

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: P641453

Luminaire Tested: GWS-SA5F-830-U-SLR-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P641453
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-SA5F-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: 17688.8 lumens
Efficiency: N/A
Efficacy: 57.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G2

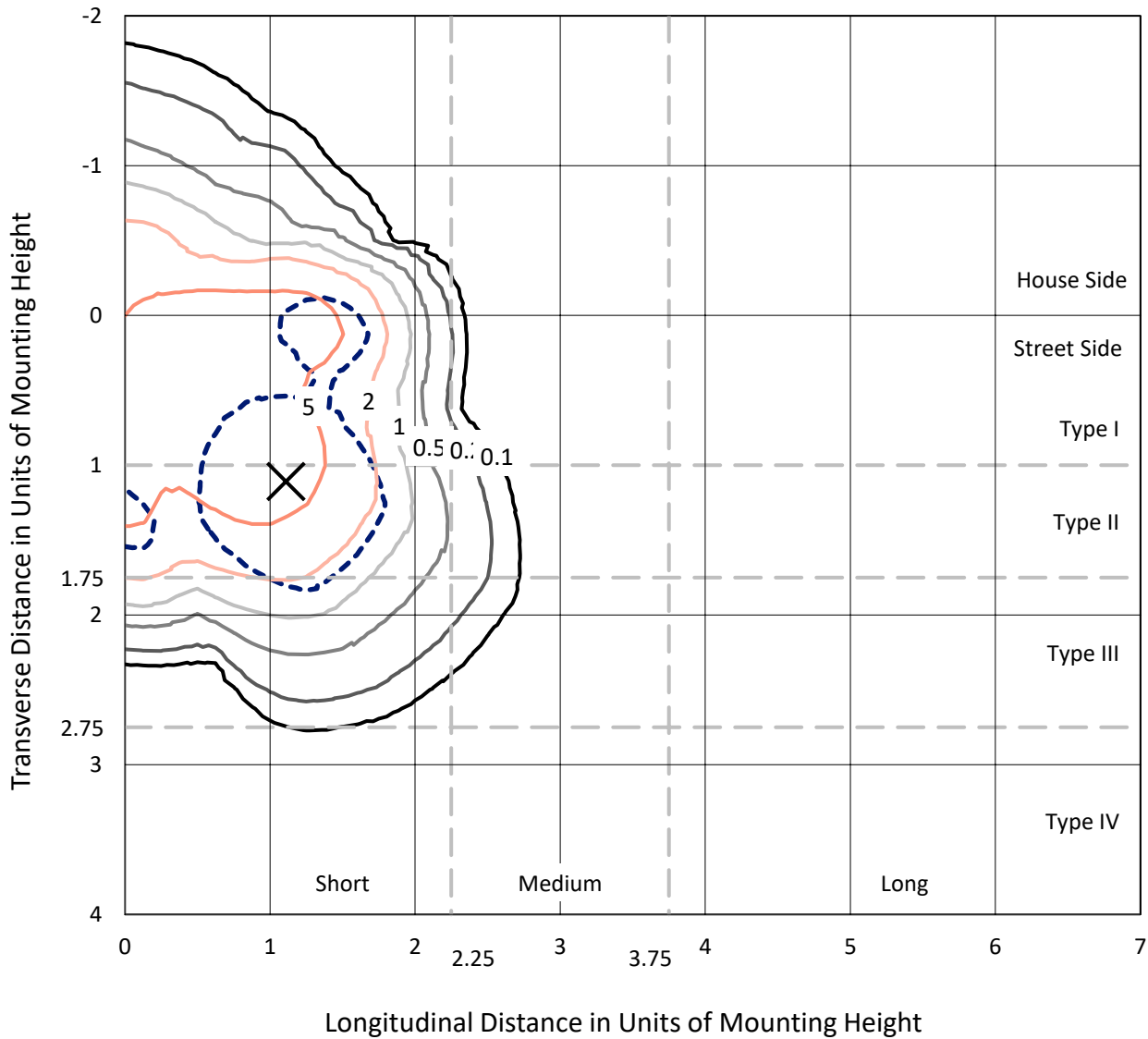
Input Watts (W): 310.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

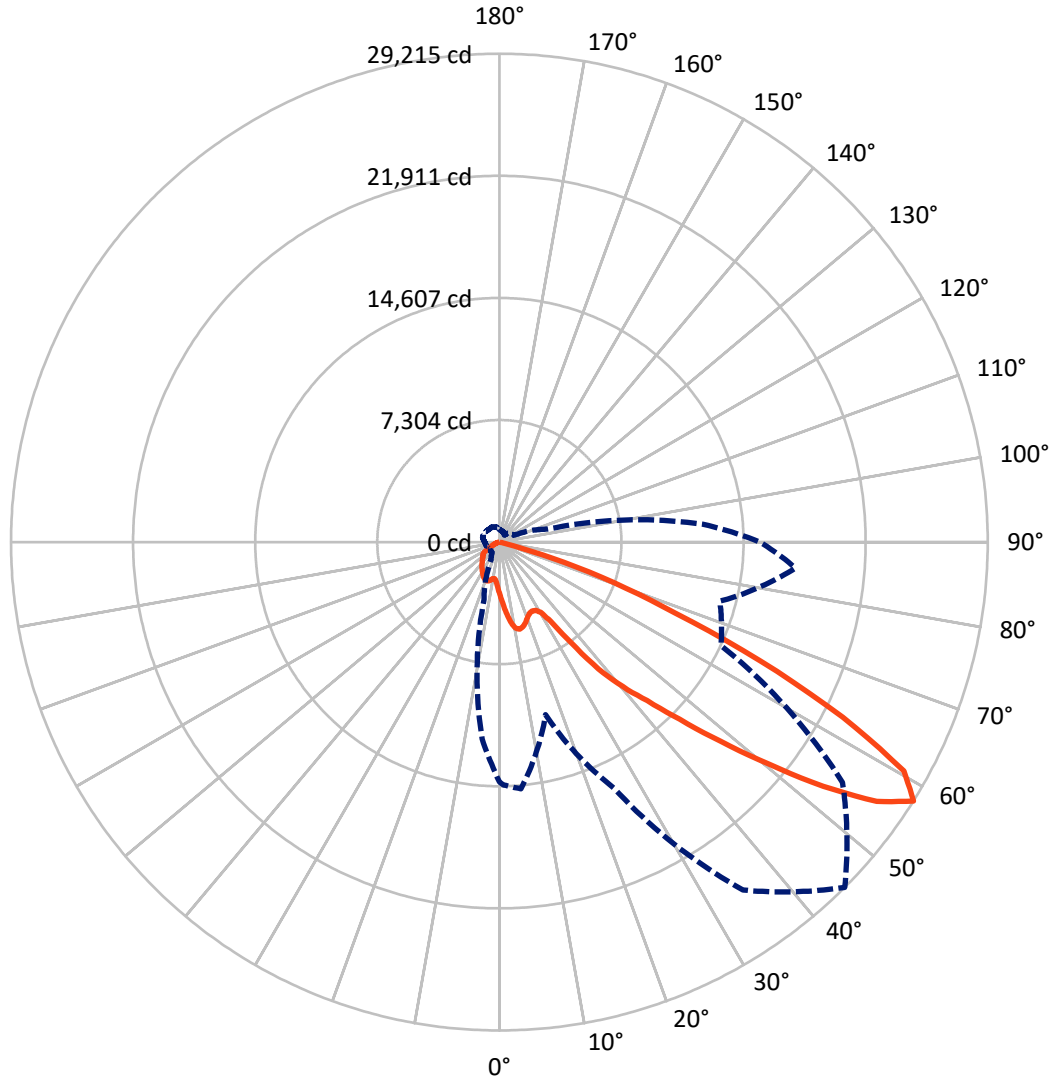
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 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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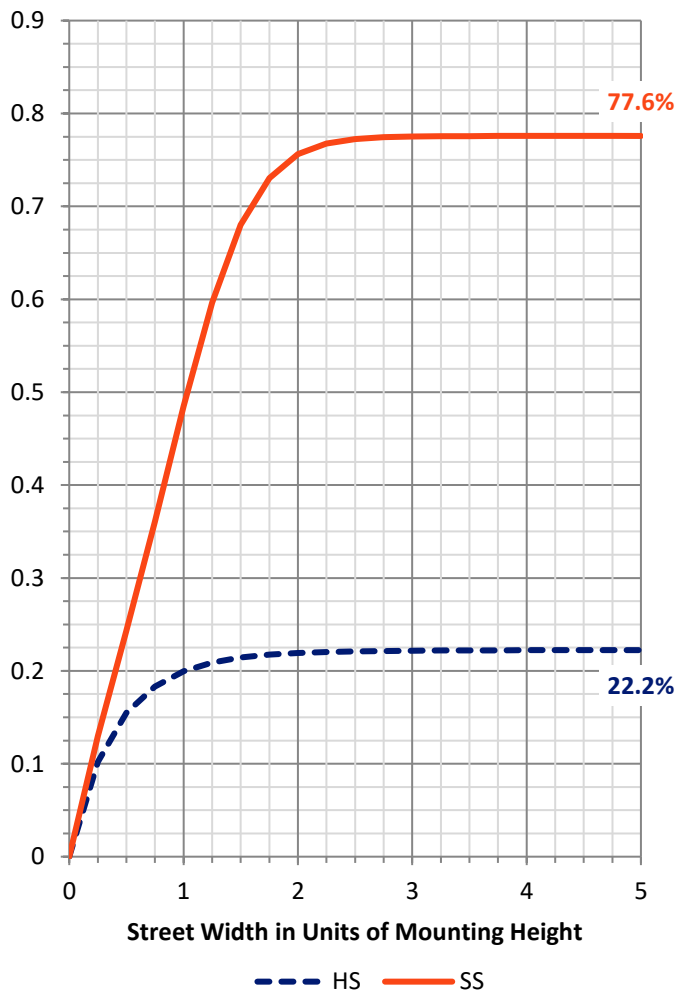
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3961.0	0.0	3961.0
	% Fixture	22.4	0.0	22.4
Street Side	Lumens	13727.8	0.0	13727.8
	% Fixture	77.6	0.0	77.6
Total	Lumens	17688.8	0.0	17688.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.9	1.7
10°-20°	989.4	5.6
20°-30°	1607.3	9.1
30°-40°	2483.4	14.0
40°-50°	3982.2	22.5
50°-60°	5442.6	30.8
60°-70°	2636.0	14.9
70°-80°	241.4	1.4
80°-90°	0.7	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°	17688.8	100.0
0°-180°	17688.8	100.0

Coefficient of Utilization



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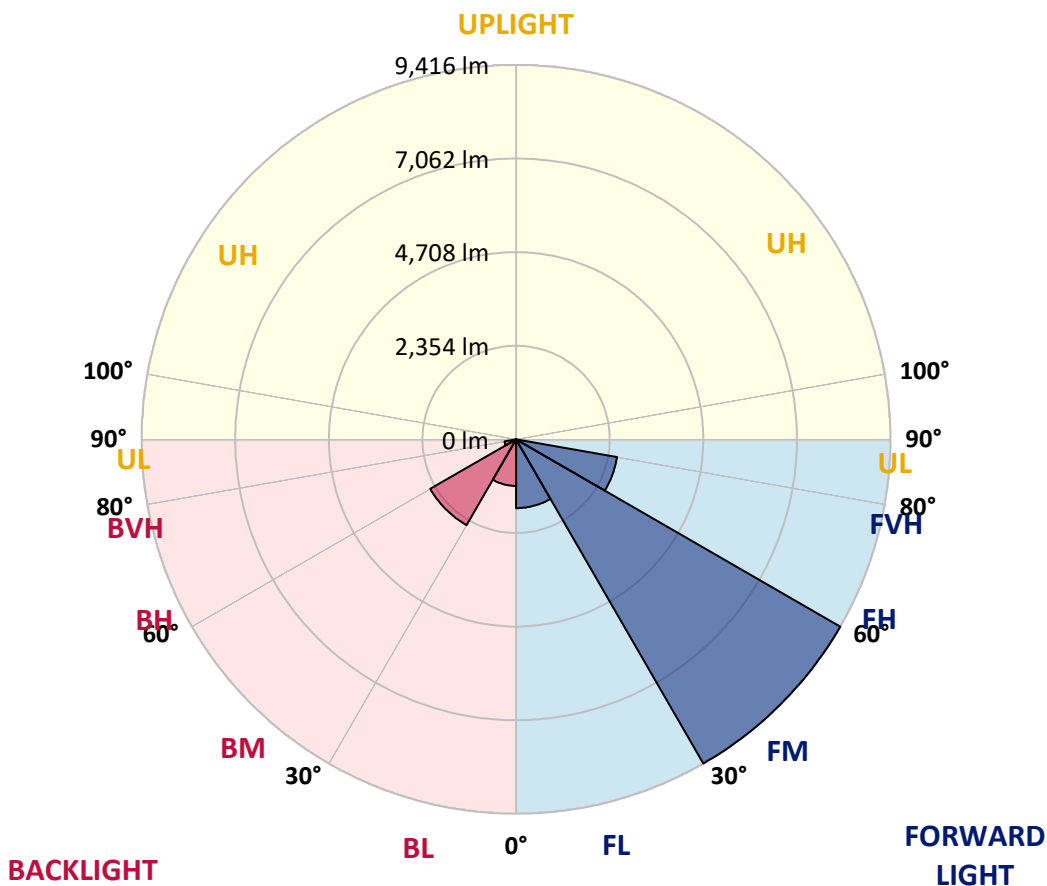
CATALOG NUMBER: GWS-SA5F-830-U-SLR-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1730.5	9.8			
FM (30°-60°)	9416.1	53.2			
FH (60°-80°)	2580.5	14.6			G2/5000
FVH (80°-90°)	0.7	0.0			G0/10
BL (0°-30°)	1172.0	6.6	B3/2500		
