G1/100
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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1
2.5°	1315.5	1315.5	1299.3	1258.7	1221.3	1182.4	1169.4	1133.6	1110.9	1089.8	1097.9
5°	1239.2	1234.3	1205.1	1120.6	1055.7	992.3	953.4	894.9	888.4	836.4	833.2
7.5°	1136.9	1133.6	1089.8	994.0	919.3	820.2	761.7	711.4	667.5	636.7	626.9
10°	1067.0	1055.7	1002.1	885.1	776.3	704.9	672.4	628.5	591.2	552.2	519.7
12.5°	1021.6	1008.6	955.0	826.7	721.1	672.4	626.9	574.9	524.6	479.1	446.6
15°	1029.7	1008.6	948.5	812.1	701.6	631.8	568.4	506.7	448.3	397.9	357.3
17.5°	1088.2	1062.2	995.6	821.8	670.8	578.2	492.1	420.6	349.2	297.2	264.7
20°	1190.5	1153.1	1068.7	849.4	648.0	527.8	414.2	320.0	245.2	209.5	199.8
22.5°	1315.5	1283.1	1167.7	872.2	623.7	471.0	328.1	230.6	193.3	175.4	170.5
25°	1445.5	1409.7	1281.4	909.5	604.2	419.0	258.2	183.5	165.7	157.5	154.3
27.5°	1578.6	1542.9	1393.5	969.6	581.4	363.8	207.9	160.8	147.8	141.3	141.3
30°	1672.8	1643.6	1494.2	1023.2	555.4	320.0	183.5	149.4	138.1	131.6	129.9
32.5°	1778.4	1737.8	1588.4	1058.9	536.0	285.8	167.3	139.7	129.9	121.8	121.8
35°	1897.0	1851.5	1676.1	1094.7	516.5	269.6	155.9	133.2	123.4	115.3	113.7
37.5°	2026.9	1968.4	1765.4	1125.5	495.4	261.5	149.4	126.7	116.9	110.4	107.2
40°	2169.8	2108.1	1884.0	1151.5	480.7	251.7	144.5	121.8	112.1	103.9	102.3
42.5°	2290.0	2234.8	1966.8	1167.7	474.2	238.7	142.9	116.9	108.8	99.1	95.8
45°	2351.7	2304.6	2067.5	1172.6	471.0	230.6	134.8	116.9	105.6	95.8	91.0
47.5°	2405.3	2371.2	2140.6	1197.0	462.9	222.5	125.1	123.4	103.9	91.0	86.1
50°	2496.3	2460.5	2254.3	1242.5	453.1	212.8	115.3	118.6	103.9	87.7	82.8
52.5°	2605.1	2595.3	2403.7	1313.9	438.5	199.8	105.6	112.1	103.9	86.1	79.6
55°	2764.2	2749.6	2601.8	1406.5	420.6	181.9	95.8	102.3	102.3	81.2	74.7
57.5°	2899.1	2900.7	2783.7	1471.5	404.4	152.7	89.3	87.7	97.4	76.3	69.8
60°	2960.8	2960.8	2842.2	1495.8	383.3	128.3	84.5	78.0	100.7	71.5	65.0
62.5°	2999.7	2967.3	2761.0	1473.1	358.9	115.3	76.3	71.5	81.2	66.6	60.1
65°	2988.4	2926.7	2598.6	1357.8	323.2	112.1	71.5	65.0	65.0	61.7	56.8
67.5°	2886.1	2790.2	2359.8	1162.9	285.8	110.4	65.0	60.1	58.5	55.2	52.0
