

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: P324660

Luminaire Tested: **GLEON-SA6D-830-U-SLR-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324660
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-SA6D-830-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(6) 80 CRI, 3000K, 1200mA 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: 27336 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G4

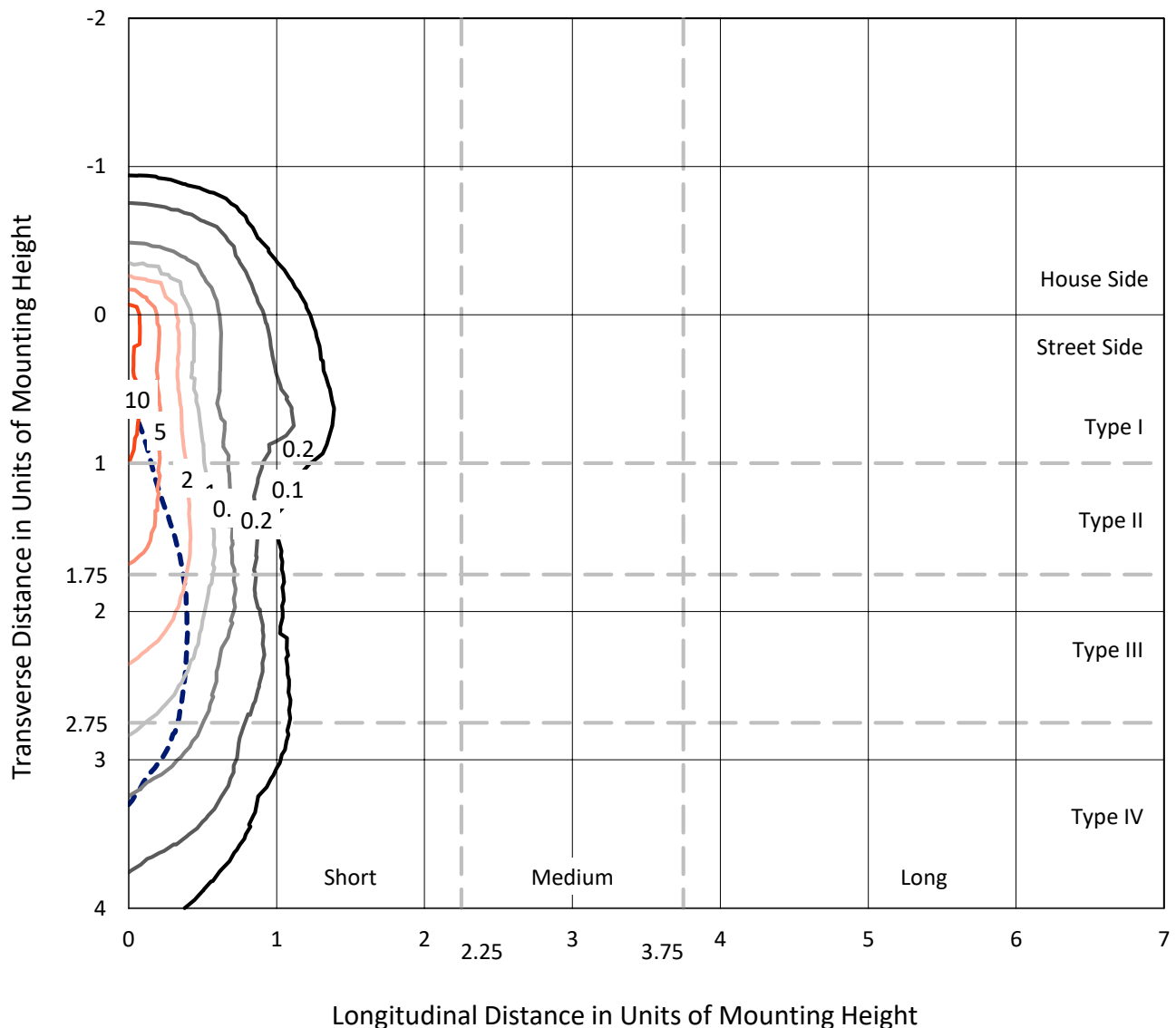
Input Watts (W): 382
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

