

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: P386728

Luminaire Tested: **GPC-SA2B-830-U-SLR-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P386728
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-SA2B-830-U-SLR-HSS
Description: GALLEON PEDESTRIAN LUMINAIRE
(2) 80 CRI, 3000K, 800mA 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: 7026 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

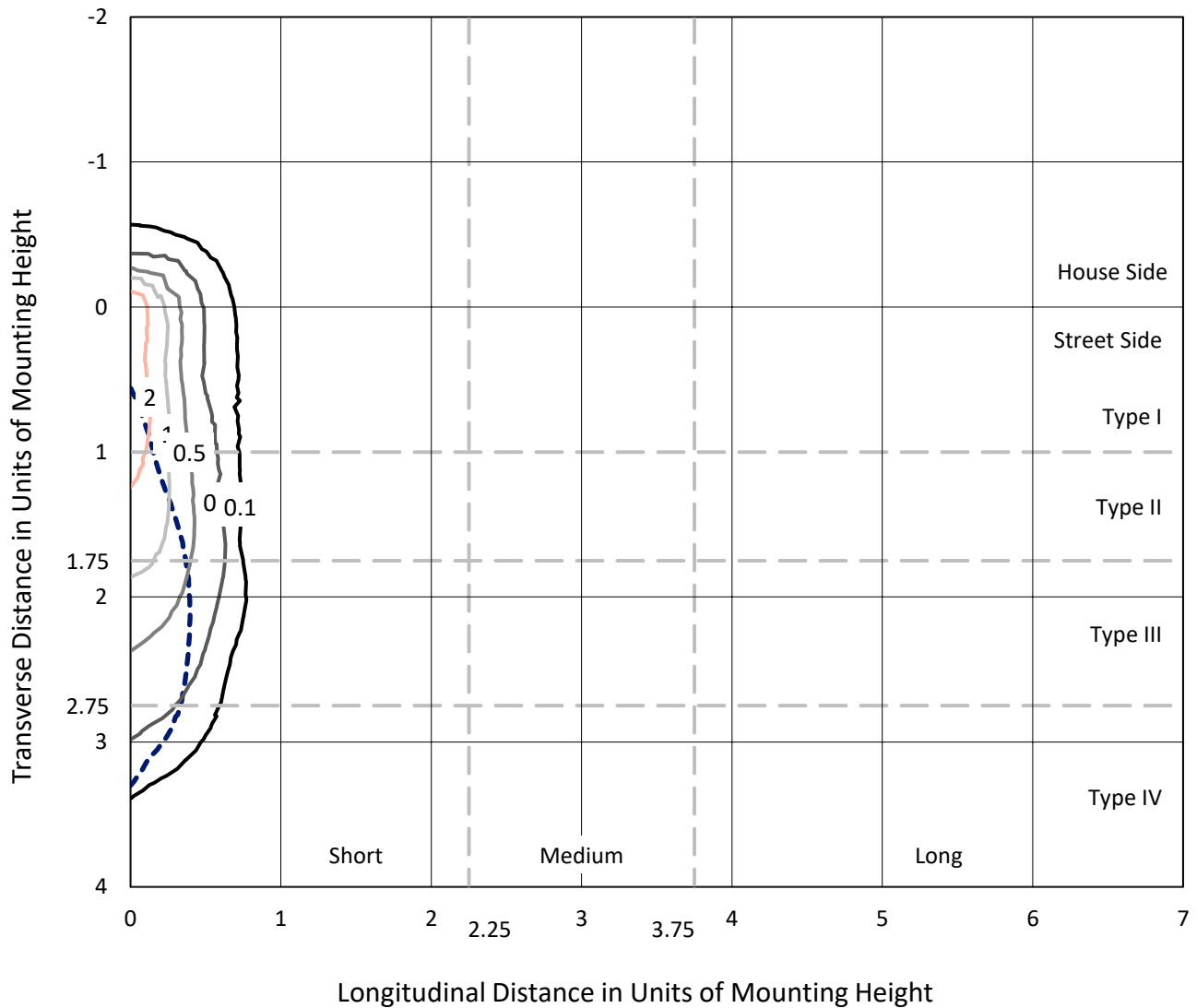
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

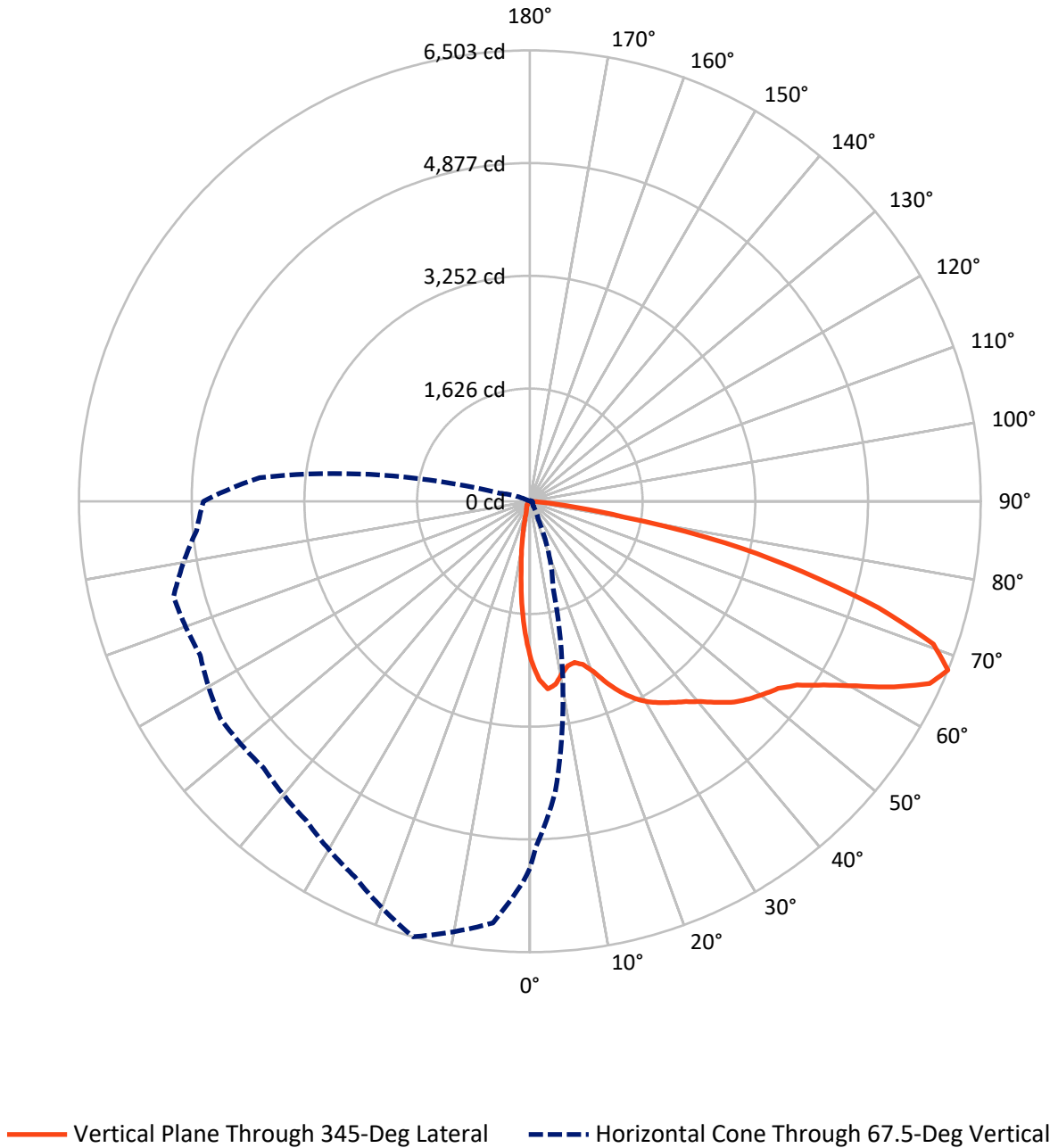
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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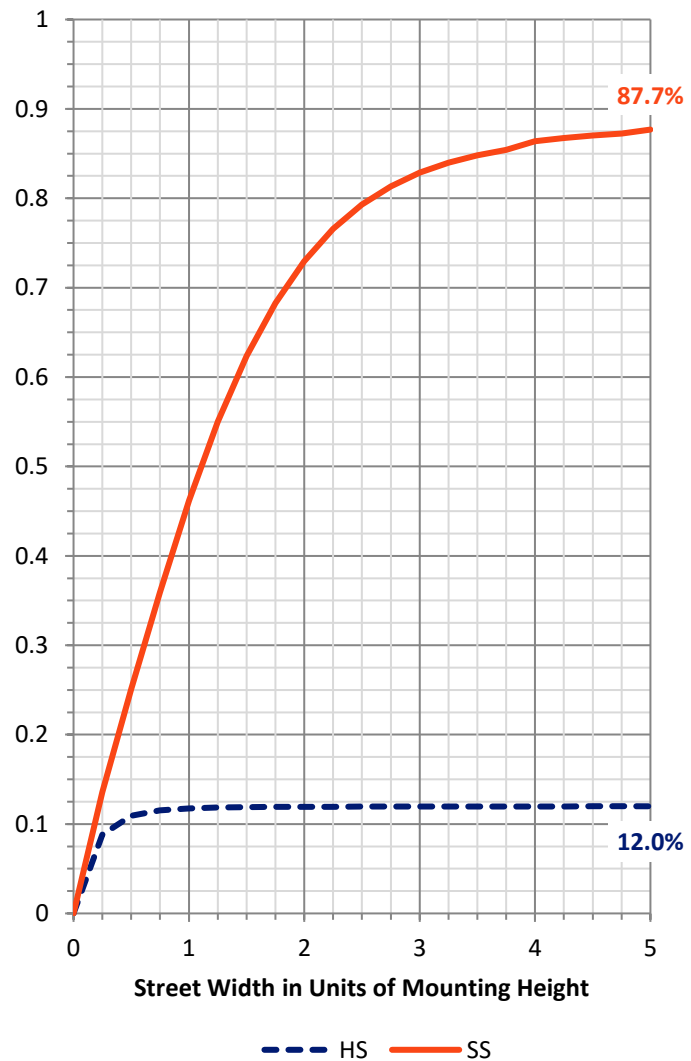
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	850.4	0.0	850.4
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	6175.6	0.0	6175.6
	% Fixture	87.9	0.0	87.9
Total	Lumens	7026.0	0.0	7026.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.7	2.5
10°-20°	349.6	5.0
20°-30°	496.5	7.1
30°-40°	733.3	10.4
40°-50°	1057.6	15.1
50°-60°	1484.7	21.1
60°-70°	1730.7	24.6
70°-80°	884.8	12.6
80°-90°	113.0	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°	7026.0	100.0
0°-180°	7026.0	100.0



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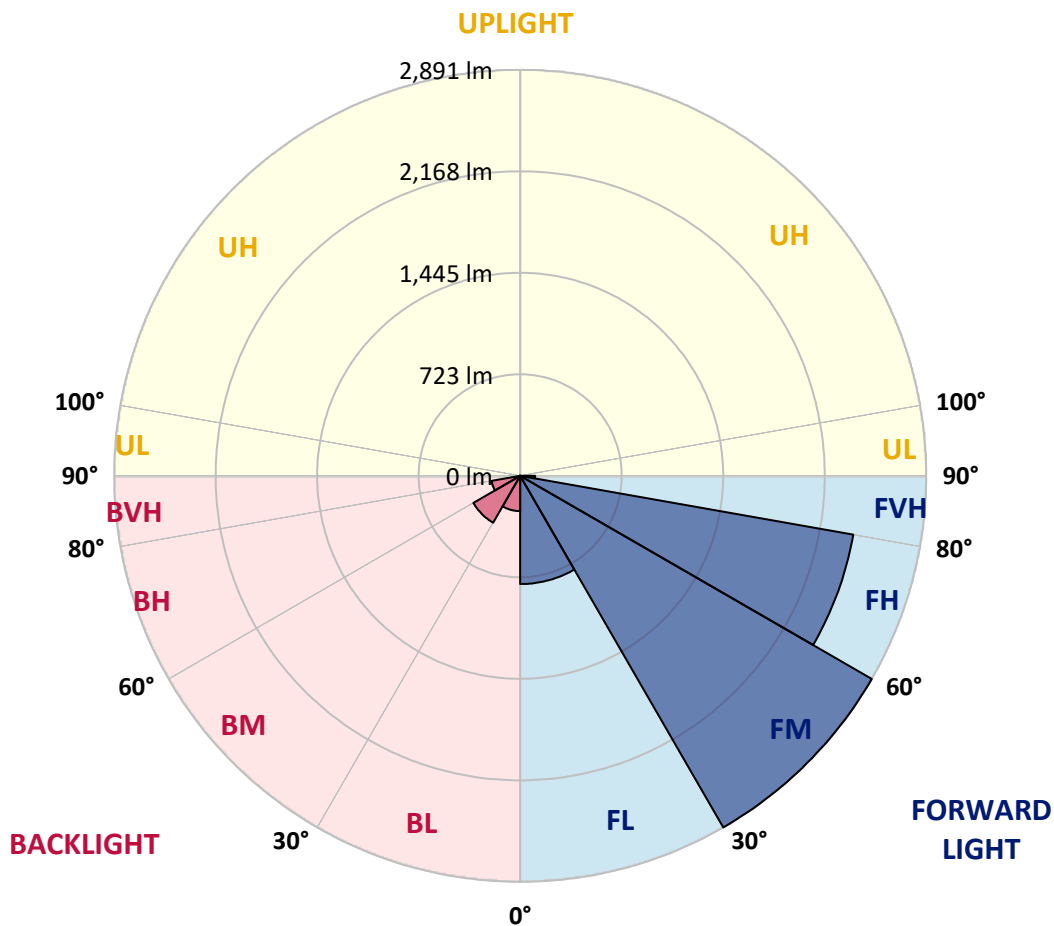
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	770.6	11.0			
FM (30°-60°)	2890.6	41.1			
FH (60°-80°)	2408.3	34.3			G2/5000
FVH (80°-90°)	106.1	1.5			G2/225
