

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: P324654

Luminaire Tested: **GLEON-SA0C-830-U-SLR-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324654
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: GLEON-SA0C-830-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(10) 80 CRI, 3000K, 1050mA 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: 41239 lumens
Efficiency: N/A
Efficacy: 73.9 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

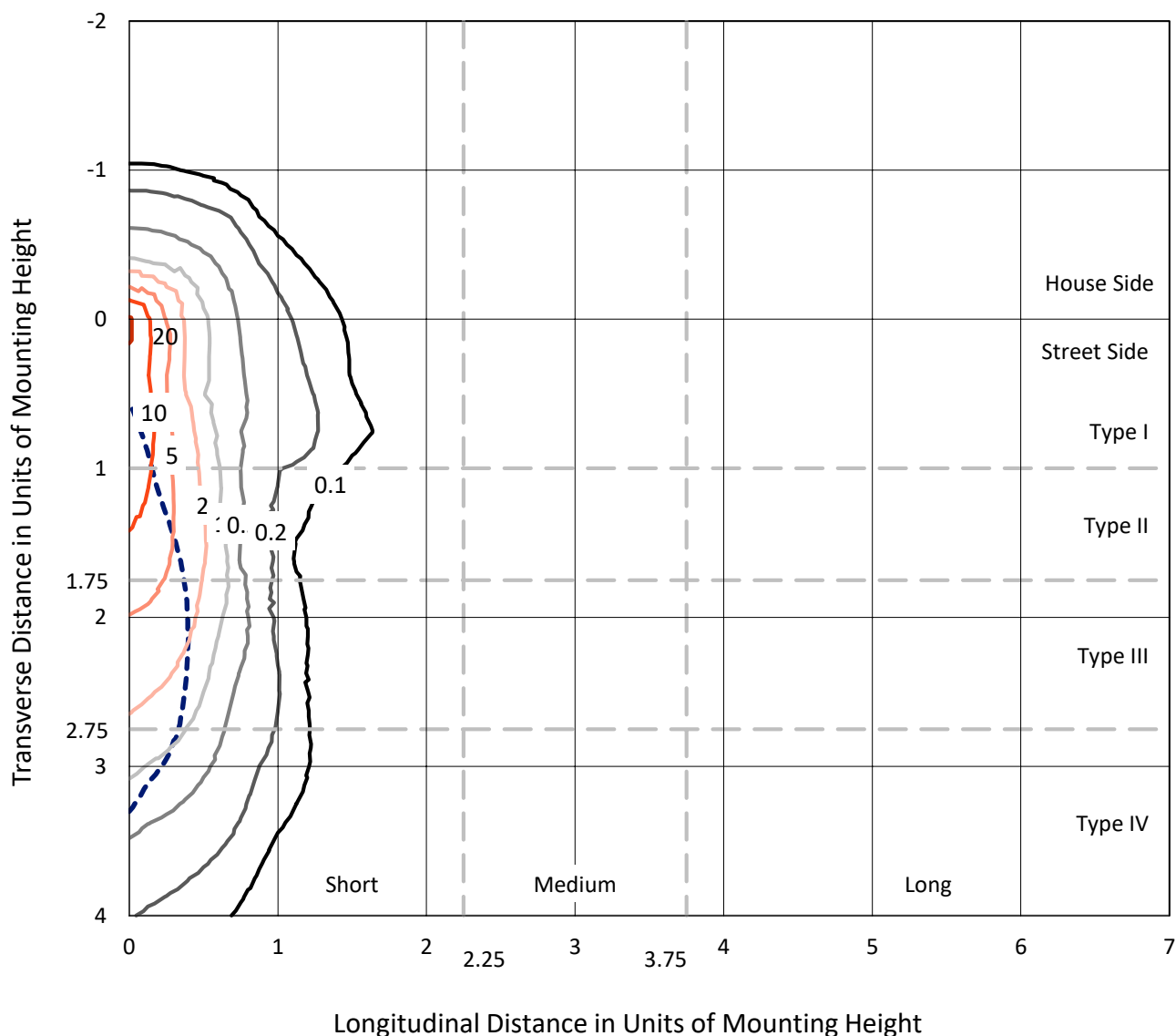
Input Watts (W): 558
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