BM (30°-60°)	2492.1	14.1	B2/2500		
BH (60°-80°)	296.9	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°	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0
2.5°	3368.1	3389.5	3425.1	3501.2	3565.4	3608.1	3627.2	3622.4	3596.3	3577.2	3539.2
5°	3729.4	3729.4	3798.3	3971.8	4104.9	4188.1	4230.9	4204.8	4152.5	4069.3	3940.9
7.5°	4045.5	4057.4	4173.9	4421.1	4623.1	4741.9	4810.9	4796.6	4703.9	4544.6	4287.9
10°	4292.7	4307.0	4461.5	4763.3	5001.0	5122.2	5224.4	5234.0	5131.7	4920.2	4625.5
12.5°	4532.8	4547.0	4708.7	4998.6	5207.8	5257.7	5348.0	5383.7	5357.6	5207.8	4901.2
15°	4791.8	4825.1	4963.0	5179.3	5267.2	5207.8	5267.2	5331.4	5419.4	5405.1	5129.4
17.5°	5046.2	5069.9	5210.2	5286.2	5188.8	5034.3	5062.8	5138.9	5338.5	5533.4	5355.2
20°	5281.5	5314.8	5431.2	5331.4	5036.7	4796.6	4799.0	4898.8	5203.1	5611.9	5585.7
22.5°	5528.7	5578.6	5661.8	5381.3	4896.4	4608.8	4620.7	4711.0	5096.1	5685.6	5847.2
25°	5851.9	5899.5	5954.2	5504.9	4851.3	4516.1	4561.3	4644.5	5096.1	5811.5	6170.5
27.5°	6289.3	6322.6	6325.0	5735.5	4929.7	4530.4	4625.5	4720.5	5248.2	6063.5	6603.1
30°	6838.4	6890.7	6821.7	6094.4	5174.5	4720.5	4860.8	4979.6	5576.2	6489.0	7240.1
32.5°	7506.3	7580.0	7487.3	6626.8	5685.6	5376.6	5630.9	5699.8	6099.1	7104.6	7962.6
35°	8290.7	8352.5	8252.6	7363.7	6878.8	6935.8	7396.9	7309.0	7149.7	7862.8	8806.4
37.5°	9151.1	9208.1	9015.6	8480.8	8642.4	8889.6	9626.5	9324.6	8811.2	8839.7	9721.6
40°	9940.2	10002.0	9700.2	9695.4	10028.2	10479.8	11368.8	10952.8	10254.0	10118.5	10579.6
42.5°	10757.9	10800.7	10527.3	10341.9	11097.8	12027.2	12968.4	12407.5	11209.5	11062.1	11654.0
