

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: P640958

Luminaire Tested: GWS-SA5E-830-U-SLR-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640958
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-42)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5E-830-U-SLR-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15909.8 lumens
Efficiency: N/A
Efficacy: 59.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G2

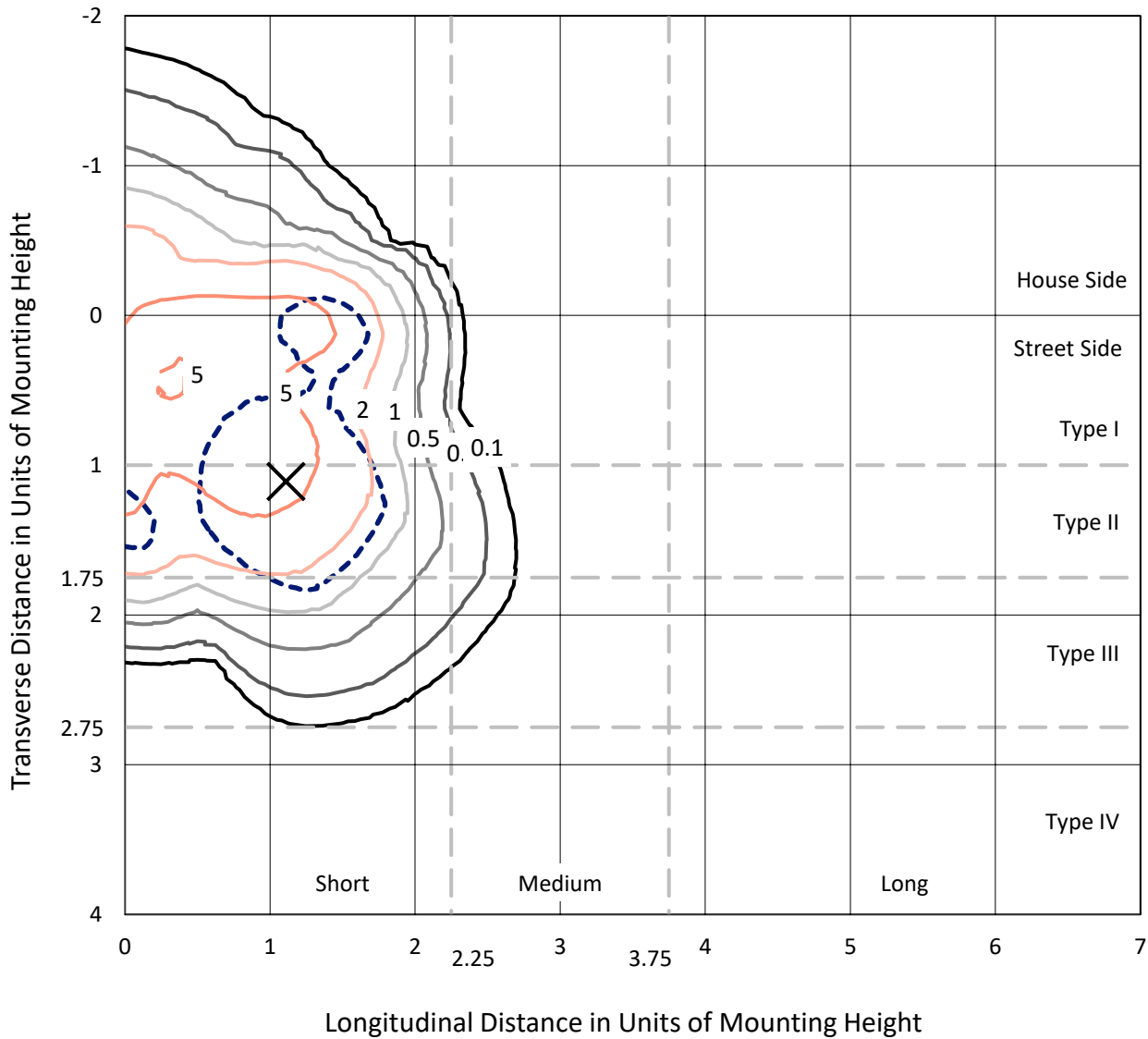
Input Watts (W): 269.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

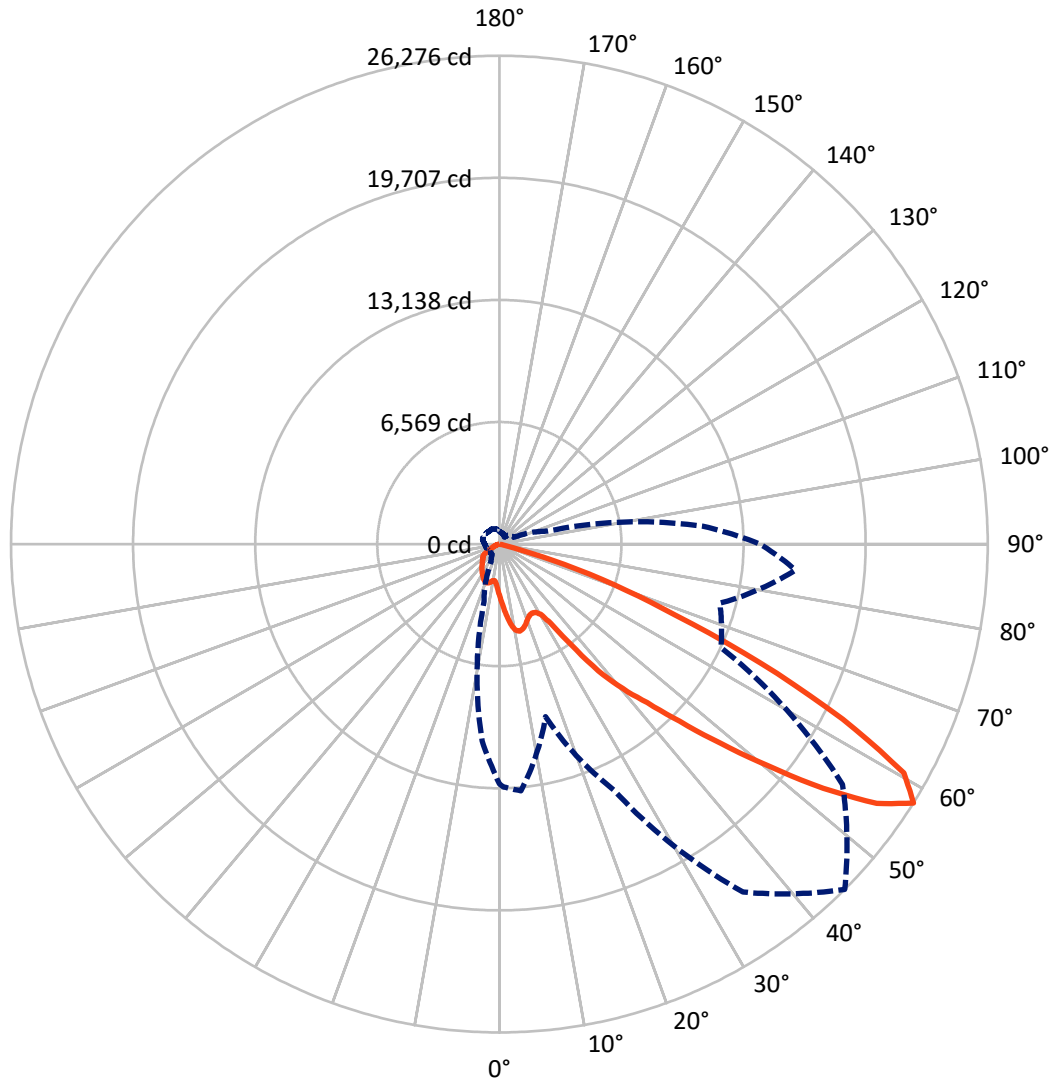
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3562.6	0.0	3562.6
	% Fixture	22.4	0.0	22.4
Street Side	Lumens	12347.2	0.0	12347.2
	% Fixture	77.6	0.0	77.6
Total	Lumens	15909.8	0.0	15909.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.1	1.7
10°-20°	889.9	5.6
20°-30°	1445.6	9.1
30°-40°	2233.7	14.0
40°-50°	3581.7	22.5
50°-60°	4895.2	30.8
60°-70°	2370.9	14.9
70°-80°	217.1	1.4
80°-90°	0.6	0.0
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°	15909.8	100.0
0°-180°	15909.8	100.0

Coefficient of Utilization



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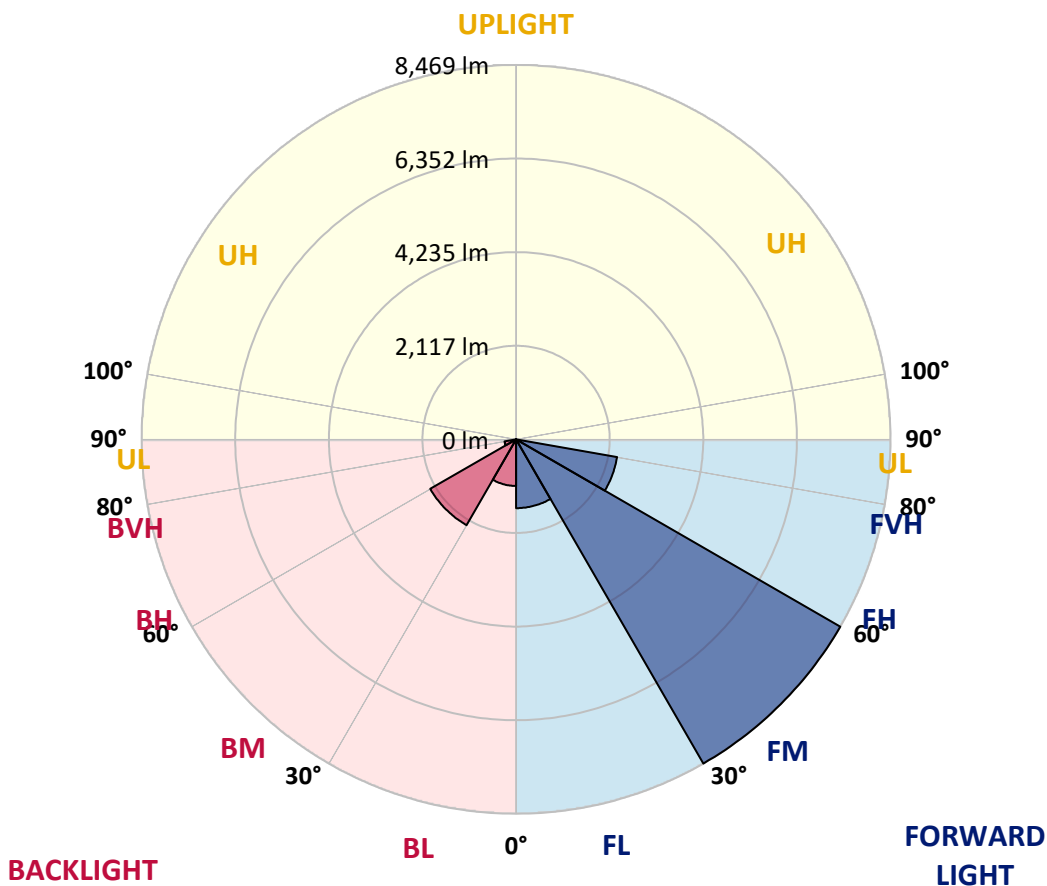
CATALOG NUMBER: GWS-SA5E-830-U-SLR-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1556.5	9.8			
FM (30°-60°)	8469.1	53.2			
FH (60°-80°)	2320.9	14.6			G2/5000
FVH (80°-90°)	0.6	0.0			G0/10
BL (0°-30°)	1054.1	6.6	B3/2500		
BM (30°-60°)	2241.5	14.1	B2/2500		
BH (60°-80°)	267.0	1.7	B1/500		G1/500
