

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: P632545

Luminaire Tested: GWS-SA2C-830-U-SLR-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P632545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-44)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2C-830-U-SLR-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4562.8 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

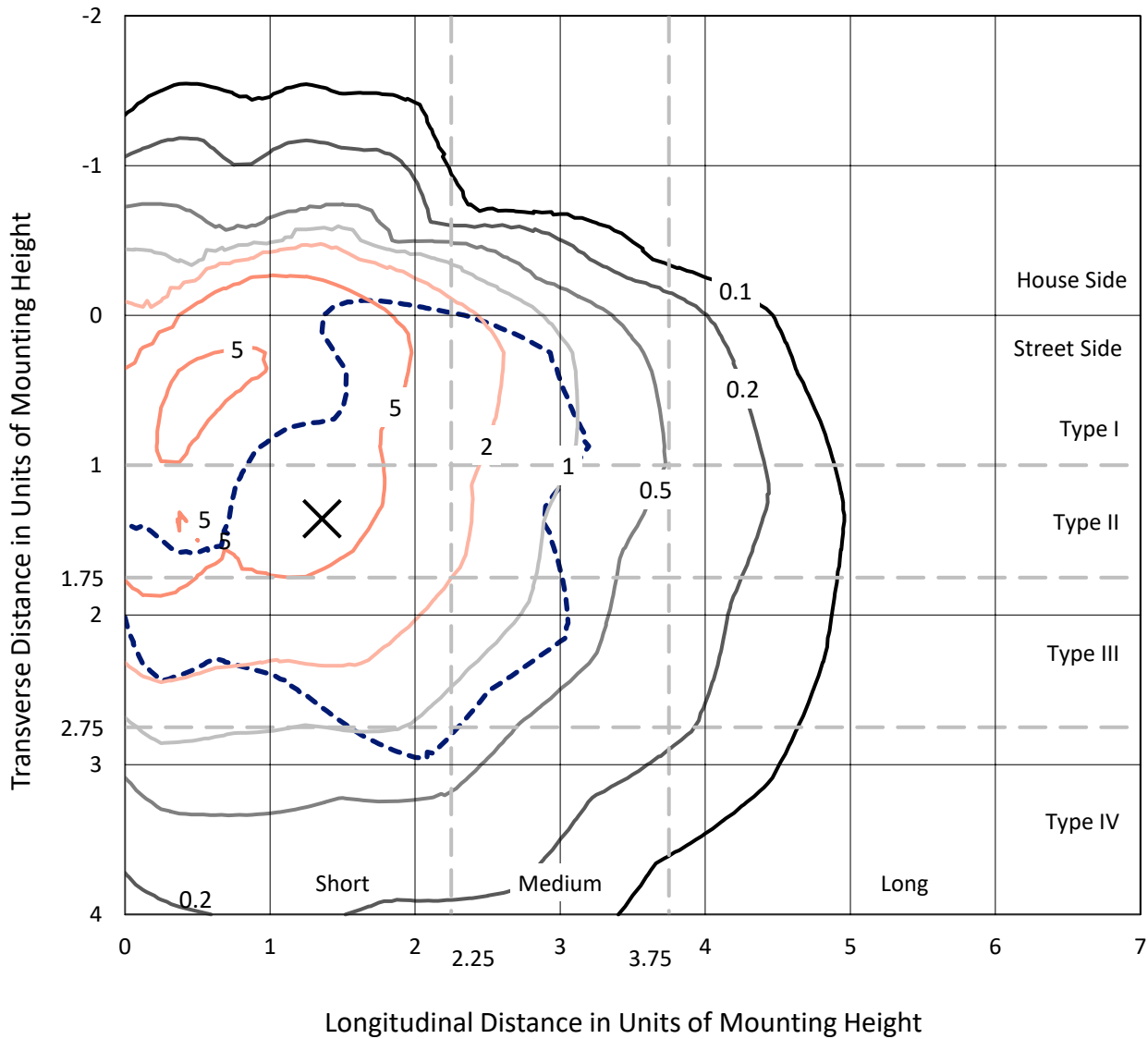
Input Watts (W): 63.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P632545
 CATALOG NUMBER: GWS-SA2C-830-U-SLR-W-HSS

