

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: P324309

Luminaire Tested: **GLEON-SA5A-830-U-SLL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324309
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA5A-830-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13723 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

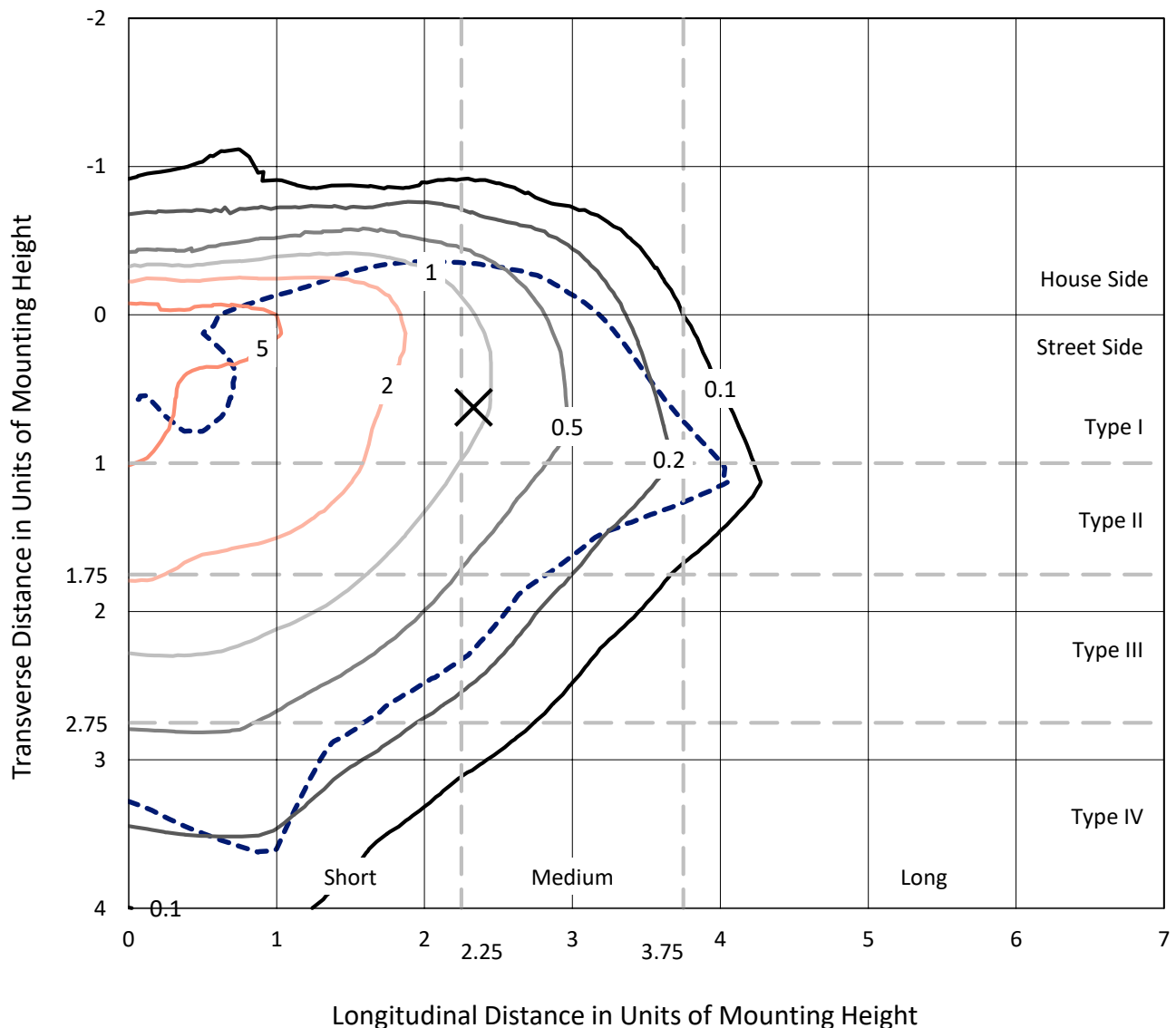
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

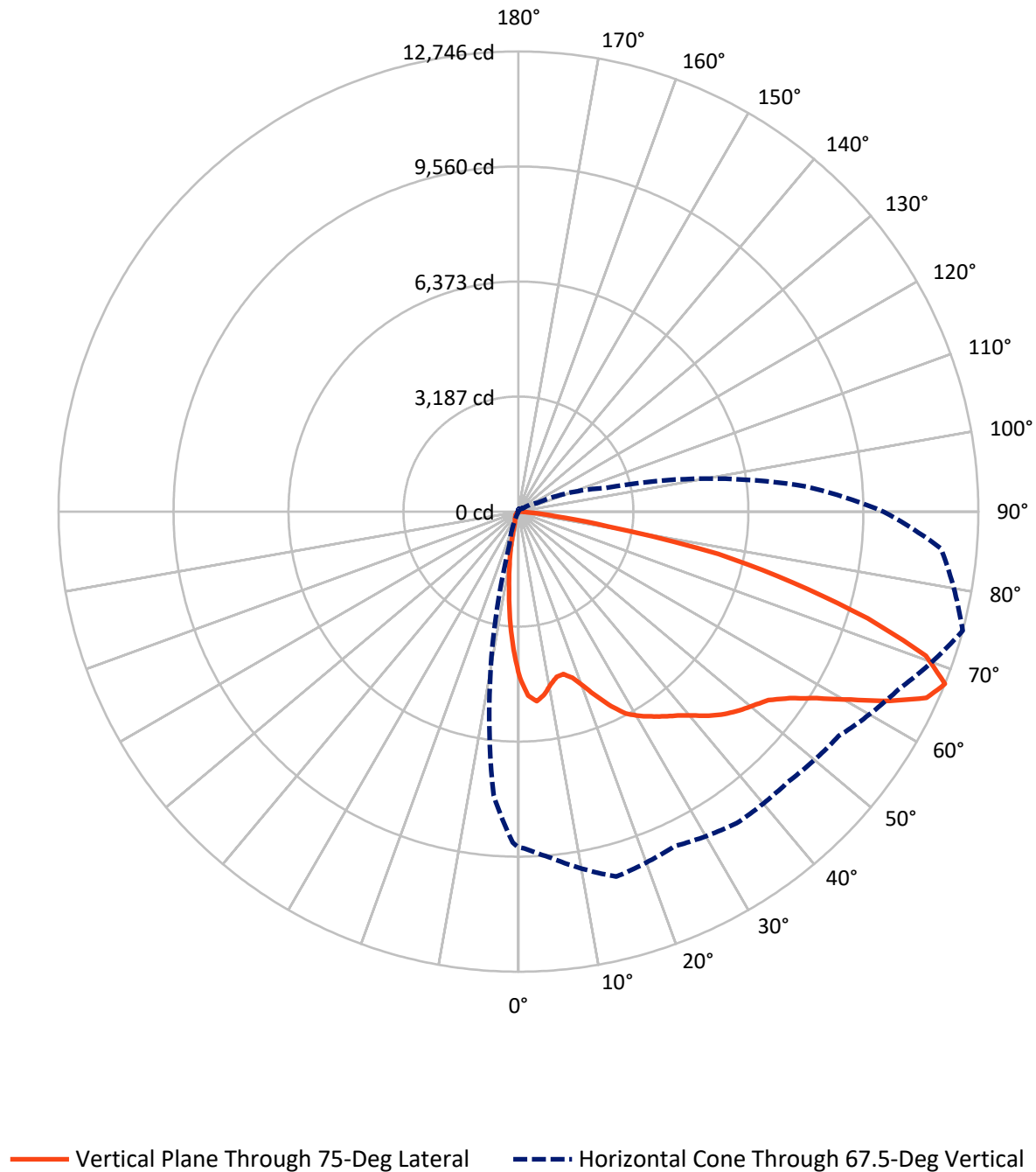
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2059.3	0.0	2059.3
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	11663.7	0.0	11663.7
	% Fixture	85.0	0.0	85.0
Total	Lumens	13723.0	0.0	13723.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.2	2.5
10°-20°	687.6	5.0
20°-30°	972.8	7.1
30°-40°	1430.3	10.4
40°-50°	2055.8	15.0
50°-60°	2894.0	21.1
60°-70°	3379.9	24.6
70°-80°	1724.3	12.6
80°-90°	229.1	1.7
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°	13723.0	100.0
0°-180°	13723.0	100.0

Coefficient of Utilization



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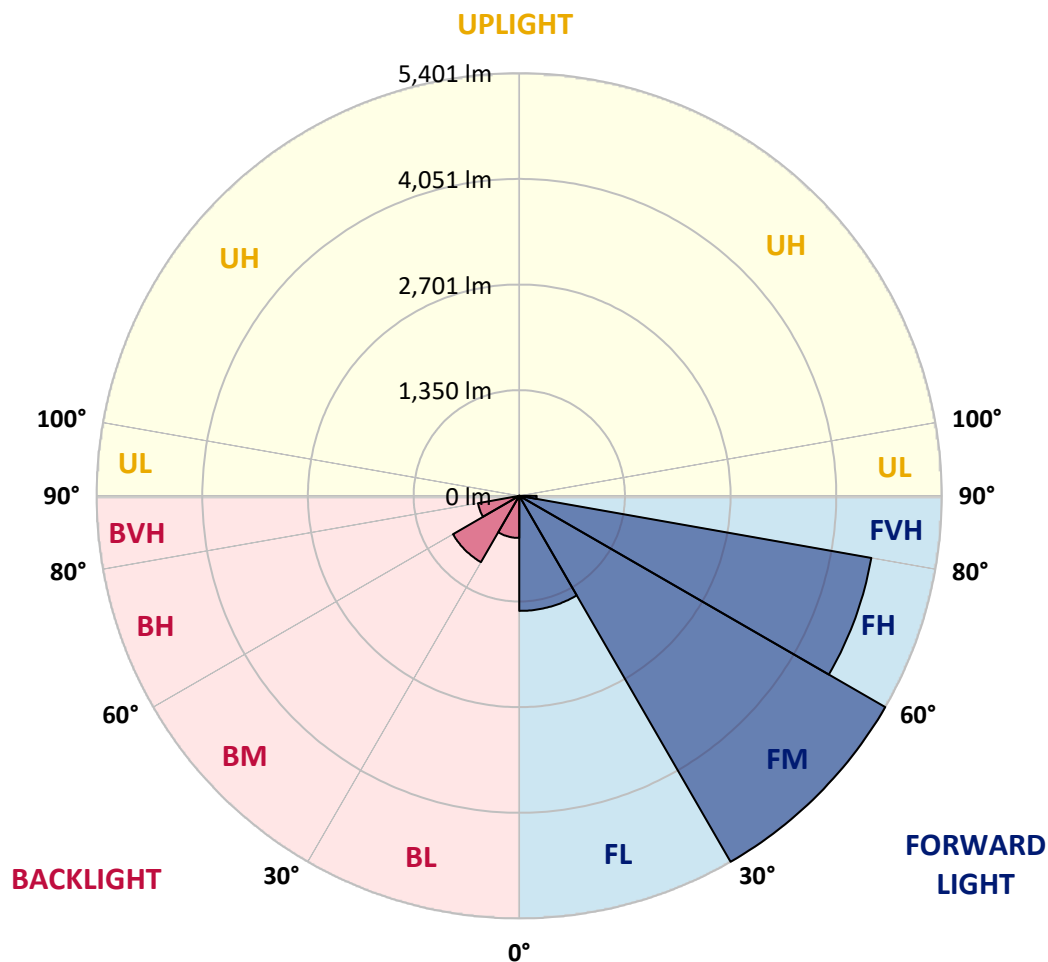
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1471.1	10.7			
FM	(30°-60°)	5401.1	39.4			