BVH (80°-90°)	0.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3
2.5°	3029.3	3048.6	3080.7	3149.1	3206.8	3245.3	3262.4	3258.1	3234.6	3217.5	3183.3
5°	3354.3	3354.3	3416.3	3572.4	3692.1	3766.9	3805.4	3781.9	3734.8	3660.0	3544.6
7.5°	3638.6	3649.3	3754.1	3976.4	4158.1	4265.0	4327.0	4314.2	4230.8	4087.6	3856.7
10°	3861.0	3873.8	4012.8	4284.3	4498.1	4607.1	4699.0	4707.6	4615.6	4425.4	4160.3
12.5°	4076.9	4089.7	4235.1	4495.9	4684.0	4728.9	4810.2	4842.2	4818.7	4684.0	4408.3
15°	4309.9	4339.9	4463.8	4658.4	4737.5	4684.0	4737.5	4795.2	4874.3	4861.5	4613.5
17.5°	4538.7	4560.1	4686.2	4754.6	4666.9	4528.0	4553.6	4622.0	4801.6	4976.9	4816.6
20°	4750.3	4780.3	4885.0	4795.2	4530.1	4314.2	4316.3	4406.1	4679.8	5047.5	5024.0
22.5°	4972.7	5017.6	5092.4	4840.1	4404.0	4145.3	4156.0	4237.2	4583.6	5113.8	5259.1
25°	5263.4	5306.2	5355.3	4951.3	4363.4	4061.9	4102.5	4177.4	4583.6	5227.1	5549.9
27.5°	5656.8	5686.7	5688.8	5158.7	4433.9	4074.8	4160.3	4245.8	4720.4	5453.7	5939.0
30°	6150.6	6197.7	6135.7	5481.5	4654.1	4245.8	4371.9	4478.8	5015.4	5836.4	6511.9
32.5°	6751.4	6817.6	6734.3	5960.3	5113.8	4835.8	5064.6	5126.6	5485.7	6390.1	7161.8
35°	7456.8	7512.4	7422.6	6623.1	6187.0	6238.3	6653.0	6573.9	6430.7	7072.0	7920.8
37.5°	8230.8	8282.1	8108.9	7627.9	7773.3	7995.6	8658.3	8386.8	7925.0	7950.7	8743.8
40°	8940.5	8996.1	8724.6	8720.3	9019.6	9425.8	10225.4	9851.2	9222.7	9100.9	9515.6
42.5°	9675.9	9714.4	9468.6	9301.8	9981.7	10817.6	11664.2	11159.6	10082.1	9949.6	10481.9
45°	10725.6	10806.9	10368.6	9588.3	10847.5	12418.8	13598.9	12613.4	10667.9	10561.0	11961.3