70°	2608.3	2540.1	2075.6	948.5	261.5	110.4	60.1	53.6	52.0	48.7	47.1
72.5°	2132.5	2031.8	1656.6	711.4	242.0	110.4	55.2	47.1	45.5	43.9	42.2
75°	1456.8	1341.5	1164.5	436.9	190.0	95.8	48.7	39.0	39.0	37.4	35.7
77.5°	803.9	778.0	656.1	230.6	118.6	58.5	37.4	30.9	32.5	30.9	29.2
80°	466.1	438.5	389.8	112.1	68.2	34.1	22.7	22.7	24.4	24.4	22.7
82.5°	225.8	196.5	201.4	45.5	24.4	14.6	9.7	11.4	13.0	16.2	16.2
85°	8.1	8.1	16.2	3.2	0.0	0.0	0.0	0.0	0.0	3.2	4.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1
2.5°	1071.9	1071.9	1078.4	1106.0	1083.3	1080.0	1086.5	1097.9	1102.8	1125.5	1123.9
5°	826.7	821.8	841.3	867.3	881.9	890.0	903.0	932.2	920.9	938.7	935.5
7.5°	610.7	618.8	610.7	639.9	662.6	696.7	722.7	716.2	717.9	703.2	724.4
10°	498.6	495.4	475.9	485.6	498.6	519.7	537.6	540.8	557.1	531.1	549.0
12.5°	425.5	412.5	393.0	383.3	380.0	396.3	401.2	409.3	419.0	427.1	430.4
15°	341.1	331.3	318.3	303.7	300.5	300.5	311.8	323.2	336.2	339.4	350.8
17.5°	255.0	250.1	245.2	245.2	245.2	245.2	255.0	259.9	266.4	276.1	274.5
20°	193.3	193.3	194.9	203.0	207.9	211.1	217.6	219.3	217.6	219.3	219.3
22.5°	170.5	168.9	173.8	177.0	185.1	193.3	196.5	194.9	190.0	186.8	190.0
25°	154.3	155.9	157.5	162.4	168.9	177.0	178.7	177.0	172.2	172.2	172.2
27.5°	141.3	142.9	146.2	151.0	157.5	164.0	165.7	162.4	157.5	159.2	157.5
30°	131.6	134.8	136.4	141.3	146.2	152.7	152.7	149.4	146.2	146.2	146.2
32.5°	120.2	123.4	126.7	131.6	138.1	141.3	141.3	139.7	136.4	134.8	134.8
35°	113.7	113.7	116.9	123.4	126.7	129.9	131.6	129.9	126.7	123.4	121.8
37.5°	107.2	107.2	108.8	112.1	118.6	121.8	123.4	120.2	116.9	113.7	113.7
40°	100.7	100.7	102.3	103.9	110.4	115.3	115.3	110.4	107.2	108.8	107.2
42.5°	95.8	95.8	97.4	97.4	100.7	108.8	107.2	103.9	102.3	102.3	100.7
45°	91.0	89.3	91.0	91.0	92.6	100.7	100.7	95.8	95.8	97.4	95.8
47.5°	86.1	84.5	86.1	86.1	87.7	92.6	92.6	91.0	91.0	91.0	92.6
50°	81.2	81.2	81.2	81.2	82.8	84.5	87.7	86.1	86.1	86.1	87.7
52.5°	76.3	76.3	76.3	78.0	78.0	81.2	82.8	81.2	82.8	82.8	82.8
55°	73.1	71.5	71.5	74.7	74.7	78.0	79.6	78.0	79.6	79.6	79.6
57.5°	68.2	68.2	68.2	69.8	71.5	74.7	78.0	74.7	76.3	76.3	78.0
60°	63.3	63.3	63.3	66.6	68.2	71.5	73.1	71.5	73.1	73.1	73.1