BL (0°-30°)	251.2	3.6	B1/500		
BM (30°-60°)	385.1	5.5	B1/1000		
BH (60°-80°)	207.3	2.9	B1/500		G1/500
BVH (80°-90°)	6.9	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°	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7
2.5°	2506.1	2486.8	2465.5	2395.9	2331.3	2257.4	2197.2	2155.2	2102.6	2034.4	2017.1
5°	2488.1	2467.4	2400.5	2245.8	2110.3	1978.5	1851.3	1776.8	1684.2	1590.4	1567.1
7.5°	2307.3	2285.7	2189.2	1977.2	1794.8	1604.4	1439.3	1337.1	1232.6	1146.7	1101.1
10°	2119.3	2095.7	1987.1	1729.8	1505.2	1333.1	1211.9	1114.4	1015.5	923.7	850.4
12.5°	1989.8	1958.8	1841.0	1549.4	1353.7	1236.9	1123.7	1006.9	873.1	774.6	694.0
15°	1935.5	1900.3	1775.8	1479.9	1300.1	1163.0	1015.5	872.1	715.3	602.5	528.6
17.5°	1977.5	1931.6	1798.1	1475.2	1232.9	1046.2	859.8	691.3	521.2	407.1	354.5
20°	2119.9	2059.7	1890.3	1473.9	1151.3	907.4	671.0	480.6	343.5	276.3	248.6
22.5°	2344.3	2264.7	2022.8	1484.5	1067.1	761.6	484.6	326.5	258.0	223.0	206.7
25°	2615.2	2523.0	2213.5	1522.1	993.2	619.8	352.2	258.0	217.7	192.1	178.4
27.5°	2872.9	2798.0	2454.5	1576.4	936.0	505.3	285.9	218.7	186.1	169.1	158.1
30°	3130.2	3036.0	2701.8	1641.0	867.1	427.7	251.3	199.4	166.8	148.8	141.8
32.5°	3317.2	3239.0	2895.5	1687.6	793.5	377.1	224.7	182.4	155.8	137.5	127.2
35°	3537.2	3448.7	3061.6	1697.9	746.3	345.2	202.0	164.1	135.1	118.8	107.8
37.5°	3774.9	3664.7	3253.3	1675.3	709.3	329.5	185.1	155.8	126.2	109.5	97.9
40°	4037.9	3913.4	3437.4	1642.6	673.0	324.2	172.1	149.5	119.2	102.2	90.2