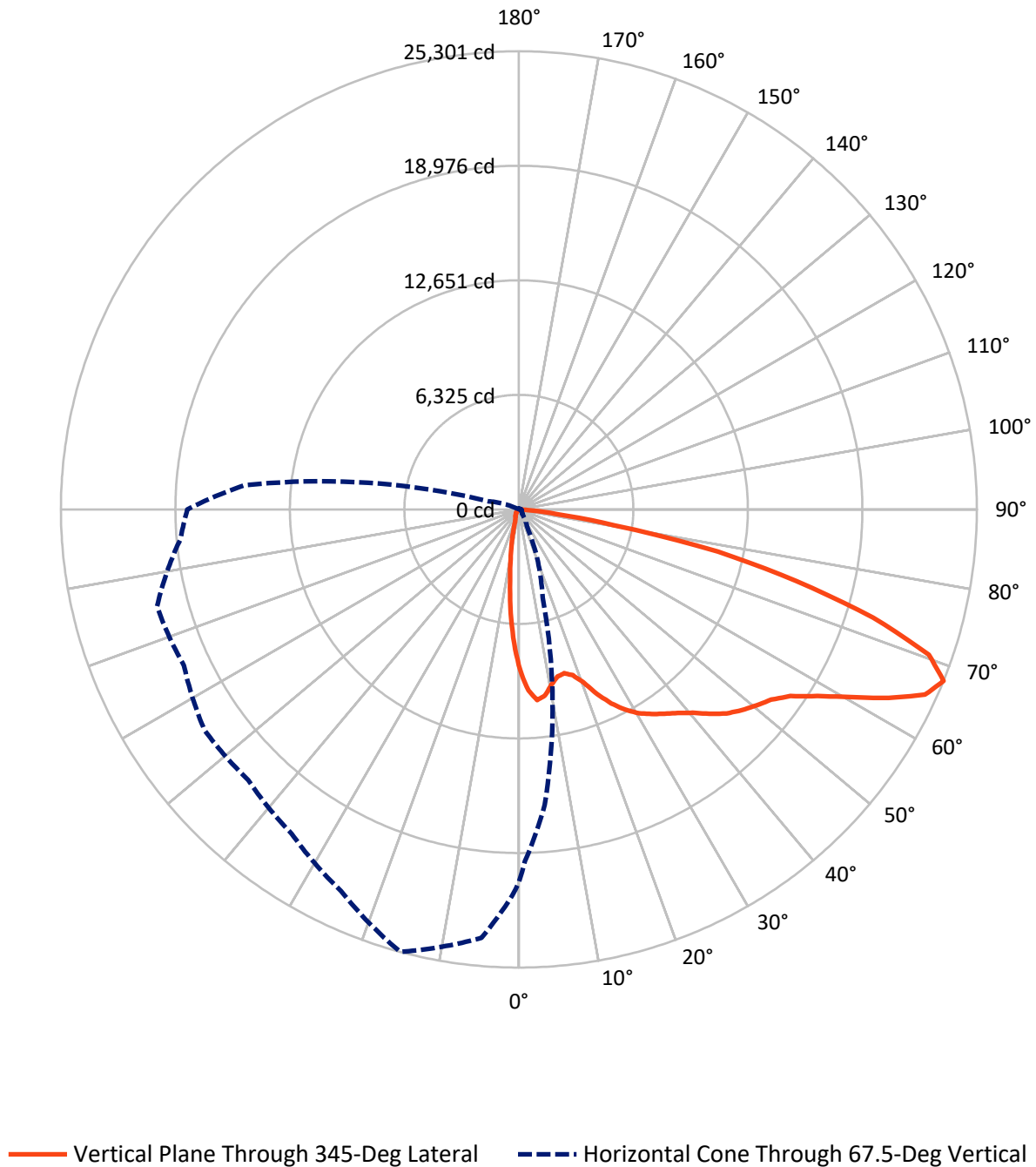
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.2 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	3308.6	0.0	3308.6
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	24027.4	0.0	24027.4
	% Fixture	87.9	0.0	87.9
Total	Lumens	27336.0	0.0	27336.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	683.4	2.5
10°-20°	1360.3	5.0
20°-30°	1931.7	7.1
30°-40°	2853.2	10.4
40°-50°	4114.9	15.1
50°-60°	5776.5	21.1
60°-70°	6733.8	24.6
70°-80°	3442.4	12.6
80°-90°	439.6	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°	27336.0	100.0
0°-180°	27336.0	100.0