Iso-Footcandle Lines of Horizontal Illumination

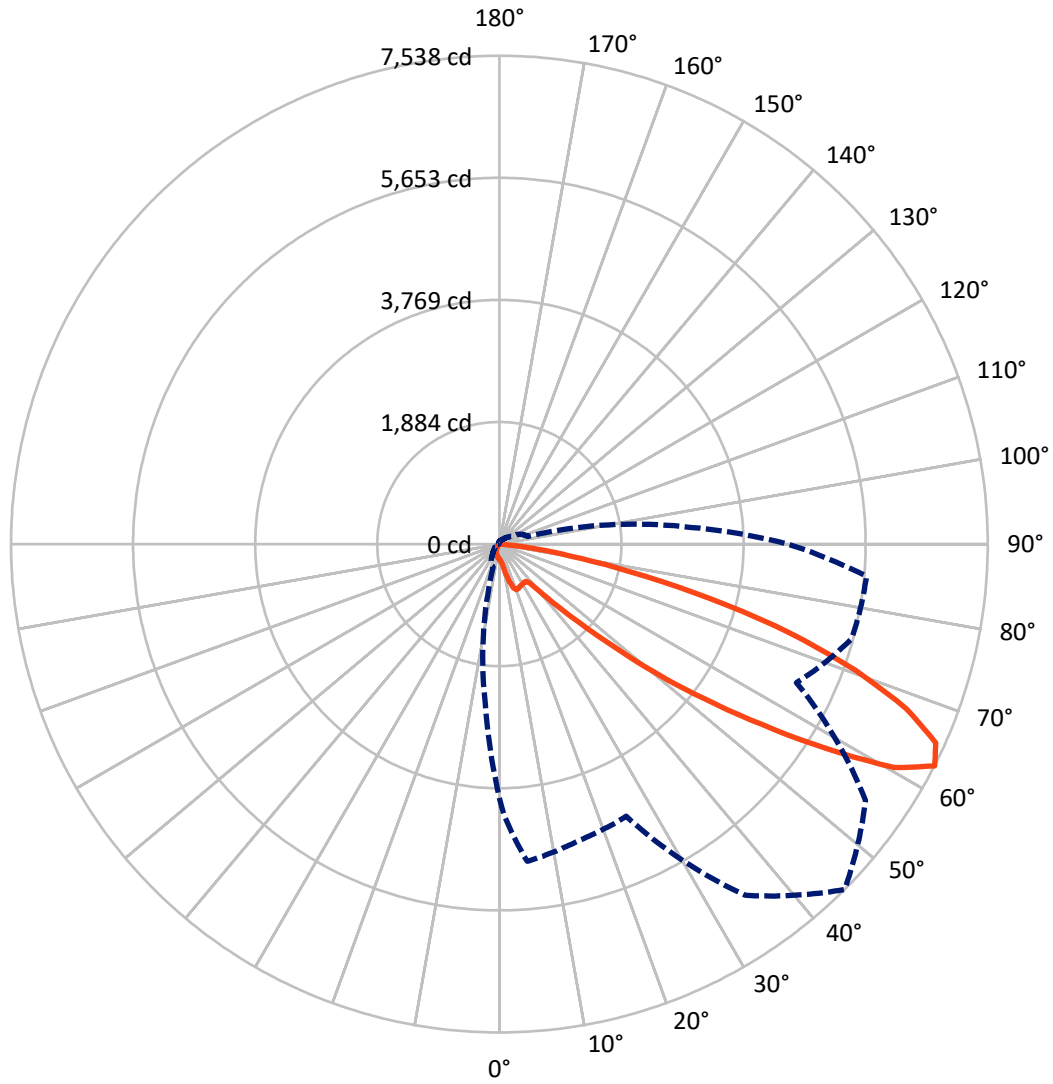
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.3 fc
 Type IV - Short - N/A

REPORT NUMBER: P632545
CATALOG NUMBER: GWS-SA2C-830-U-SLR-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P632545
 CATALOG NUMBER: GWS-SA2C-830-U-SLR-W-HSS