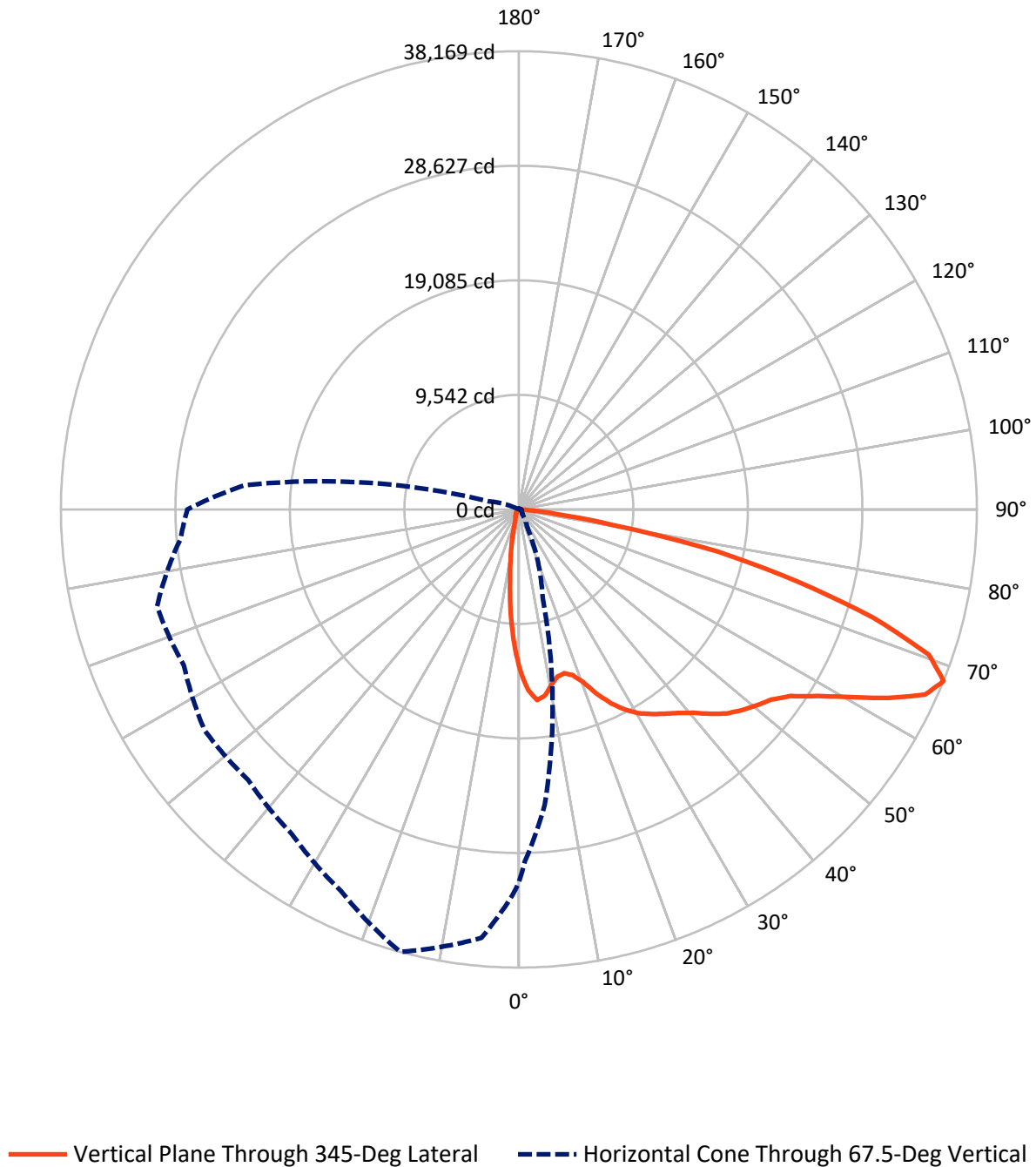
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 21.5 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	4991.3	0.0	4991.3
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	36247.7	0.0	36247.7
	% Fixture	87.9	0.0	87.9
Total	Lumens	41239.0	0.0	41239.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1031.0	2.5
10°-20°	2052.2	5.0
20°-30°	2914.1	7.1
30°-40°	4304.4	10.4
40°-50°	6207.8	15.1
50°-60°	8714.5	21.1
60°-70°	10158.5	24.6
70°-80°	5193.2	12.6
80°-90°	663.2	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°	41239.0	100.0
0°-180°	41239.0	100.0