Coefficient of Utilization



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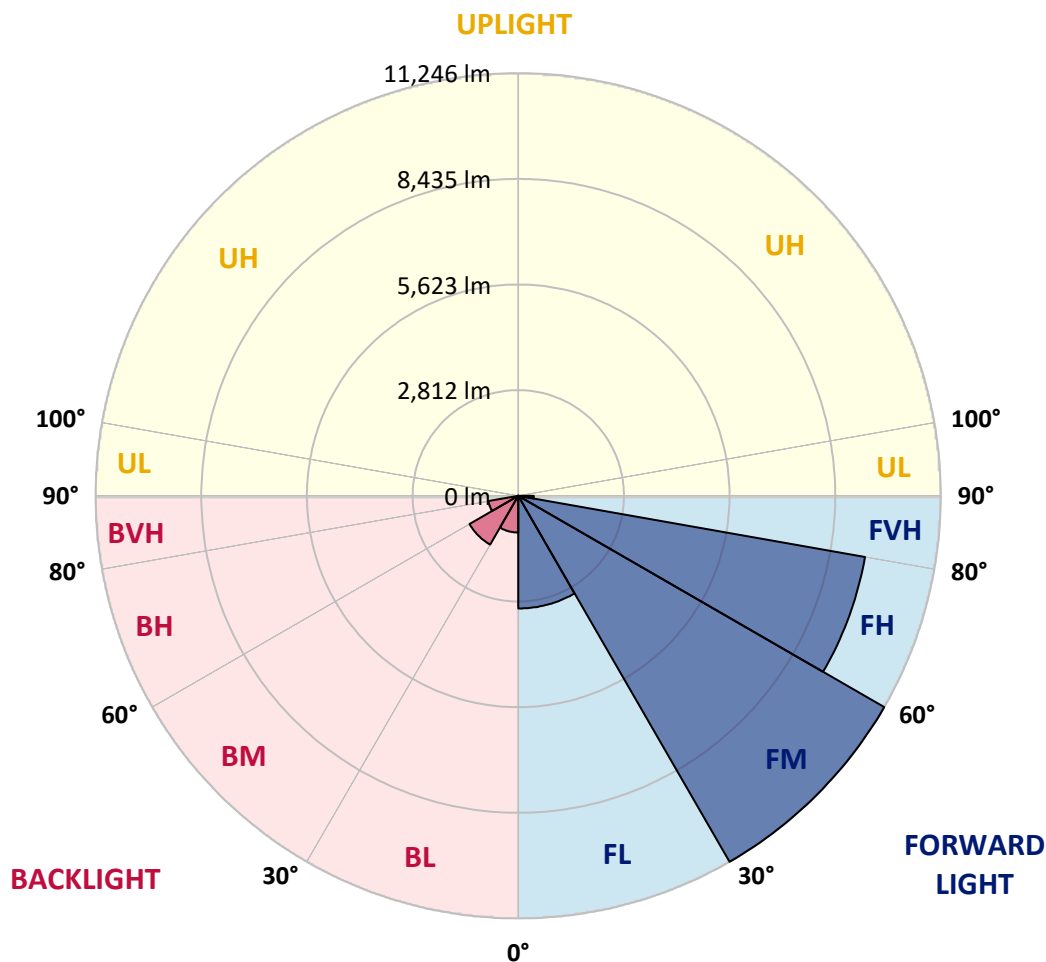
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2998.2	11.0			
FM	(30°-60°)	11246.5	41.1			
FH	(60°-80°)	9369.8	34.3			G4/12000
FVH	(80°-90°)	412.9	1.5			G3/500
BL	(0°-30°)	977.2	3.6	B2/1000		
BM	(30°-60°)	1498.2	5.5	B2/2500		
BH	(60°-80°)	806.4	2.9	B2/1000		G2/1000
BVH	(80°-90°)	26.7	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7
2.5°	9750.3	9675.2	9592.3	9321.7	9070.4	8782.9	8548.5	8385.3	8180.7	7915.2	7847.9
5°	9680.4	9600.1	9339.8	8737.6	8210.5	7697.7	7203.0	6912.9	6552.9	6187.7	6097.0
7.5°	8977.2	8893.0	8517.4	7692.5	6982.8	6242.1	5599.7	5202.2	4795.5	4461.4	4284.0
10°	8245.5	8153.5	7731.4	6730.3	5856.1	5186.6	4715.2	4335.8	3951.1	3593.7	3308.8
12.5°	7741.7	7621.3	7162.8	6028.4	5266.9	4812.3	4372.0	3917.5	3396.9	3013.5	2700.1
15°	7530.6	7393.3	6909.0	5757.7	5058.4	4524.8	3951.1	3393.0	2783.0	2344.0	2056.5
17.5°	7693.8	7515.1	6995.8	5739.6	4796.8	4070.3	3345.1	2689.8	2028.0	1583.8	1379.2
20°	8248.1	8013.7	7354.5	5734.4	4479.5	3530.3	2610.8	1870.0	1336.5	1074.9	967.4
22.5°	9120.9	8811.4	7869.9	5775.9	4151.9	2963.0	1885.6	1270.4	1003.7	867.7	804.2
25°	10175.1	9816.4	8612.0	5922.2	3864.4	2411.4	1370.1	1003.7	847.0	747.2	694.1
27.5°	11177.4	10886.1	9549.6	6133.3	3641.6	1965.9	1112.4	850.8	723.9	657.9	615.1
30°	12178.5	11812.0	10511.8	6384.5	3373.6	1664.1	977.8	775.7	648.8	578.9	551.7
32.5°	12906.3	12602.0	11265.5	6565.8	3087.4	1467.3	874.1	709.7	606.1	534.8	494.7
35°	13762.3	13417.8	11911.7	6606.0	2903.5	1342.9	786.1	638.5	525.8	462.3	419.6
37.5°	14687.0	14258.3	12657.7	6517.9	2759.7	1282.1	720.0	606.1	490.8	426.1	380.7
40°	15710.1	15225.7	13373.8	6391.0	2618.6	1261.4	669.5	581.5	463.6	397.6	351.0
42.5°	16787.5	16216.4	13994.1	6257.6	2529.2	1190.1	664.4	556.9	442.9	371.7	325.1
45°	17692.7	17113.9	14631.3	6213.6	2465.7	1112.4	686.4	540.0	428.7	351.0	305.6
47.5°	18414.1	17866.3	15284.0	6312.0	2429.5	1041.2	625.5	562.0	420.9	332.8	288.8
50°	19275.3	18655.0	16203.5	6606.0	2376.4	970.0	565.9	643.6	420.9	321.2	274.5
52.5°	20355.3	19741.5	17229.1	7061.8	2270.2	871.6	508.9	644.9	424.8	305.6	256.4
55°	21713.8	21268.3	18693.8	7561.7	2100.5	726.5	440.3	554.3	409.2	277.1	239.6
57.5°	23016.6	22652.7	20029.0	7903.6	1873.9	567.2	383.3	446.8	374.3	243.5	213.7
59°	23372.8	22975.2	20518.5	7919.1	1704.3	494.7	354.8	369.1	366.5	227.9	198.1
60°	23372.8	22950.6	20659.7	7836.2	1581.2	454.6	336.7	328.9	382.0	217.6	189.1
62.5°	22949.3	22356.2	20201.2	7275.5	1289.9	387.2	294.0	272.0	343.2	195.6	167.1
65°	22068.7	21204.9	18639.4	6261.5	1150.0	354.8	253.8	222.7	238.3	172.2	146.3
67.5°	20600.1	19429.4	16387.4	5058.4	1094.3	345.8	218.9	189.1	180.0	147.6	128.2
70°	18013.9	16715.0	13653.5	3977.0	1046.4	341.9	183.9	159.3	145.0	124.3	108.8
72.5°	13110.9	11756.3	9693.3	3109.4	1017.9	349.7	147.6	133.4	119.1	97.1	84.2