45°	11925.0	12015.3	11528.0	10660.4	12060.4	13807.5	15119.5	14023.8	11860.8	11741.9	13298.8
47.5°	13641.1	13707.6	12714.1	10860.1	12956.5	16025.1	17807.8	16120.2	12433.6	12162.6	15547.4
50°	15060.1	15105.3	13805.1	11078.8	13909.7	18416.3	20871.6	18606.4	13077.8	12859.1	17646.2
52.5°	16105.9	16277.1	15238.4	11528.0	15162.3	21228.2	24263.5	21551.4	14083.2	14204.4	19386.1
55°	16322.2	16555.2	16217.6	11803.7	16265.2	24092.3	27396.2	24187.4	15086.2	15224.1	19970.8
57.5°	14344.6	14530.0	14810.5	10691.3	16239.0	25404.4	29214.6	25062.1	14629.9	13653.0	17781.7
60°	10746.0	10874.4	11383.0	8171.8	14934.1	24244.5	27797.9	23574.2	12792.5	10418.0	13548.4
62.5°	6372.5	6429.5	7073.7	5293.4	12395.6	20878.8	23053.6	20341.6	10109.0	7007.1	8297.8
65°	2445.8	2422.1	2914.1	2612.2	9115.4	16631.2	17147.0	15507.0	6935.8	3211.2	3163.7
67.5°	377.9	361.3	487.3	772.5	6574.5	11525.6	11314.1	11176.2	4345.0	748.7	653.6
70°	85.6	85.6	104.6	228.2	4017.0	6771.8	7247.2	6909.7	2781.0	159.3	85.6
72.5°	40.4	40.4	49.9	97.5	1454.7	2790.5	3251.6	3201.7	903.2	52.3	30.9
75°	14.3	16.6	16.6	21.4	87.9	145.0	332.8	237.7	57.0	0.0	0.0
77.5°	4.8	4.8	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.4	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.4	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°	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0
2.5°	3456.0	3439.4	3377.6	3294.4	3213.6	3142.3	3068.6	2980.6	2916.5	2842.8	2819.0
5°	3841.1	3736.5	3567.7	3391.8	3230.2	3092.4	2959.3	2816.6	2712.1	2607.5	2571.8
7.5°	4166.7	4012.2	3738.9	3475.0	3254.0	3059.1	2866.6	2671.6	2519.5	2395.9	2357.9
