

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: P387176

Luminaire Tested: **GPC-SA2D-830-U-SLR-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P387176  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GPC-SA2D-830-U-SLR-HSS  
Description: GALLEON PEDESTRIAN LUMINAIRE  
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

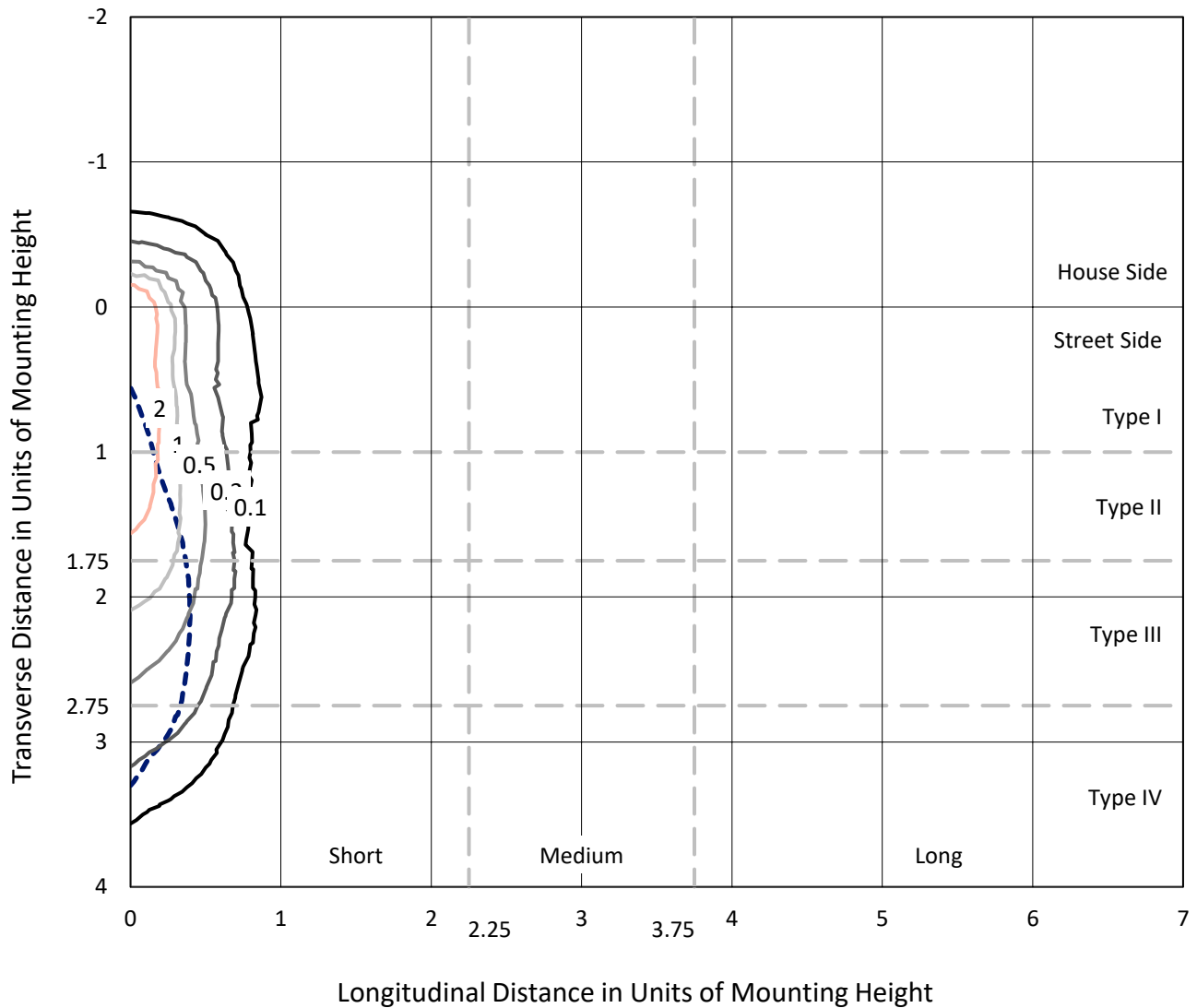
Lumens per Lamp: N/A  
Luminaire Lumens: 9539 lumens  
Efficiency: N/A  
Efficacy: 74.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 128  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