75°	7499.5	6612.4	5448.2	2053.9	867.7	334.1	114.0	111.4	85.5	69.9	58.3
77.5°	3874.7	3756.9	3264.8	788.7	415.7	146.3	75.1	64.8	50.5	42.7	35.0
80°	1671.9	1653.8	1431.0	227.9	110.1	81.6	42.7	27.2	23.3	18.1	14.2
82.5°	577.6	577.6	508.9	76.4	49.2	40.1	5.2	0.0	0.0	0.0	0.0
85°	116.6	130.8	91.9	0.0	16.8	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°	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7
2.5°	7766.3	7609.6	7599.3	7500.8	7377.8	7322.1	7289.7	7346.7	7416.7	7424.4	7529.3
5°	6028.4	5863.9	5932.5	5757.7	5792.7	5757.7	5700.7	5711.1	5742.2	5645.1	5765.5
7.5°	4233.5	4109.1	4188.1	4141.5	4203.7	4228.3	4193.3	4141.5	3988.7	3970.6	4075.5
10°	3191.0	3049.8	2965.6	2877.6	2897.0	2937.1	2924.2	2886.6	2789.5	2794.7	2895.7
12.5°	2564.2	2406.2	2239.1	2022.8	1969.7	1999.5	1969.7	1947.7	1854.5	1862.3	1951.6
15°	1945.1	1815.6	1640.8	1467.3	1372.7	1381.8	1298.9	1240.6	1182.4	1112.4	1166.8
17.5°	1313.2	1234.2	1182.4	1130.6	1017.9	992.0	887.1	774.4	730.4	698.0	721.3
20°	929.8	887.1	866.4	863.8	799.0	766.7	664.4	594.4	572.4	565.9	580.2
22.5°	777.0	745.9	716.2	699.3	666.9	629.4	551.7	516.7	501.2	493.4	503.8
25°	676.0	652.7	621.6	593.1	580.2	540.0	484.3	458.4	448.1	440.3	445.5
27.5°	600.9	580.2	543.9	525.8	515.4	480.5	432.5	411.8	402.8	400.2	398.9
30°	541.3	521.9	488.2	467.5	449.4	418.3	389.8	369.1	360.0	357.4	354.8
32.5°	481.8	466.2	444.2	423.5	404.1	375.6	351.0	334.1	319.9	317.3	316.0
35°	406.6	391.1	379.4	378.1	360.0	332.8	314.7	292.7	281.0	277.1	278.4
37.5°	361.3	340.6	314.7	323.8	318.6	299.2	274.5	252.5	240.9	238.3	238.3
40°	332.8	310.8	281.0	265.5	281.0	277.1	238.3	216.3	204.6	203.3	200.7
42.5°	305.6	283.6	249.9	224.0	231.8	243.5	205.9	185.2	173.5	170.9	167.1
45°	286.2	262.9	225.3	195.6	180.0	204.6	176.1	150.2	143.7	138.6	136.0
47.5°	268.1	246.1	203.3	169.6	143.7	147.6	141.2	123.0	115.3	110.1	108.8
50°	252.5	229.2	183.9	145.0	119.1	108.8	114.0	97.1	90.7	85.5	82.9
52.5°	234.4	212.4	163.2	125.6	99.7	85.5	86.8	76.4	69.9	66.0	64.8
55°	220.2	198.1	146.3	110.1	88.1	69.9	62.2	59.6	55.7	53.1	51.8
57.5°	200.7	180.0	129.5	93.2	75.1	57.0	47.9	47.9	46.6	44.0	42.7
59°	189.1	170.9	119.1	84.2	68.6	49.2	42.7	44.0	42.7	40.1	38.9
60°	180.0	163.2	111.4	77.7	64.8	45.3	38.9	41.4	40.1	37.6	36.3
62.5°	159.3	147.6	95.8	64.8	57.0	36.3	32.4	35.0	35.0	33.7	32.4
65°	139.9	126.9	81.6	54.4	53.1	31.1	25.9	31.1	32.4	29.8	27.2
67.5°	121.7	108.8	71.2	44.0	49.2	24.6	19.4	25.9	35.0	27.2	24.6
70°	103.6	90.7	55.7	35.0	51.8	16.8	15.5	23.3	41.4	29.8	23.3
72.5°	80.3	69.9	38.9	25.9	55.7	11.7	11.7	19.4	46.6	32.4	22.0
75°	55.7	45.3	23.3	15.5	45.3	7.8	7.8	18.1	44.0	29.8	20.7
77.5°	32.4	24.6	7.8	1.3	23.3	0.0	1.3	13.0	31.1	18.1	9.1
80°	11.7	5.2	0.0	0.0	14.2	0.0	0.0	0.0	2.6	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°	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7
2.5°	7556.5	7731.4	7888.0	8125.0	8406.1	8729.8	9008.3	9307.4	9588.4	9705.0	9785.3