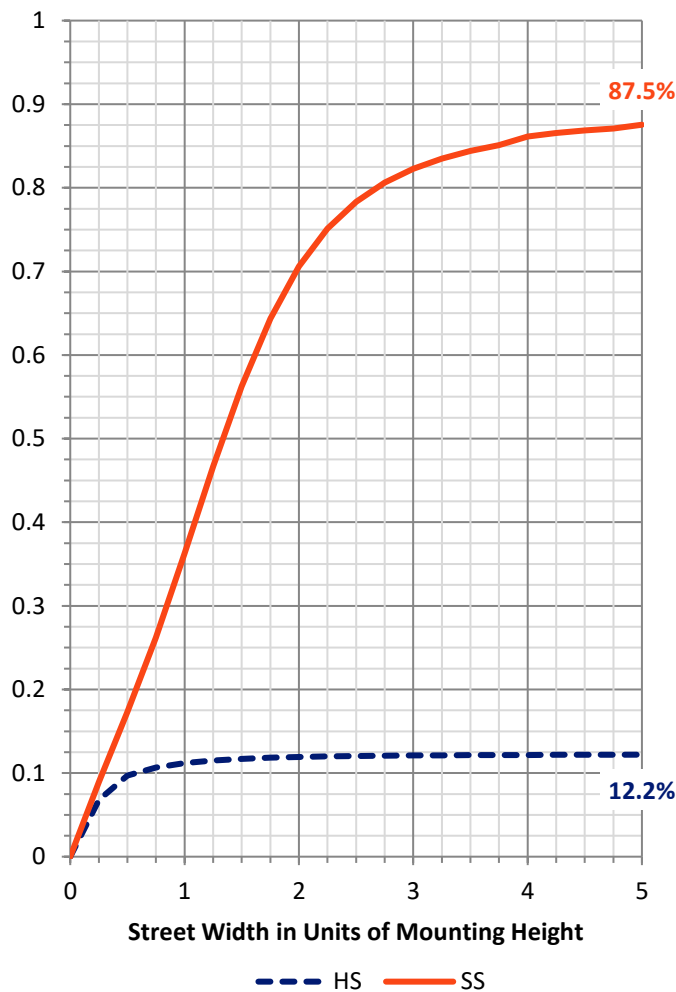
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	563.0	0.0	563.0
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	3999.8	0.0	3999.8
	% Fixture	87.7	0.0	87.7
Total	Lumens	4562.8	0.0	4562.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.0	0.5
10°-20°	79.6	1.7
20°-30°	172.9	3.8
30°-40°	283.8	6.2
40°-50°	521.8	11.4
50°-60°	1120.6	24.6
60°-70°	1505.1	33.0
70°-80°	783.7	17.2
80°-90°	74.3	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°	4562.8	100.0
0°-180°	4562.8	100.0

