

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: P324645

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324645
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: GLEON-SA1C-830-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY 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: 4363 lumens
Efficiency: N/A
Efficacy: 73.9 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

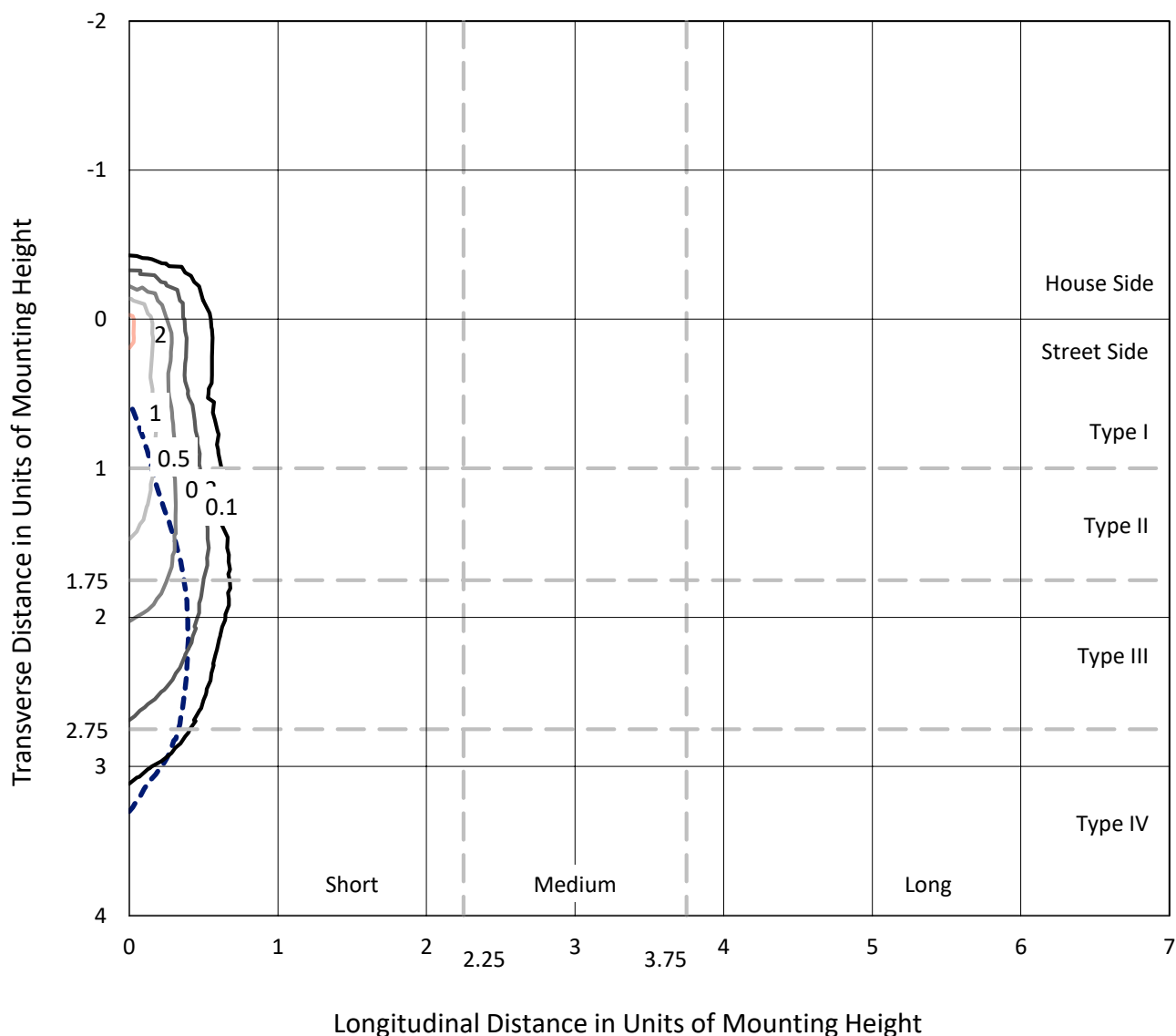
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

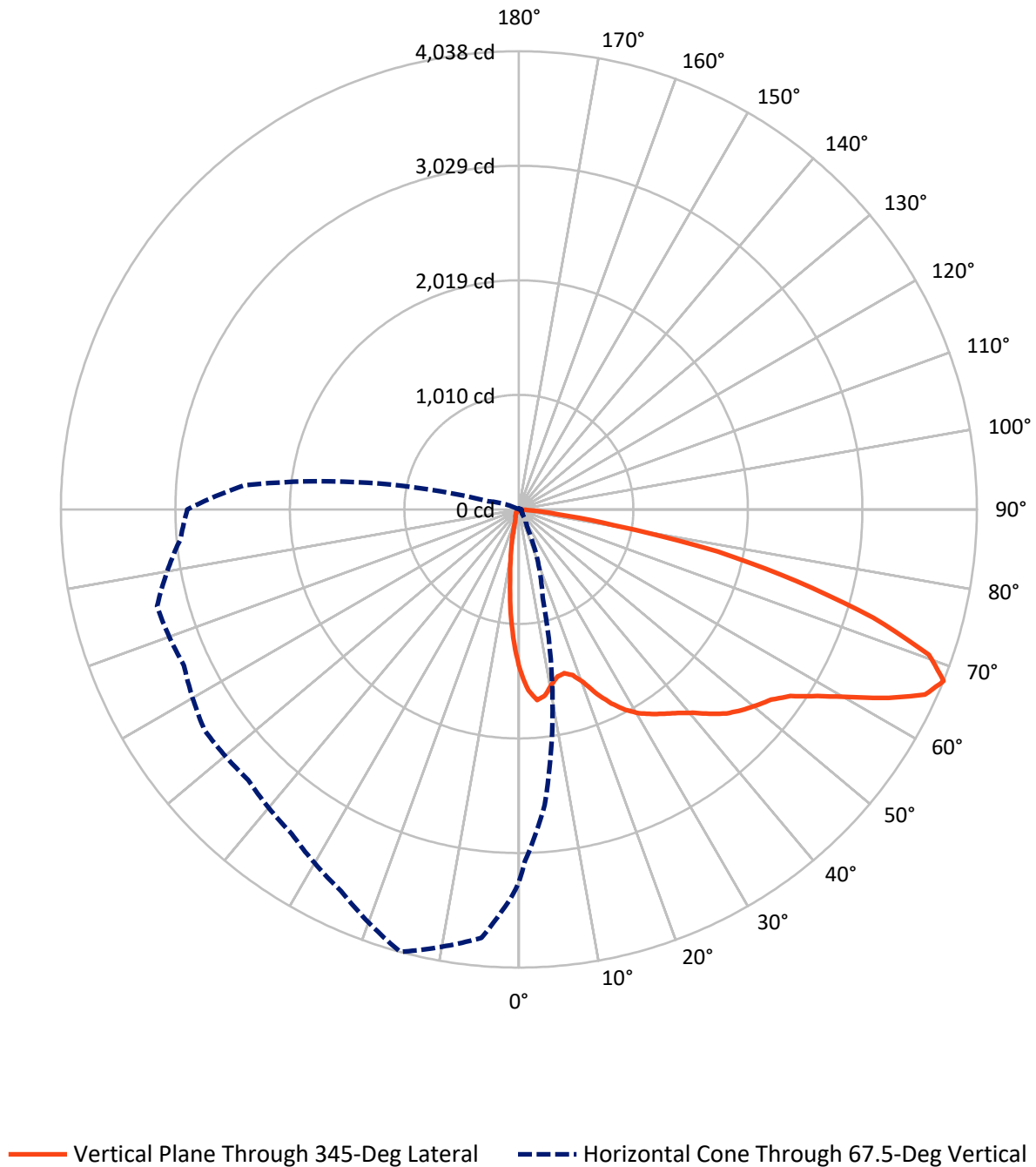
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	528.1	0.0	528.1
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	3834.9	0.0	3834.9
	% Fixture	87.9	0.0	87.9
Total	Lumens	4363.0	0.0	4363.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.1	2.5
10°-20°	217.1	5.0
20°-30°	308.3	7.1
30°-40°	455.4	10.4
40°-50°	656.8	15.1
50°-60°	922.0	21.1
60°-70°	1074.8	24.6
70°-80°	549.4	12.6
80°-90°	70.2	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°	4363.0	100.0
0°-180°	4363.0	100.0

Coefficient of Utilization



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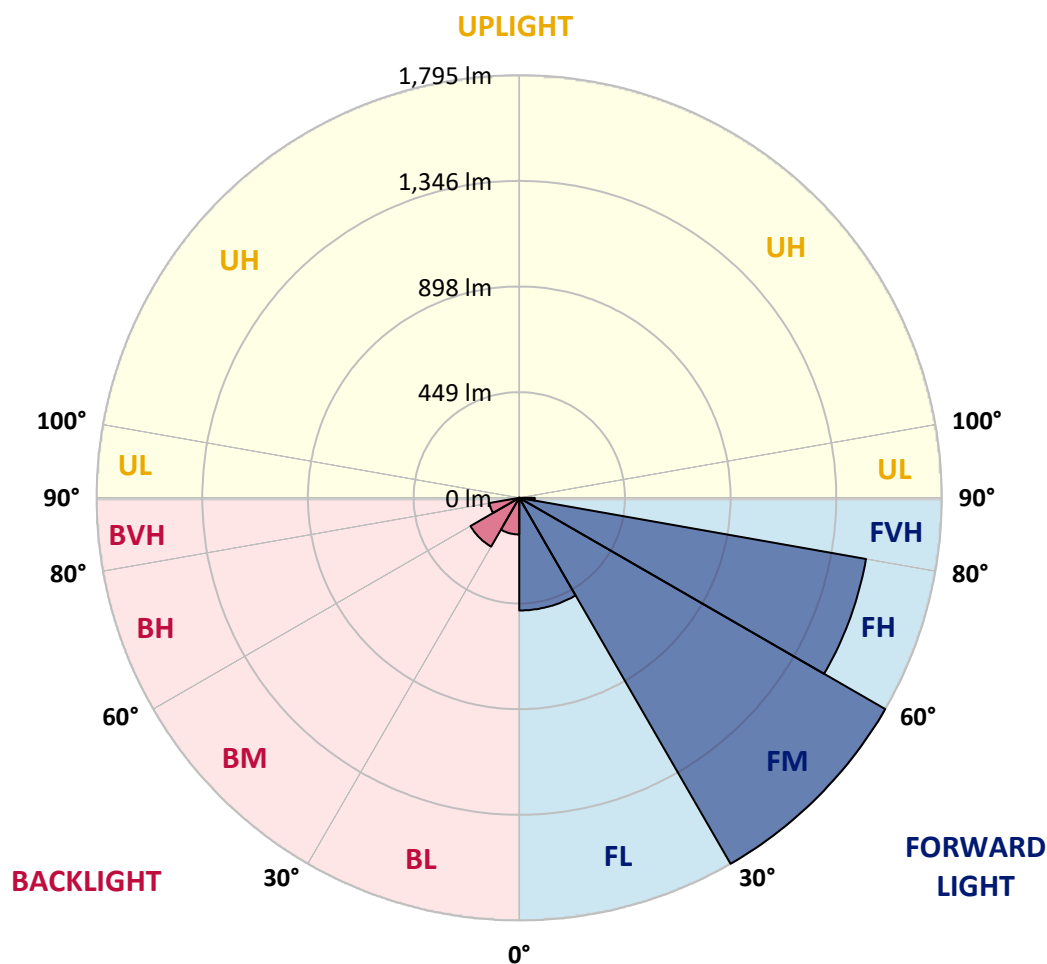
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	478.5	11.0			
FM	(30°-60°)	1795.0	41.1			
FH	(60°-80°)	1495.5	34.3			G1/1800
FVH	(80°-90°)	65.9	1.5			G1/100
BL	(0°-30°)	156.0	3.6	B1/500		
BM	(30°-60°)	239.1	5.5	B1/1000		
BH	(60°-80°)	128.7	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





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2