5°	5790.1	6006.4	6258.9	6607.3	7070.9	7642.0	8176.8	8781.6	9431.7	9756.8	10062.4
7.5°	4093.6	4313.8	4627.2	4997.5	5558.3	6238.2	6937.5	7772.8	8653.4	9167.5	9673.9
10°	2943.6	3214.3	3507.0	4013.3	4583.1	5228.1	5948.1	6880.5	7862.1	8432.0	9041.9
12.5°	2003.4	2311.6	2754.5	3321.8	3991.3	4623.3	5248.8	6138.5	7278.1	7842.7	8496.7
15°	1201.8	1372.7	1841.5	2498.1	3319.2	4106.6	4791.6	5683.9	6898.6	7590.2	8270.1
17.5°	740.8	819.8	1074.9	1613.6	2476.1	3472.0	4410.9	5529.8	6953.0	7794.8	8522.6
20°	590.5	621.6	703.2	953.1	1640.8	2772.7	3982.2	5498.7	7397.2	8433.3	9214.2
22.5°	512.8	542.6	597.0	692.8	1032.1	2075.9	3575.6	5527.2	8034.4	9390.3	10302.0
25°	452.0	477.9	529.7	608.7	756.3	1462.1	3140.5	5654.1	8864.5	10577.8	11546.5
27.5°	404.1	426.1	474.0	546.5	648.8	1020.5	2647.0	5808.2	9848.7	11792.6	12748.3
30°	360.0	379.4	422.2	489.5	563.3	784.8	2105.7	5913.1	10834.3	12748.3	13606.9
32.5°	322.5	336.7	375.6	432.5	489.5	625.5	1600.7	5896.3	11565.9	13543.5	14224.6
35°	283.6	297.9	331.5	380.7	426.1	516.7	1258.8	5581.6	12203.1	14368.4	14931.7
37.5°	240.9	259.0	291.4	335.4	366.5	454.6	1017.9	5202.2	12849.3	15311.2	15720.4
40°	204.6	222.7	251.2	299.2	318.6	431.2	782.2	4739.8	13575.8	16365.3	16585.5
42.5°	169.6	186.5	216.3	257.7	300.4	371.7	578.9	4211.4	14273.9	17266.7	17374.2
45°	137.3	154.1	185.2	226.6	321.2	308.2	448.1	3645.5	14837.2	18016.5	18051.5
47.5°	108.8	124.3	156.7	213.7	299.2	246.1	319.9	3201.3	15309.9	18601.9	18509.9
50°	84.2	97.1	130.8	244.8	261.6	203.3	242.2	3053.7	15733.4	18964.5	18726.2
52.5°	66.0	77.7	107.5	229.2	203.3	168.4	203.3	3192.3	16313.5	19264.9	18847.9
55°	53.1	64.8	84.2	130.8	138.6	142.5	173.5	3321.8	17314.6	19969.4	19566.7
57.5°	44.0	55.7	68.6	91.9	104.9	120.4	154.1	3336.0	18494.4	21140.1	20759.4
59°	40.1	50.5	62.2	81.6	91.9	110.1	145.0	3258.3	18910.1	21566.2	21375.8
60°	37.6	47.9	58.3	75.1	85.5	103.6	139.9	3184.5	18928.2	21550.7	21638.7
62.5°	32.4	42.7	51.8	63.5	72.5	88.1	125.6	2911.2	18161.6	20844.9	21480.7
65°	28.5	37.6	46.6	54.4	62.2	79.0	114.0	2412.6	16852.3	19706.5	20399.4
67.5°	25.9	32.4	42.7	47.9	55.7	69.9	101.0	1719.8	15216.6	18314.4	18763.7
70°	23.3	31.1	38.9	44.0	50.5	60.9	86.8	988.1	12849.3	16276.0	16595.9
72.5°	22.0	29.8	35.0	41.4	45.3	54.4	79.0	464.9	9408.4	13038.4	13873.7
75°	19.4	27.2	32.4	38.9	42.7	49.2	67.3	222.7	6257.6	9435.6	10384.9
77.5°	11.7	22.0	29.8	35.0	37.6	42.7	55.7	128.2	3993.9	6530.9	7692.5
80°	0.0	7.8	22.0	29.8	32.4	36.3	42.7	101.0	2136.8	3731.0	4478.2
82.5°	0.0	0.0	15.5	23.3	22.0	24.6	32.4	63.5	963.5	2438.5	2748.1
85°	0.0	0.0	5.2	18.1	15.5	11.7	22.0	22.0	211.1	1234.2	1539.8
87.5°	0.0	0.0	0.0	1.3	7.8	5.2	9.1	2.6	1.3	91.9	373.0
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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CATALOG NUMBER: GLEON-SA6D-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7	8904.7
2.5°	10066.3	10162.1	10324.0	10400.4	10362.9	10203.6	10013.2	9818.9	9705.0	9750.3
