

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: P630560

Luminaire Tested: GWS-SA1D-830-U-SLL-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P630560
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-SA1D-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: 3749.4 lumens
Efficiency: N/A
Efficacy: 84.6 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

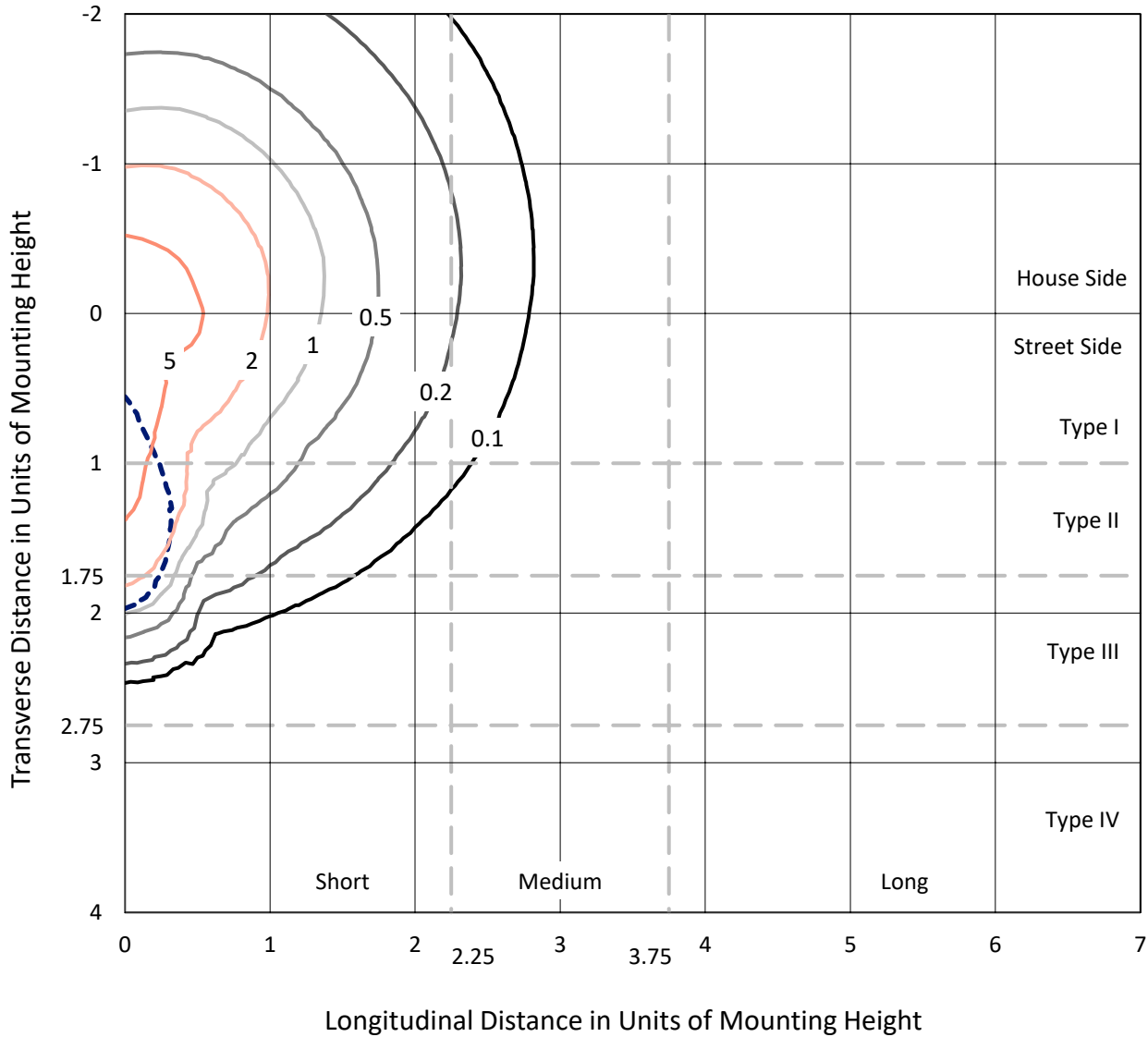
Input Watts (W): 44.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

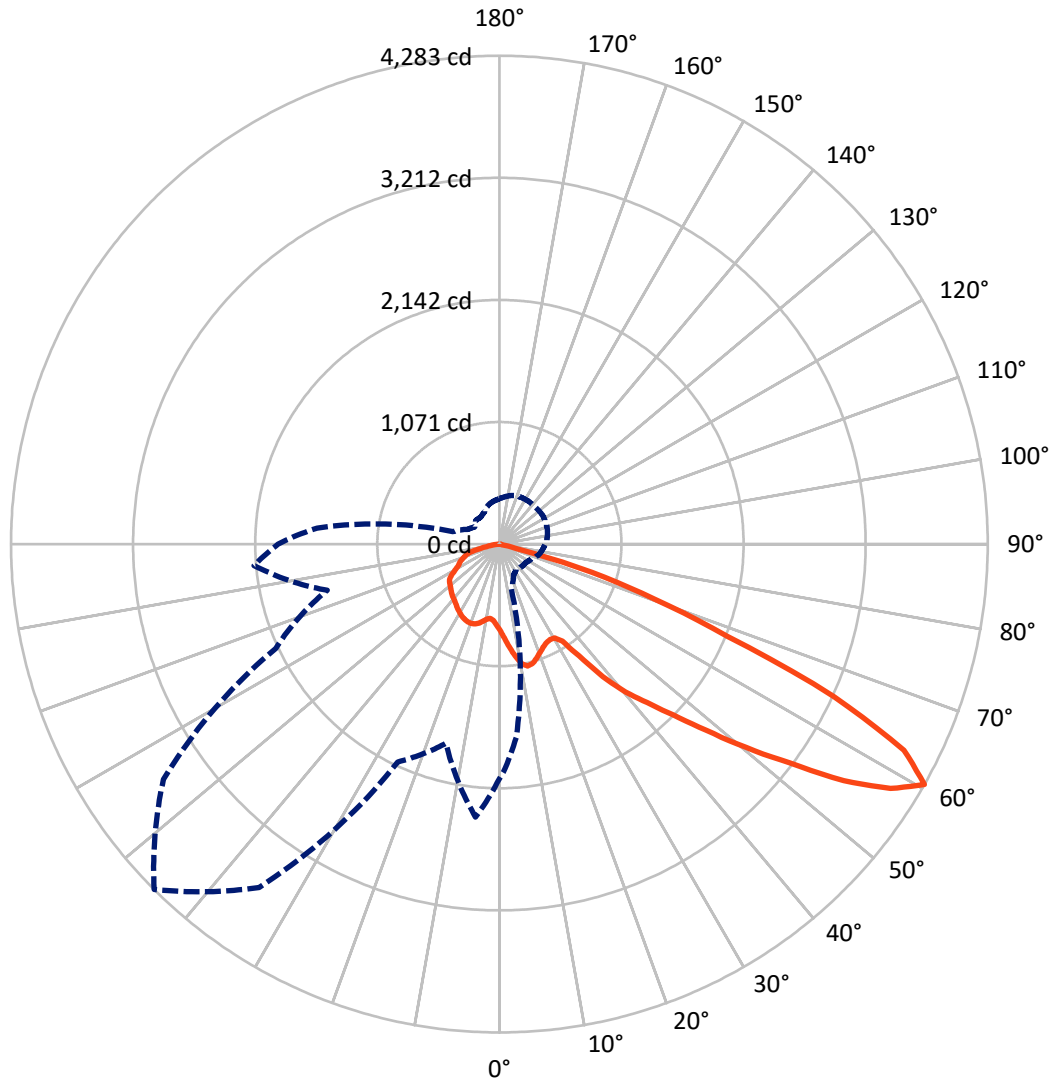
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.1 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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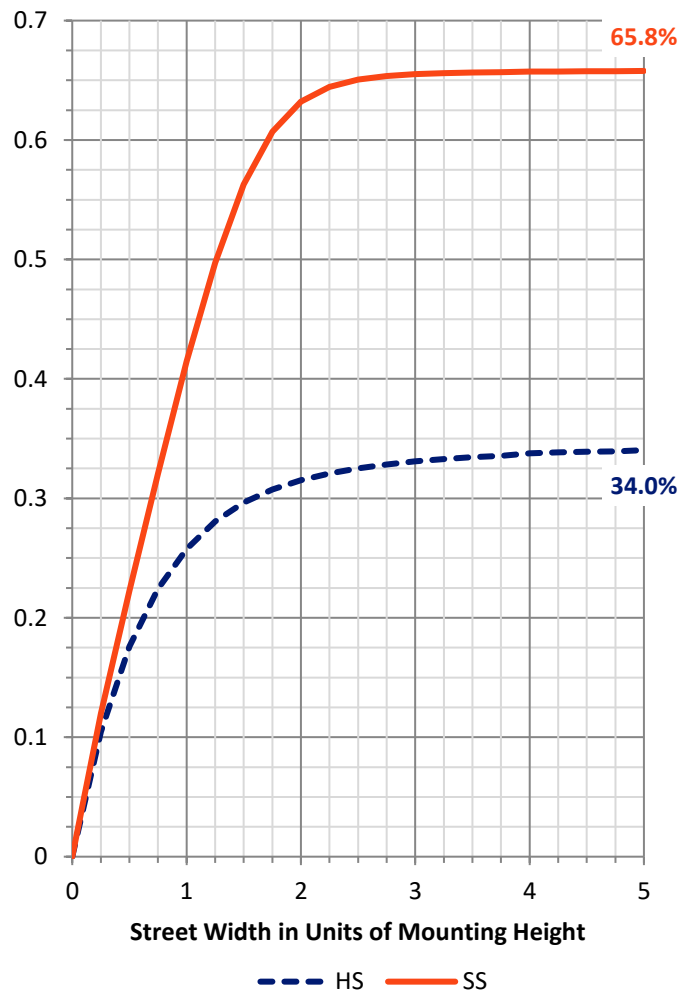
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1282.6	0.0	1282.6
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	2466.8	0.0	2466.8
	% Fixture	65.8	0.0	65.8
Total	Lumens	3749.4	0.0	3749.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	2.0
10°-20°	237.0	6.3
20°-30°	385.9	10.3
30°-40°	542.2	14.5
40°-50°	741.9	19.8
50°-60°	951.8	25.4
60°-70°	640.9	17.1
70°-80°	160.2	4.3
80°-90°	15.6	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°	3749.4	100.0
0°-180°	3749.4	100.0

Coefficient of Utilization



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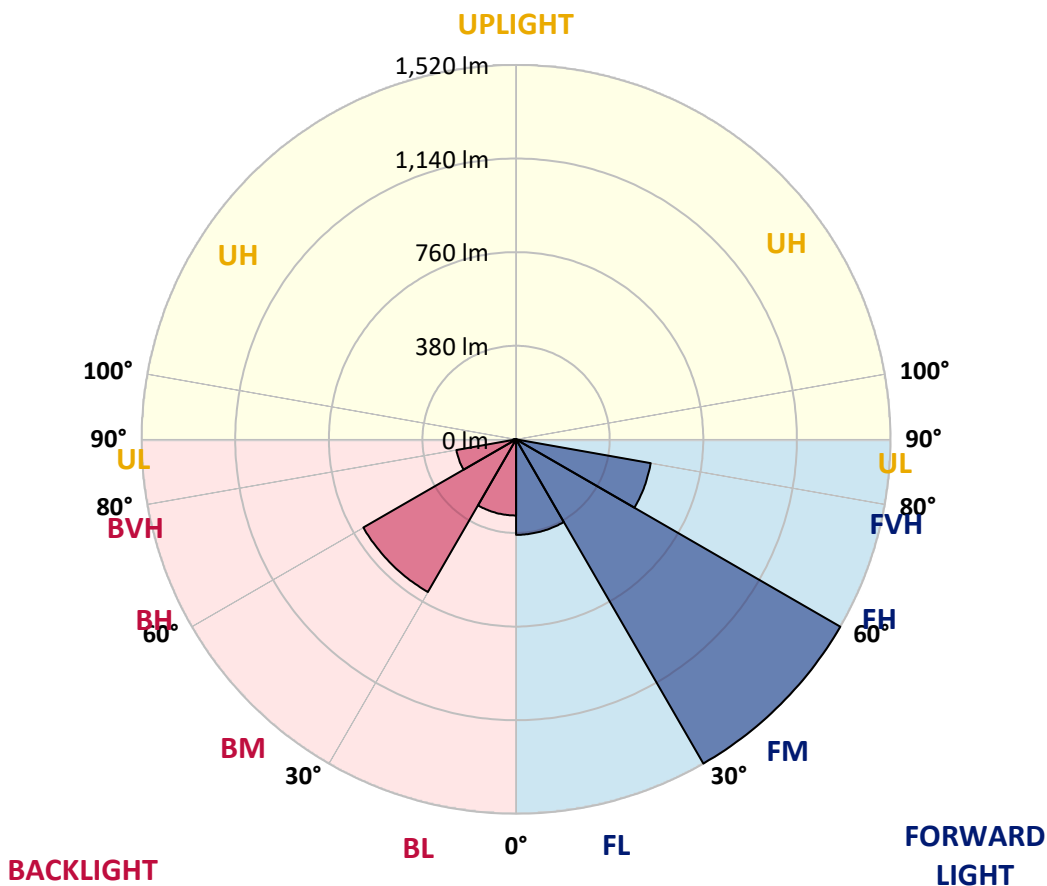
CATALOG NUMBER: GWS-SA1D-830-U-SLL-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	387.6	10.3			
FM (30°-60°)	1520.0	40.5			