2.5°	1556.2	1544.2	1531.0	1487.8	1447.7	1401.8	1364.4	1338.4	1305.7	1263.3	1252.6
5°	1545.0	1532.2	1490.7	1394.6	1310.5	1228.6	1149.6	1103.3	1045.9	987.6	973.1
7.5°	1432.8	1419.4	1359.4	1227.8	1114.5	996.3	893.8	830.3	765.4	712.1	683.7
10°	1316.0	1301.4	1234.0	1074.2	934.7	827.8	752.6	692.0	630.6	573.6	528.1
12.5°	1235.6	1216.4	1143.2	962.2	840.6	768.1	697.8	625.3	542.2	481.0	431.0
15°	1201.9	1180.0	1102.7	919.0	807.4	722.2	630.6	541.5	444.2	374.1	328.2
17.5°	1228.0	1199.5	1116.6	916.1	765.6	649.6	533.9	429.3	323.7	252.8	220.1
20°	1316.4	1279.0	1173.8	915.2	715.0	563.5	416.7	298.5	213.3	171.6	154.4
22.5°	1455.8	1406.4	1256.1	921.9	662.7	472.9	300.9	202.8	160.2	138.5	128.4
25°	1624.0	1566.8	1374.5	945.2	616.8	384.9	218.7	160.2	135.2	119.3	110.8
27.5°	1784.0	1737.5	1524.2	978.9	581.2	313.8	177.6	135.8	115.5	105.0	98.2
30°	1943.8	1885.3	1677.7	1019.0	538.4	265.6	156.1	123.8	103.6	92.4	88.1
32.5°	2059.9	2011.4	1798.0	1047.9	492.8	234.2	139.5	113.3	96.7	85.4	79.0
35°	2196.6	2141.6	1901.2	1054.4	463.4	214.3	125.5	101.9	83.9	73.8	67.0
37.5°	2344.1	2275.7	2020.2	1040.3	440.5	204.6	114.9	96.7	78.3	68.0	60.8
40°	2507.4	2430.1	2134.5	1020.0	417.9	201.3	106.9	92.8	74.0	63.5	56.0
42.5°	2679.4	2588.2	2233.6	998.8	403.7	190.0	106.0	88.9	70.7	59.3	51.9
45°	2823.9	2731.5	2335.2	991.7	393.5	177.6	109.5	86.2	68.4	56.0	48.8
47.5°	2939.0	2851.6	2439.4	1007.4	387.8	166.2	99.8	89.7	67.2	53.1	46.1
50°	3076.5	2977.5	2586.2	1054.4	379.3	154.8	90.3	102.7	67.2	51.3	43.8