Coefficient of Utilization

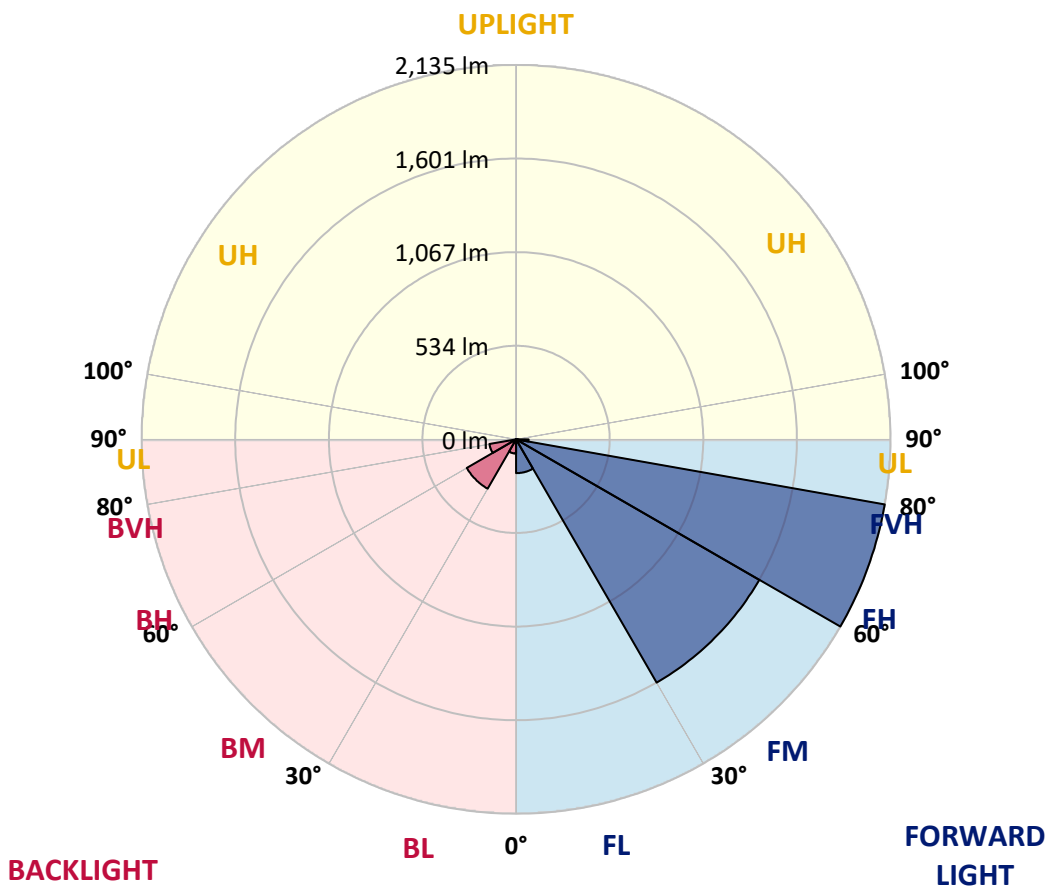


REPORT NUMBER: P632545
 CATALOG NUMBER: GWS-SA2C-830-U-SLR-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	192.8	4.2			
FM (30°-60°)	1601.5	35.1			
FH (60°-80°)	2134.5	46.8			G2/5000
FVH (80°-90°)	71.0	1.6			G1/100
BL (0°-30°)	80.8	1.8	B0/110		
BM (30°-60°)	324.7	7.1	B1/1000		
BH (60°-80°)	154.3	3.4	B1/500		G1/500
BVH (80°-90°)	3.3	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 Short





REPORT NUMBER: P632545
 CATALOG NUMBER: GWS-SA2C-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2
2.5°	241.9	243.0	244.0	247.7	250.3	252.5	253.0	251.4	247.7	244.0	238.8
5°	234.5	235.6	239.3	249.3	259.3	267.2	269.8	268.3	259.3	247.7	235.6
7.5°	234.0	236.1	245.1	266.2	287.8	304.1	308.3	304.6	287.8	264.6	239.8
10°	253.0	256.7	269.8	307.8	347.3	376.3	387.9	372.1	345.2	303.1	262.5
12.5°	302.5	308.8	334.1	389.5	450.6	489.1	504.9	485.4	443.2	382.1	317.8
15°	380.5	390.0	428.0	510.7	582.9	617.2	622.4	611.4	562.4	494.9	408.5
17.5°	490.7	504.4	563.4	647.7	699.9	712.0	710.5	698.9	663.0	616.6	535.0
20°	622.4	638.8	696.8	766.3	771.6	757.4	749.5	742.6	730.5	722.6	658.8
22.5°	755.3	775.3	835.9	853.3	805.9	764.7	745.2	750.5	768.4	807.4	781.6
25°	887.5	906.5	963.4	916.5	821.7	753.1	728.4	741.0	783.7	868.0	901.2
27.5°	1042.0	1056.2	1089.9	959.7	824.3	743.7	719.4	738.9	791.1	906.0	1032.5
30°	1202.7	1211.1	1194.8	971.3	815.3	729.4	710.5	738.9	803.7	931.3	1131.0
32.5°	1320.8	1322.4	1269.1	972.4	810.6	717.8	702.0	735.8	815.9	952.4	1226.4
35°	1442.5	1434.6	1340.3	988.2	823.2	722.1	708.3	744.7	834.8	977.1	1310.2
37.5°	1565.8	1551.6	1419.9	1014.0	855.9	767.9	759.5	790.6	865.4	1011.4	1402.5