FH (60°-80°)	555.1	14.8			G0/660
FVH (80°-90°)	4.1	0.1			G0/10
BL (0°-30°)	309.2	8.2	B1/500		
BM (30°-60°)	715.8	19.1	B1/1000		
BH (60°-80°)	246.1	6.6	B1/500		G1/500
BVH (80°-90°)	11.6	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2
2.5°	800.1	798.3	796.6	783.1	779.7	770.0	763.1	754.5	742.1	735.2	729.3
5°	850.1	847.4	838.1	810.4	792.5	772.8	756.6	738.6	719.6	707.2	697.5
7.5°	897.4	896.8	880.9	835.3	806.3	778.0	755.9	729.6	702.3	683.7	671.3
10°	941.3	936.1	917.1	857.7	819.7	787.3	763.5	734.5	702.7	677.5	660.9
12.5°	980.0	973.4	947.2	878.5	831.5	791.4	765.5	741.7	720.6	699.6	680.6
15°	1011.7	1003.8	977.2	897.8	841.8	789.0	752.8	734.1	741.4	750.7	729.6
17.5°	1041.4	1033.1	1000.7	911.9	845.0	774.2	721.3	713.4	750.0	792.5	782.8
20°	1066.3	1057.0	1019.3	918.9	839.4	745.9	680.6	694.4	742.7	793.5	809.0
22.5°	1093.2	1085.6	1040.4	928.9	832.5	706.8	646.4	680.2	730.3	774.9	798.3
25°	1136.4	1127.1	1073.2	946.5	829.1	670.2	621.9	666.4	713.1	753.5	771.8
27.5°	1198.9	1181.6	1118.1	977.2	832.9	635.7	606.4	649.5	693.0	727.6	742.4
30°	1266.9	1246.2	1167.8	1009.0	838.4	614.6	598.1	630.2	662.3	696.8	713.1
32.5°	1347.4	1329.1	1221.0	1032.8	826.7	605.0	591.8	609.1	634.7	662.3	675.8
35°	1443.4	1410.6	1279.0	1052.1	788.7	590.8	586.3	586.0	599.4	626.4	641.6
37.5°	1546.6	1511.4	1350.5	1072.9	729.6	568.4	573.2	558.7	571.1	592.5	609.8
40°	1631.2	1594.3	1422.6	1101.2	655.7	533.1	544.2	528.7	536.3	558.4	577.7
42.5°	1714.1	1674.7	1490.0	1133.3	584.3	498.6	504.1	498.3	500.7	523.8	550.8