Coefficient of Utilization



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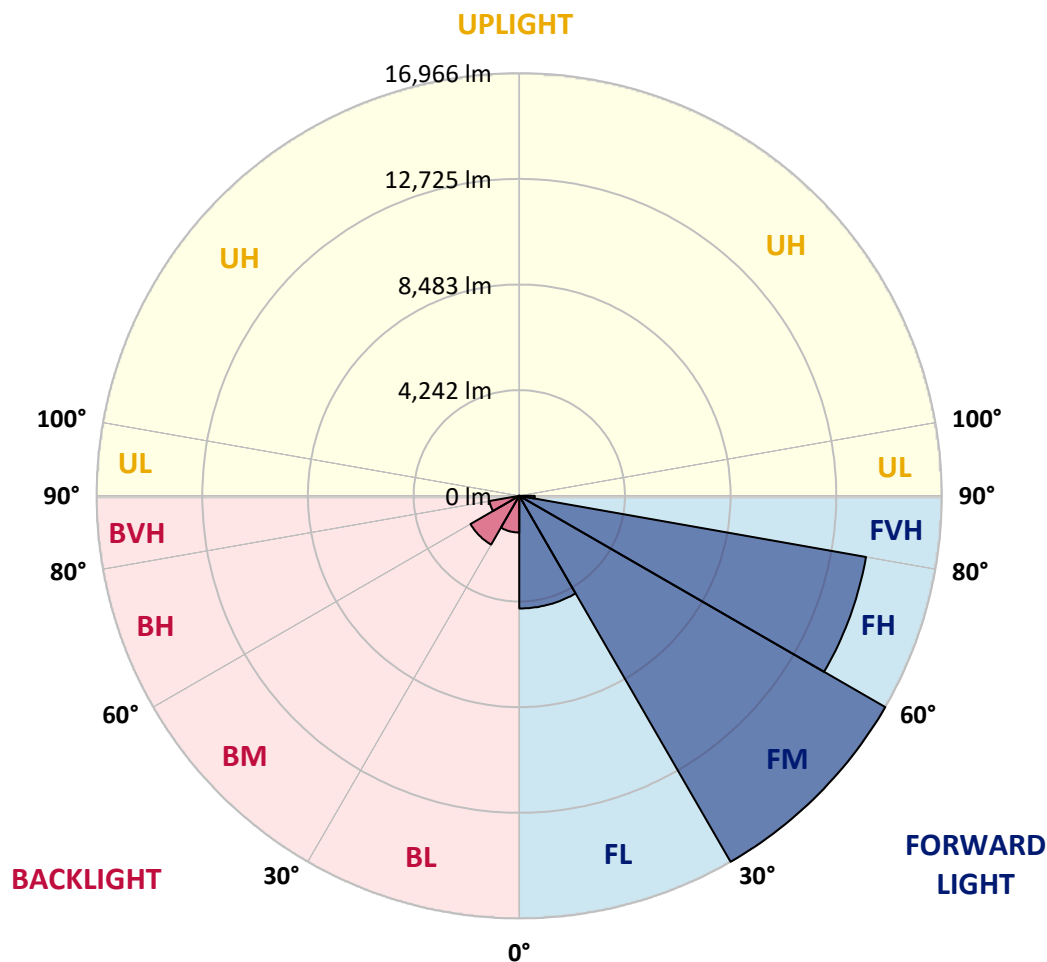
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4523.1	11.0			
FM	(30°-60°)	16966.4	41.1			
FH	(60°-80°)	14135.3	34.3			G5
FVH	(80°-90°)	622.9	1.5			G4/750
BL	(0°-30°)	1474.2	3.6	B3/2500		
BM	(30°-60°)	2260.2	5.5	B2/2500		
BH	(60°-80°)	1216.5	2.9	B3/2500		G3/2500
BVH	(80°-90°)	40.3	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5
2.5°	14709.3	14596.0	14470.9	14062.6	13683.6	13249.9	12896.3	12650.1	12341.4	11940.9	11839.3
5°	14603.8	14482.7	14090.0	13181.5	12386.4	11612.7	10866.4	10428.8	9885.6	9334.7	9197.9
7.5°	13542.9	13415.9	12849.4	11604.9	10534.3	9416.8	8447.7	7847.9	7234.5	6730.4	6462.8
10°	12439.1	12300.4	11663.5	10153.3	8834.6	7824.5	7113.4	6540.9	5960.7	5421.5	4991.7
12.5°	11679.1	11497.4	10805.8	9094.4	7945.6	7259.9	6595.6	5909.9	5124.5	4546.2	4073.4
15°	11360.7	11153.6	10422.9	8686.1	7631.1	6826.2	5960.7	5118.7	4198.5	3536.2	3102.4
17.5°	11606.8	11337.2	10553.8	8658.7	7236.4	6140.4	5046.4	4057.8	3059.5	2389.4	2080.7
20°	12443.0	12089.4	11095.0	8650.9	6757.8	5325.7	3938.6	2821.1	2016.2	1621.6	1459.4
22.5°	13759.8	13292.9	11872.5	8713.4	6263.5	4470.0	2844.6	1916.6	1514.1	1309.0	1213.2
25°	15350.1	14808.9	12992.0	8934.2	5829.8	3637.8	2067.0	1514.1	1277.7	1127.3	1047.2
27.5°	16862.2	16422.7	14406.5	9252.6	5493.8	2965.7	1678.2	1283.6	1092.1	992.5	928.0
30°	18372.4	17819.5	15858.0	9631.7	5089.3	2510.5	1475.0	1170.3	978.8	873.3	832.3
32.5°	19470.4	19011.3	16995.1	9905.2	4657.6	2213.5	1318.7	1070.6	914.3	806.9	746.3
35°	20761.8	20242.1	17970.0	9965.7	4380.2	2026.0	1185.9	963.2	793.2	697.5	633.0
37.5°	22156.7	21510.1	19095.3	9832.9	4163.3	1934.1	1086.2	914.3	740.4	642.8	574.4
40°	23700.1	22969.5	20175.7	9641.4	3950.3	1902.9	1010.1	877.2	699.4	599.8	529.4
42.5°	25325.6	24464.0	21111.5	9440.2	3815.5	1795.4	1002.2	840.1	668.2	560.7	490.4
45°	26691.2	25817.9	22072.7	9373.8	3719.8	1678.2	1035.5	814.7	646.7	529.4	461.1
47.5°	27779.4	26953.0	23057.4	9522.3	3665.1	1570.8	943.6	847.9	634.9	502.1	435.7
50°	29078.6	28142.8	24444.5	9965.7	3585.0	1463.3	853.8	971.0	634.9	484.5	414.2