10°	4459.1	4280.8	3914.8	3589.1	3311.0	3085.2	2852.3	2607.5	2410.2	2262.8	2227.2
12.5°	4711.0	4504.2	4064.5	3674.7	3334.8	3075.7	2849.9	2655.0	2476.7	2308.0	2262.8
15°	4922.6	4694.4	4190.5	3731.7	3299.1	2956.9	2759.6	2728.7	2714.4	2529.0	2441.1
17.5°	5129.4	4872.7	4292.7	3757.9	3199.3	2747.7	2605.1	2745.3	2895.1	2773.9	2662.1
20°	5345.7	5053.3	4397.3	3762.6	3032.9	2512.4	2488.6	2709.7	2899.8	2861.8	2757.2
22.5°	5600.0	5279.1	4528.0	3760.3	2823.8	2312.7	2403.1	2640.7	2795.2	2792.9	2709.7
25°	5968.4	5564.3	4703.9	3774.5	2595.6	2158.2	2308.0	2524.3	2650.3	2645.5	2576.6
27.5°	6363.0	5904.2	4932.1	3810.2	2400.7	2067.9	2196.3	2365.0	2474.4	2469.6	2410.2
30°	6916.8	6296.4	5150.8	3812.6	2260.4	2020.4	2072.7	2189.1	2293.7	2281.8	2236.7
32.5°	7589.5	6738.5	5333.8	3677.1	2172.5	1975.2	1944.3	2003.7	2084.5	2067.9	2056.0
35°	8402.4	7263.8	5490.7	3380.0	2037.0	1884.9	1801.7	1813.6	1870.6	1880.1	1875.4
37.5°	9329.4	7889.0	5685.6	2987.8	1854.0	1754.2	1642.4	1632.9	1666.2	1697.1	1720.9
40°	10244.5	8592.5	5949.4	2590.8	1687.6	1587.8	1480.8	1457.0	1471.3	1526.0	1575.9
42.5°	11273.7	9407.8	6234.6	2250.9	1573.5	1404.8	1302.5	1257.4	1297.8	1385.7	1445.2
45°	12756.9	10551.1	6512.7	1980.0	1526.0	1243.1	1105.3	1100.5	1145.7	1259.8	1326.3
47.5°	14839.0	12029.5	6695.8	1768.4	1523.6	1117.1	953.1	981.7	1034.0	1145.7	1221.7
50°	16868.9	13881.1	6493.7	1606.8	1473.7	1034.0	839.0	896.1	948.4	1045.8	1124.3
52.5°	18093.0	14877.1	5707.0	1454.7	1319.2	995.9	727.3	827.2	836.7	924.6	1007.8
55°	17964.7	14232.9	4371.1	1219.4	1091.0	941.3	610.9	746.3	751.1	817.7	889.0