40°	1692.3	1672.8	1502.6	1053.0	928.7	923.9	952.9	949.2	949.2	1055.1	1497.3
42.5°	1846.8	1824.1	1624.9	1163.2	1098.4	1204.3	1283.4	1234.3	1143.7	1155.8	1620.7
45°	2050.7	2031.2	1836.8	1374.0	1364.5	1608.0	1714.5	1617.5	1391.9	1388.2	1826.7
47.5°	2377.0	2373.3	2174.6	1618.6	1690.2	2121.9	2327.4	2140.9	1674.9	1634.4	2216.7
50°	2835.5	2824.4	2595.7	1905.3	2077.6	2758.6	3125.4	2814.4	2017.0	1921.6	2739.1
52.5°	3352.0	3363.6	3185.5	2218.3	2489.2	3466.9	3977.6	3586.0	2388.6	2286.8	3396.3
55°	3838.5	3904.9	3858.0	2584.6	2891.4	4249.0	4913.6	4432.4	2848.7	2764.9	4133.1
57.5°	4219.0	4406.1	4735.0	3116.9	3364.1	5164.0	5958.8	5350.0	3385.7	3541.2	5136.1
60°	4240.1	4487.8	5251.5	4230.6	3972.3	5948.8	7002.3	6246.5	4230.1	4859.4	5921.9
62.5°	3922.3	4187.9	4915.2	4736.6	4634.8	6616.5	7537.8	6900.1	5060.7	5631.5	5688.9
65°	3558.6	3826.9	4540.0	4162.6	4557.9	6588.1	7401.8	6915.4	5136.1	5106.5	5272.0
67.5°	3008.9	3249.8	3895.4	3684.6	4201.1	6270.3	6773.6	6479.5	4731.8	4776.1	4849.9
70°	2196.2	2428.1	3027.3	3037.9	3668.8	5697.4	5820.2	5779.6	4357.6	4404.5	4193.7
72.5°	1586.4	1781.9	2299.0	2491.3	2928.8	4777.7	4692.8	4849.3	3738.9	3922.8	3368.3
75°	1140.5	1287.0	1686.5	2167.2	2321.6	3548.1	3359.4	3755.7	2999.9	3377.8	2532.4
77.5°	462.7	514.4	663.5	1459.9	1525.8	2387.0	2056.5	2728.0	2138.7	2219.4	1227.5
80°	19.0	21.1	27.4	753.7	1046.2	1342.9	1100.5	1458.3	1412.5	893.9	289.9
82.5°	2.1	2.1	4.7	217.1	458.0	741.0	518.6	840.1	715.2	378.9	131.8
85°	0.5	0.5	1.1	24.8	107.5	118.6	70.1	257.7	332.6	155.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	4.7	5.3	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: P632545