42.5°	4314.8	4168.0	3596.8	1608.4	650.1	305.9	170.8	143.1	113.8	95.5	83.5
45°	4547.5	4398.7	3760.6	1597.0	633.8	285.9	176.4	138.8	110.2	90.2	78.6
47.5°	4732.9	4592.1	3928.3	1622.3	624.4	267.6	160.8	144.5	108.2	85.5	74.2
50°	4954.2	4794.8	4164.7	1697.9	610.8	249.3	145.5	165.4	108.2	82.5	70.6
52.5°	5231.8	5074.0	4428.3	1815.1	583.5	224.0	130.8	165.8	109.2	78.6	65.9
55°	5581.0	5466.5	4804.8	1943.5	539.9	186.7	113.2	142.5	105.2	71.2	61.6
57.5°	5915.8	5822.3	5147.9	2031.4	481.6	145.8	98.5	114.8	96.2	62.6	54.9
59°	6007.4	5905.2	5273.7	2035.4	438.0	127.2	91.2	94.9	94.2	58.6	50.9
60°	6007.4	5898.8	5310.0	2014.1	406.4	116.8	86.5	84.5	98.2	55.9	48.6
62.5°	5898.5	5746.1	5192.2	1870.0	331.5	99.5	75.6	69.9	88.2	50.3	42.9
65°	5672.2	5450.2	4790.8	1609.4	295.6	91.2	65.2	57.3	61.2	44.3	37.6
67.5°	5294.7	4993.8	4211.9	1300.1	281.3	88.9	56.3	48.6	46.3	37.9	33.0
70°	4630.0	4296.2	3509.3	1022.2	268.9	87.9	47.3	40.9	37.3	32.0	28.0
72.5°	3369.8	3021.7	2491.4	799.2	261.6	89.9	37.9	34.3	30.6	25.0	21.6
75°	1927.6	1699.6	1400.3	527.9	223.0	85.9	29.3	28.6	22.0	18.0	15.0
77.5°	995.9	965.6	839.1	202.7	106.8	37.6	19.3	16.6	13.0	11.0	9.0
80°	429.7	425.1	367.8	58.6	28.3	21.0	11.0	7.0	6.0	4.7	3.7
82.5°	148.5	148.5	130.8	19.6	12.6	10.3	1.3	0.0	0.0	0.0	0.0
85°	30.0	33.6	23.6	0.0	4.3	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°	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7
2.5°	1996.1	1955.9	1953.2	1927.9	1896.3	1882.0	1873.6	1888.3	1906.3	1908.3	1935.2