45°	1822.9	1778.7	1572.9	1156.1	520.0	471.3	466.2	456.1	468.9	499.0	527.6
47.5°	2004.5	1951.7	1708.6	1170.9	473.4	455.8	432.0	426.1	442.0	475.5	505.2
50°	2216.8	2171.3	1925.4	1170.2	438.5	442.7	398.8	393.6	419.9	453.7	485.2
52.5°	2390.9	2344.6	2110.8	1135.7	409.9	414.7	379.5	365.0	400.9	432.3	463.7
55°	2531.4	2479.3	2196.1	991.4	373.6	370.2	358.4	331.8	377.1	410.9	440.3
57.5°	2455.8	2393.6	2092.9	753.8	336.3	314.6	322.2	302.5	344.6	387.1	415.4
60°	2059.0	2003.1	1700.3	401.2	295.9	262.8	278.7	281.8	309.0	358.4	387.4
62.5°	1414.4	1373.6	1152.3	243.4	233.4	211.0	235.8	258.3	278.7	320.4	345.6
65°	692.0	679.9	576.3	156.1	163.3	170.6	195.4	222.7	252.8	289.4	316.0
67.5°	190.6	192.0	174.7	121.9	128.8	148.8	168.5	190.3	220.3	254.1	281.1
70°	83.9	85.3	88.1	93.9	107.0	125.3	145.7	168.2	195.8	224.1	250.0
72.5°	58.4	59.7	63.9	71.5	83.2	100.5	119.8	141.2	169.9	193.7	215.1
75°	35.9	36.9	40.7	47.3	55.2	68.4	87.4	107.0	132.3	154.0	173.0
77.5°	19.0	18.3	20.7	25.2	32.1	39.0	51.8	64.2	82.2	99.8	115.7
80°	10.4	10.0	11.4	13.8	15.9	21.4	30.0	38.3	48.7	58.7	67.3
82.5°	4.5	4.1	4.5	5.9	7.3	10.4	15.2	21.1	26.9	33.8	39.4
85°	0.0	0.0	0.0	0.3	1.7	2.8	5.2	7.6	11.0	15.2	18.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	3.1
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2
2.5°	725.8	717.2	716.5	709.6	710.3	710.6	703.7	701.0	703.4	706.1	704.8
5°	694.1	685.1	681.3	674.7	674.0	670.9	668.2	664.7	667.1	669.5	670.9
7.5°	666.4	660.6	658.1	656.4	657.1	655.7	650.2	647.1	646.8	647.8	649.2