CATALOG NUMBER: GWS-SA2C-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2
2.5°	238.8	236.1	233.0	229.8	228.2	224.0	222.4	221.4	220.3	220.8	220.8
5°	230.8	225.0	218.2	211.3	207.7	203.4	201.3	200.3	200.8	202.9	202.9
7.5°	229.8	218.7	204.0	195.0	190.8	187.6	185.5	184.5	185.0	187.6	188.7
10°	247.2	227.7	201.3	186.0	181.3	178.1	176.0	174.5	173.4	175.5	176.0
12.5°	284.6	257.7	214.0	185.0	176.6	172.3	170.8	167.6	166.0	167.1	167.6
15°	362.1	315.7	239.3	189.2	172.3	167.6	165.0	162.3	159.7	159.2	159.7
17.5°	463.3	396.9	277.8	199.2	169.2	163.4	159.7	156.0	152.3	151.8	151.3
20°	588.7	496.5	331.5	215.0	166.5	159.7	154.4	149.2	144.4	142.8	142.8
22.5°	703.1	616.6	400.6	234.5	162.9	154.4	148.1	141.8	136.5	133.9	133.3
25°	842.7	744.2	483.3	257.2	157.6	147.6	140.7	134.4	129.1	126.0	124.9
27.5°	983.5	878.6	577.1	286.7	151.3	140.7	134.4	128.6	122.8	119.1	118.1
30°	1120.0	1023.5	682.5	323.6	146.5	133.9	128.6	122.8	117.5	111.7	110.2
32.5°	1266.5	1171.6	800.6	364.7	142.8	129.1	123.3	118.1	111.2	105.9	103.3
35°	1407.7	1324.5	930.8	404.8	139.1	124.9	118.6	113.3	105.9	100.1	96.4
37.5°	1550.0	1479.9	1066.7	429.0	133.9	119.1	113.3	109.1	100.7	93.8	89.6
40°	1700.8	1640.7	1213.8	419.0	129.1	112.8	109.6	104.9	95.4	87.5	82.2
42.5°	1866.3	1794.1	1363.5	380.5	124.9	107.5	104.4	99.6	90.7	81.2	74.3
45°	2074.4	1962.2	1486.3	322.6	127.0	102.2	95.9	94.9	86.4	74.3	65.9
47.5°	2432.3	2220.4	1581.7	285.1	141.2	96.4	89.1	91.7	82.7	67.5	58.0
50°	2979.9	2648.4	1670.7	282.5	162.9	93.8	82.7	89.6	79.1	60.6	51.1
52.5°	3501.7	3083.2	1727.7	305.7	181.8	100.7	76.4	87.0	76.4	55.9	46.4
55°	4000.8	3334.1	1625.9	322.6	199.7	121.2	71.7	82.7	73.3	53.2	44.8
57.5°	4538.9	3445.8	1280.2	356.8	212.4	138.6	72.7	76.4	69.0	51.7	44.3
60°	4699.7	3303.0	772.6	401.6	205.5	143.9	80.6	68.0	63.2	48.5	42.7
62.5°	4449.8	2964.1	455.9	365.8	199.7	136.0	92.2	62.7	57.4	44.3	39.5
65°	4076.2	2504.0	297.3	308.8	211.9	121.2	98.0	60.1	52.2	40.1	34.8
67.5°	3649.3	2017.0	208.2	182.4	195.5	109.1	82.7	59.6	46.9	33.7	28.5
70°	3073.7	1510.5	146.5	120.7	162.9	97.0	64.3	58.0	41.1	27.4	22.1
72.5°	2374.9	945.5	109.1	78.0	115.9	79.1	51.1	49.0	33.2	22.7	16.9
75°	1751.4	539.2	76.9	56.4	76.4	60.1	37.9	34.8	28.5	21.6	15.3
77.5°	914.4	269.8	48.0	43.2	43.7	37.4	27.4	25.3	26.4	21.6	14.2
80°	175.5	53.8	29.0	31.6	23.7	23.7	20.0	21.1	23.2	17.4	12.1
82.5°	73.3	11.6	15.8	17.9	14.8	16.3	16.3	16.9	16.3	12.6	9.0
85°	0.0	0.0	6.9	7.4	10.0	10.0	8.4	8.4	8.4	7.4	5.3
87.5°	0.0	0.0	0.0	0.0	0.5	1.6	3.2	3.7	4.2	3.2	2.1
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: P632545
 CATALOG NUMBER: GWS-SA2C-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2
2.5°	220.3	219.3	220.8	221.9	222.9	222.9	221.9	220.8	219.3	220.8	219.3
5°	203.4	205.0	207.7	208.7	209.8	207.7	206.6	203.4	200.8	201.3	200.3
7.5°	190.3	191.8	195.0	197.1	197.1	196.1	192.9	189.7	185.5	185.5	185.0
10°	178.1	180.2	183.9	186.6	187.6	186.6	183.4	179.2	175.5	175.5	173.9
12.5°	168.1	170.8	175.0	178.7	179.7	178.7	175.5	171.3	167.1	167.1	166.0
15°	159.7	162.9	167.6	171.8	173.4	171.8	168.1	162.9	158.6	159.2	157.6
17.5°	151.8	154.4	160.7	165.5	167.1	165.5	160.7	153.9	149.7	150.7	149.7
20°	142.8	146.0	152.3	157.6	159.2	157.6	152.3	144.9	140.7	140.7	141.2
22.5°	133.3	136.5	142.8	146.5	148.6	147.0	141.8	134.9	130.7	130.7	131.2
25°	124.9	126.5	131.2	134.9	135.5	133.9	129.7	124.4	121.2	122.8	123.3
27.5°	117.0	117.0	119.1	121.2	120.7	119.1	117.5	113.3	112.8	114.4	115.9
30°	108.6	105.9	104.9	103.3	102.8	102.2	103.8	103.8	104.9	107.0	108.6
32.5°	101.2	95.9	91.2	86.4	83.8	85.9	90.1	93.8	97.5	100.7	102.2
35°	92.8	84.3	76.4	70.1	65.9	69.0	75.9	82.7	89.1	93.3	95.9
