

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



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P631550

Luminaire Tested: GWS-SA1F-830-U-SLL-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P631550
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-SA1F-830-U-SLL-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5209.4 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

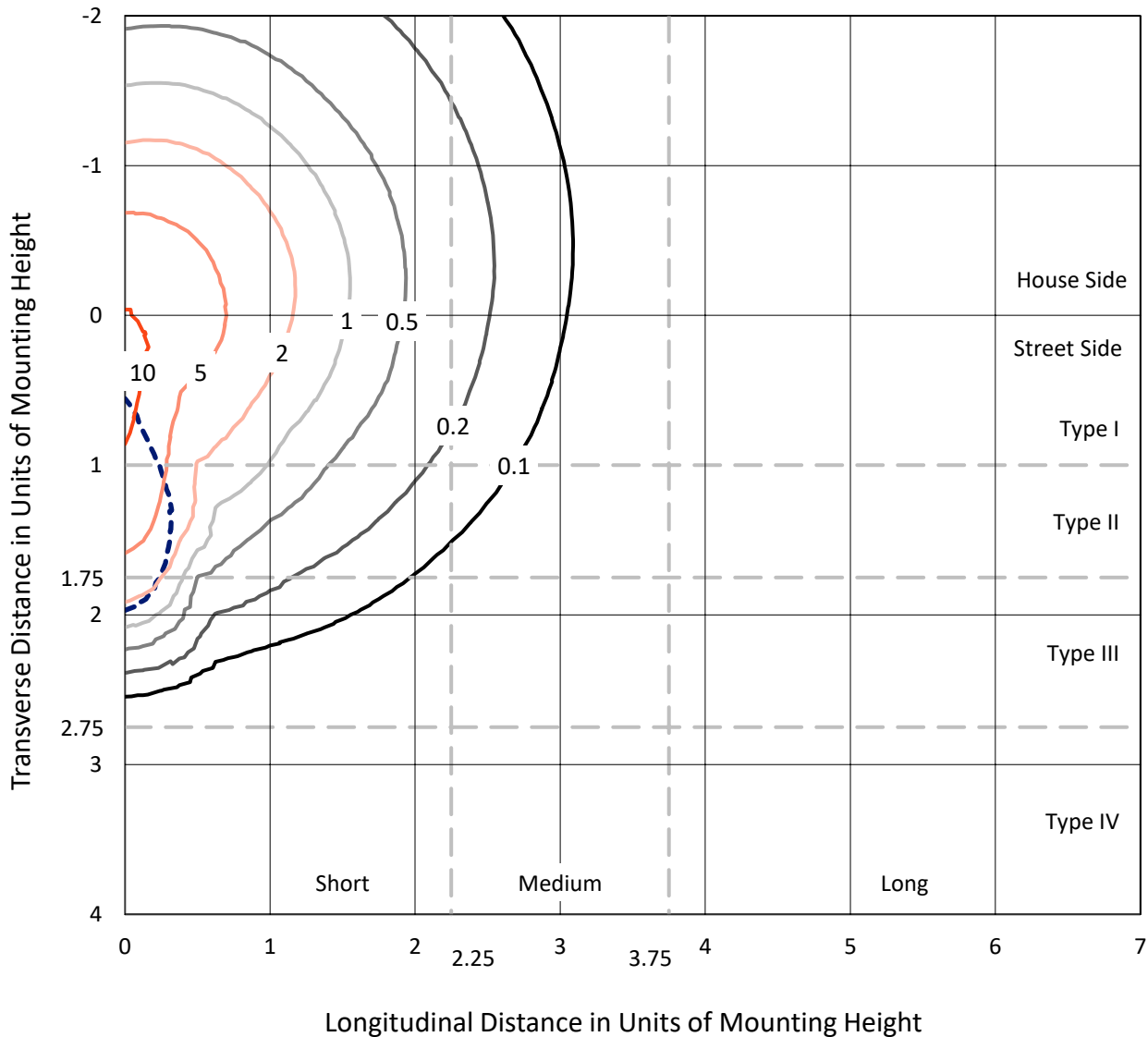
Input Watts (W): 67.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

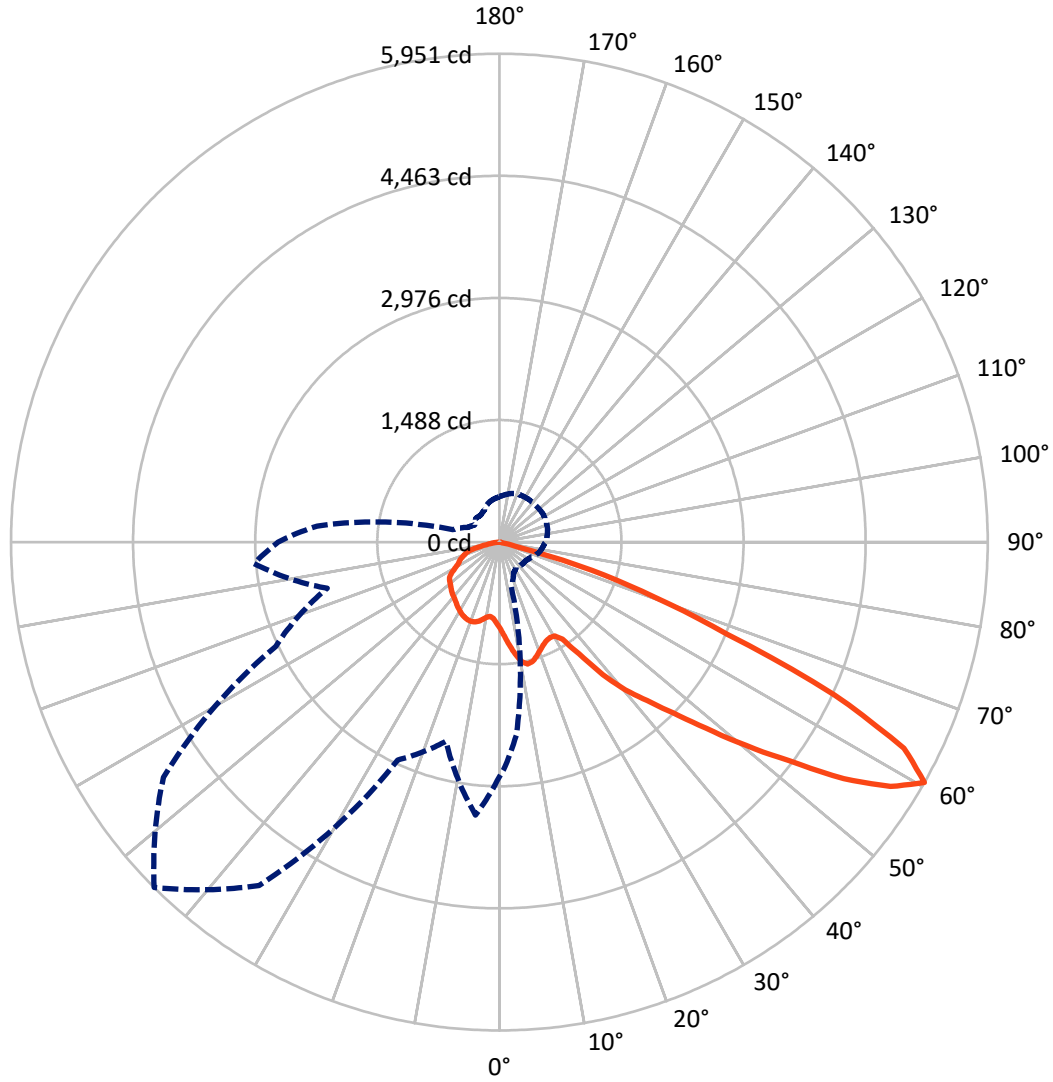
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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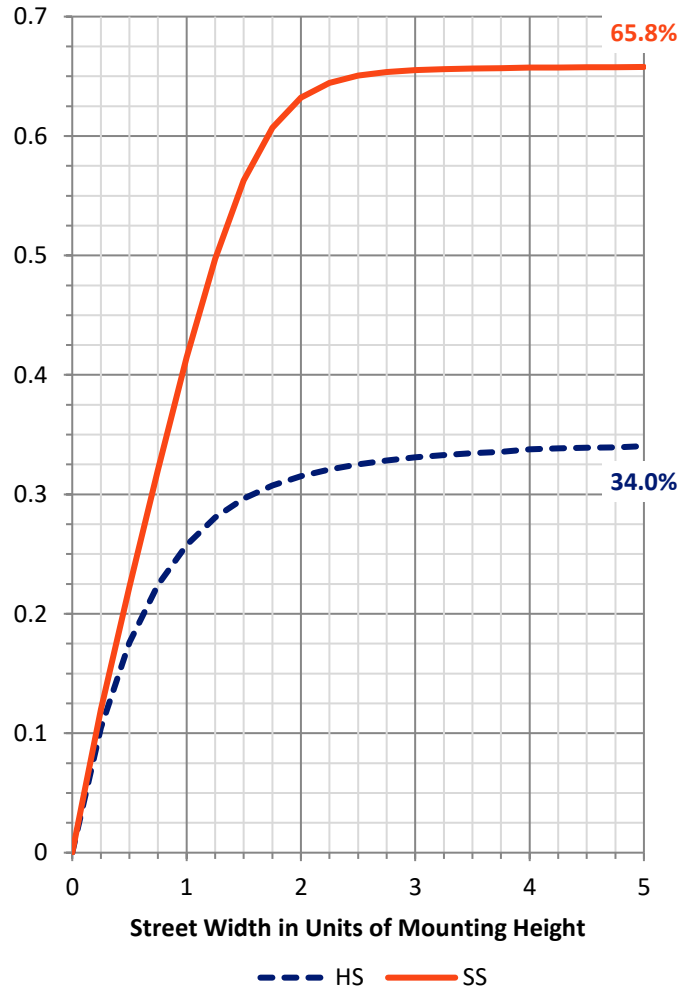
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1782.1	0.0	1782.1
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	3427.3	0.0	3427.3
	% Fixture	65.8	0.0	65.8
Total	Lumens	5209.4	0.0	5209.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.7	2.0
10°-20°	329.3	6.3
20°-30°	536.2	10.3
30°-40°	753.3	14.5
40°-50°	1030.8	19.8
50°-60°	1322.4	25.4
60°-70°	890.5	17.1
70°-80°	222.6	4.3
80°-90°	21.7	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°	5209.4	100.0
0°-180°	5209.4	100.0

Coefficient of Utilization



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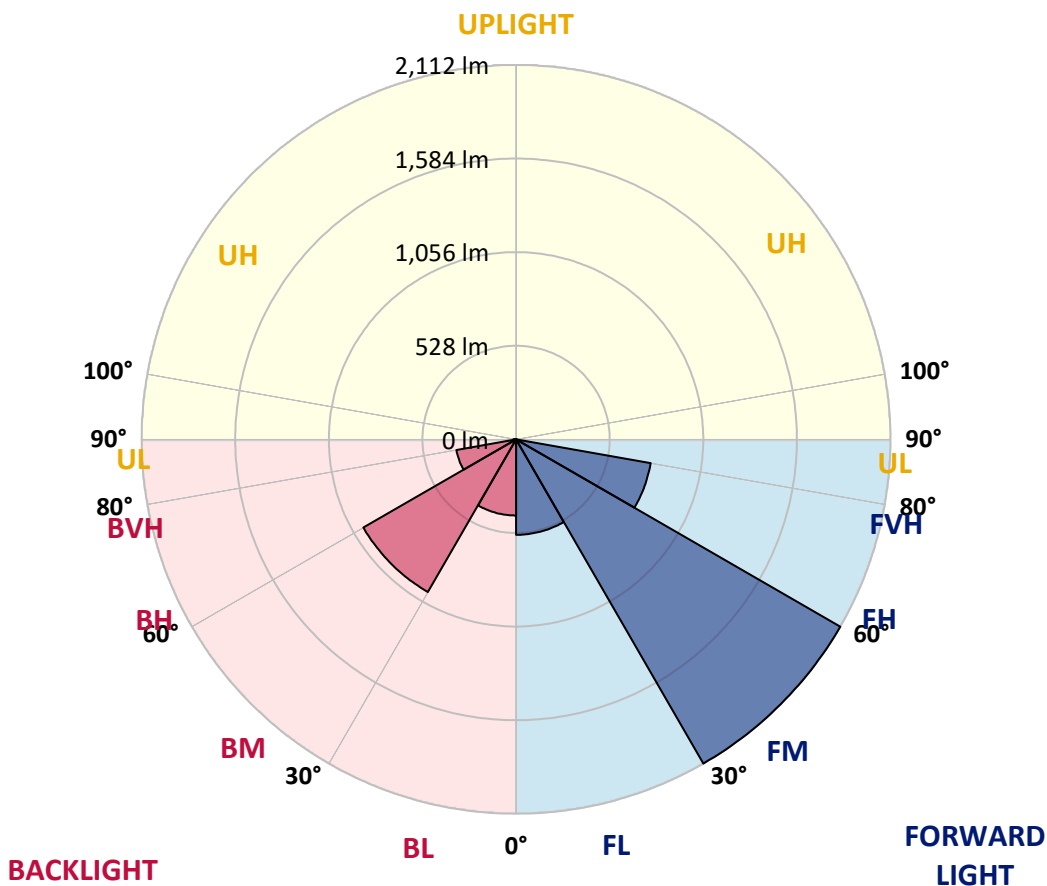
CATALOG NUMBER: GWS-SA1F-830-U-SLL-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	538.5	10.3			
FM (30°-60°)	2111.9	40.5			
FH (60°-80°)	771.2	14.8			G1/1800
FVH (80°-90°)	5.6	0.1			G0/10
BL (0°-30°)	429.6	8.2	B1/500		