10°	657.5	652.6	655.7	660.6	664.0	666.4	660.6	655.4	650.6	648.5	648.5
12.5°	676.8	670.6	676.8	682.0	688.9	690.6	684.0	678.5	676.8	678.9	683.0
15°	719.6	705.1	704.8	707.9	713.4	716.2	709.9	707.2	707.2	720.3	730.7
17.5°	762.4	738.6	728.6	726.9	730.3	731.4	726.2	723.8	730.0	755.5	774.9
20°	792.5	763.5	741.7	737.6	738.6	738.9	734.8	733.1	742.1	773.1	789.4
22.5°	789.4	768.0	741.4	736.2	737.9	737.2	733.4	732.7	740.0	766.9	774.5
25°	768.0	751.4	728.9	725.5	728.2	727.9	724.1	722.4	725.5	743.4	744.1
27.5°	743.4	728.9	709.6	708.6	713.1	715.5	708.9	703.7	702.7	714.8	712.0
30°	714.1	703.4	687.8	688.5	696.8	698.2	690.3	682.7	680.6	687.2	683.4
32.5°	679.2	675.8	667.5	669.2	677.1	679.9	671.6	663.7	661.3	663.3	655.4
35°	649.5	648.1	648.8	651.9	658.8	660.9	654.0	647.8	644.3	637.1	626.7
37.5°	618.8	622.6	632.6	638.5	642.3	641.6	637.8	633.3	627.8	614.3	601.5
40°	590.1	599.8	617.7	624.3	625.7	626.0	623.3	619.5	612.6	594.6	580.1
42.5°	568.0	578.7	602.6	612.6	613.3	613.9	611.2	608.1	598.4	574.6	560.4
45°	544.9	559.0	587.0	599.1	598.4	598.1	595.6	594.3	582.9	555.2	539.7
47.5°	525.2	541.8	571.8	582.2	581.8	581.5	579.8	579.8	568.4	538.3	520.7
50°	505.9	524.9	556.3	564.9	565.6	564.9	564.2	565.3	551.8	519.7	502.4
52.5°	484.8	506.2	539.0	547.0	551.1	552.8	552.8	550.4	534.5	501.0	482.0
55°	461.7	482.0	520.0	530.7	534.2	537.3	537.3	532.5	517.6	483.8	463.4
57.5°	433.0	451.0	481.0	491.7	500.0	502.1	502.1	494.1	482.0	449.6	433.0
60°	401.9	417.5	437.8	449.2	455.5	451.3	454.4	452.3	442.7	412.6	398.8
62.5°	360.5	376.4	398.8	410.6	413.3	409.2	413.3	413.0	399.9	372.9	356.4