47.5°	12269.2	12329.0	11435.4	9767.9	11653.5	14413.4	16016.8	14499.0	11183.1	10939.4	13983.7
50°	13545.5	13586.1	12416.7	9964.6	12510.7	16564.1	18772.5	16735.2	11762.5	11565.8	15871.5
52.5°	14486.1	14640.1	13705.8	10368.6	13637.4	19093.2	21823.3	19384.0	12666.8	12775.8	17436.4
55°	14680.7	14890.2	14586.6	10616.6	14629.4	21669.3	24641.0	21754.8	13569.0	13693.0	17962.3
57.5°	12902.0	13068.7	13321.0	9616.1	14605.8	22849.4	26276.4	22541.6	13158.5	12279.9	15993.3
60°	9665.3	9780.7	10238.2	7350.0	13432.2	21806.2	25002.2	21203.3	11506.0	9370.2	12185.8
62.5°	5731.6	5782.9	6362.3	4761.0	11148.9	18778.9	20735.1	18295.8	9092.3	6302.4	7463.3
65°	2199.9	2178.5	2621.0	2349.5	8198.7	14958.6	15422.5	13947.4	6238.3	2888.2	2845.5
67.5°	339.9	325.0	438.3	694.8	5913.3	10366.5	10176.2	10052.2	3908.0	673.4	587.9
70°	77.0	77.0	94.1	205.2	3613.0	6090.8	6518.3	6214.8	2501.3	143.2	77.0
72.5°	36.3	36.3	44.9	87.7	1308.4	2509.8	2924.6	2879.7	812.4	47.0	27.8
75°	12.8	15.0	15.0	19.2	79.1	130.4	299.3	213.8	51.3	0.0	0.0
77.5°	4.3	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.1	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3
2.5°	3108.4	3093.5	3037.9	2963.1	2890.4	2826.2	2760.0	2680.9	2623.2	2556.9	2535.5
5°	3454.8	3360.7	3208.9	3050.7	2905.3	2781.4	2661.6	2533.4	2439.3	2345.2	2313.2
7.5°	3747.7	3608.7	3362.9	3125.5	2926.7	2751.4	2578.3	2403.0	2266.1	2155.0	2120.8
10°	4010.6	3850.3	3521.1	3228.2	2978.0	2774.9	2565.4	2345.2	2167.8	2035.2	2003.2
12.5°	4237.2	4051.2	3655.7	3305.1	2999.4	2766.4	2563.3	2388.0	2227.6	2075.9	2035.2