FH	(60°-80°)	4569.4	33.3			G2/5000
FVH	(80°-90°)	222.1	1.6			G2/225
BL	(0°-30°)	538.5	3.9	B2/1000		
BM	(30°-60°)	978.9	7.1	B1/1000		
BH	(60°-80°)	534.9	3.9	B2/1000		G2/1000
BVH	(80°-90°)	6.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8
2.5°	4990.6	4998.4	5038.7	5132.3	5234.4	5242.2	5311.1	5240.3	5216.2	5101.8	4983.5
5°	5028.3	5058.2	5196.7	5471.7	5710.3	5787.0	5841.6	5702.5	5556.2	5276.7	4978.3
7.5°	4724.7	4774.8	4992.6	5508.7	5935.2	6123.7	6159.5	5941.7	5583.5	5123.2	4674.7
10°	4336.0	4393.2	4655.8	5290.3	5876.0	6199.1	6248.5	5963.1	5448.3	4874.9	4346.4
12.5°	4021.4	4088.3	4356.8	5044.6	5672.6	6030.1	6127.6	5891.0	5331.3	4698.7	4122.1
15°	3876.4	3953.1	4235.2	4886.0	5447.0	5728.5	5809.1	5707.0	5266.3	4670.8	4070.1
17.5°	3959.6	4042.8	4334.1	4899.6	5235.1	5355.3	5420.3	5461.9	5266.3	4839.2	4222.2
20°	4300.9	4390.6	4698.7	5038.1	5059.5	5014.7	5084.2	5230.5	5327.4	5159.0	4587.6
22.5°	4772.9	4878.2	5226.0	5275.4	4973.7	4804.1	4813.2	5042.6	5438.5	5564.6	5094.6
25°	5348.2	5476.9	5830.5	5629.0	5009.5	4678.6	4675.3	4887.9	5547.1	5970.9	5659.6
27.5°	5919.6	6061.3	6372.0	6060.7	5157.0	4655.8	4649.3	4841.1	5653.1	6332.4	6276.5
30°	6398.7	6536.5	6804.3	6373.3	5316.3	4709.1	4677.9	4891.2	5716.1	6567.1	6726.3