65°	330.8	346.3	368.4	383.6	388.1	387.1	389.8	385.7	369.5	343.9	328.0
67.5°	295.6	312.2	337.7	354.6	363.9	365.0	368.8	360.2	343.6	315.6	295.6
70°	262.1	276.2	295.9	311.8	324.9	331.5	332.2	319.8	299.0	275.9	261.4
72.5°	226.9	241.4	265.2	282.5	299.0	306.6	306.6	291.4	269.0	243.4	227.9
75°	184.0	197.5	219.3	237.9	256.9	266.6	266.2	253.1	228.2	204.1	187.8
77.5°	124.7	134.7	148.5	162.6	165.4	173.0	176.8	160.2	146.4	133.3	118.8
80°	72.5	78.7	86.3	94.3	96.0	98.4	92.2	86.0	78.7	70.1	63.5
82.5°	42.5	46.6	50.4	56.6	57.7	58.4	52.8	50.1	44.2	39.0	34.9
85°	20.7	22.1	25.6	28.7	27.3	26.6	24.2	21.4	19.0	16.9	14.8
87.5°	4.1	4.1	6.2	5.9	4.8	4.1	2.4	3.1	0.7	0.7	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°	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2
2.5°	709.3	715.1	722.4	732.0	743.1	754.8	766.2	774.9	783.5	796.3	794.2
5°	673.0	683.0	694.4	709.3	727.2	747.6	770.4	793.2	817.7	838.4	847.4
7.5°	651.9	663.0	676.4	695.8	718.9	743.8	775.9	812.8	852.6	879.8	896.8
10°	651.9	666.1	683.7	702.3	722.7	748.3	788.0	834.3	885.4	921.3	941.0
12.5°	689.6	703.7	707.5	706.8	718.2	746.5	797.7	856.7	917.8	955.8	980.0
15°	748.3	753.1	724.4	698.2	699.9	734.1	802.1	874.7	945.8	991.4	1017.6
17.5°	787.6	774.9	723.8	677.8	668.2	713.1	802.1	891.9	975.5	1026.9	1051.4
20°	790.7	759.0	706.1	658.1	633.3	685.1	796.6	905.0	1004.1	1061.1	1087.4
22.5°	763.5	732.0	687.5	641.2	604.6	651.2	787.6	915.1	1028.7	1093.2	1125.7
25°	732.4	706.1	668.5	624.0	584.9	617.1	779.3	932.0	1062.8	1136.7	1169.5