37.5°	84.3	72.2	62.7	54.8	51.7	54.3	61.7	71.2	80.6	85.9	89.6
40°	75.4	60.1	49.0	42.7	39.5	42.2	49.5	59.0	71.7	78.5	83.3
42.5°	66.4	49.5	39.5	33.2	31.6	33.2	39.0	48.5	62.2	70.6	76.9
45°	57.4	41.1	31.6	26.9	25.3	26.9	31.6	39.5	53.2	62.7	70.1
47.5°	49.5	34.8	26.4	22.1	21.1	22.7	26.4	33.2	44.8	54.3	62.7
50°	43.2	30.6	22.7	19.0	17.9	19.5	22.7	27.9	37.9	46.4	55.3
52.5°	39.0	28.5	20.0	16.3	15.8	16.9	19.5	23.7	32.1	39.5	48.0
55°	37.9	28.5	18.4	14.8	14.2	15.3	17.4	20.6	27.9	34.3	41.6
57.5°	39.0	30.6	17.4	12.6	12.1	13.2	15.3	17.9	24.2	29.5	36.4
60°	39.0	31.1	15.3	10.0	9.5	10.5	12.6	15.8	21.6	25.8	31.6
62.5°	35.3	28.5	12.6	7.9	6.9	7.9	10.5	13.2	19.0	23.2	27.9
65°	30.6	24.2	10.5	5.8	4.7	5.8	8.4	11.1	16.3	20.0	25.3
67.5°	24.8	18.4	7.9	4.2	3.2	4.2	6.3	9.0	13.7	17.4	22.7
70°	18.4	13.2	6.3	3.7	3.2	3.7	5.8	8.4	12.1	15.8	21.1
72.5°	13.7	9.0	5.3	3.7	2.6	3.7	5.3	7.9	11.6	15.3	20.0
75°	11.6	7.4	4.7	3.2	2.6	3.2	4.7	7.4	10.5	14.2	19.0
77.5°	11.1	6.9	4.2	2.6	2.1	2.6	4.2	6.3	9.5	13.2	18.4
80°	9.5	5.8	3.7	2.1	1.6	2.1	3.7	5.3	7.4	10.0	14.2
82.5°	7.4	4.7	2.6	1.1	0.5	1.1	2.6	3.2	4.7	5.8	8.4
85°	4.7	2.6	1.1	0.0	0.0	0.0	1.1	2.1	2.1	2.6	4.2
87.5°	2.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1	1.6
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: P632545
 CATALOG NUMBER: GWS-SA2C-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2	237.2
2.5°	222.4	222.9	224.0	225.6	229.3	232.4	235.6	239.8	241.9	241.9
5°	201.3	201.9	202.4	204.5	209.8	214.0	220.8	229.3	233.5	234.5
7.5°	185.0	186.0	187.1	188.7	194.0	199.7	208.7	224.5	232.4	234.0
10°	175.5	177.1	179.2	182.4	187.1	193.4	208.7	237.2	250.3	253.0
12.5°	168.1	170.8	172.9	176.6	182.4	192.4	222.9	273.0	296.2	302.5
15°	160.7	163.9	167.1	170.8	177.1	196.1	250.3	337.3	375.8	380.5
17.5°	153.4	157.1	161.3	165.5	173.4	205.0	293.6	426.4	480.1	490.7
20°	144.9	149.7	155.5	160.7	169.7	219.3	353.6	532.3	599.8	622.4
22.5°	136.0	141.8	148.6	155.5	165.5	236.6	426.4	646.2	740.5	755.3
25°	128.6	134.4	140.7	147.6	158.6	257.7	514.4	787.4	873.3	887.5
27.5°	121.7	127.5	133.3	139.7	151.8	285.1	620.3	937.6	1027.2	1042.0
30°	114.4	121.2	127.0	133.3	145.5	318.9	742.6	1104.2	1189.0	1202.7
32.5°	108.0	114.9	120.7	127.0	140.7	355.8	871.2	1251.7	1320.8	1320.8
35°	102.8	110.2	114.4	122.8	137.0	379.5	993.0	1392.5	1444.6	1442.5
37.5°	97.0	105.9	109.1	114.9	132.3	382.1	1107.3	1541.1	1579.6	1565.8
40°	91.2	100.7	105.4	108.6	127.0	360.5	1232.8	1677.6	1710.3	1692.3
42.5°	85.9	93.3	100.1	103.8	123.9	322.6	1333.4	1823.6	1862.6	1846.8
45°	80.6	87.0	91.2	98.0	126.0	296.2	1419.9	1993.8	2062.3	2050.7
47.5°	75.4	80.6	83.3	93.8	140.2	284.1	1472.6	2257.3	2386.5	2377.0
50°	69.6	75.9	75.9	92.8	161.3	288.3	1518.4	2638.9	2838.7	2835.5
52.5°	63.8	70.6	69.6	100.7	177.6	307.8	1570.6	2975.7	3323.0	3352.0
55°	58.0	64.3	65.4	116.5	187.1	324.7	1368.7	3117.5	3736.7	3838.5
57.5°	51.7	55.3	68.0	128.6	183.9	373.7	937.6	3143.3	4000.8	4219.0
60°	44.8	48.0	76.9	126.0	173.9	345.2	590.3	2911.4	3963.4	4240.1
62.5°	39.0	44.3	81.2	111.2	177.1	299.4	376.3	2481.3	3606.6	3922.3
65°	34.3	42.7	73.8	100.7	179.2	202.9	254.0	2018.6	3258.2	3558.6
67.5°	30.6	47.4	60.6	89.6	153.9	142.8	174.5	1568.5	2739.6	3008.9
70°	27.9	48.5	49.5	76.9	119.1	91.7	114.9	1055.7	1888.4	2196.2
72.5°	25.3	35.8	37.4	61.7	76.9	55.9	74.3	604.0	1376.6	1586.4
75°	24.2	24.2	25.8	40.1	42.7	40.6	48.0	360.5	987.2	1140.5
77.5°	22.7	18.4	16.3	25.8	23.2	29.0	28.5	160.2	428.0	462.7
80°	17.9	13.2	11.1	16.3	15.8	19.5	16.9	13.2	19.5	19.0
82.5°	11.1	8.4	7.9	10.0	9.0	10.0	7.9	2.1	2.1	2.1
85°	5.3	4.7	4.2	4.2	4.7	4.2	3.2	1.1	0.5	0.5
87.5°	2.6	2.6	2.1	1.6	2.1	2.1	1.6	0.5	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