BM (30°-60°)	994.5	19.1	B1/1000		
BH (60°-80°)	341.9	6.6	B1/500		G1/500
BVH (80°-90°)	16.1	0.3			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7
2.5°	1111.6	1109.2	1106.8	1088.1	1083.3	1069.9	1060.3	1048.3	1031.0	1021.4	1013.3
5°	1181.2	1177.3	1164.4	1126.0	1101.1	1073.7	1051.2	1026.2	999.8	982.6	969.1
7.5°	1246.9	1245.9	1223.9	1160.5	1120.2	1080.9	1050.2	1013.7	975.8	949.9	932.7
10°	1307.8	1300.6	1274.3	1191.7	1139.0	1093.9	1060.8	1020.5	976.3	941.3	918.3
12.5°	1361.6	1352.5	1316.0	1220.5	1155.3	1099.6	1063.6	1030.5	1001.3	972.0	945.6
15°	1405.7	1394.7	1357.7	1247.4	1169.7	1096.3	1045.9	1020.0	1030.1	1043.0	1013.7
17.5°	1447.0	1435.5	1390.4	1267.1	1174.0	1075.6	1002.2	991.2	1042.0	1101.1	1087.6
20°	1481.5	1468.6	1416.3	1276.6	1166.3	1036.3	945.6	964.8	1032.0	1102.5	1124.1
22.5°	1518.9	1508.4	1445.5	1290.6	1156.7	982.1	898.1	945.1	1014.7	1076.6	1109.2
25°	1578.9	1565.9	1491.1	1315.0	1151.9	931.2	864.1	925.9	990.7	1046.8	1072.3
27.5°	1665.7	1641.7	1553.5	1357.7	1157.2	883.2	842.5	902.4	962.9	1010.9	1031.5
30°	1760.2	1731.5	1622.6	1401.9	1164.9	854.0	830.9	875.6	920.2	968.2	990.7
32.5°	1872.0	1846.6	1696.4	1435.0	1148.6	840.5	822.3	846.3	881.8	920.2	938.9
35°	2005.4	1959.8	1777.0	1461.8	1095.8	820.9	814.6	814.2	832.9	870.3	891.4
37.5°	2148.9	2099.9	1876.4	1490.6	1013.7	789.7	796.4	776.3	793.5	823.3	847.3
40°	2266.4	2215.1	1976.6	1530.0	911.1	740.8	756.1	734.5	745.1	775.8	802.6
42.5°	2381.5	2326.8	2070.2	1574.6	811.8	692.8	700.5	692.3	695.7	727.8	765.2
45°	2532.7	2471.3	2185.3	1606.2	722.5	654.9	647.7	633.8	651.5	693.3	733.1