52.5°	3248.8	3150.9	2749.9	1127.1	362.3	139.1	81.2	102.9	67.8	48.8	40.9
55°	3465.7	3394.6	2983.7	1206.9	335.3	116.0	70.3	88.5	65.3	44.2	38.2
57.5°	3673.6	3615.5	3196.8	1261.5	299.1	90.5	61.2	71.3	59.7	38.9	34.1
59°	3730.4	3667.0	3274.9	1263.9	272.0	79.0	56.6	58.9	58.5	36.4	31.6
60°	3730.4	3663.1	3297.4	1250.7	252.4	72.6	53.7	52.5	61.0	34.7	30.2
62.5°	3662.9	3568.2	3224.2	1161.2	205.9	61.8	46.9	43.4	54.8	31.2	26.7
65°	3522.3	3384.4	2975.0	999.4	183.5	56.6	40.5	35.6	38.0	27.5	23.4
67.5°	3287.9	3101.1	2615.5	807.4	174.7	55.2	34.9	30.2	28.7	23.6	20.5
70°	2875.1	2667.8	2179.2	634.8	167.0	54.6	29.4	25.4	23.1	19.8	17.4
72.5°	2092.6	1876.4	1547.1	496.3	162.5	55.8	23.6	21.3	19.0	15.5	13.4
75°	1197.0	1055.4	869.6	327.8	138.5	53.3	18.2	17.8	13.6	11.2	9.3
77.5°	618.4	599.6	521.1	125.9	66.3	23.4	12.0	10.3	8.1	6.8	5.6
80°	266.8	264.0	228.4	36.4	17.6	13.0	6.8	4.3	3.7	2.9	2.3
82.5°	92.2	92.2	81.2	12.2	7.9	6.4	0.8	0.0	0.0	0.0	0.0
85°	18.6	20.9	14.7	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2
2.5°	1239.6	1214.5	1212.9	1197.2	1177.5	1168.7	1163.5	1172.6	1183.7	1185.0	1201.7
5°	962.2	935.9	946.9	919.0	924.5	919.0	909.9	911.5	916.5	901.0	920.2
7.5°	675.7	655.8	668.5	661.0	670.9	674.9	669.3	661.0	636.6	633.7	650.5
10°	509.3	486.8	473.3	459.3	462.4	468.8	466.7	460.7	445.2	446.0	462.2
12.5°	409.3	384.0	357.4	322.9	314.4	319.1	314.4	310.9	296.0	297.2	311.5
15°	310.5	289.8	261.9	234.2	219.1	220.5	207.3	198.0	188.7	177.6	186.2
17.5°	209.6	197.0	188.7	180.4	162.5	158.3	141.6	123.6	116.6	111.4	115.1