57.5°	15592.5	12219.7	3002.0	988.8	820.0	777.2	503.9	629.9	675.0	715.4	767.7
60°	11620.7	8915.8	1338.2	803.4	520.5	525.3	430.2	475.4	544.3	591.9	637.0
62.5°	6847.9	5129.4	544.3	482.5	287.6	330.4	347.0	347.0	389.8	425.5	454.0
65°	2588.5	1794.6	221.1	242.4	149.7	154.5	204.4	252.0	285.2	316.1	354.2
67.5°	454.0	313.8	114.1	90.3	87.9	78.4	104.6	164.0	183.0	206.8	223.4
70°	76.1	64.2	47.5	45.2	40.4	42.8	68.9	116.5	128.4	135.5	142.6
72.5°	21.4	19.0	14.3	11.9	9.5	11.9	42.8	90.3	95.1	99.8	107.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	16.6	64.2	68.9	71.3	78.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3	19.0	23.8	19.0
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°	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0
2.5°	2804.8	2757.2	2731.1	2716.8	2716.8	2697.8	2676.4	2669.3	2700.2	2700.2	2752.5
5°	2526.7	2488.6	2445.8	2419.7	2379.3	2386.4	2362.6	2360.3	2391.2	2405.4	2460.1
7.5°	2334.1	2286.6	2260.4	2243.8	2222.4	2212.9	2191.5	2184.4	2201.0	2224.8	2277.1
10°	2205.8	2198.6	2196.3	2208.1	2208.1	2196.3	2177.2	2165.4	2170.1	2215.3	2274.7
12.5°	2239.0	2253.3	2258.1	2277.1	2286.6	2277.1	2262.8	2267.6	2298.5	2381.7	2469.6
15°	2384.0	2372.2	2367.4	2376.9	2384.0	2374.5	2369.8	2405.4	2512.4	2631.2	2731.1
17.5°	2538.5	2462.5	2429.2	2429.2	2434.0	2429.2	2434.0	2502.9	2676.4	2795.2	2868.9
20°	2617.0	2476.7	2424.4	2412.6	2422.1	2424.4	2441.1	2519.5	2709.7	2792.9	2809.5
22.5°	2593.2	2417.3	2357.9	2348.4	2357.9	2367.4	2384.0	2450.6	2628.9	2671.6	2664.5
25°	2474.4	2300.8	2253.3	2253.3	2274.7	2272.3	2279.5	2327.0	2474.4	2500.5	2488.6