15°	4427.5	4222.3	3769.0	3356.4	2967.3	2659.5	2482.1	2454.3	2441.4	2274.7	2195.6
17.5°	4613.5	4382.6	3861.0	3380.0	2877.6	2471.4	2343.1	2469.2	2603.9	2494.9	2394.4
20°	4808.0	4545.1	3955.0	3384.2	2727.9	2259.7	2238.3	2437.2	2608.2	2574.0	2479.9
22.5°	5036.8	4748.2	4072.6	3382.1	2539.8	2080.1	2161.4	2375.2	2514.1	2512.0	2437.2
25°	5368.2	5004.7	4230.8	3394.9	2334.5	1941.2	2075.9	2270.4	2383.7	2379.4	2317.4
27.5°	5723.0	5310.4	4436.1	3427.0	2159.2	1859.9	1975.4	2127.2	2225.5	2221.2	2167.8
30°	6221.2	5663.2	4632.7	3429.1	2033.1	1817.2	1864.2	1969.0	2063.0	2052.3	2011.7
32.5°	6826.2	6060.8	4797.4	3307.3	1954.0	1776.6	1748.8	1802.2	1874.9	1859.9	1849.2
35°	7557.3	6533.3	4938.5	3040.0	1832.1	1695.3	1620.5	1631.2	1682.5	1691.0	1686.8
37.5°	8391.1	7095.6	5113.8	2687.3	1667.5	1577.7	1477.3	1468.7	1498.6	1526.4	1547.8
40°	9214.2	7728.4	5351.1	2330.3	1517.9	1428.1	1331.9	1310.5	1323.3	1372.5	1417.4
42.5°	10139.9	8461.6	5607.6	2024.6	1415.3	1263.5	1171.5	1130.9	1167.3	1246.4	1299.8
45°	11473.9	9490.0	5857.7	1780.8	1372.5	1118.1	994.1	989.8	1030.4	1133.1	1192.9
47.5°	13346.6	10819.7	6022.3	1590.6	1370.4	1004.8	857.3	882.9	930.0	1030.4	1098.9
50°	15172.4	12485.1	5840.6	1445.2	1325.5	930.0	754.7	806.0	853.0	940.7	1011.2
52.5°	16273.4	13380.9	5133.0	1308.4	1186.5	895.8	654.2	744.0	752.5	831.6	906.5
55°	16157.9	12801.5	3931.5	1096.7	981.3	846.6	549.4	671.3	675.6	735.4	799.6
57.5°	14024.3	10990.7	2700.1	889.3	737.6	699.1	453.2	566.5	607.2	643.5	690.5
60°	10452.0	8019.1	1203.6	722.6	468.2	472.5	387.0	427.6	489.6	532.3	572.9