52.5°	30708.0	29782.0	25991.8	10653.4	3424.8	1314.8	767.8	972.9	640.8	461.1	386.8
55°	32757.4	32085.3	28201.4	11407.6	3168.9	1096.0	664.3	836.2	617.4	418.1	361.4
57.5°	34722.8	34173.8	30215.7	11923.3	2827.0	855.7	578.3	674.0	564.6	367.3	322.4
59°	35260.1	34660.3	30954.2	11946.8	2571.0	746.3	535.3	556.8	552.9	343.8	298.9
60°	35260.1	34623.2	31167.1	11821.7	2385.4	685.7	508.0	496.2	576.3	328.2	285.2
62.5°	34621.2	33726.4	30475.5	10975.8	1945.9	584.2	443.5	410.3	517.7	295.0	252.0
65°	33292.7	31989.6	28119.4	9446.1	1734.9	535.3	382.9	336.0	359.5	259.8	220.8
67.5°	31077.2	29311.1	24721.9	7631.1	1650.9	521.6	330.2	285.2	271.6	222.7	193.4
70°	27175.7	25216.2	20597.7	5999.8	1578.6	515.8	277.4	240.3	218.8	187.6	164.1
72.5°	19779.1	17735.5	14623.3	4690.8	1535.6	527.5	222.7	201.2	179.7	146.5	127.0
75°	11313.8	9975.5	8219.1	3098.5	1309.0	504.1	171.9	168.0	128.9	105.5	87.9
77.5°	5845.4	5667.6	4925.2	1189.8	627.1	220.8	113.3	97.7	76.2	64.5	52.7
80°	2522.2	2494.9	2158.8	343.8	166.1	123.1	64.5	41.0	35.2	27.4	21.5
82.5°	871.3	871.3	767.8	115.3	74.2	60.6	7.8	0.0	0.0	0.0	0.0
85°	175.8	197.3	138.7	0.0	25.4	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°	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5
2.5°	11716.2	11479.8	11464.2	11315.7	11130.1	11046.1	10997.3	11083.2	11188.7	11200.5	11358.7
5°	9094.4	8846.3	8949.8	8686.1	8738.8	8686.1	8600.1	8615.7	8662.6	8516.1	8697.8
7.5°	6386.6	6199.0	6318.2	6247.9	6341.7	6378.8	6326.0	6247.9	6017.3	5990.0	6148.2
10°	4813.9	4600.9	4473.9	4341.1	4370.4	4431.0	4411.4	4354.8	4208.2	4216.0	4368.4
12.5°	3868.3	3629.9	3377.9	3051.7	2971.6	3016.5	2971.6	2938.3	2797.7	2809.4	2944.2
15°	2934.4	2739.1	2475.3	2213.5	2070.9	2084.6	1959.5	1871.6	1783.7	1678.2	1760.3
17.5°	1981.0	1861.9	1783.7	1705.6	1535.6	1496.5	1338.3	1168.3	1101.9	1053.0	1088.2
20°	1402.7	1338.3	1307.0	1303.1	1205.4	1156.6	1002.2	896.7	863.5	853.8	875.3
22.5°	1172.2	1125.3	1080.4	1055.0	1006.1	949.5	832.3	779.5	756.1	744.4	760.0
25°	1019.8	984.7	937.8	894.8	875.3	814.7	730.7	691.6	676.0	664.3	672.1
27.5°	906.5	875.3	820.5	793.2	777.6	724.8	652.5	621.3	607.6	603.7	601.7
30°	816.6	787.3	736.5	705.3	677.9	631.0	588.1	556.8	543.1	539.2	535.3