20°	148.4	141.6	138.3	137.9	127.5	122.4	106.0	94.9	91.4	90.3	92.6
22.5°	124.0	119.1	114.3	111.6	106.4	100.5	88.1	82.5	80.0	78.8	80.4
25°	107.9	104.2	99.2	94.7	92.6	86.2	77.3	73.2	71.5	70.3	71.1
27.5°	95.9	92.6	86.8	83.9	82.3	76.7	69.0	65.7	64.3	63.9	63.7
30°	86.4	83.3	77.9	74.6	71.7	66.8	62.2	58.9	57.5	57.0	56.6
32.5°	76.9	74.4	70.9	67.6	64.5	59.9	56.0	53.3	51.1	50.6	50.4
35°	64.9	62.4	60.6	60.4	57.5	53.1	50.2	46.7	44.9	44.2	44.4
37.5°	57.7	54.4	50.2	51.7	50.8	47.7	43.8	40.3	38.4	38.0	38.0
40°	53.1	49.6	44.9	42.4	44.9	44.2	38.0	34.5	32.7	32.5	32.0
42.5°	48.8	45.3	39.9	35.8	37.0	38.9	32.9	29.6	27.7	27.3	26.7
45°	45.7	42.0	36.0	31.2	28.7	32.7	28.1	24.0	22.9	22.1	21.7
47.5°	42.8	39.3	32.5	27.1	22.9	23.6	22.5	19.6	18.4	17.6	17.4
50°	40.3	36.6	29.4	23.1	19.0	17.4	18.2	15.5	14.5	13.6	13.2
52.5°	37.4	33.9	26.0	20.0	15.9	13.6	13.8	12.2	11.2	10.5	10.3
55°	35.1	31.6	23.4	17.6	14.1	11.2	9.9	9.5	8.9	8.5	8.3
57.5°	32.0	28.7	20.7	14.9	12.0	9.1	7.6	7.6	7.4	7.0	6.8
59°	30.2	27.3	19.0	13.4	11.0	7.9	6.8	7.0	6.8	6.4	6.2
60°	28.7	26.0	17.8	12.4	10.3	7.2	6.2	6.6	6.4	6.0	5.8
62.5°	25.4	23.6	15.3	10.3	9.1	5.8	5.2	5.6	5.6	5.4	5.2
65°	22.3	20.3	13.0	8.7	8.5	5.0	4.1	5.0	5.2	4.8	4.3
67.5°	19.4	17.4	11.4	7.0	7.9	3.9	3.1	4.1	5.6	4.3	3.9
70°	16.5	14.5	8.9	5.6	8.3	2.7	2.5	3.7	6.6	4.8	3.7
72.5°	12.8	11.2	6.2	4.1	8.9	1.9	1.9	3.1	7.4	5.2	3.5
75°	8.9	7.2	3.7	2.5	7.2	1.2	1.2	2.9	7.0	4.8	3.3
77.5°	5.2	3.9	1.2	0.2	3.7	0.0	0.2	2.1	5.0	2.9	1.4
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