62.5°	6159.2	4613.5	489.6	434.0	258.7	297.2	312.1	312.1	350.6	382.7	408.3
65°	2328.1	1614.1	198.8	218.1	134.7	139.0	183.9	226.6	256.5	284.3	318.5
67.5°	408.3	282.2	102.6	81.2	79.1	70.5	94.1	147.5	164.6	186.0	201.0
70°	68.4	57.7	42.8	40.6	36.3	38.5	62.0	104.8	115.4	121.9	128.3
72.5°	19.2	17.1	12.8	10.7	8.6	10.7	38.5	81.2	85.5	89.8	96.2
75°	0.0	0.0	0.0	0.0	0.0	0.0	15.0	57.7	62.0	64.1	70.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.8	17.1	21.4	17.1
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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°	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3
2.5°	2522.7	2479.9	2456.4	2443.6	2443.6	2426.5	2407.2	2400.8	2428.6	2428.6	2475.6
5°	2272.5	2238.3	2199.9	2176.3	2140.0	2146.4	2125.0	2122.9	2150.7	2163.5	2212.7
7.5°	2099.4	2056.6	2033.1	2018.1	1998.9	1990.3	1971.1	1964.7	1979.7	2001.0	2048.1
10°	1983.9	1977.5	1975.4	1986.1	1986.1	1975.4	1958.3	1947.6	1951.9	1992.5	2045.9
12.5°	2013.9	2026.7	2031.0	2048.1	2056.6	2048.1	2035.2	2039.5	2067.3	2142.1	2221.2
15°	2144.3	2133.6	2129.3	2137.9	2144.3	2135.7	2131.4	2163.5	2259.7	2366.6	2456.4
17.5°	2283.2	2214.8	2184.9	2184.9	2189.2	2184.9	2189.2	2251.2	2407.2	2514.1	2580.4
20°	2353.8	2227.6	2180.6	2169.9	2178.5	2180.6	2195.6	2266.1	2437.2	2512.0	2526.9
22.5°	2332.4	2174.2	2120.8	2112.2	2120.8	2129.3	2144.3	2204.1	2364.5	2403.0	2396.5
25°	2225.5	2069.4	2026.7	2026.7	2045.9	2043.8	2050.2	2093.0	2225.5	2249.0	2238.3
27.5°	2090.8	1943.3	1907.0	1928.3	1945.5	1941.2	1943.3	1979.7	2078.0	2084.4	2073.7