47.5°	2785.0	2711.6	2373.9	1626.9	657.8	633.3	600.2	592.0	614.1	660.6	701.9
50°	3080.1	3016.7	2675.2	1625.9	609.3	615.1	554.1	546.9	583.4	630.4	674.1
52.5°	3321.9	3257.6	2932.8	1577.9	569.5	576.2	527.3	507.1	557.0	600.7	644.3
55°	3517.1	3444.7	3051.3	1377.4	519.1	514.3	498.0	461.1	523.9	570.9	611.7
57.5°	3412.1	3325.7	2907.8	1047.3	467.3	437.1	447.6	420.3	478.8	537.8	577.2
60°	2860.8	2783.1	2362.4	557.5	411.2	365.1	387.2	391.5	429.4	498.0	538.3
62.5°	1965.1	1908.5	1601.0	338.2	324.3	293.1	327.7	358.9	387.2	445.2	480.2
65°	961.4	944.7	800.7	216.9	226.9	237.0	271.5	309.4	351.2	402.0	439.0
67.5°	264.8	266.7	242.8	169.4	179.0	206.8	234.1	264.3	306.1	353.1	390.5
70°	116.6	118.5	122.3	130.5	148.7	174.2	202.5	233.6	272.0	311.4	347.3
72.5°	81.1	83.0	88.8	99.3	115.6	139.6	166.5	196.2	236.0	269.1	298.9
75°	49.9	51.3	56.6	65.7	76.8	95.0	121.4	148.7	183.7	214.0	240.4
77.5°	26.4	25.4	28.8	35.0	44.6	54.2	72.0	89.2	114.2	138.7	160.7
80°	14.4	13.9	15.8	19.2	22.1	29.7	41.7	53.3	67.6	81.6	93.6
82.5°	6.2	5.8	6.2	8.2	10.1	14.4	21.1	29.3	37.4	47.0	54.7
85°	0.0	0.0	0.0	0.5	2.4	3.8	7.2	10.6	15.4	21.1	25.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	4.3
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°	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7
2.5°	1008.5	996.5	995.5	985.9	986.9	987.4	977.8	973.9	977.3	981.1	979.2
5°	964.3	951.8	946.6	937.5	936.5	932.2	928.3	923.5	926.9	930.3	932.2
7.5°	925.9	917.8	914.4	912.0	913.0	911.1	903.4	899.1	898.6	900.0	902.0
10°	913.5	906.8	911.1	917.8	922.6	925.9	917.8	910.6	903.9	901.0	901.0