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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2
2.5°	1206.1	1234.0	1259.0	1296.8	1341.7	1393.3	1437.8	1485.5	1530.4	1549.0	1561.8
5°	924.1	958.7	999.0	1054.6	1128.6	1219.7	1305.1	1401.6	1505.4	1557.2	1606.0
7.5°	653.4	688.5	738.5	797.6	887.1	995.7	1107.3	1240.6	1381.1	1463.2	1544.0
10°	469.8	513.0	559.7	640.5	731.5	834.4	949.4	1098.2	1254.8	1345.8	1443.1
12.5°	319.8	369.0	439.6	530.2	637.0	737.9	837.7	979.7	1161.6	1251.7	1356.1
15°	191.8	219.1	293.9	398.7	529.8	655.4	764.8	907.2	1101.1	1211.4	1320.0
17.5°	118.2	130.8	171.6	257.5	395.2	554.2	704.0	882.6	1109.7	1244.1	1360.3
20°	94.3	99.2	112.2	152.1	261.9	442.5	635.6	877.6	1180.6	1346.0	1470.6
22.5°	81.9	86.6	95.3	110.6	164.7	331.3	570.7	882.2	1282.3	1498.8	1644.3
25°	72.1	76.3	84.5	97.1	120.7	233.4	501.2	902.4	1414.8	1688.3	1842.9
27.5°	64.5	68.0	75.7	87.2	103.6	162.9	422.5	927.0	1571.9	1882.2	2034.7
30°	57.5	60.6	67.4	78.1	89.9	125.3	336.1	943.8	1729.2	2034.7	2171.8
32.5°	51.5	53.7	59.9	69.0	78.1	99.8	255.5	941.1	1846.0	2161.6	2270.3
35°	45.3	47.5	52.9	60.8	68.0	82.5	200.9	890.9	1947.7	2293.3	2383.2
37.5°	38.4	41.3	46.5	53.5	58.5	72.6	162.5	830.3	2050.8	2443.8	2509.1
40°	32.7	35.6	40.1	47.7	50.8	68.8	124.8	756.5	2166.8	2612.0	2647.2
42.5°	27.1	29.8	34.5	41.1	48.0	59.3	92.4	672.2	2278.2	2755.9	2773.0
45°	21.9	24.6	29.6	36.2	51.3	49.2	71.5	581.8	2368.1	2875.5	2881.1
47.5°	17.4	19.8	25.0	34.1	47.7	39.3	51.1	511.0	2443.6	2969.0	2954.3
50°	13.4	15.5	20.9	39.1	41.8	32.5	38.7	487.4	2511.1	3026.9	2988.8