62.5°	58.5	60.1	60.1	61.7	63.3	68.2	69.8	68.2	69.8	69.8	69.8
65°	55.2	55.2	56.8	58.5	60.1	63.3	65.0	65.0	65.0	66.6	65.0
67.5°	50.3	50.3	52.0	53.6	55.2	60.1	60.1	60.1	61.7	60.1	60.1
70°	45.5	45.5	47.1	48.7	50.3	55.2	55.2	55.2	56.8	53.6	53.6
72.5°	40.6	40.6	42.2	43.9	47.1	52.0	50.3	50.3	50.3	48.7	48.7
75°	35.7	35.7	37.4	39.0	40.6	47.1	45.5	43.9	43.9	42.2	42.2
77.5°	29.2	29.2	30.9	34.1	35.7	40.6	39.0	37.4	35.7	35.7	35.7
80°	22.7	24.4	26.0	27.6	29.2	32.5	30.9	29.2	27.6	27.6	27.6
82.5°	16.2	17.9	19.5	21.1	22.7	22.7	22.7	22.7	21.1	19.5	19.5
85°	6.5	9.7	13.0	13.0	14.6	13.0	14.6	13.0	11.4	11.4	9.7
87.5°	0.0	0.0	0.0	0.0	0.0	1.6	3.2	4.9	4.9	4.9	4.9
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°	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1
2.5°	1136.9	1162.9	1177.5	1203.5	1231.1	1268.4	1299.3	1343.1	1382.1	1390.2	1400.0
5°	942.0	976.1	992.3	1034.6	1099.5	1140.1	1205.1	1273.3	1357.8	1383.7	1417.9
7.5°	708.1	734.1	776.3	813.7	890.0	958.2	1045.9	1145.0	1244.1	1300.9	1356.1
10°	539.2	571.7	617.2	661.0	735.7	803.9	907.9	1018.3	1145.0	1197.0	1255.4
12.5°	448.3	474.2	519.7	579.8	649.6	714.6	792.6	912.8	1045.9	1112.5	1184.0
15°	362.2	389.8	446.6	513.2	581.4	654.5	729.2	844.5	1007.0	1075.2	1143.4
17.5°	289.1	313.5	362.2	433.6	508.3	589.6	680.5	826.7	1015.1	1099.5	1179.1
20°	224.1	245.2	282.6	347.6	423.9	519.7	636.7	820.2	1063.8	1182.4	1261.9
22.5°	193.3	201.4	222.5	268.0	345.9	458.0	596.1	825.1	1141.8	1294.4	1385.4
25°	172.2	178.7	186.8	214.4	276.1	394.7	560.3	834.8	1224.6	1421.1	1525.0
27.5°	159.2	162.4	167.3	180.3	225.8	342.7	524.6	847.8	1336.6	1549.4	1650.1
30°	146.2	146.2	151.0	164.0	198.1	305.3	498.6	873.8	1447.1	1659.8	1758.9
32.5°	133.2	133.2	141.3	152.7	180.3	274.5	472.6	881.9	1529.9	1757.3	1836.9
35°	121.8	125.1	131.6	144.5	168.9	251.7	448.3	867.3	1590.0	1840.1	1921.3
37.5°	115.3	116.9	125.1	136.4	154.3	230.6	423.9	847.8	1671.2	1950.6	2013.9
40°	107.2	110.4	118.6	129.9	144.5	214.4	396.3	826.7	1742.7	2074.0	2106.5
42.5°	102.3	105.6	112.1	123.4	138.1	194.9	370.3	810.4	1819.0	2179.6	2202.3
45°	97.4	100.7	108.8	118.6	138.1	180.3	344.3	799.1	1893.7	2260.8	2278.6