32.5°	726.8	703.3	670.1	638.9	609.5	566.6	529.4	504.1	482.6	478.7	476.7
35°	613.5	590.0	572.4	570.5	543.1	502.1	474.7	441.5	423.9	418.1	420.0
37.5°	545.1	513.8	474.7	488.4	480.6	451.3	414.2	381.0	363.4	359.5	359.5
40°	502.1	468.9	423.9	400.5	423.9	418.1	359.5	326.3	308.7	306.7	302.8
42.5°	461.1	427.9	377.1	338.0	349.7	367.3	310.6	279.4	261.8	257.9	252.0
45°	431.8	396.6	339.9	295.0	271.6	308.7	265.7	226.6	216.9	209.0	205.1
47.5°	404.4	371.2	306.7	255.9	216.9	222.7	213.0	185.6	173.9	166.1	164.1
50°	381.0	345.8	277.4	218.8	179.7	164.1	171.9	146.5	136.8	128.9	125.0
52.5°	353.6	320.4	246.2	189.5	150.4	128.9	130.9	115.3	105.5	99.6	97.7
55°	332.1	298.9	220.8	166.1	132.9	105.5	93.8	89.9	84.0	80.1	78.1
57.5°	302.8	271.6	195.4	140.7	113.3	86.0	72.3	72.3	70.3	66.4	64.5
59°	285.2	257.9	179.7	127.0	103.5	74.2	64.5	66.4	64.5	60.6	58.6
60°	271.6	246.2	168.0	117.2	97.7	68.4	58.6	62.5	60.6	56.7	54.7
62.5°	240.3	222.7	144.6	97.7	86.0	54.7	48.8	52.7	52.7	50.8	48.8
65°	211.0	191.5	123.1	82.1	80.1	46.9	39.1	46.9	48.8	44.9	41.0
67.5°	183.6	164.1	107.5	66.4	74.2	37.1	29.3	39.1	52.7	41.0	37.1
70°	156.3	136.8	84.0	52.7	78.1	25.4	23.4	35.2	62.5	44.9	35.2
72.5°	121.1	105.5	58.6	39.1	84.0	17.6	17.6	29.3	70.3	48.8	33.2
75°	84.0	68.4	35.2	23.4	68.4	11.7	11.7	27.4	66.4	44.9	31.3
77.5°	48.8	37.1	11.7	2.0	35.2	0.0	2.0	19.5	46.9	27.4	13.7
80°	17.6	7.8	0.0	0.0	21.5	0.0	0.0	0.0	3.9	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5
2.5°	11399.7	11663.5	11899.9	12257.4	12681.4	13169.8	13589.8	14041.1	14465.1	14640.9	14762.0
5°	8734.9	9061.2	9442.2	9967.7	10667.1	11528.7	12335.6	13247.9	14228.7	14719.1	15180.1
7.5°	6175.6	6507.7	6980.5	7539.3	8385.2	9410.9	10465.9	11726.0	13054.5	13830.1	14594.0
10°	4440.7	4849.0	5290.6	6054.5	6914.1	7887.0	8973.3	10379.9	11860.8	12720.4	13640.6
12.5°	3022.3	3487.3	4155.5	5011.2	6021.3	6974.7	7918.3	9260.5	10979.7	11831.5	12818.1
15°	1813.0	2070.9	2778.1	3768.7	5007.3	6195.1	7228.6	8574.7	10407.3	11450.5	12476.2
17.5°	1117.5	1236.7	1621.6	2434.3	3735.4	5237.8	6654.2	8342.2	10489.3	11759.2	12857.2
20°	890.9	937.8	1060.9	1437.9	2475.3	4182.8	6007.6	8295.3	11159.4	12722.4	13900.5