5°	1549.4	1507.2	1524.8	1479.9	1488.9	1479.9	1465.2	1467.9	1475.9	1450.9	1481.9
7.5°	1088.1	1056.1	1076.5	1064.5	1080.4	1086.8	1077.8	1064.5	1025.2	1020.5	1047.5
10°	820.2	783.9	762.2	739.6	744.6	754.9	751.6	741.9	717.0	718.3	744.3
12.5°	659.1	618.4	575.5	519.9	506.3	513.9	506.3	500.6	476.6	478.6	501.6
15°	499.9	466.7	421.7	377.1	352.8	355.2	333.9	318.9	303.9	285.9	299.9
17.5°	337.5	317.2	303.9	290.6	261.6	255.0	228.0	199.0	187.7	179.4	185.4
20°	239.0	228.0	222.7	222.0	205.4	197.0	170.8	152.8	147.1	145.5	149.1
22.5°	199.7	191.7	184.1	179.7	171.4	161.8	141.8	132.8	128.8	126.8	129.5
25°	173.7	167.8	159.8	152.4	149.1	138.8	124.5	117.8	115.2	113.2	114.5
27.5°	154.4	149.1	139.8	135.1	132.5	123.5	111.2	105.8	103.5	102.9	102.5
30°	139.1	134.1	125.5	120.2	115.5	107.5	100.2	94.9	92.5	91.9	91.2
32.5°	123.8	119.8	114.2	108.8	103.9	96.5	90.2	85.9	82.2	81.5	81.2
35°	104.5	100.5	97.5	97.2	92.5	85.5	80.9	75.2	72.2	71.2	71.6
37.5°	92.9	87.5	80.9	83.2	81.9	76.9	70.6	64.9	61.9	61.2	61.2
40°	85.5	79.9	72.2	68.2	72.2	71.2	61.2	55.6	52.6	52.3	51.6
42.5°	78.6	72.9	64.2	57.6	59.6	62.6	52.9	47.6	44.6	43.9	42.9
45°	73.6	67.6	57.9	50.3	46.3	52.6	45.3	38.6	36.9	35.6	34.9
47.5°	68.9	63.2	52.3	43.6	36.9	37.9	36.3	31.6	29.6	28.3	28.0
50°	64.9	58.9	47.3	37.3	30.6	28.0	29.3	25.0	23.3	22.0	21.3
52.5°	60.2	54.6	41.9	32.3	25.6	22.0	22.3	19.6	18.0	17.0	16.6
55°	56.6	50.9	37.6	28.3	22.6	18.0	16.0	15.3	14.3	13.6	13.3
57.5°	51.6	46.3	33.3	24.0	19.3	14.6	12.3	12.3	12.0	11.3	11.0