12.5°	940.3	931.7	940.3	947.5	957.1	959.5	950.4	942.7	940.3	943.2	949.0
15°	999.8	979.7	979.2	983.5	991.2	995.0	986.4	982.6	982.6	1000.8	1015.2
17.5°	1059.3	1026.2	1012.3	1009.9	1014.7	1016.1	1008.9	1005.6	1014.2	1049.7	1076.6
20°	1101.1	1060.8	1030.5	1024.8	1026.2	1026.7	1020.9	1018.5	1031.0	1074.2	1096.7
22.5°	1096.7	1067.0	1030.1	1022.9	1025.3	1024.3	1019.0	1018.1	1028.1	1065.6	1076.1
25°	1067.0	1044.0	1012.8	1008.0	1011.8	1011.3	1006.1	1003.7	1008.0	1032.9	1033.9
27.5°	1032.9	1012.8	985.9	984.5	990.7	994.1	985.0	977.8	976.3	993.1	989.3
30°	992.1	977.3	955.7	956.6	968.2	970.1	959.0	948.5	945.6	954.7	949.5
32.5°	943.7	938.9	927.4	929.8	940.8	944.7	933.1	922.1	918.7	921.6	910.6
35°	902.4	900.5	901.5	905.8	915.4	918.3	908.7	900.0	895.2	885.2	870.8
37.5°	859.7	865.0	878.9	887.1	892.4	891.4	886.1	879.9	872.2	853.5	835.7
40°	819.9	833.3	858.3	867.4	869.3	869.8	866.0	860.7	851.1	826.2	806.0
42.5°	789.2	804.1	837.2	851.1	852.1	853.0	849.2	844.9	831.4	798.3	778.7
45°	757.1	776.7	815.6	832.4	831.4	830.9	827.6	825.7	809.8	771.5	749.9
47.5°	729.7	752.7	794.5	808.9	808.4	807.9	805.5	805.5	789.7	748.0	723.5
50°	702.9	729.2	772.9	784.9	785.9	784.9	783.9	785.4	766.7	722.0	698.1
52.5°	673.6	703.3	748.9	759.9	765.7	768.1	768.1	764.7	742.7	696.1	669.7
55°	641.4	669.7	722.5	737.4	742.2	746.5	746.5	739.8	719.2	672.1	643.8
57.5°	601.6	626.6	668.3	683.2	694.7	697.6	697.6	686.5	669.7	624.7	601.6
60°	558.4	580.0	608.3	624.2	632.8	627.1	631.4	628.5	615.1	573.3	554.1
62.5°	500.9	522.9	554.1	570.4	574.3	568.5	574.3	573.8	555.6	518.1	495.1