47.5°	92.6	95.8	103.9	116.9	136.4	172.2	326.4	787.7	1940.8	2330.6	2335.5
50°	89.3	92.6	102.3	120.2	131.6	168.9	318.3	799.1	2020.4	2385.8	2371.2
52.5°	84.5	89.3	100.7	125.1	125.1	165.7	311.8	839.7	2119.5	2467.0	2429.7
55°	82.8	86.1	97.4	120.2	113.7	157.5	311.8	870.5	2251.0	2627.8	2566.1
57.5°	78.0	81.2	94.2	112.1	103.9	144.5	308.6	920.9	2437.8	2804.9	2749.6
60°	73.1	78.0	91.0	100.7	94.2	128.3	294.0	976.1	2566.1	2900.7	2910.4
62.5°	69.8	74.7	91.0	87.7	86.1	112.1	271.2	1010.2	2553.1	2869.8	2962.4
65°	65.0	69.8	82.8	79.6	81.2	100.7	242.0	994.0	2382.6	2739.9	2902.3
67.5°	60.1	65.0	71.5	71.5	74.7	97.4	211.1	899.8	2197.4	2582.3	2769.1
70°	55.2	58.5	61.7	65.0	68.2	95.8	186.8	771.5	1984.7	2431.3	2579.1
72.5°	48.7	50.3	53.6	56.8	63.3	91.0	177.0	626.9	1690.7	2104.9	2333.9
75°	42.2	43.9	47.1	50.3	55.2	86.1	162.4	475.9	1393.5	1663.1	1885.6
77.5°	35.7	37.4	40.6	42.2	47.1	76.3	139.7	344.3	1084.9	1198.6	1378.9
80°	27.6	29.2	32.5	32.5	39.0	56.8	108.8	240.4	761.7	849.4	943.6
82.5°	19.5	21.1	22.7	24.4	29.2	39.0	71.5	144.5	516.5	583.1	566.8
85°	11.4	13.0	13.0	16.2	17.9	26.0	40.6	74.7	337.8	266.4	263.1
87.5°	4.9	4.9	4.9	6.5	6.5	9.7	13.0	14.6	32.5	11.4	8.1
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1	1283.1
2.5°	1414.6	1426.0	1434.1	1430.8	1426.0	1398.4	1370.8	1341.5	1315.5	1315.5
5°	1473.1	1520.2	1539.7	1523.4	1487.7	1430.8	1359.4	1284.7	1248.9	1239.2
7.5°	1442.2	1531.5	1578.6	1557.5	1510.4	1406.5	1297.7	1200.2	1146.6	1136.9
10°	1380.5	1497.4	1551.0	1544.5	1492.6	1372.4	1240.8	1130.4	1073.5	1067.0
12.5°	1309.0	1422.7	1490.9	1494.2	1460.1	1354.5	1216.5	1084.9	1034.6	1021.6
15°	1265.2	1364.3	1411.4	1400.0	1409.7	1339.9	1226.2	1102.8	1041.1	1029.7
17.5°	1266.8	1309.0	1320.4	1302.5	1339.9	1336.6	1281.4	1167.7	1099.5	1088.2
20°	1309.0	1273.3	1237.6	1234.3	1283.1	1348.0	1369.1	1276.6	1198.6	1190.5
22.5°	1382.1	1263.6	1188.9	1177.5	1239.2	1359.4	1453.6	1409.7	1336.6	1315.5
25°	1463.3	1273.3	1158.0	1143.4	1198.6	1367.5	1544.5	1546.2	1465.0	1445.5
27.5°	1551.0	1304.2	1158.0	1141.8	1200.2	1380.5	1604.6	1669.6	1594.9	1578.6
30°	1629.0	1348.0	1169.4	1151.5	1219.7	1393.5	1645.2	1780.0	1695.6	1672.8