52.5°	10.5	12.4	17.2	36.6	32.5	26.9	32.5	509.5	2603.7	3074.8	3008.2
55°	8.5	10.3	13.4	20.9	22.1	22.7	27.7	530.2	2763.5	3187.2	3123.0
57.5°	7.0	8.9	11.0	14.7	16.7	19.2	24.6	532.4	2951.8	3374.1	3313.3
59°	6.4	8.1	9.9	13.0	14.7	17.6	23.1	520.0	3018.2	3442.1	3411.7
60°	6.0	7.6	9.3	12.0	13.6	16.5	22.3	508.3	3021.1	3439.6	3453.7
62.5°	5.2	6.8	8.3	10.1	11.6	14.1	20.0	464.7	2898.7	3327.0	3428.5
65°	4.5	6.0	7.4	8.7	9.9	12.6	18.2	385.1	2689.7	3145.3	3255.9
67.5°	4.1	5.2	6.8	7.6	8.9	11.2	16.1	274.5	2428.7	2923.1	2994.8
70°	3.7	5.0	6.2	7.0	8.1	9.7	13.8	157.7	2050.8	2597.8	2648.8
72.5°	3.5	4.8	5.6	6.6	7.2	8.7	12.6	74.2	1501.6	2081.0	2214.3
75°	3.1	4.3	5.2	6.2	6.8	7.9	10.7	35.6	998.8	1506.0	1657.5
77.5°	1.9	3.5	4.8	5.6	6.0	6.8	8.9	20.5	637.4	1042.4	1227.8
80°	0.0	1.2	3.5	4.8	5.2	5.8	6.8	16.1	341.0	595.5	714.8
82.5°	0.0	0.0	2.5	3.7	3.5	3.9	5.2	10.1	153.8	389.2	438.6
85°	0.0	0.0	0.8	2.9	2.5	1.9	3.5	3.5	33.7	197.0	245.8
87.5°	0.0	0.0	0.0	0.2	1.2	0.8	1.4	0.4	0.2	14.7	59.5
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°	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2	1421.2
2.5°	1606.6	1621.9	1647.8	1660.0	1654.0	1628.6	1598.2	1567.2	1549.0	1556.2
5°	1705.4	1784.2	1829.7	1844.8	1819.5	1762.5	1687.9	1589.5	1554.6	1545.0
7.5°	1705.4	1853.6	1947.5	1964.0	1907.8	1796.0	1656.0	1502.5	1451.4	1432.8
10°	1645.5	1847.2	1978.1	2004.3	1925.8	1758.6	1571.1	1395.8	1335.3	1316.0
12.5°	1577.9	1795.2	1933.0	1969.2	1904.7	1721.4	1512.2	1323.7	1252.4	1235.6
15°	1536.4	1731.1	1845.2	1871.4	1844.1	1699.7	1498.1	1302.0	1218.1	1201.9