30°	1954.0	1825.7	1791.5	1817.2	1840.7	1836.4	1838.6	1874.9	1936.9	1930.5	1915.5
32.5°	1815.0	1721.0	1695.3	1710.3	1746.6	1742.4	1750.9	1789.4	1812.9	1785.1	1768.0
35°	1686.8	1637.6	1618.4	1626.9	1654.7	1661.1	1676.1	1701.7	1701.7	1667.5	1637.6
37.5°	1567.0	1560.6	1547.8	1537.1	1562.8	1582.0	1603.4	1633.3	1590.6	1541.4	1513.6
40°	1455.9	1483.7	1466.6	1438.8	1453.7	1481.5	1524.3	1547.8	1496.5	1447.3	1400.3
42.5°	1353.3	1400.3	1393.9	1359.7	1372.5	1398.2	1447.3	1466.6	1406.7	1351.1	1306.2
45°	1254.9	1321.2	1325.5	1282.7	1295.5	1321.2	1378.9	1385.3	1308.4	1248.5	1216.4
47.5°	1169.4	1242.1	1244.2	1212.2	1216.4	1252.8	1306.2	1308.4	1220.7	1165.1	1124.5
50°	1088.2	1171.5	1178.0	1150.2	1154.4	1197.2	1242.1	1233.5	1139.5	1081.8	1045.4
52.5°	989.8	1103.1	1118.1	1105.3	1122.4	1156.6	1184.4	1154.4	1045.4	987.7	955.6
55°	882.9	1030.4	1062.5	1054.0	1073.2	1101.0	1107.4	1088.2	951.3	893.6	863.7
57.5°	758.9	848.7	904.3	887.2	902.2	930.0	949.2	934.2	831.6	786.7	761.1
60°	628.5	688.4	701.2	673.4	660.6	709.8	754.7	735.4	647.8	620.0	590.0
62.5°	459.6	528.1	536.6	500.3	485.3	538.7	577.2	558.0	461.8	431.8	408.3
65°	367.7	431.8	449.0	414.7	406.2	446.8	470.3	423.3	354.9	322.8	297.2
67.5°	241.6	292.9	337.8	335.6	318.5	331.4	314.3	275.8	226.6	209.5	192.4
70°	149.7	179.6	207.4	218.1	215.9	211.6	188.1	160.3	145.4	139.0	130.4
72.5°	115.4	145.4	166.8	173.2	175.3	168.9	149.7	124.0	109.0	100.5	94.1
75°	85.5	109.0	126.1	134.7	139.0	134.7	115.4	98.3	83.4	77.0	70.5
77.5°	29.9	36.3	44.9	49.2	47.0	44.9	40.6	40.6	32.1	29.9	25.7
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P640958