32.5°	6788.7	6899.2	7115.7	6588.5	5486.6	4812.5	4744.9	5025.1	5823.4	6765.3	7139.8
35°	7217.8	7334.1	7420.6	6793.3	5677.8	4961.4	4864.5	5237.7	5988.5	6966.9	7592.9
37.5°	7707.3	7823.0	7812.6	6980.5	5920.2	5207.8	5146.0	5574.4	6245.3	7166.4	8098.6
40°	8186.4	8304.7	8220.2	7185.3	6205.0	5614.0	5568.5	6080.2	6589.2	7421.9	8691.5
42.5°	8634.9	8763.0	8582.3	7379.0	6544.3	6126.3	6204.3	6731.5	7019.5	7736.5	9202.5
45°	8996.4	9127.1	8885.9	7567.5	6901.8	6747.8	6982.5	7453.1	7537.0	8002.4	9547.7
47.5°	9259.0	9382.5	9096.5	7756.0	7359.5	7507.7	7916.6	8209.8	8004.4	8233.2	9792.7
50°	9426.7	9523.0	9158.3	7992.0	7960.2	8394.4	8889.8	9032.8	8444.5	8441.2	10090.5
52.5°	9533.4	9576.9	9203.8	8238.4	8586.8	9359.8	9842.8	9887.6	8897.6	8670.1	10491.6
55°	9900.6	9935.7	9526.2	8536.8	9105.0	10205.5	10704.8	10663.2	9410.5	9118.0	10964.8
57.5°	10527.3	10564.4	10192.5	8965.8	9524.3	10728.2	11329.5	11404.3	10011.8	9747.2	11471.9
60°	10842.0	10910.9	10778.2	9509.3	9930.5	11062.3	11755.3	11993.9	10763.3	10576.7	11963.3
62.5°	10556.6	10656.7	10849.1	10111.9	10334.2	11246.3	11887.9	12205.2	11533.0	11543.4	12266.3
65°	9987.1	10067.1	10393.4	10442.2	10568.3	11223.5	11560.3	11910.0	12004.3	12431.4	12250.0