17.5°	1551.3	1681.5	1722.6	1737.9	1756.3	1692.0	1536.4	1349.5	1243.3	1228.0
20°	1607.3	1629.2	1607.9	1627.1	1676.7	1699.5	1627.5	1464.4	1336.9	1316.4
22.5°	1702.3	1602.1	1542.4	1550.0	1610.4	1724.0	1766.8	1628.6	1481.4	1455.8
25°	1813.1	1624.0	1506.0	1499.2	1561.2	1756.5	1894.2	1807.1	1652.3	1624.0
27.5°	1952.4	1673.2	1498.5	1491.7	1544.0	1786.9	2000.0	1983.7	1832.4	1784.0
30°	2059.9	1721.6	1520.7	1505.0	1561.2	1808.0	2084.9	2133.5	1975.8	1943.8
32.5°	2137.0	1778.6	1556.6	1533.9	1609.5	1844.3	2150.5	2270.8	2108.5	2059.9
35°	2195.7	1840.6	1614.7	1577.3	1676.1	1899.5	2211.8	2416.9	2249.7	2196.6
37.5°	2250.7	1927.6	1705.4	1660.8	1780.5	1988.4	2276.8	2582.7	2407.6	2344.1
40°	2327.4	2026.2	1845.4	1805.7	1956.0	2109.5	2357.8	2755.5	2587.2	2507.4
42.5°	2404.1	2132.1	1988.6	1999.4	2174.9	2256.7	2462.4	2938.2	2764.6	2679.4
45°	2474.1	2241.2	2192.6	2242.2	2378.0	2418.1	2566.3	3043.8	2906.1	2823.9
47.5°	2536.6	2377.6	2395.4	2527.5	2609.1	2564.3	2644.1	3135.0	3011.6	2939.0
50°	2609.1	2554.1	2662.7	2849.5	2875.1	2696.6	2714.7	3242.8	3134.7	3076.5
52.5°	2688.5	2740.2	2958.6	3123.4	3115.1	2840.2	2785.8	3363.8	3303.6	3248.8
55°	2778.6	2890.4	3219.3	3379.7	3372.7	3000.6	2903.7	3513.2	3515.3	3465.7
57.5°	2912.3	3019.8	3396.2	3587.0	3598.8	3185.8	3103.3	3680.6	3706.7	3673.6
59°	3008.2	3103.7	3466.3	3673.6	3721.6	3329.0	3249.3	3777.8	3760.6	3730.4
60°	3079.4	3157.1	3501.0	3718.9	3792.9	3426.2	3356.9	3834.8	3767.0	3730.4
62.5°	3255.2	3273.2	3563.6	3770.1	3874.9	3642.0	3660.0	3932.0	3722.6	3662.9