59°	48.6	43.9	30.6	21.6	17.6	12.6	11.0	11.3	11.0	10.3	10.0
60°	46.3	41.9	28.6	20.0	16.6	11.6	10.0	10.7	10.3	9.7	9.3
62.5°	40.9	37.9	24.6	16.6	14.6	9.3	8.3	9.0	9.0	8.7	8.3
65°	35.9	32.6	21.0	14.0	13.6	8.0	6.7	8.0	8.3	7.7	7.0
67.5°	31.3	28.0	18.3	11.3	12.6	6.3	5.0	6.7	9.0	7.0	6.3
70°	26.6	23.3	14.3	9.0	13.3	4.3	4.0	6.0	10.7	7.7	6.0
72.5°	20.6	18.0	10.0	6.7	14.3	3.0	3.0	5.0	12.0	8.3	5.7
75°	14.3	11.6	6.0	4.0	11.6	2.0	2.0	4.7	11.3	7.7	5.3
77.5°	8.3	6.3	2.0	0.3	6.0	0.0	0.3	3.3	8.0	4.7	2.3
80°	3.0	1.3	0.0	0.0	3.7	0.0	0.0	0.0	0.7	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°	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7
2.5°	1942.2	1987.1	2027.4	2088.3	2160.6	2243.8	2315.3	2392.2	2464.5	2494.4	2515.0
5°	1488.2	1543.8	1608.7	1698.2	1817.4	1964.2	2101.6	2257.1	2424.2	2507.7	2586.3
7.5°	1052.2	1108.7	1189.3	1284.5	1428.6	1603.4	1783.1	1997.8	2224.1	2356.3	2486.4
10°	756.6	826.1	901.4	1031.5	1178.0	1343.7	1528.8	1768.5	2020.8	2167.2	2324.0
12.5°	514.9	594.1	708.0	853.8	1025.9	1188.3	1349.1	1577.7	1870.6	2015.8	2183.9
15°	308.9	352.8	473.3	642.1	853.1	1055.5	1231.6	1460.9	1773.1	1950.9	2125.6
17.5°	190.4	210.7	276.3	414.7	636.4	892.4	1133.7	1421.3	1787.1	2003.5	2190.5
20°	151.8	159.8	180.7	245.0	421.7	712.6	1023.5	1413.3	1901.3	2167.5	2368.3
22.5°	131.8	139.5	153.4	178.1	265.3	533.6	919.0	1420.6	2065.0	2413.5	2647.9
25°	116.2	122.8	136.1	156.4	194.4	375.8	807.2	1453.2	2278.4	2718.8	2967.7
27.5°	103.9	109.5	121.8	140.5	166.8	262.3	680.4	1492.9	2531.4	3031.0	3276.6