5°	10685.3	11178.7	11463.6	11558.2	11400.2	11042.8	10575.2	9958.8	9739.9	9680.4
7.5°	10685.3	11613.9	12201.8	12305.4	11953.2	11252.5	10375.8	9413.6	9093.7	8977.2
10°	10309.8	11573.7	12393.5	12557.9	12065.8	11018.1	9843.6	8745.4	8365.9	8245.5
12.5°	9886.3	11247.4	12111.2	12337.8	11933.7	10785.0	9474.5	8293.4	7846.6	7741.7
15°	9626.0	10845.9	11560.8	11725.2	11554.3	10649.1	9386.4	8157.4	7631.6	7530.6
17.5°	9719.2	10535.1	10792.8	10888.6	11003.9	10601.1	9626.0	8455.3	7789.6	7693.8
20°	10070.2	10207.5	10074.1	10194.5	10505.3	10647.8	10197.1	9175.3	8376.3	8248.1
22.5°	10665.9	10037.8	9663.5	9711.5	10089.6	10801.9	11069.9	10203.6	9281.5	9120.9
25°	11360.0	10175.1	9435.6	9392.9	9781.4	11005.2	11867.7	11322.5	10352.5	10175.1
27.5°	12232.9	10483.3	9389.0	9346.3	9673.9	11195.6	12530.7	12428.4	11480.5	11177.4
30°	12906.3	10786.3	9527.6	9429.1	9781.4	11327.7	13063.0	13367.3	12379.2	12178.5
32.5°	13389.4	11143.8	9752.9	9610.4	10084.4	11555.6	13473.5	14227.2	13210.6	12906.3
35°	13757.1	11532.3	10116.8	9882.4	10501.4	11901.4	13858.2	15142.8	14095.1	13762.3
37.5°	14101.6	12077.5	10685.3	10405.6	11155.4	12458.2	14264.8	16181.4	15084.6	14687.0
40°	14582.1	12695.2	11562.1	11313.4	12254.9	13217.1	14772.4	17264.1	16209.9	15710.1
42.5°	15062.5	13358.3	12459.5	12526.9	13626.3	14139.2	15427.7	18408.9	17321.1	16787.5
45°	15501.6	14042.0	13737.7	14048.5	14899.4	15150.6	16079.1	19070.7	18208.2	17692.7
47.5°	15892.7	14896.8	15008.1	15835.7	16347.2	16066.2	16566.1	19641.8	18868.6	18414.1
50°	16347.2	16002.7	16682.6	17853.3	18013.9	16895.0	17009.0	20317.8	19640.5	19275.3
52.5°	16844.5	17168.3	18537.1	19569.3	19517.5	17795.1	17454.5	21075.4	20698.5	20355.3
55°	17409.1	18109.8	20170.1	21175.1	21131.1	18800.0	18192.6	22011.7	22024.6	21713.8
57.5°	18247.0	18920.4	21278.7	22474.0	22547.8	19960.4	19443.6	23060.7	23223.8	23016.6
59°	18847.9	19446.2	21717.7	23016.6	23317.1	20857.8	20357.9	23669.3	23561.8	23372.8
60°	19293.4	19780.3	21935.3	23300.2	23763.9	21466.5	21032.6	24026.8	23602.0	23372.8
62.5°	20395.5	20508.2	22327.7	23621.4	24278.0	22818.5	22931.2	24635.4	23323.6	22949.3
65°	20909.6	20967.9	22322.5	23046.4	23780.7	23871.4	24653.6	24653.6	22643.7	22068.7
67.5°	20694.6	20413.6	21215.2	21140.1	21873.1	23245.9	25301.1	23749.6	21343.4	20600.1
70°	18946.3	17865.0	17508.9	17541.2	18102.0	20219.4	24019.0	21089.6	18882.9	18013.9
72.5°	15764.4	13170.5	12291.2	13294.8	13441.2	15539.1	20469.3	15882.3	13925.5	13110.9
75°	12679.7	9284.1	7854.4	8913.7	9162.4	11371.7	15834.4	9891.5	8134.1	7499.5
77.5°	9109.3	6664.2	5636.0	5562.2	5883.3	7212.0	11235.7	4978.1	4151.9	3874.7
80°	5175.0	4386.3	4723.0	4456.2	4618.1	4509.3	5338.1	2183.4	1788.4	1671.9
82.5°	3123.6	2592.7	2807.6	2337.5	2957.9	2575.8	2056.5	699.3	607.4	577.6
85°	2031.9	1416.8	738.2	494.7	1019.2	1646.0	459.7	190.4	146.3	116.6
87.5°	700.6	361.3	36.3	15.5	108.8	306.9	16.8	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.