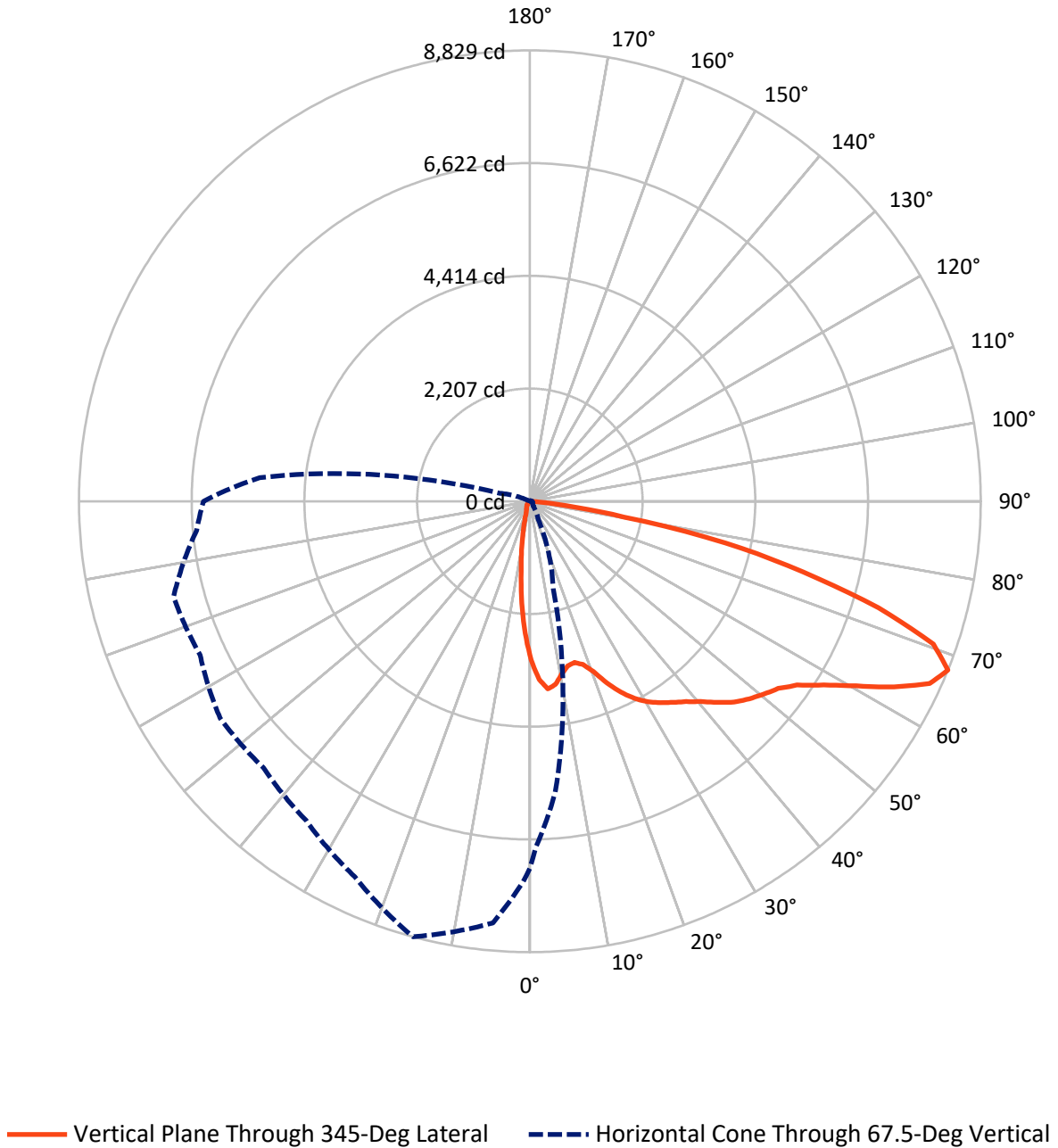
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