30°	92.5	97.5	108.5	125.8	144.8	201.7	541.2	1519.8	2784.7	3276.6	3497.3
32.5°	82.9	86.5	96.5	111.2	125.8	160.8	411.4	1515.5	2972.7	3481.0	3656.1
35°	72.9	76.6	85.2	97.9	109.5	132.8	323.5	1434.6	3136.5	3693.0	3837.8
37.5°	61.9	66.6	74.9	86.2	94.2	116.8	261.6	1337.1	3302.6	3935.3	4040.5
40°	52.6	57.3	64.6	76.9	81.9	110.8	201.0	1218.2	3489.3	4206.3	4262.9
42.5°	43.6	47.9	55.6	66.2	77.2	95.5	148.8	1082.4	3668.7	4437.9	4465.6
45°	35.3	39.6	47.6	58.2	82.5	79.2	115.2	937.0	3813.5	4630.7	4639.7
47.5°	28.0	32.0	40.3	54.9	76.9	63.2	82.2	822.8	3935.0	4781.1	4757.5
50°	21.6	25.0	33.6	62.9	67.2	52.3	62.2	784.9	4043.8	4874.3	4813.1
52.5°	17.0	20.0	27.6	58.9	52.3	43.3	52.3	820.5	4193.0	4951.5	4844.4
55°	13.6	16.6	21.6	33.6	35.6	36.6	44.6	853.8	4450.3	5132.6	5029.1
57.5°	11.3	14.3	17.6	23.6	27.0	31.0	39.6	857.4	4753.5	5433.5	5335.7
59°	10.3	13.0	16.0	21.0	23.6	28.3	37.3	837.5	4860.3	5543.0	5494.1
60°	9.7	12.3	15.0	19.3	22.0	26.6	35.9	818.5	4865.0	5539.0	5561.7
62.5°	8.3	11.0	13.3	16.3	18.6	22.6	32.3	748.3	4667.9	5357.6	5521.1
65°	7.3	9.7	12.0	14.0	16.0	20.3	29.3	620.1	4331.4	5065.0	5243.1
67.5°	6.7	8.3	11.0	12.3	14.3	18.0	26.0	442.0	3911.0	4707.2	4822.7
70°	6.0	8.0	10.0	11.3	13.0	15.6	22.3	254.0	3302.6	4183.3	4265.5
72.5°	5.7	7.7	9.0	10.7	11.6	14.0	20.3	119.5	2418.2	3351.2	3565.9
75°	5.0	7.0	8.3	10.0	11.0	12.6	17.3	57.3	1608.4	2425.2	2669.2
77.5°	3.0	5.7	7.7	9.0	9.7	11.0	14.3	33.0	1026.5	1678.6	1977.2
80°	0.0	2.0	5.7	7.7	8.3	9.3	11.0	26.0	549.2	959.0	1151.0