 CATALOG NUMBER: GWS-SA5E-830-U-SLR-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3	2796.3
2.5°	2529.1	2567.6	2638.1	2702.3	2770.7	2841.2	2918.2	2997.3	3033.6	3029.3
5°	2287.5	2370.9	2486.3	2612.5	2753.6	2905.3	3074.2	3247.4	3322.2	3354.3
7.5°	2135.7	2253.3	2405.1	2565.4	2751.4	2967.3	3221.8	3493.3	3602.3	3638.6
10°	2155.0	2291.8	2417.9	2574.0	2772.8	3052.9	3369.3	3692.1	3820.4	3861.0
12.5°	2311.0	2341.0	2375.2	2503.4	2753.6	3117.0	3503.9	3888.8	4036.3	4076.9
15°	2452.1	2313.2	2249.0	2366.6	2685.1	3161.9	3640.8	4100.4	4262.9	4309.9
17.5°	2458.5	2249.0	2105.8	2197.7	2574.0	3181.1	3775.5	4316.3	4493.8	4538.7
20°	2379.4	2178.5	1994.6	1996.8	2422.2	3176.9	3886.6	4510.9	4709.7	4750.3
22.5°	2264.0	2095.1	1904.8	1838.6	2259.7	3168.3	4008.5	4718.3	4934.2	4972.7
25°	2135.7	1988.2	1819.3	1718.8	2097.2	3176.9	4179.5	4989.8	5227.1	5263.4
27.5°	1996.8	1870.6	1753.0	1671.8	1960.4	3208.9	4384.7	5336.1	5618.3	5656.8
30°	1851.4	1757.3	1710.3	1661.1	1874.9	3217.5	4607.1	5740.1	6097.2	6150.6
32.5°	1708.1	1656.8	1659.0	1667.5	1793.7	3157.6	4810.2	6189.1	6665.8	6751.4
35°	1575.6	1560.6	1603.4	1646.2	1676.1	3003.7	4987.6	6719.3	7369.2	7456.8
37.5°	1462.3	1475.1	1528.6	1571.3	1547.8	2785.6	5222.8	7382.0	8155.9	8230.8
40°	1353.3	1385.3	1447.3	1466.6	1449.5	2531.2	5505.0	8021.2	8837.9	8940.5
42.5°	1252.8	1276.3	1364.0	1368.2	1421.7	2272.5	5776.5	8709.6	9622.5	9675.9
45°	1171.5	1167.3	1257.1	1284.9	1458.0	1986.1	6041.6	9626.8	10648.7	10725.6
47.5°	1092.4	1088.2	1109.5	1235.7	1473.0	1721.0	6304.5	10969.3	12136.6	12269.2