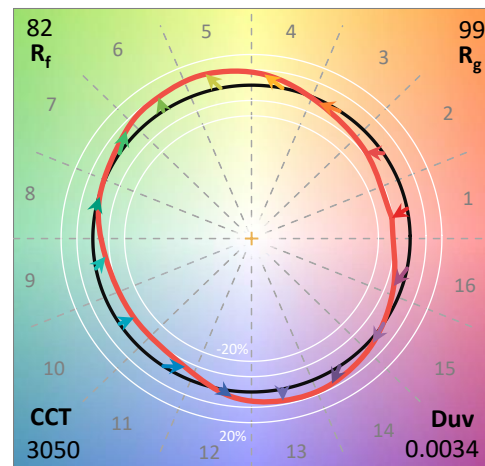
Test Information

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

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

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			

REPORT NUMBER: SP1-2408-195-9

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			

REPORT NUMBER: SP1-2408-195-9

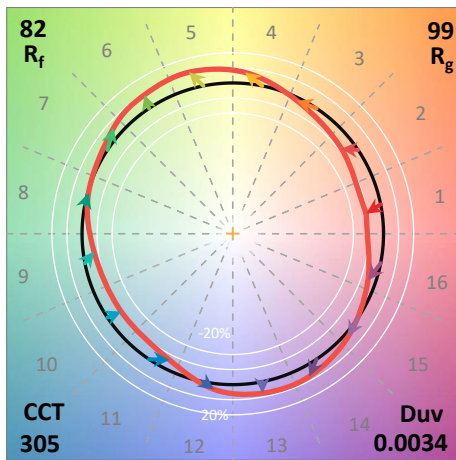
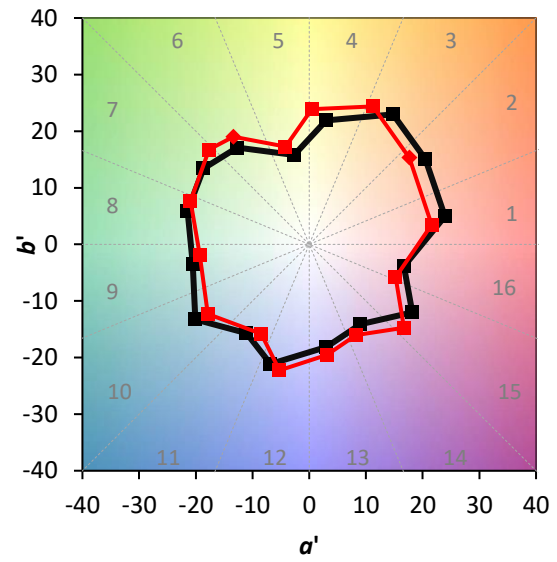
TM-30-18