65°	459.6	481.2	511.9	533.0	539.3	537.8	541.7	535.9	513.3	477.8	455.8
67.5°	410.7	433.7	469.2	492.7	505.7	507.1	512.4	500.4	477.4	438.5	410.7
70°	364.1	383.8	411.2	433.2	451.5	460.6	461.5	444.3	415.5	383.3	363.2
72.5°	315.2	335.4	368.5	392.4	415.5	426.0	426.0	404.9	373.7	338.2	316.6
75°	255.7	274.4	304.6	330.6	356.9	370.4	369.9	351.7	317.1	283.5	261.0
77.5°	173.2	187.1	206.3	226.0	229.8	240.4	245.6	222.6	203.4	185.2	165.0
80°	100.8	109.4	119.9	131.0	133.4	136.7	128.1	119.5	109.4	97.4	88.3
82.5°	59.0	64.8	70.0	78.7	80.1	81.1	73.4	69.6	61.4	54.2	48.5
85°	28.8	30.7	35.5	39.8	37.9	36.9	33.6	29.7	26.4	23.5	20.6
87.5°	5.8	5.8	8.6	8.2	6.7	5.8	3.4	4.3	1.0	1.0	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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7
2.5°	985.4	993.6	1003.7	1017.1	1032.4	1048.8	1064.6	1076.6	1088.6	1106.3	1103.5
5°	935.1	949.0	964.8	985.4	1010.4	1038.7	1070.4	1102.0	1136.1	1164.9	1177.3
7.5°	905.8	921.1	939.9	966.7	998.9	1033.4	1078.0	1129.4	1184.5	1222.4	1245.9
10°	905.8	925.5	949.9	975.8	1004.1	1039.6	1094.8	1159.1	1230.1	1280.0	1307.4
12.5°	958.1	977.8	983.0	982.1	997.9	1037.2	1108.3	1190.3	1275.2	1328.0	1361.6
15°	1039.6	1046.4	1006.5	970.1	972.5	1020.0	1114.5	1215.2	1314.1	1377.4	1413.9
17.5°	1094.3	1076.6	1005.6	941.8	928.3	990.7	1114.5	1239.2	1355.3	1426.8	1460.9
20°	1098.7	1054.5	981.1	914.4	879.9	951.8	1106.8	1257.5	1395.2	1474.3	1510.8
22.5°	1060.8	1017.1	955.2	890.9	840.1	904.8	1094.3	1271.4	1429.2	1518.9	1564.0
25°	1017.6	981.1	928.8	866.9	812.7	857.3	1082.8	1294.9	1476.7	1579.4	1625.0