22.5°	773.7	818.6	900.6	1045.2	1557.1	3131.8	5394.1	8338.3	12120.7	14166.2	15541.6
25°	681.8	720.9	799.1	918.2	1141.0	2205.7	4737.7	8529.8	13373.0	15957.7	17419.0
27.5°	609.5	642.8	715.0	824.5	978.8	1539.5	3993.3	8762.3	14857.8	17790.2	19232.1
30°	543.1	572.4	636.9	738.5	849.9	1183.9	3176.7	8920.5	16344.5	19232.1	20527.4
32.5°	486.5	508.0	566.6	652.5	738.5	943.6	2414.8	8895.1	17448.3	20431.6	21459.3
35°	427.9	449.3	500.1	574.4	642.8	779.5	1899.0	8420.4	18409.6	21676.1	22526.0
37.5°	363.4	390.7	439.6	506.0	552.9	685.7	1535.6	7847.9	19384.4	23098.4	23715.8
40°	308.7	336.0	379.0	451.3	480.6	650.6	1180.0	7150.5	20480.5	24688.7	25020.8
42.5°	255.9	281.3	326.3	388.8	453.3	560.7	873.3	6353.4	21533.5	26048.5	26210.6
45°	207.1	232.5	279.4	341.9	484.5	465.0	676.0	5499.6	22383.4	27179.6	27232.4
47.5°	164.1	187.6	236.4	322.4	451.3	371.2	482.6	4829.5	23096.4	28062.7	27924.0
50°	127.0	146.5	197.3	369.2	394.6	306.7	365.3	4606.8	23735.3	28609.7	28250.3
52.5°	99.6	117.2	162.2	345.8	306.7	254.0	306.7	4815.8	24610.6	29063.0	28433.9
55°	80.1	97.7	127.0	197.3	209.0	214.9	261.8	5011.2	26120.7	30125.8	29518.2
57.5°	66.4	84.0	103.5	138.7	158.2	181.7	232.5	5032.7	27900.6	31891.9	31317.5
59°	60.6	76.2	93.8	123.1	138.7	166.1	218.8	4915.5	28527.7	32534.7	32247.5
60°	56.7	72.3	87.9	113.3	128.9	156.3	211.0	4804.1	28555.0	32511.2	32644.1
62.5°	48.8	64.5	78.1	95.7	109.4	132.9	189.5	4391.9	27398.5	31446.5	32405.7
65°	43.0	56.7	70.3	82.1	93.8	119.2	171.9	3639.7	25423.3	29729.2	30774.4
67.5°	39.1	48.8	64.5	72.3	84.0	105.5	152.4	2594.5	22955.8	27629.0	28306.9
70°	35.2	46.9	58.6	66.4	76.2	91.8	130.9	1490.7	19384.4	24553.9	25036.5
72.5°	33.2	44.9	52.7	62.5	68.4	82.1	119.2	701.4	14193.5	19669.7	20929.8
75°	29.3	41.0	48.8	58.6	64.5	74.2	101.6	336.0	9440.2	14234.5	15666.6
77.5°	17.6	33.2	44.9	52.7	56.7	64.5	84.0	193.4	6025.2	9852.4	11604.9
80°	0.0	11.7	33.2	44.9	48.8	54.7	64.5	152.4	3223.6	5628.6	6755.8
82.5°	0.0	0.0	23.4	35.2	33.2	37.1	48.8	95.7	1453.5	3678.8	4145.7
85°	0.0	0.0	7.8	27.4	23.4	17.6	33.2	33.2	318.5	1861.9	2322.9
87.5°	0.0	0.0	0.0	2.0	11.7	7.8	13.7	3.9	2.0	138.7	562.7
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: P324654