50°	1017.6	1024.0	957.8	1212.2	1391.7	1517.9	6424.3	12211.4	13489.9	13545.5
52.5°	951.3	927.8	812.4	1135.2	1218.6	1325.5	6084.3	12775.8	14327.9	14486.1
55°	857.3	726.9	669.1	921.4	962.0	1156.6	4983.3	12448.7	14400.6	14680.7
57.5°	733.3	570.8	568.7	679.8	679.8	1073.2	3191.8	10635.8	12410.3	12902.0
60°	564.4	442.5	470.3	472.5	436.1	782.5	1791.5	7704.8	9175.7	9665.3
62.5°	401.9	337.8	354.9	282.2	250.1	391.2	859.4	4436.1	5663.2	5731.6
65°	269.4	228.8	186.0	156.1	153.9	166.8	354.9	1603.4	1949.7	2199.9
67.5°	177.4	139.0	98.3	98.3	111.2	111.2	134.7	265.1	372.0	339.9
70°	115.4	96.2	62.0	59.9	72.7	72.7	68.4	72.7	77.0	77.0
72.5°	85.5	72.7	36.3	32.1	40.6	42.8	38.5	36.3	36.3	36.3
75°	64.1	51.3	21.4	15.0	19.2	25.7	21.4	15.0	15.0	12.8
77.5°	25.7	19.2	8.6	6.4	10.7	15.0	12.8	6.4	4.3	4.3
80°	2.1	4.3	4.3	4.3	6.4	8.6	10.7	4.3	2.1	2.1
82.5°	0.0	2.1	2.1	2.1	4.3	6.4	8.6	4.3	2.1	2.1
85°	0.0	0.0	0.0	0.0	4.3	6.4	4.3	2.1	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	2.1	6.4	4.3	2.1	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

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CIE 1931 Chromaticity Diagram



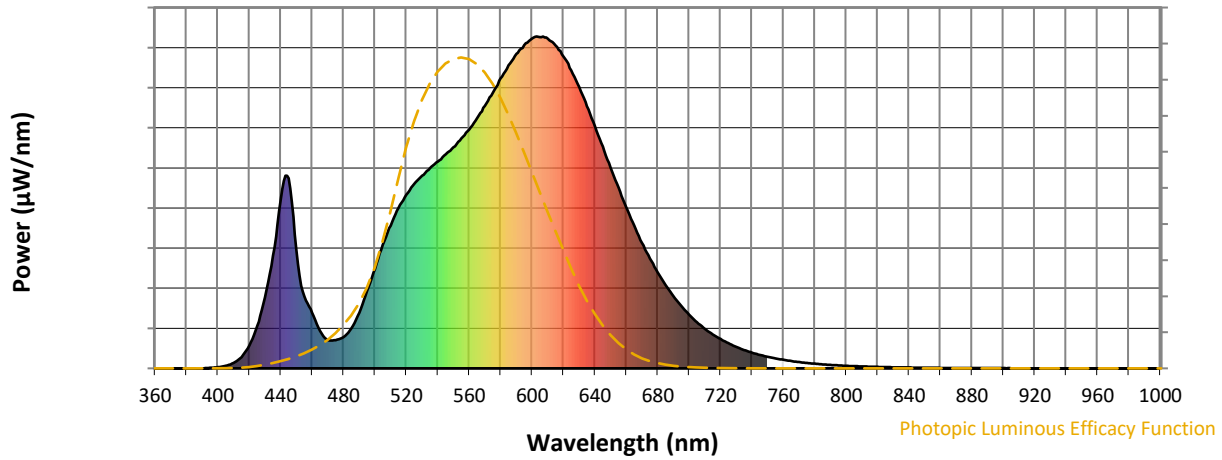
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

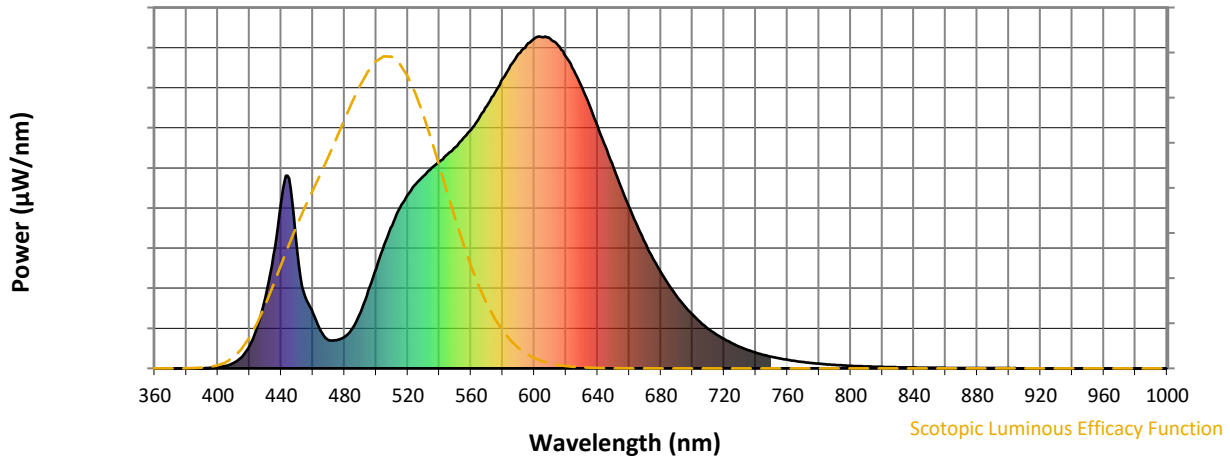


Photopic Lumens: NR

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			

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

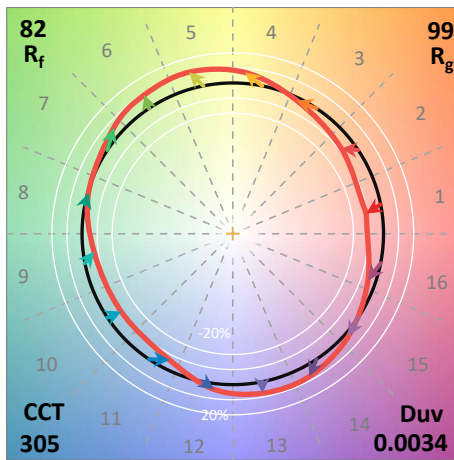
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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)