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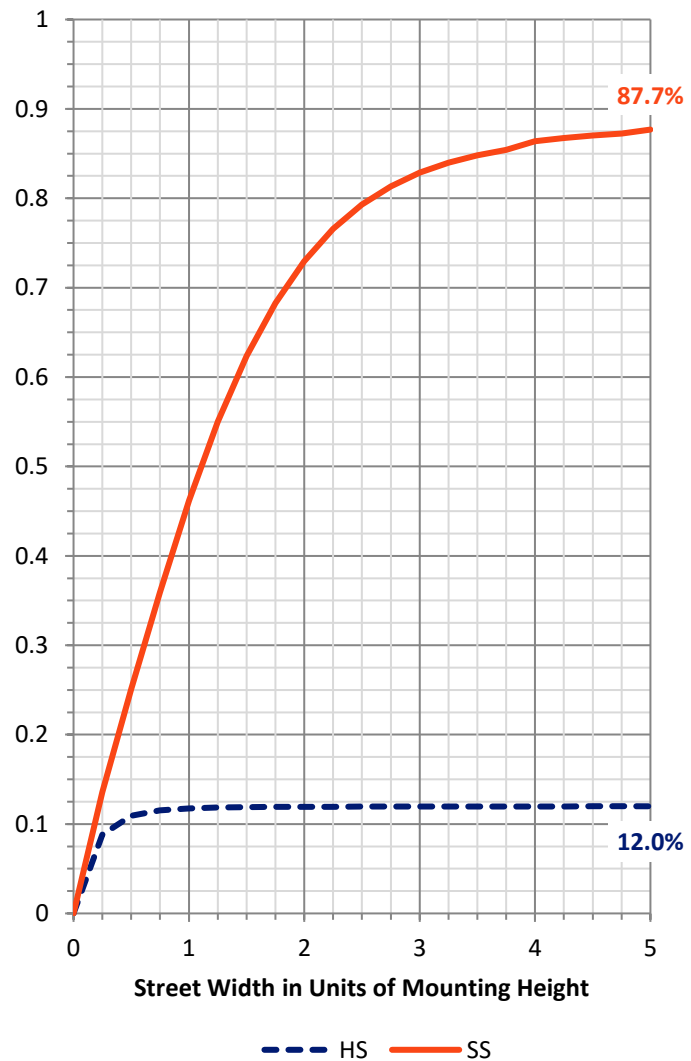
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1154.5	0.0	1154.5
	% Fixture	12.1	0.0	12.1
<b>Street Side</b>	Lumens	8384.5	0.0	8384.5
	% Fixture	87.9	0.0	87.9
<b>Total</b>	Lumens	9539.0	0.0	9539.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.5	2.5
10°-20°	474.7	5.0
20°-30°	674.1	7.1
30°-40°	995.6	10.4
40°-50°	1435.9	15.1
50°-60°	2015.7	21.1
60°-70°	2349.8	24.6
70°-80°	1201.2	12.6
80°-90°	153.4	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°	9539.0	100.0
0°-180°	9539.0	100.0