27.5°	702.0	679.9	645.7	609.5	573.9	587.4	774.2	956.8	1103.6	1198.5	1226.9
30°	672.3	652.3	621.2	595.6	568.0	568.0	769.7	985.5	1157.5	1268.0	1296.3
32.5°	642.3	623.3	598.1	582.2	564.6	560.4	757.3	1012.4	1213.1	1343.9	1372.9
35°	614.3	595.3	576.0	569.4	562.8	554.6	726.5	1033.5	1267.3	1432.7	1457.5
37.5°	588.1	569.8	555.2	553.5	554.2	538.7	678.2	1051.1	1334.9	1523.5	1536.6
40°	565.3	544.9	533.5	533.1	536.6	513.1	617.1	1076.3	1412.3	1600.5	1595.0
42.5°	544.9	523.5	509.7	512.8	510.7	487.6	557.3	1099.4	1479.6	1672.6	1661.6
45°	524.9	504.1	484.8	489.3	486.9	471.7	506.6	1116.4	1554.2	1759.3	1760.7
47.5°	505.5	485.2	465.8	460.3	459.9	466.8	467.5	1121.9	1675.8	1898.8	1867.4
50°	487.6	467.2	447.2	428.5	435.8	457.2	438.5	1117.7	1857.7	2052.8	1965.1
52.5°	468.9	449.6	427.5	394.0	413.0	434.0	412.6	1102.9	1968.9	2188.9	2136.4
55°	447.5	429.2	399.2	358.4	381.6	386.0	386.0	959.3	2016.2	2323.5	2356.0
57.5°	418.9	394.7	347.0	314.2	334.9	317.7	357.7	671.3	1938.2	2281.1	2407.1
60°	386.4	360.5	310.1	286.6	292.8	262.4	304.9	420.9	1606.4	1940.9	2159.2
62.5°	343.6	319.8	278.0	259.7	246.9	214.1	245.5	266.2	1101.2	1441.3	1590.1
65°	314.9	288.7	251.4	227.2	201.0	172.3	163.0	174.7	592.2	806.6	907.1
67.5°	281.1	255.2	220.0	189.6	168.5	147.8	131.6	127.4	203.0	268.6	290.7
70°	249.0	224.1	194.8	166.4	145.4	125.0	109.1	97.7	93.9	93.2	91.9
72.5°	216.2	193.0	168.5	142.3	119.1	100.5	86.3	73.2	67.7	66.0	64.2
75°	177.1	158.8	134.3	106.0	87.4	70.1	59.0	50.4	45.6	43.9	41.8