82.5°	0.0	0.0	4.0	6.0	5.7	6.3	8.3	16.3	247.6	626.8	706.3
85°	0.0	0.0	1.3	4.7	4.0	3.0	5.7	5.7	54.3	317.2	395.8
87.5°	0.0	0.0	0.0	0.3	2.0	1.3	2.3	0.7	0.3	23.6	95.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7	2288.7
2.5°	2587.3	2611.9	2653.5	2673.2	2663.5	2622.6	2573.6	2523.7	2494.4	2506.1
5°	2746.4	2873.2	2946.4	2970.7	2930.1	2838.2	2718.1	2559.6	2503.4	2488.1
7.5°	2746.4	2985.0	3136.2	3162.8	3072.2	2892.2	2666.8	2419.5	2337.3	2307.3
10°	2649.9	2974.7	3185.4	3227.7	3101.2	2831.9	2530.0	2247.8	2150.2	2119.3
12.5°	2541.0	2890.8	3112.9	3171.1	3067.3	2772.0	2435.2	2131.6	2016.8	1989.8
15°	2474.1	2787.7	2971.4	3013.7	2969.7	2737.1	2412.5	2096.6	1961.5	1935.5
17.5°	2498.1	2707.8	2774.0	2798.6	2828.3	2724.7	2474.1	2173.2	2002.1	1977.5
20°	2588.3	2623.6	2589.3	2620.2	2700.1	2736.7	2620.9	2358.3	2152.9	2119.9
22.5°	2741.4	2580.0	2483.8	2496.1	2593.3	2776.3	2845.2	2622.6	2385.6	2344.3
25°	2919.8	2615.2	2425.2	2414.2	2514.0	2828.6	3050.3	2910.1	2660.8	2615.2
27.5°	3144.1	2694.5	2413.2	2402.2	2486.4	2877.5	3220.7	3194.4	2950.8	2872.9
30°	3317.2	2772.3	2448.8	2423.5	2514.0	2911.5	3357.5	3435.7	3181.8	3130.2
32.5°	3441.4	2864.2	2506.7	2470.1	2591.9	2970.1	3463.0	3656.7	3395.4	3317.2
35°	3535.9	2964.1	2600.3	2540.0	2699.1	3058.9	3561.9	3892.1	3622.8	3537.2
37.5°	3624.5	3104.2	2746.4	2674.5	2867.2	3202.1	3666.4	4159.0	3877.1	3774.9
40°	3747.9	3263.0	2971.7	2907.8	3149.8	3397.1	3796.9	4437.3	4166.3	4037.9