**Coefficient of Utilization**

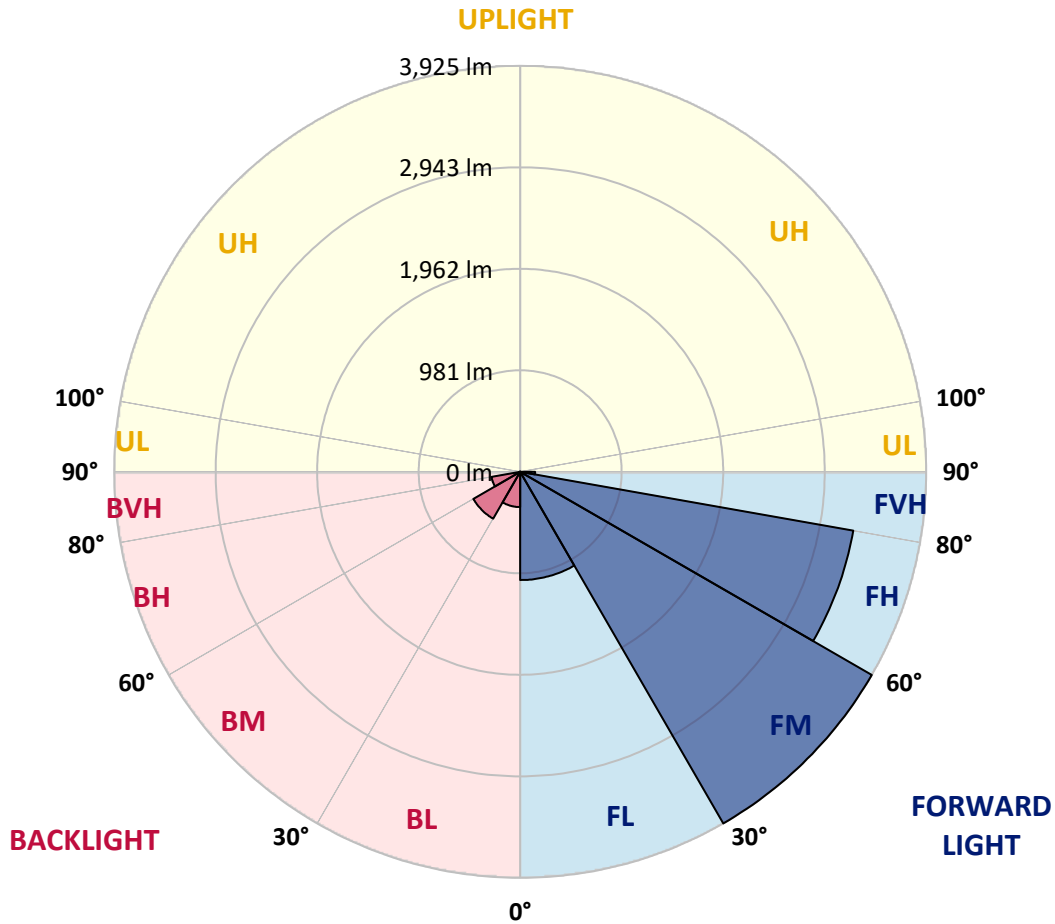


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1046.2	11.0			
FM (30°-60°)	3924.5	41.1			
FH (60°-80°)	3269.6	34.3			G2/5000
FVH (80°-90°)	144.1	1.5			G2/225
BL (0°-30°)	341.0	3.6	B1/500		
BM (30°-60°)	522.8	5.5	B1/1000		
BH (60°-80°)	281.4	2.9	B1/500		G1/500
BVH (80°-90°)	9.3	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-G2**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3
2.5°	3402.4	3376.2	3347.3	3252.8	3165.2	3064.8	2983.0	2926.1	2854.7	2762.1	2738.6
5°	3378.0	3350.0	3259.2	3049.0	2865.1	2686.1	2513.5	2412.3	2286.6	2159.2	2127.6
7.5°	3132.6	3103.2	2972.2	2684.3	2436.7	2178.2	1954.0	1815.3	1673.4	1556.8	1494.9
10°	2877.3	2845.2	2697.9	2348.6	2043.5	1809.9	1645.4	1513.0	1378.8	1254.0	1154.6
12.5°	2701.5	2659.5	2499.5	2103.6	1837.9	1679.3	1525.6	1367.0	1185.4	1051.6	942.2
15°	2627.8	2579.9	2410.9	2009.2	1765.1	1579.0	1378.8	1184.0	971.1	818.0	717.6
17.5°	2684.8	2622.4	2441.2	2002.9	1673.9	1420.3	1167.3	938.6	707.7	552.7	481.3
20°	2878.2	2796.4	2566.4	2001.0	1563.1	1231.9	911.0	652.6	466.4	375.1	337.6
22.5°	3182.8	3074.8	2746.2	2015.5	1448.8	1034.0	658.0	443.3	350.2	302.8	280.6
25°	3550.6	3425.5	3005.2	2066.6	1348.5	841.5	478.1	350.2	295.5	260.8	242.2
27.5°	3900.4	3798.7	3332.4	2140.2	1270.8	686.0	388.2	296.9	252.6	229.6	214.7
30°	4249.7	4121.8	3668.1	2227.9	1177.2	580.7	341.2	270.7	226.4	202.0	192.5
32.5°	4503.7	4397.5	3931.1	2291.2	1077.3	512.0	305.0	247.6	211.5	186.6	172.6
35°	4802.4	4682.2	4156.6	2305.2	1013.2	468.6	274.3	222.8	183.5	161.3	146.4
37.5°	5125.1	4975.5	4416.9	2274.4	963.0	447.4	251.3	211.5	171.3	148.7	132.9
40°	5482.1	5313.1	4666.8	2230.2	913.8	440.2	233.6	202.9	161.8	138.7	122.5
42.5°	5858.1	5658.8	4883.3	2183.6	882.6	415.3	231.8	194.3	154.6	129.7	113.4
45°	6174.0	5971.9	5105.6	2168.2	860.4	388.2	239.5	188.4	149.6	122.5	106.7
47.5°	6425.7	6234.5	5333.4	2202.6	847.8	363.3	218.3	196.1	146.9	116.1	100.8
50°	6726.2	6509.7	5654.3	2305.2	829.2	338.5	197.5	224.6	146.9	112.1	95.8