27.5°	975.4	944.7	897.2	846.8	797.4	816.1	1075.6	1329.4	1533.3	1665.3	1704.6
30°	934.1	906.3	863.1	827.6	789.2	789.2	1069.4	1369.2	1608.2	1761.7	1801.0
32.5°	892.4	866.0	830.9	808.9	784.4	778.7	1052.1	1406.7	1685.4	1867.2	1907.5
35°	853.5	827.1	800.2	791.1	782.0	770.5	1009.4	1435.9	1760.7	1990.5	2025.1
37.5°	817.0	791.6	771.5	769.1	770.0	748.4	942.3	1460.4	1854.8	2116.7	2134.9
40°	785.4	757.1	741.2	740.8	745.6	712.9	857.3	1495.4	1962.2	2223.7	2216.0
42.5°	757.1	727.3	708.1	712.4	709.6	677.4	774.3	1527.6	2055.8	2324.0	2308.6
45°	729.2	700.5	673.6	679.8	676.5	655.4	703.8	1551.1	2159.4	2444.4	2446.3
47.5°	702.4	674.1	647.2	639.5	639.0	648.6	649.6	1558.7	2328.3	2638.2	2594.6
50°	677.4	649.1	621.3	595.4	605.5	635.2	609.3	1553.0	2581.1	2852.2	2730.3
52.5°	651.5	624.7	593.9	547.4	573.8	603.1	573.3	1532.4	2735.6	3041.2	2968.3
55°	621.8	596.3	554.6	498.0	530.1	536.4	536.4	1332.8	2801.3	3228.3	3273.4
57.5°	582.0	548.4	482.2	436.6	465.4	441.4	497.0	932.7	2692.9	3169.3	3344.4
60°	536.9	500.9	430.8	398.2	406.8	364.6	423.6	584.8	2231.9	2696.7	3000.0
62.5°	477.4	444.3	386.2	360.8	343.0	297.5	341.1	369.9	1530.0	2002.5	2209.3
65°	437.5	401.1	349.3	315.7	279.2	239.4	226.4	242.8	822.8	1120.7	1260.3
67.5°	390.5	354.5	305.6	263.4	234.1	205.3	182.8	177.0	282.1	373.3	404.0
70°	345.9	311.4	270.6	231.2	202.0	173.7	151.6	135.8	130.5	129.5	127.6
72.5°	300.3	268.2	234.1	197.7	165.5	139.6	119.9	101.7	94.0	91.6	89.2
75°	246.1	220.7	186.6	147.3	121.4	97.4	82.0	70.0	63.3	60.9	58.1
77.5°	158.3	146.8	117.1	95.0	73.4	58.1	49.9	42.2	37.9	36.9	34.5