42.5°	3871.4	3433.4	3202.4	3219.7	3502.3	3634.1	3965.3	4731.5	4451.9	4314.8
45°	3984.3	3609.1	3530.9	3610.8	3829.5	3894.1	4132.7	4901.6	4679.9	4547.5
47.5°	4084.8	3828.8	3857.4	4070.1	4201.6	4129.4	4257.9	5048.4	4849.7	4732.9
50°	4201.6	4113.1	4287.8	4588.7	4630.0	4342.4	4371.7	5222.2	5048.1	4954.2
52.5°	4329.4	4412.7	4764.5	5029.8	5016.4	4573.8	4486.2	5416.9	5320.0	5231.8
55°	4474.6	4654.6	5184.2	5442.5	5431.2	4832.0	4675.9	5657.5	5660.9	5581.0
57.5°	4689.9	4863.0	5469.1	5776.4	5795.3	5130.3	4997.5	5927.1	5969.1	5915.8
59°	4844.4	4998.1	5582.0	5915.8	5993.0	5361.0	5232.5	6083.6	6056.0	6007.4
60°	4958.9	5084.0	5637.9	5988.7	6107.9	5517.4	5405.9	6175.4	6066.3	6007.4
62.5°	5242.1	5271.1	5738.7	6071.3	6240.0	5864.9	5893.9	6331.9	5994.7	5898.5
65°	5374.3	5389.2	5737.4	5923.5	6112.2	6135.5	6336.5	6336.5	5820.0	5672.2
67.5°	5319.0	5246.8	5452.8	5433.5	5621.9	5974.7	6503.0	6104.2	5485.8	5294.7
70°	4869.7	4591.7	4500.2	4508.5	4652.6	5196.9	6173.4	5420.5	4853.3	4630.0
72.5°	4051.8	3385.1	3159.1	3417.1	3454.7	3993.9	5261.1	4082.1	3579.2	3369.8
75°	3259.0	2386.2	2018.8	2291.0	2354.9	2922.8	4069.8	2542.3	2090.7	1927.6
77.5°	2341.3	1712.9	1448.6	1429.6	1512.2	1853.7	2887.8	1279.5	1067.1	995.9
80°	1330.1	1127.4	1213.9	1145.4	1187.0	1159.0	1372.0	561.2	459.7	429.7
82.5°	802.8	666.4	721.6	600.8	760.2	662.0	528.6	179.7	156.1	148.5
85°	522.2	364.1	189.7	127.2	262.0	423.1	118.2	48.9	37.6	30.0
87.5°	180.1	92.9	9.3	4.0	28.0	78.9	4.3	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)