52.5°	7103.1	6888.9	6012.2	2464.2	792.2	304.1	177.6	225.0	148.2	106.7	89.5
55°	7577.1	7421.7	6523.3	2638.7	733.0	253.5	153.6	193.4	142.8	96.7	83.6
57.5°	8031.7	7904.8	6989.2	2758.0	653.9	197.9	133.8	155.9	130.6	85.0	74.6
59°	8156.0	8017.3	7160.0	2763.4	594.7	172.6	123.8	128.8	127.9	79.5	69.1
60°	8156.0	8008.7	7209.3	2734.5	551.8	158.6	117.5	114.8	133.3	75.9	66.0
62.5°	8008.2	7801.3	7049.3	2538.8	450.1	135.1	102.6	94.9	119.8	68.2	58.3
65°	7700.9	7399.5	6504.3	2185.0	401.3	123.8	88.6	77.7	83.2	60.1	51.1
67.5°	7188.5	6780.0	5718.4	1765.1	381.9	120.7	76.4	66.0	62.8	51.5	44.7
70°	6286.0	5832.8	4764.5	1387.8	365.1	119.3	64.2	55.6	50.6	43.4	38.0
72.5°	4575.1	4102.4	3382.5	1085.0	355.2	122.0	51.5	46.5	41.6	33.9	29.4
75°	2617.0	2307.4	1901.2	716.7	302.8	116.6	39.8	38.9	29.8	24.4	20.3
77.5°	1352.1	1311.0	1139.3	275.2	145.1	51.1	26.2	22.6	17.6	14.9	12.2
80°	583.4	577.1	499.4	79.5	38.4	28.5	14.9	9.5	8.1	6.3	5.0
82.5°	201.6	201.6	177.6	26.7	17.2	14.0	1.8	0.0	0.0	0.0	0.0
85°	40.7	45.6	32.1	0.0	5.9	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°	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3
2.5°	2710.1	2655.4	2651.8	2617.4	2574.5	2555.1	2543.8	2563.7	2588.1	2590.8	2627.4
5°	2103.6	2046.2	2070.2	2009.2	2021.4	2009.2	1989.3	1992.9	2003.8	1969.9	2011.9
7.5°	1477.3	1433.9	1461.5	1445.2	1466.9	1475.5	1463.3	1445.2	1391.9	1385.5	1422.2
10°	1113.5	1064.2	1034.9	1004.1	1010.9	1024.9	1020.4	1007.3	973.4	975.2	1010.5
12.5°	894.8	839.6	781.3	705.9	687.4	697.7	687.4	679.7	647.1	649.8	681.0
15°	678.8	633.6	572.6	512.0	479.0	482.2	453.3	432.9	412.6	388.2	407.2
17.5°	458.2	430.7	412.6	394.5	355.2	346.2	309.6	270.2	254.9	243.6	251.7
20°	324.5	309.6	302.3	301.4	278.8	267.5	231.8	207.4	199.7	197.5	202.5
22.5°	271.1	260.3	249.9	244.0	232.7	219.6	192.5	180.3	174.9	172.2	175.8
25°	235.9	227.8	216.9	207.0	202.5	188.4	169.0	160.0	156.4	153.6	155.5
27.5°	209.7	202.5	189.8	183.5	179.9	167.7	150.9	143.7	140.5	139.6	139.2