32.5°	1676.1	1385.4	1197.0	1164.5	1253.8	1419.5	1682.6	1874.2	1809.3	1778.4
35°	1713.4	1429.2	1242.5	1200.2	1304.2	1461.7	1713.4	1976.6	1914.8	1897.0
37.5°	1741.1	1481.2	1289.6	1248.9	1370.8	1518.6	1757.3	2085.4	2065.9	2026.9
40°	1786.5	1513.7	1374.0	1359.4	1486.1	1607.9	1809.3	2179.6	2192.6	2169.8
42.5°	1827.1	1577.0	1494.2	1510.4	1633.9	1706.9	1879.1	2249.4	2319.2	2290.0
45°	1859.6	1664.7	1645.2	1698.8	1804.4	1833.6	1918.1	2298.1	2371.2	2351.7
47.5°	1905.1	1780.0	1846.6	1916.5	2004.2	1965.2	1958.7	2350.1	2424.8	2405.3
50°	1970.1	1914.8	2048.0	2139.0	2195.8	2072.4	2009.0	2397.2	2507.6	2496.3
52.5°	2036.6	2070.8	2252.7	2337.1	2374.5	2205.6	2080.5	2471.9	2605.1	2605.1
55°	2160.1	2223.4	2470.3	2523.9	2574.2	2325.7	2176.3	2584.0	2756.1	2764.2
57.5°	2340.4	2387.5	2635.9	2697.7	2710.7	2460.5	2327.4	2739.9	2884.4	2899.1
60°	2527.1	2549.9	2800.0	2855.2	2811.3	2634.3	2504.4	2921.8	2968.9	2960.8
62.5°	2733.4	2707.4	2913.7	2952.6	2941.3	2787.0	2726.9	3087.4	3030.6	2999.7
65°	2897.4	2800.0	2972.1	2980.3	2986.8	2892.6	2954.3	3162.2	3056.6	2988.4
67.5°	2996.5	2814.6	2853.6	2816.2	2842.2	2864.9	3108.6	3131.3	2946.2	2886.1
70°	2973.8	2608.3	2432.9	2390.7	2392.3	2551.5	3009.5	2938.0	2694.4	2608.3
72.5°	2764.2	2192.6	1937.6	1880.7	1892.1	1906.7	2530.4	2564.5	2177.9	2132.5
75°	2327.4	1689.1	1395.1	1382.1	1365.9	1429.2	2023.7	1874.2	1445.5	1456.8
77.5°	1898.6	1244.1	1024.8	958.2	948.5	958.2	1380.5	1070.3	839.7	803.9
80°	1369.1	828.3	765.0	750.3	704.9	566.8	722.7	688.6	474.2	466.1
82.5°	901.4	571.7	584.7	487.2	458.0	358.9	438.5	350.8	237.1	225.8
85°	467.7	297.2	245.2	107.2	120.2	100.7	95.8	78.0	8.1	8.1
87.5°	16.2	6.5	4.9	4.9	3.2	1.6	1.6	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

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Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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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

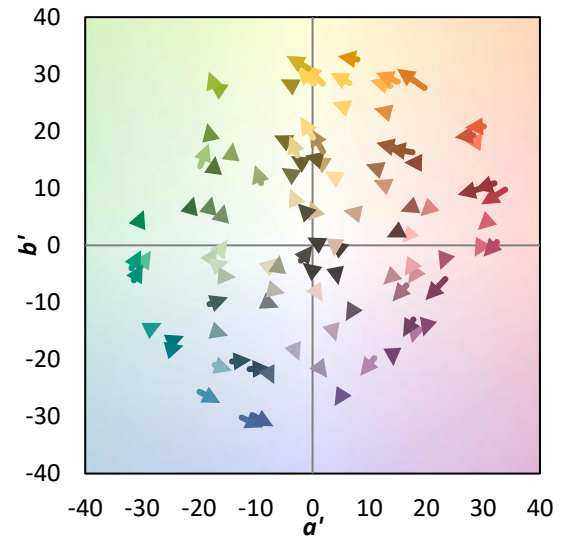
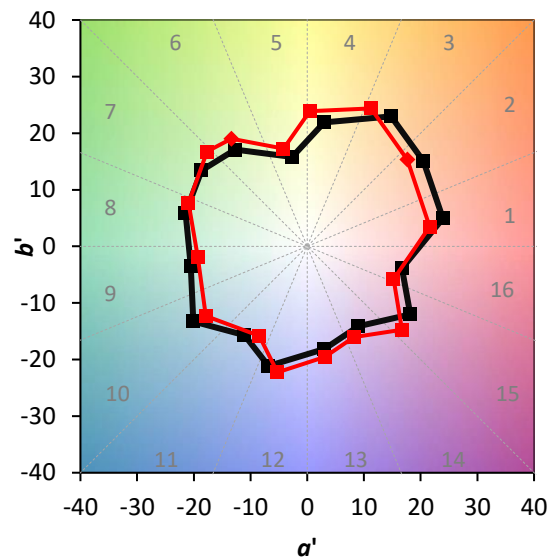
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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)