77.5°	114.0	105.7	84.3	68.4	52.8	41.8	35.9	30.4	27.3	26.6	24.9
80°	60.8	56.6	46.6	39.4	31.4	25.6	22.4	19.3	17.6	16.9	16.2
82.5°	33.8	30.7	25.9	22.8	18.3	15.5	13.8	12.4	11.4	11.0	10.7
85°	15.2	13.1	10.4	9.7	8.6	7.9	7.6	6.9	6.6	6.2	5.9
87.5°	0.7	1.4	1.7	1.4	1.4	2.1	2.4	2.4	2.1	2.1	1.7
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-SA1D-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2	756.2
2.5°	807.0	817.3	818.4	821.8	817.3	816.3	809.0	804.9	801.1	800.1
5°	869.8	890.5	898.8	904.7	899.2	896.4	880.5	863.9	854.6	850.1
7.5°	934.4	965.5	981.7	988.9	989.6	977.2	949.9	918.9	903.3	897.4
10°	992.1	1030.4	1051.8	1065.6	1060.8	1045.6	1008.3	966.2	946.5	941.3
12.5°	1034.9	1071.5	1088.1	1097.0	1096.7	1088.4	1053.2	1007.6	985.2	980.0
15°	1062.5	1084.3	1085.3	1087.4	1093.2	1104.3	1086.0	1043.9	1019.0	1011.7
17.5°	1084.3	1075.6	1059.4	1053.9	1067.0	1097.7	1108.8	1074.6	1047.7	1041.4
20°	1098.1	1054.6	1025.9	1015.2	1030.4	1080.5	1122.6	1102.2	1074.2	1066.3
22.5°	1108.8	1034.9	988.6	981.4	997.2	1061.8	1136.7	1135.0	1104.3	1093.2
25°	1125.7	1021.8	962.4	957.2	972.0	1052.8	1155.7	1179.6	1152.3	1136.4
27.5°	1152.3	1020.4	948.9	947.2	967.5	1060.8	1183.0	1244.8	1210.6	1198.9
30°	1189.2	1033.5	952.0	955.5	980.3	1089.4	1225.5	1319.4	1285.2	1266.9
32.5°	1242.4	1068.7	999.3	1014.2	1032.5	1135.4	1287.6	1400.2	1374.3	1347.4
35°	1312.5	1165.4	1139.2	1202.3	1185.1	1235.8	1362.6	1498.3	1466.8	1443.4
37.5°	1406.1	1363.6	1387.8	1474.8	1433.0	1425.8	1454.1	1587.4	1570.1	1546.6
40°	1537.3	1545.9	1590.5	1704.8	1644.3	1597.7	1566.3	1654.3	1660.2	1631.2