30°	188.9	182.1	170.4	163.1	156.8	146.0	136.0	128.8	125.6	124.7	123.8
32.5°	168.1	162.7	155.0	147.8	141.0	131.1	122.5	116.6	111.6	110.7	110.3
35°	141.9	136.5	132.4	132.0	125.6	116.1	109.8	102.1	98.1	96.7	97.2
37.5°	126.1	118.9	109.8	113.0	111.2	104.4	95.8	88.1	84.1	83.2	83.2
40°	116.1	108.5	98.1	92.6	98.1	96.7	83.2	75.5	71.4	70.9	70.0
42.5°	106.7	99.0	87.2	78.2	80.9	85.0	71.9	64.6	60.6	59.7	58.3
45°	99.9	91.7	78.6	68.2	62.8	71.4	61.5	52.4	50.2	48.4	47.5
47.5°	93.5	85.9	70.9	59.2	50.2	51.5	49.3	42.9	40.2	38.4	38.0
50°	88.1	80.0	64.2	50.6	41.6	38.0	39.8	33.9	31.6	29.8	28.9
52.5°	81.8	74.1	56.9	43.8	34.8	29.8	30.3	26.7	24.4	23.0	22.6
55°	76.8	69.1	51.1	38.4	30.7	24.4	21.7	20.8	19.4	18.5	18.1
57.5°	70.0	62.8	45.2	32.5	26.2	19.9	16.7	16.7	16.3	15.4	14.9
59°	66.0	59.7	41.6	29.4	24.0	17.2	14.9	15.4	14.9	14.0	13.6
60°	62.8	56.9	38.9	27.1	22.6	15.8	13.6	14.5	14.0	13.1	12.7
62.5°	55.6	51.5	33.4	22.6	19.9	12.7	11.3	12.2	12.2	11.7	11.3
65°	48.8	44.3	28.5	19.0	18.5	10.8	9.0	10.8	11.3	10.4	9.5
67.5°	42.5	38.0	24.9	15.4	17.2	8.6	6.8	9.0	12.2	9.5	8.6
70°	36.2	31.6	19.4	12.2	18.1	5.9	5.4	8.1	14.5	10.4	8.1
72.5°	28.0	24.4	13.6	9.0	19.4	4.1	4.1	6.8	16.3	11.3	7.7
75°	19.4	15.8	8.1	5.4	15.8	2.7	2.7	6.3	15.4	10.4	7.2
77.5°	11.3	8.6	2.7	0.5	8.1	0.0	0.5	4.5	10.8	6.3	3.2
80°	4.1	1.8	0.0	0.0	5.0	0.0	0.0	0.0	0.9	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°	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3
2.5°	2636.9	2697.9	2752.6	2835.3	2933.3	3046.3	3143.5	3247.9	3345.9	3386.6	3414.6
5°	2020.5	2095.9	2184.1	2305.6	2467.4	2666.7	2853.3	3064.4	3291.2	3404.7	3511.3
7.5°	1428.5	1505.3	1614.7	1743.9	1939.6	2176.8	2420.9	2712.3	3019.6	3199.0	3375.7
10°	1027.2	1121.6	1223.8	1400.5	1599.3	1824.3	2075.6	2401.0	2743.5	2942.4	3155.2
12.5°	699.1	806.7	961.2	1159.1	1392.8	1613.3	1831.6	2142.0	2539.7	2736.7	2965.0
15°	419.4	479.0	642.6	871.7	1158.2	1433.0	1672.1	1983.4	2407.3	2648.6	2885.9
17.5°	258.5	286.1	375.1	563.1	864.0	1211.6	1539.2	1929.6	2426.3	2720.0	2974.0
20°	206.1	216.9	245.4	332.6	572.6	967.5	1389.6	1918.8	2581.3	2942.8	3215.3