67.5°	9299.3	9329.2	9606.2	10468.2	10228.9	10539.7	10576.1	10834.8	11631.8	12746.0	11757.9
70°	8309.3	8325.5	8567.3	9597.7	8790.3	8858.6	8804.6	8857.3	10000.1	11979.6	10515.6
72.5°	6687.3	6728.3	7072.2	7970.6	6403.9	6206.9	6630.8	6607.4	7701.4	10121.0	7810.0
75°	4923.7	4994.5	5513.9	6420.1	4494.6	4065.6	4375.0	4457.6	5474.9	7828.9	4884.0
77.5°	3447.3	3500.0	4003.2	4719.5	3253.0	2907.1	2795.3	2893.5	3613.8	5663.5	2460.5
80°	1986.0	2005.5	2326.6	2725.1	2192.1	2508.0	2272.0	2339.6	2165.4	2519.7	1058.3
82.5°	1299.5	1302.8	1428.2	1621.9	1365.2	1586.2	1174.0	1501.0	1332.0	1012.2	344.5
85°	702.1	706.0	828.2	1151.3	772.9	436.9	256.8	527.2	823.6	232.1	94.3
87.5°	77.4	70.9	249.6	418.6	214.5	39.7	13.7	59.2	132.0	15.0	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°	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8
2.5°	4923.0	4869.1	4734.5	4592.1	4477.7	4370.5	4262.5	4130.6	4028.5	4007.7	3973.9
5°	4817.7	4646.7	4364.6	4081.2	3853.0	3565.0	3382.3	3240.0	3100.9	3092.4	3064.5
7.5°	4449.8	4224.8	3827.6	3435.6	3114.5	2840.2	2563.2	2378.0	2232.4	2181.0	2150.4
10°	4096.1	3843.2	3347.2	2900.0	2613.3	2370.8	2175.8	1982.1	1806.6	1685.6	1631.0