27.5°	2324.6	2160.6	2120.2	2144.0	2163.0	2158.2	2160.6	2201.0	2310.4	2317.5	2305.6
30°	2172.5	2029.9	1991.8	2020.4	2046.5	2041.8	2044.1	2084.5	2153.5	2146.3	2129.7
32.5°	2018.0	1913.4	1884.9	1901.5	1941.9	1937.2	1946.7	1989.5	2015.6	1984.7	1965.7
35°	1875.4	1820.7	1799.3	1808.8	1839.7	1846.9	1863.5	1892.0	1892.0	1854.0	1820.7
37.5°	1742.3	1735.1	1720.9	1709.0	1737.5	1758.9	1782.7	1816.0	1768.4	1713.8	1682.9
40°	1618.7	1649.6	1630.6	1599.7	1616.3	1647.2	1694.7	1720.9	1663.8	1609.2	1556.9
42.5°	1504.6	1556.9	1549.7	1511.7	1526.0	1554.5	1609.2	1630.6	1564.0	1502.2	1452.3
45°	1395.2	1468.9	1473.7	1426.1	1440.4	1468.9	1533.1	1540.2	1454.7	1388.1	1352.5
47.5°	1300.2	1381.0	1383.4	1347.7	1352.5	1392.9	1452.3	1454.7	1357.2	1295.4	1250.3
50°	1209.8	1302.5	1309.7	1278.8	1283.5	1331.1	1381.0	1371.5	1266.9	1202.7	1162.3
52.5°	1100.5	1226.5	1243.1	1228.9	1247.9	1285.9	1316.8	1283.5	1162.3	1098.1	1062.5
55°	981.7	1145.7	1181.3	1171.8	1193.2	1224.1	1231.2	1209.8	1057.7	993.5	960.3
57.5°	843.8	943.6	1005.4	986.4	1003.1	1034.0	1055.3	1038.7	924.6	874.7	846.2
60°	698.8	765.4	779.6	748.7	734.5	789.1	839.0	817.7	720.2	689.3	656.0
62.5°	511.0	587.1	596.6	556.2	539.6	599.0	641.8	620.4	513.4	480.1	454.0
65°	408.8	480.1	499.2	461.1	451.6	496.8	522.9	470.6	394.6	358.9	330.4
67.5°	268.6	325.6	375.6	373.2	354.2	368.4	349.4	306.6	252.0	232.9	213.9
70°	166.4	199.7	230.6	242.4	240.1	235.3	209.2	178.3	161.6	154.5	145.0
72.5°	128.4	161.6	185.4	192.5	194.9	187.8	166.4	137.9	121.2	111.7	104.6
75°	95.1	121.2	140.2	149.7	154.5	149.7	128.4	109.3	92.7	85.6	78.4