CATALOG NUMBER: GLEON-SA0C-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5	13433.5
2.5°	15186.0	15330.6	15574.8	15690.0	15633.4	15393.1	15105.9	14812.8	14640.9	14709.3
5°	16119.8	16864.2	17294.0	17436.6	17198.3	16659.1	15953.8	15023.8	14693.7	14603.8
7.5°	16119.8	17520.6	18407.6	18563.9	18032.5	16975.6	15652.9	14201.3	13718.8	13542.9
10°	15553.3	17460.1	18696.8	18944.9	18202.5	16621.9	14849.9	13193.2	12620.8	12439.1
12.5°	14914.4	16967.7	18270.8	18612.7	18003.2	16270.3	14293.1	12511.4	11837.4	11679.1
15°	14521.7	16362.1	17440.5	17688.7	17430.8	16065.1	14160.3	12306.3	11513.1	11360.7
17.5°	14662.4	15893.2	16282.0	16426.6	16600.4	15992.9	14521.7	12755.6	11751.4	11606.8
20°	15191.8	15398.9	15197.7	15379.4	15848.3	16063.2	15383.3	13841.8	12636.4	12443.0
22.5°	16090.5	15143.0	14578.4	14650.7	15221.1	16295.7	16700.1	15393.1	14002.0	13759.8
25°	17137.7	15350.1	14234.5	14170.1	14756.2	16602.4	17903.6	17081.1	15617.7	15350.1
27.5°	18454.5	15815.1	14164.2	14099.7	14594.0	16889.6	18903.8	18749.5	17319.4	16862.2
30°	19470.4	16272.2	14373.2	14224.8	14756.2	17088.9	19706.8	20165.9	18675.3	18372.4
32.5°	20199.1	16811.4	14713.2	14498.3	15213.3	17432.7	20326.1	21463.2	19929.5	19470.4
35°	20754.0	17397.6	15262.2	14908.6	15842.4	17954.4	20906.4	22844.4	21263.9	20761.8
37.5°	21273.7	18220.1	16119.8	15697.8	16829.0	18794.4	21519.8	24411.3	22756.5	22156.7
40°	21998.5	19152.0	17442.5	17067.4	18487.7	19939.3	22285.7	26044.6	24454.3	23700.1
42.5°	22723.3	20152.2	18796.4	18898.0	20556.7	21330.3	23274.2	27771.6	26130.5	25325.6
45°	23385.6	21183.8	20724.7	21193.6	22477.1	22856.1	24256.9	28769.9	27468.8	26691.2
47.5°	23975.6	22473.2	22641.2	23889.6	24661.3	24237.4	24991.5	29631.5	28465.2	27779.4
50°	24661.3	24141.7	25167.4	26933.5	27175.7	25487.8	25659.7	30651.3	29629.6	29078.6
52.5°	25411.6	25900.0	27965.0	29522.1	29444.0	26845.6	26331.7	31794.2	31225.7	30708.0
55°	26263.4	27320.3	30428.6	31944.7	31878.3	28361.6	27445.3	33206.8	33226.3	32757.4
57.5°	27527.4	28543.3	32101.0	33904.2	34015.6	30112.1	29332.6	34789.2	35035.4	34722.8
59°	28433.9	29336.5	32763.3	34722.8	35176.1	31466.0	30711.9	35707.5	35545.3	35260.1
60°	29106.0	29840.6	33091.5	35150.7	35850.1	32384.3	31729.8	36246.7	35605.9	35260.1
62.5°	30768.6	30938.5	33683.5	35635.2	36625.7	34423.9	34593.9	37164.9	35185.8	34621.2
65°	31544.2	31632.1	33675.6	34767.8	35875.5	36012.2	37192.3	37192.3	34160.2	33292.7
67.5°	31219.9	30795.9	32005.2	31891.9	32997.7	35068.6	38169.1	35828.6	32198.7	31077.2
70°	28582.4	26951.1	26413.8	26462.6	27308.6	30502.9	36235.0	31815.7	28486.7	27175.7
72.5°	23782.2	19869.0	18542.4	20056.5	20277.3	23442.2	30879.9	23960.0	21008.0	19779.1
75°	19128.5	14006.0	11849.1	13447.2	13822.3	17155.3	23887.7	14922.2	12271.1	11313.8
77.5°	13742.2	10053.7	8502.4	8391.1	8875.6	10880.1	16950.2	7510.0	6263.5	5845.4
80°	7806.9	6617.1	7125.1	6722.6	6966.8	6802.7	8053.1	3293.9	2698.0	2522.2
82.5°	4712.3	3911.3	4235.6	3526.4	4462.2	3885.9	3102.4	1055.0	916.3	871.3
85°	3065.3	2137.3	1113.6	746.3	1537.5	2483.1	693.6	287.2	220.8	175.8
87.5°	1056.9	545.1	54.7	23.4	164.1	463.0	25.4	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