Summary

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

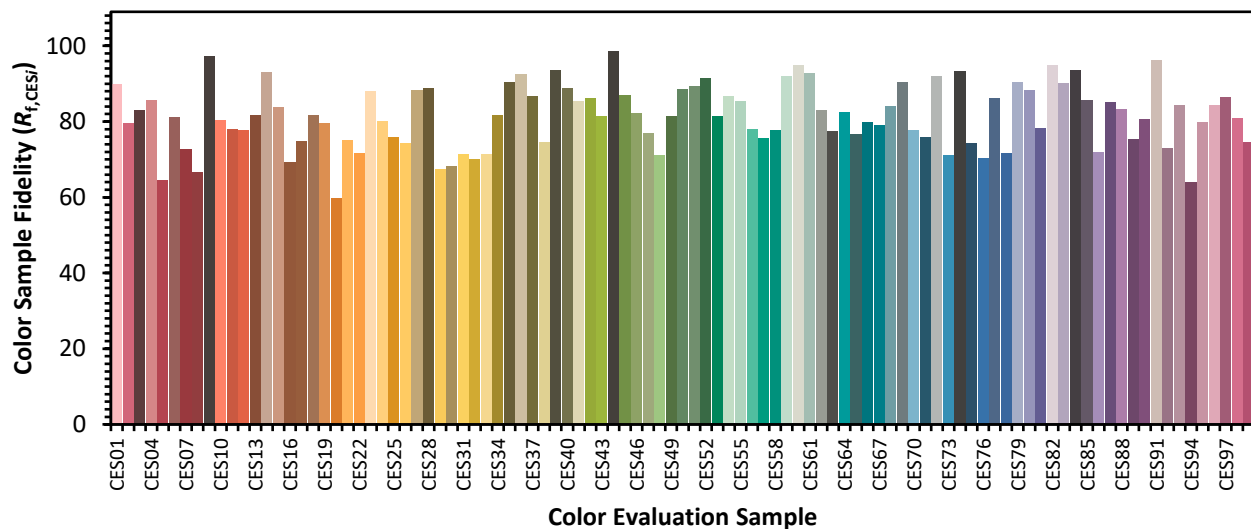


Color Vector Graphics

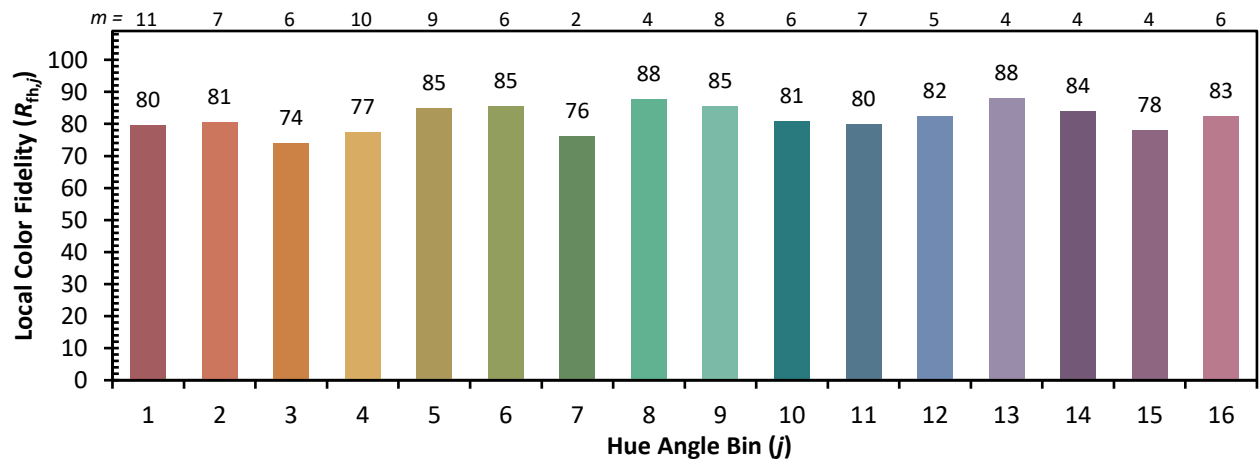


Individual Sample Fidelity Index ($R_{f,i}$)

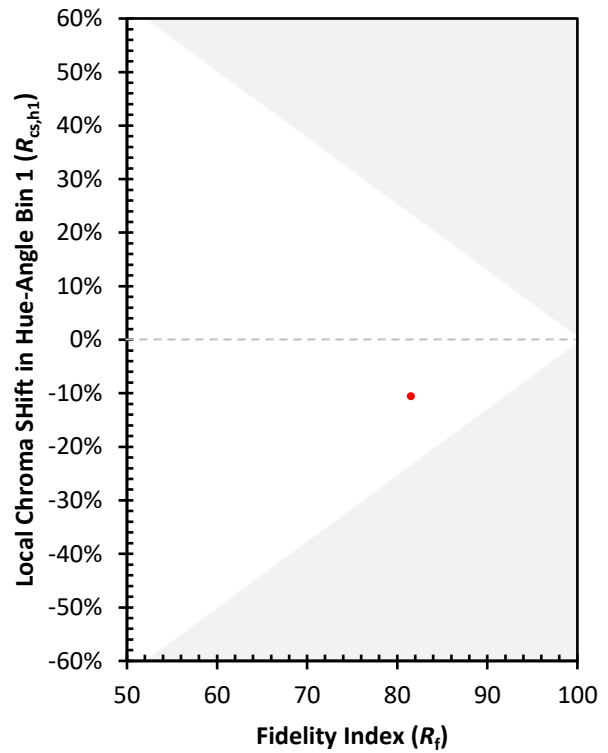
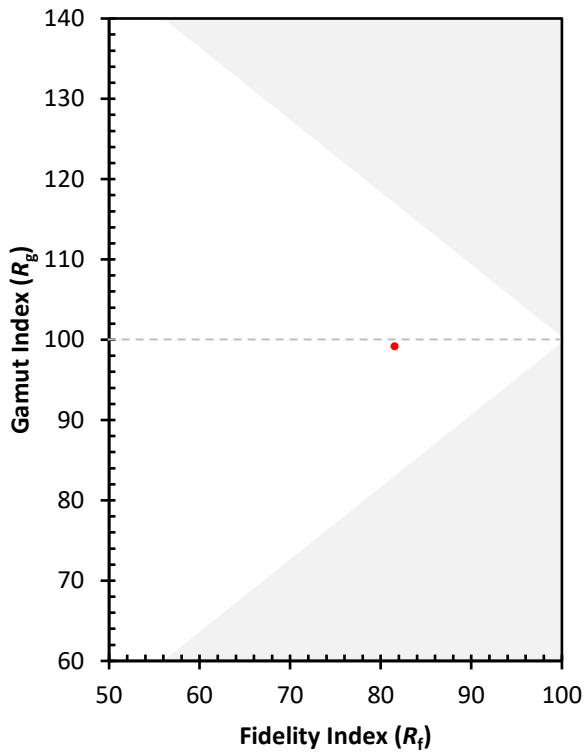
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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)