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



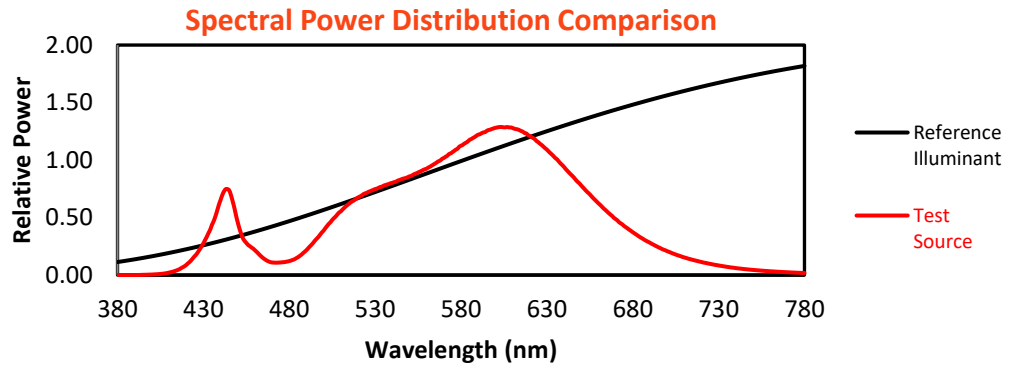
Melanopic Lumens: NR

M/P: 2.32

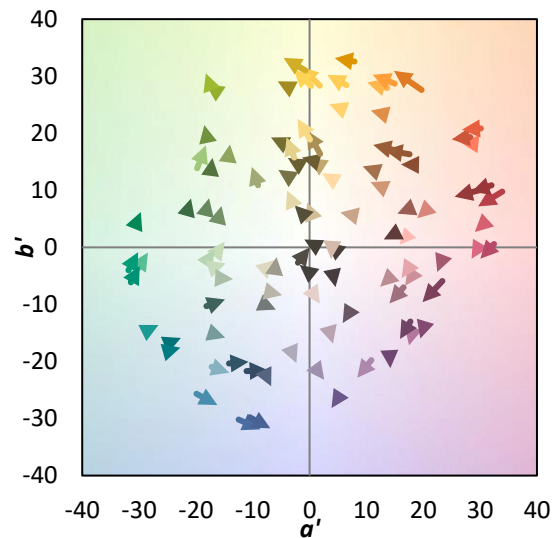
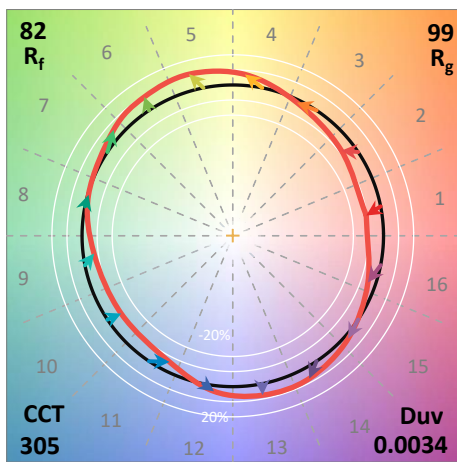
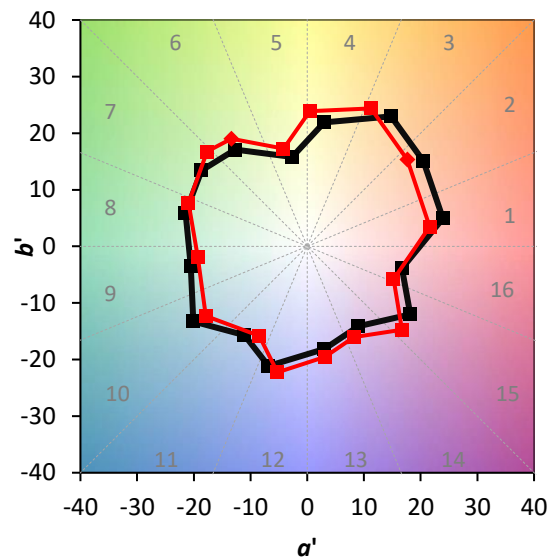
λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500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