80°	84.4	78.7	64.8	54.7	43.7	35.5	31.2	26.9	24.5	23.5	22.5
82.5°	47.0	42.7	36.0	31.7	25.4	21.6	19.2	17.3	15.8	15.4	14.9
85°	21.1	18.2	14.4	13.4	12.0	11.0	10.6	9.6	9.1	8.6	8.2
87.5°	1.0	1.9	2.4	1.9	1.9	2.9	3.4	3.4	2.9	2.9	2.4
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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CATALOG NUMBER: GWS-SA1F-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7	1050.7
2.5°	1121.2	1135.6	1137.0	1141.8	1135.6	1134.2	1124.1	1118.3	1113.0	1111.6
5°	1208.5	1237.3	1248.8	1257.0	1249.3	1245.5	1223.4	1200.4	1187.4	1181.2
7.5°	1298.2	1341.4	1364.0	1374.0	1375.0	1357.7	1319.8	1276.6	1255.1	1246.9
10°	1378.4	1431.6	1461.4	1480.5	1473.8	1452.7	1400.9	1342.4	1315.0	1307.8
12.5°	1437.8	1488.7	1511.7	1524.2	1523.7	1512.2	1463.3	1399.9	1368.8	1361.6
15°	1476.2	1506.5	1507.9	1510.8	1518.9	1534.3	1508.9	1450.3	1415.8	1405.7
17.5°	1506.5	1494.5	1471.9	1464.2	1482.5	1525.2	1540.5	1493.0	1455.6	1447.0
20°	1525.6	1465.2	1425.4	1410.5	1431.6	1501.2	1559.7	1531.4	1492.5	1481.5
22.5°	1540.5	1437.8	1373.6	1363.5	1385.6	1475.3	1579.4	1577.0	1534.3	1518.9
25°	1564.0	1419.6	1337.1	1329.9	1350.5	1462.8	1605.8	1638.9	1601.0	1578.9
27.5°	1601.0	1417.7	1318.4	1316.0	1344.3	1473.8	1643.7	1729.5	1682.0	1665.7
30°	1652.3	1435.9	1322.7	1327.5	1362.0	1513.7	1702.7	1833.2	1785.7	1760.2
32.5°	1726.2	1484.9	1388.4	1409.1	1434.5	1577.5	1789.0	1945.4	1909.5	1872.0
35°	1823.6	1619.2	1582.7	1670.5	1646.5	1717.1	1893.1	2081.7	2038.0	2005.4
37.5°	1953.6	1894.6	1928.2	2049.1	1991.0	1980.9	2020.3	2205.5	2181.5	2148.9