22.5°	179.0	189.3	208.3	241.8	360.2	724.4	1247.7	1928.7	2803.6	3276.8	3594.9
25°	157.7	166.8	184.8	212.4	263.9	510.2	1095.9	1973.0	3093.3	3691.2	4029.2
27.5°	141.0	148.7	165.4	190.7	226.4	356.1	923.7	2026.8	3436.8	4115.1	4448.6
30°	125.6	132.4	147.3	170.8	196.6	273.9	734.8	2063.4	3780.7	4448.6	4748.2
32.5°	112.5	117.5	131.1	150.9	170.8	218.3	558.6	2057.5	4036.0	4726.0	4963.7
35°	99.0	103.9	115.7	132.9	148.7	180.3	439.3	1947.7	4258.3	5013.9	5210.5
37.5°	84.1	90.4	101.7	117.0	127.9	158.6	355.2	1815.3	4483.8	5342.9	5485.7
40°	71.4	77.7	87.7	104.4	111.2	150.5	273.0	1654.0	4737.3	5710.7	5787.6
42.5°	59.2	65.1	75.5	89.9	104.8	129.7	202.0	1469.6	4980.9	6025.3	6062.8
45°	47.9	53.8	64.6	79.1	112.1	107.6	156.4	1272.1	5177.5	6286.9	6299.1
47.5°	38.0	43.4	54.7	74.6	104.4	85.9	111.6	1117.1	5342.4	6491.2	6459.1
50°	29.4	33.9	45.6	85.4	91.3	70.9	84.5	1065.6	5490.2	6617.7	6534.6
52.5°	23.0	27.1	37.5	80.0	70.9	58.7	70.9	1114.0	5692.7	6722.6	6577.1
55°	18.5	22.6	29.4	45.6	48.4	49.7	60.6	1159.1	6042.0	6968.4	6827.9
57.5°	15.4	19.4	24.0	32.1	36.6	42.0	53.8	1164.1	6453.7	7376.9	7244.1
59°	14.0	17.6	21.7	28.5	32.1	38.4	50.6	1137.0	6598.7	7525.6	7459.2
60°	13.1	16.7	20.3	26.2	29.8	36.2	48.8	1111.2	6605.1	7520.2	7550.9
62.5°	11.3	14.9	18.1	22.1	25.3	30.7	43.8	1015.9	6337.5	7273.9	7495.8
65°	9.9	13.1	16.3	19.0	21.7	27.6	39.8	841.9	5880.7	6876.7	7118.4
67.5°	9.0	11.3	14.9	16.7	19.4	24.4	35.2	600.1	5309.9	6390.9	6547.7
70°	8.1	10.8	13.6	15.4	17.6	21.2	30.3	344.8	4483.8	5679.6	5791.2
72.5°	7.7	10.4	12.2	14.5	15.8	19.0	27.6	162.2	3283.1	4549.8	4841.3
75°	6.8	9.5	11.3	13.6	14.9	17.2	23.5	77.7	2183.6	3292.6	3623.8
77.5°	4.1	7.7	10.4	12.2	13.1	14.9	19.4	44.7	1393.7	2279.0	2684.3
80°	0.0	2.7	7.7	10.4	11.3	12.7	14.9	35.2	745.6	1301.9	1562.7
82.5°	0.0	0.0	5.4	8.1	7.7	8.6	11.3	22.1	336.2	850.9	958.9
85°	0.0	0.0	1.8	6.3	5.4	4.1	7.7	7.7	73.7	430.7	537.3
87.5°	0.0	0.0	0.0	0.5	2.7	1.8	3.2	0.9	0.5	32.1	130.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P387176