65°	3337.3	3346.6	3562.8	3678.4	3795.6	3810.0	3934.9	3934.9	3614.1	3522.3
67.5°	3303.0	3258.1	3386.1	3374.1	3491.1	3710.2	4038.2	3790.6	3406.6	3287.9
70°	3024.0	2851.4	2794.5	2799.7	2889.2	3227.1	3833.6	3366.0	3013.8	2875.1
72.5°	2516.1	2102.1	1961.7	2121.9	2145.3	2480.1	3267.0	2534.9	2222.6	2092.6
75°	2023.8	1481.8	1253.6	1422.7	1462.4	1815.0	2527.3	1578.7	1298.3	1197.0
77.5°	1453.9	1063.7	899.5	887.8	939.0	1151.1	1793.3	794.5	662.7	618.4
80°	826.0	700.1	753.8	711.2	737.1	719.7	852.0	348.5	285.4	266.8
82.5°	498.5	413.8	448.1	373.1	472.1	411.1	328.2	111.6	96.9	92.2
85°	324.3	226.1	117.8	79.0	162.7	262.7	73.4	30.4	23.4	18.6
87.5°	111.8	57.7	5.8	2.5	17.4	49.0	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

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
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 81.0
 R1: 79.6
 R2: 85.6
 R3: 92.0
 R4: 82.6
 R5: 78.9
 R6: 81.7
 R7: 85.2
 R8: 62.0
 R9: 7.1
 R10: 67.0
 R11: 82.7
 R12: 63.2
 R13: 80.3
 R14: 95.0
 R15: 71.7



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

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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			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.32

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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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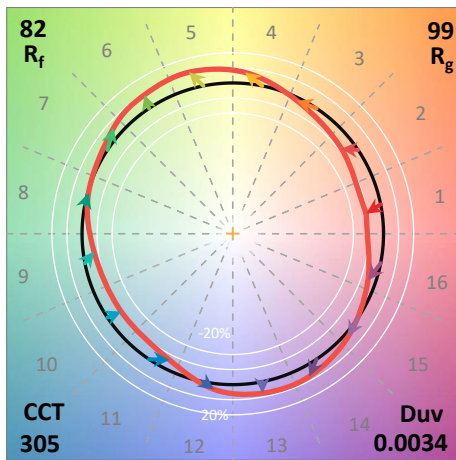
TM-30-18

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)