40°	2135.9	2147.9	2209.8	2368.6	2284.6	2219.9	2176.2	2298.5	2306.7	2266.4
42.5°	2256.8	2312.0	2461.2	2641.6	2526.0	2371.0	2306.7	2417.5	2418.0	2381.5
45°	2301.9	2446.3	2758.2	2965.9	2772.5	2457.3	2378.7	2579.2	2574.4	2532.7
47.5°	2285.6	2559.5	3066.6	3384.2	3089.2	2518.8	2368.6	2809.5	2848.4	2785.0
50°	2251.5	2673.2	3426.9	3896.6	3477.8	2584.0	2353.2	3064.7	3129.0	3080.1
52.5°	2286.1	2799.9	3853.0	4426.3	3965.2	2688.1	2456.9	3392.4	3380.9	3321.9
55°	2395.5	2949.6	4370.6	5091.7	4500.7	2864.2	2723.1	3704.7	3587.7	3517.1
57.5°	2390.2	3056.6	4824.5	5618.0	4966.5	3008.6	2815.7	3737.8	3501.3	3412.1
60°	2169.5	3007.6	4997.2	5951.0	5107.1	2929.0	2511.1	3338.7	2954.4	2860.8
62.5°	1619.2	2668.9	4662.3	5534.1	4709.4	2529.8	1888.3	2396.4	2123.0	1965.1
65°	1035.8	2087.9	3919.7	4483.4	3881.8	1934.9	1124.6	1284.8	1006.5	961.4
67.5°	440.9	1473.8	3047.0	2996.6	2904.0	1253.6	434.2	361.7	269.6	264.8
70°	145.8	1002.7	1878.3	1998.7	1734.3	863.6	143.4	121.4	120.9	116.6
72.5°	95.5	538.3	1057.4	1177.3	1115.9	497.0	86.8	81.1	83.0	81.1
75°	57.1	117.1	178.0	231.2	178.0	83.5	52.3	51.3	52.3	49.9
77.5°	33.6	32.6	31.7	31.7	31.2	28.8	26.4	25.4	25.9	26.4
80°	21.6	20.6	19.7	19.2	16.8	15.8	14.9	13.9	13.9	14.4
82.5°	13.9	13.0	12.0	10.6	8.6	7.2	6.7	5.8	5.8	6.2
85°	7.2	5.8	4.3	3.4	1.9	1.0	0.0	0.0	0.0	0.0
87.5°	1.4	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.

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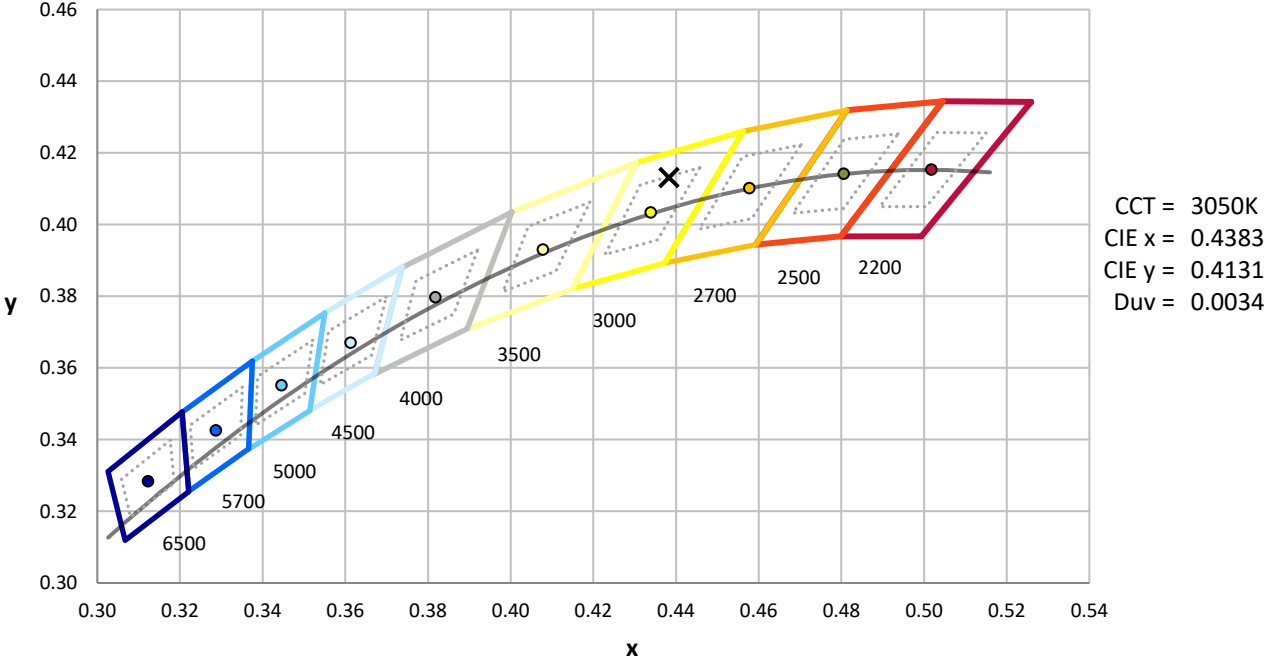
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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)