77.5°	33.3	40.4	49.9	54.7	52.3	49.9	45.2	45.2	35.7	33.3	28.5
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: P641453

CATALOG NUMBER: GWS-SA5F-830-U-SLR-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0	3109.0
2.5°	2811.9	2854.7	2933.1	3004.4	3080.5	3158.9	3244.5	3332.4	3372.8	3368.1
5°	2543.3	2636.0	2764.3	2904.6	3061.5	3230.2	3418.0	3610.5	3693.7	3729.4
7.5°	2374.5	2505.3	2674.0	2852.3	3059.1	3299.1	3582.0	3883.9	4005.1	4045.5
10°	2395.9	2548.0	2688.3	2861.8	3082.9	3394.2	3746.0	4104.9	4247.5	4292.7
12.5°	2569.4	2602.7	2640.7	2783.4	3061.5	3465.5	3895.8	4323.6	4487.6	4532.8
15°	2726.3	2571.8	2500.5	2631.2	2985.4	3515.4	4047.9	4558.9	4739.6	4791.8
17.5°	2733.4	2500.5	2341.3	2443.5	2861.8	3536.8	4197.6	4799.0	4996.3	5046.2
20°	2645.5	2422.1	2217.7	2220.0	2693.0	3532.1	4321.2	5015.3	5236.3	5281.5
22.5°	2517.1	2329.4	2117.8	2044.1	2512.4	3522.6	4456.7	5245.8	5485.9	5528.7
25°	2374.5	2210.5	2022.7	1911.0	2331.7	3532.1	4646.9	5547.7	5811.5	5851.9
27.5°	2220.0	2079.8	1949.1	1858.7	2179.6	3567.7	4875.0	5932.8	6246.5	6289.3
30°	2058.4	1953.8	1901.5	1846.9	2084.5	3577.2	5122.2	6382.0	6778.9	6838.4
32.5°	1899.1	1842.1	1844.5	1854.0	1994.2	3510.7	5348.0	6881.2	7411.2	7506.3
35°	1751.8	1735.1	1782.7	1830.2	1863.5	3339.6	5545.3	7470.6	8193.2	8290.7
37.5°	1625.8	1640.1	1699.5	1747.0	1720.9	3097.1	5806.8	8207.5	9067.9	9151.1
40°	1504.6	1540.2	1609.2	1630.6	1611.5	2814.3	6120.5	8918.2	9826.1	9940.2
42.5°	1392.9	1419.0	1516.5	1521.2	1580.6	2526.7	6422.4	9683.5	10698.5	10757.9
45°	1302.5	1297.8	1397.6	1428.5	1621.1	2208.1	6717.1	10703.2	11839.4	11925.0