42.5°	1624.3	1664.0	1771.4	1901.2	1818.0	1706.5	1660.2	1740.0	1740.3	1714.1
45°	1656.8	1760.7	1985.1	2134.7	1995.5	1768.6	1712.0	1856.4	1852.9	1822.9
47.5°	1645.0	1842.2	2207.2	2435.8	2223.4	1812.8	1704.8	2022.1	2050.1	2004.5
50°	1620.5	1924.0	2466.5	2804.6	2503.1	1859.8	1693.7	2205.8	2252.1	2216.8
52.5°	1645.4	2015.2	2773.1	3185.8	2853.9	1934.7	1768.3	2441.6	2433.4	2390.9
55°	1724.1	2122.9	3145.7	3664.7	3239.3	2061.5	1959.9	2666.4	2582.2	2531.4
57.5°	1720.3	2199.9	3472.4	4043.5	3574.6	2165.4	2026.6	2690.3	2520.0	2455.8
60°	1561.5	2164.7	3596.7	4283.1	3675.8	2108.1	1807.3	2403.0	2126.4	2059.0
62.5°	1165.4	1920.9	3355.7	3983.1	3389.5	1820.8	1359.1	1724.8	1528.0	1414.4
65°	745.5	1502.8	2821.1	3226.9	2793.8	1392.6	809.4	924.7	724.4	692.0
67.5°	317.3	1060.8	2193.0	2156.8	2090.1	902.3	312.5	260.4	194.1	190.6
70°	105.0	721.7	1351.9	1438.5	1248.3	621.5	103.2	87.4	87.0	83.9
72.5°	68.7	387.4	761.0	847.4	803.2	357.7	62.5	58.4	59.7	58.4
75°	41.1	84.3	128.1	166.4	128.1	60.1	37.6	36.9	37.6	35.9
77.5°	24.2	23.5	22.8	22.8	22.4	20.7	19.0	18.3	18.6	19.0
80°	15.5	14.8	14.2	13.8	12.1	11.4	10.7	10.0	10.0	10.4
82.5°	10.0	9.3	8.6	7.6	6.2	5.2	4.8	4.1	4.1	4.5
85°	5.2	4.1	3.1	2.4	1.4	0.7	0.0	0.0	0.0	0.0
87.5°	1.0	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

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

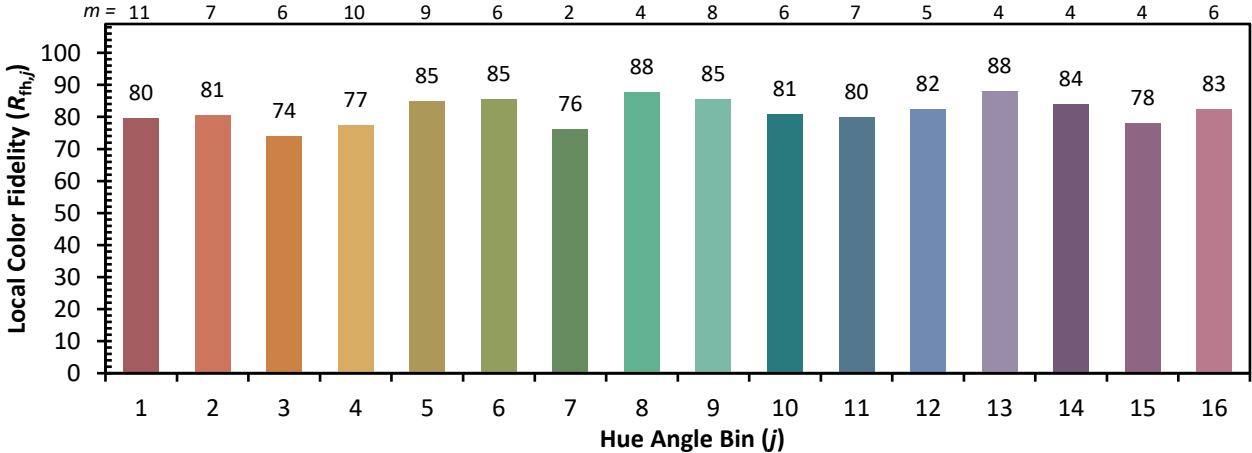


Individual Sample Fidelity Index ($R_{f,i}$)

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)