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
 R_f: 81.5
 R_g: 99.2

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



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

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 ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /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			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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 $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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			

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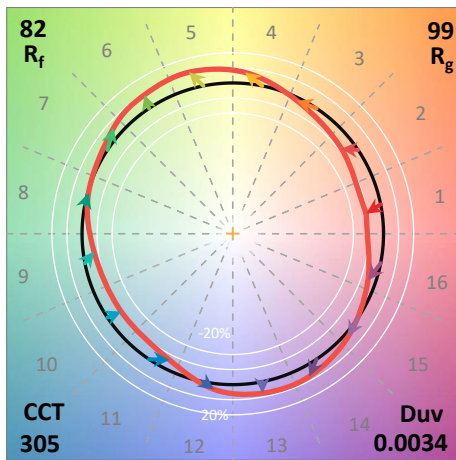
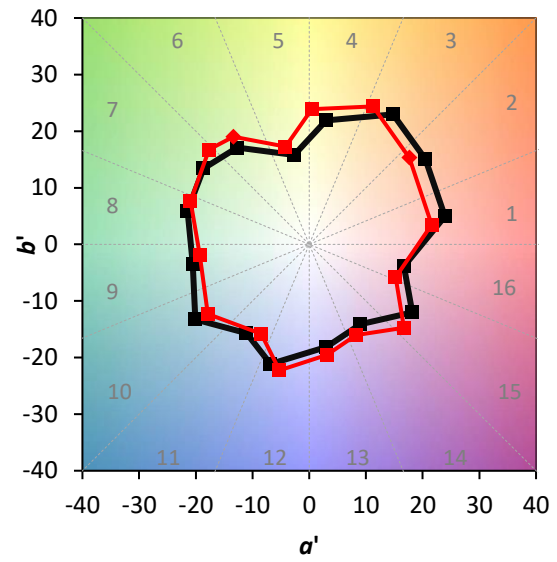
TM-30-18

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_9 = 7.1$

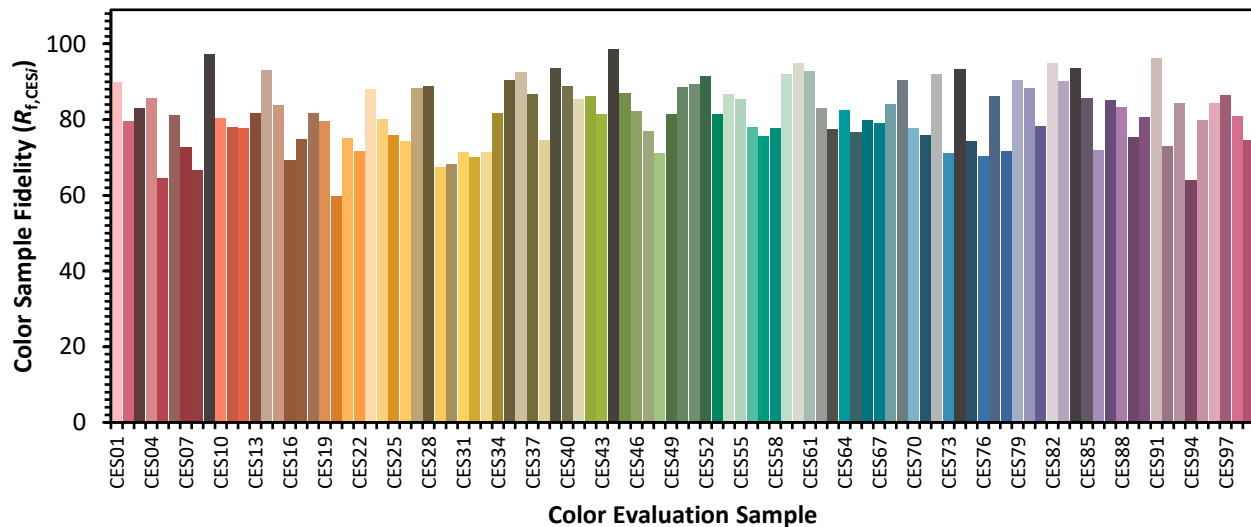


Color Vector Graphics



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)