47.5°	1214.6	1209.8	1233.6	1373.9	1637.7	1913.4	7009.5	12195.9	13493.7	13641.1
50°	1131.4	1138.5	1064.9	1347.7	1547.4	1687.6	7142.6	13576.9	14998.3	15060.1
52.5°	1057.7	1031.6	903.2	1262.1	1354.8	1473.7	6764.7	14204.4	15930.0	16105.9
55°	953.1	808.1	744.0	1024.4	1069.6	1285.9	5540.6	13840.7	16010.9	16322.2
57.5°	815.3	634.6	632.3	755.9	755.9	1193.2	3548.7	11825.1	13798.0	14344.6
60°	627.5	492.0	522.9	525.3	484.9	869.9	1991.8	8566.4	10201.7	10746.0
62.5°	446.9	375.6	394.6	313.8	278.1	435.0	955.5	4932.1	6296.4	6372.5
65°	299.5	254.3	206.8	173.5	171.1	185.4	394.6	1782.7	2167.7	2445.8
67.5°	197.3	154.5	109.3	109.3	123.6	123.6	149.7	294.7	413.6	377.9
70°	128.4	107.0	68.9	66.6	80.8	80.8	76.1	80.8	85.6	85.6
72.5°	95.1	80.8	40.4	35.7	45.2	47.5	42.8	40.4	40.4	40.4
75°	71.3	57.0	23.8	16.6	21.4	28.5	23.8	16.6	16.6	14.3
77.5°	28.5	21.4	9.5	7.1	11.9	16.6	14.3	7.1	4.8	4.8
80°	2.4	4.8	4.8	4.8	7.1	9.5	11.9	4.8	2.4	2.4
82.5°	0.0	2.4	2.4	2.4	4.8	7.1	9.5	4.8	2.4	2.4
85°	0.0	0.0	0.0	0.0	4.8	7.1	4.8	2.4	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	2.4	7.1	4.8	2.4	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



CCT = 3050K
 CIE x = 0.4383
 CIE y = 0.4131
 Duv = 0.0034

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

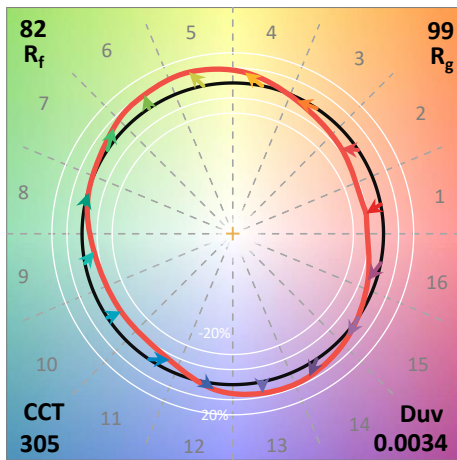
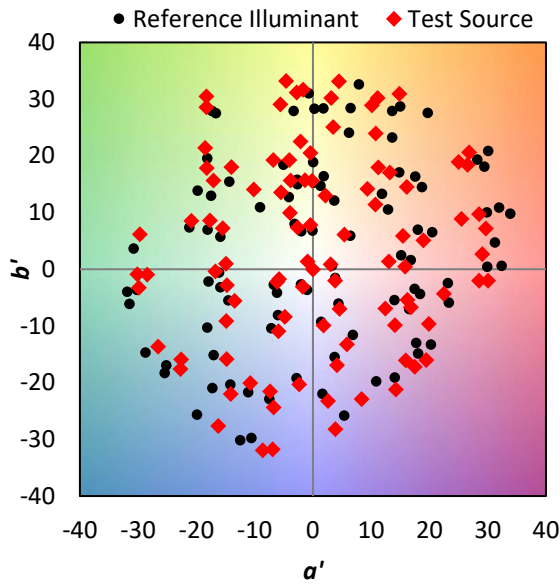
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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

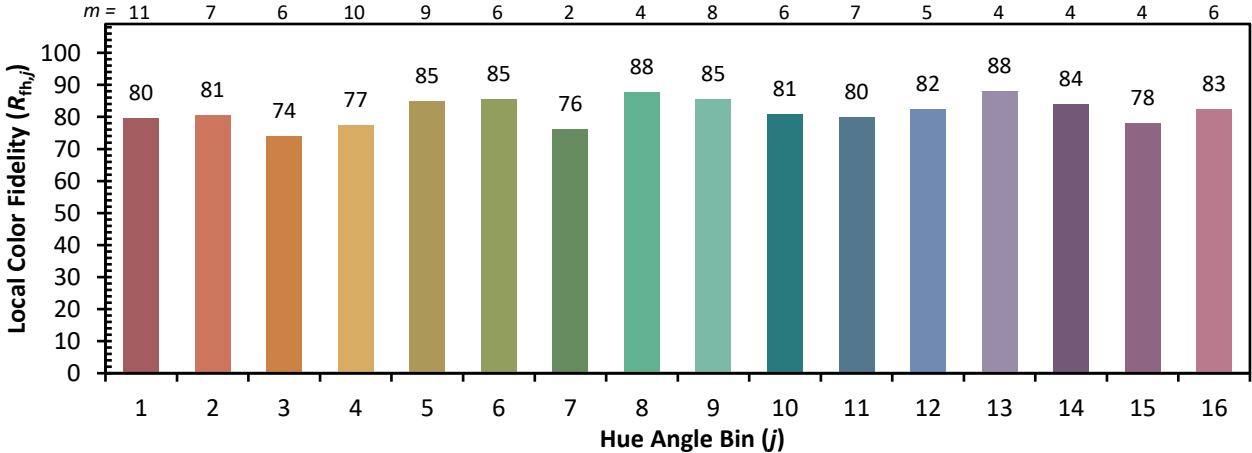


Individual Sample Fidelity Index ($R_{f,i}$)

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)