CATALOG NUMBER: GPC-SA2D-830-U-SLR-HSS

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3	3107.3
2.5°	3512.7	3546.1	3602.6	3629.3	3616.2	3560.6	3494.1	3426.4	3386.6	3402.4
5°	3728.7	3900.9	4000.3	4033.3	3978.1	3853.4	3690.3	3475.2	3398.8	3378.0
7.5°	3728.7	4052.7	4257.9	4294.0	4171.1	3926.6	3620.7	3284.9	3173.3	3132.6
10°	3597.6	4038.7	4324.7	4382.1	4210.4	3844.8	3434.9	3051.7	2919.3	2877.3
12.5°	3449.9	3924.8	4226.2	4305.3	4164.3	3763.5	3306.2	2894.0	2738.1	2701.5
15°	3359.0	3784.7	4034.2	4091.6	4031.9	3716.0	3275.4	2846.6	2663.1	2627.8
17.5°	3391.6	3676.3	3766.2	3799.6	3839.9	3699.3	3359.0	2950.5	2718.2	2684.8
20°	3514.0	3561.9	3515.4	3557.4	3665.9	3715.6	3558.3	3201.8	2922.9	2878.2
22.5°	3721.9	3502.7	3372.1	3388.8	3520.8	3769.4	3862.9	3560.6	3238.8	3182.8
25°	3964.1	3550.6	3292.6	3277.7	3413.3	3840.3	4141.3	3951.0	3612.5	3550.6
27.5°	4268.7	3658.2	3276.3	3261.4	3375.7	3906.7	4372.7	4337.0	4006.2	3900.4
30°	4503.7	3763.9	3324.7	3290.3	3413.3	3952.8	4558.4	4664.6	4319.8	4249.7
32.5°	4672.3	3888.7	3403.3	3353.6	3519.0	4032.4	4701.6	4964.6	4609.9	4503.7
35°	4800.6	4024.2	3530.3	3448.5	3664.5	4153.0	4835.9	5284.1	4918.6	4802.4
37.5°	4920.8	4214.5	3728.7	3631.1	3892.7	4347.3	4977.8	5646.6	5263.8	5125.1
40°	5088.5	4430.0	4034.6	3947.9	4276.4	4612.2	5154.9	6024.4	5656.5	5482.1
42.5°	5256.1	4661.4	4347.8	4371.3	4755.0	4933.9	5383.6	6423.9	6044.3	5858.1
45°	5409.3	4900.0	4793.8	4902.3	5199.2	5286.9	5610.9	6654.8	6353.8	6174.0
47.5°	5545.8	5198.3	5237.1	5525.9	5704.4	5606.4	5780.8	6854.1	6584.3	6425.7
50°	5704.4	5584.2	5821.5	6230.0	6286.0	5895.6	5935.3	7090.0	6853.6	6726.2
52.5°	5878.0	5990.9	6468.6	6828.8	6810.7	6209.7	6090.8	7354.3	7222.8	7103.1
55°	6075.0	6319.5	7038.4	7389.1	7373.8	6560.3	6348.4	7681.1	7685.6	7577.1
57.5°	6367.4	6602.4	7425.3	7842.4	7868.2	6965.2	6784.9	8047.1	8104.0	8031.7
59°	6577.1	6785.8	7578.5	8031.7	8136.6	7278.4	7104.0	8259.5	8222.0	8156.0
60°	6732.5	6902.4	7654.4	8130.7	8292.5	7490.8	7339.4	8384.2	8236.0	8156.0
62.5°	7117.1	7156.4	7791.3	8242.8	8471.9	7962.6	8001.9	8596.6	8138.8	8008.2
65°	7296.5	7316.8	7789.5	8042.1	8298.4	8330.0	8603.0	8603.0	7901.6	7700.9
67.5°	7221.5	7123.4	7403.1	7376.9	7632.7	8111.7	8828.9	8287.5	7447.9	7188.5
70°	6611.4	6234.1	6109.8	6121.1	6316.8	7055.6	8381.5	7359.3	6589.3	6286.0
72.5°	5501.1	4595.9	4289.0	4639.3	4690.3	5422.4	7142.8	5542.2	4859.4	4575.1
75°	4424.6	3239.7	2740.8	3110.5	3197.2	3968.2	5525.5	3451.7	2838.4	2617.0
77.5°	3178.7	2325.5	1966.7	1940.9	2053.0	2516.7	3920.7	1737.1	1448.8	1352.1
80°	1805.8	1530.6	1648.1	1555.0	1611.5	1573.5	1862.8	761.9	624.1	583.4
82.5°	1090.0	904.7	979.7	815.7	1032.2	898.8	717.6	244.0	211.9	201.6
85°	709.0	494.4	257.6	172.6	355.7	574.4	160.4	66.4	51.1	40.7
87.5°	244.5	126.1	12.7	5.4	38.0	107.1	5.9	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2408-195-9  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 08/07/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: MCGRAW EDISON  
 Catalog Number: **GALN-SB1A-830-U-5WQ**  
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

**Spectral Parameters**

CCT (K): 3050  
 CIE u': 0.2476  
 CIE v': 0.5251  
 Duv: 0.0034  
 CIE x: 0.4383  
 CIE y: 0.4131  
 CIE z: 0.1487  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 581  
 Purity: 55.55201  
 Rf: 81.5  
 Rg: 99.2

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



**Test Conditions**

Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

**CIE 1931 Chromaticity Diagram**



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



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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 <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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 <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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)