12.5°	3849.1	3569.6	3022.8	2637.4	2431.9	2201.8	1963.9	1722.0	1519.9	1374.3	1285.2
15°	3753.5	3455.1	2914.3	2533.3	2279.8	1988.6	1684.3	1408.1	1183.8	1051.8	971.9
17.5°	3867.3	3520.2	2905.8	2406.6	2052.3	1690.2	1354.1	1027.8	816.5	716.4	665.0
20°	4155.9	3726.9	2902.6	2251.2	1781.9	1336.6	917.3	676.1	548.0	492.1	468.1
22.5°	4564.2	3990.8	2928.6	2097.8	1500.4	955.0	633.2	496.7	431.0	401.1	387.4
25°	5089.4	4361.4	3002.0	1958.7	1235.8	712.5	493.4	416.0	369.9	346.5	336.7
27.5°	5649.2	4787.8	3116.5	1837.8	1020.6	568.2	422.5	356.2	323.1	306.8	297.7
30°	6110.7	5281.9	3232.2	1703.2	864.6	495.4	386.8	325.0	286.7	276.3	267.8
32.5°	6514.4	5655.7	3314.1	1581.6	762.5	440.1	349.7	290.6	264.6	244.4	235.3
35°	6932.4	5967.0	3311.5	1496.5	692.3	398.5	318.5	260.0	228.8	205.4	198.3
37.5°	7384.9	6318.7	3254.9	1423.7	661.8	365.3	301.0	243.8	212.6	189.2	180.1
40°	7914.7	6688.0	3197.1	1355.4	653.3	338.7	288.6	230.8	197.6	174.9	165.8
42.5°	8430.8	7020.8	3146.4	1304.7	616.9	338.0	277.6	221.0	185.9	163.8	153.4
45°	8843.6	7330.9	3136.6	1274.1	578.6	349.7	271.7	214.5	176.8	154.7	145.0
47.5°	9186.9	7667.6	3199.0	1252.7	542.2	319.2	286.0	210.0	168.4	146.9	135.9
50°	9595.1	8081.1	3345.9	1217.6	503.8	287.3	327.6	211.3	161.2	139.1	127.4
52.5°	10164.6	8653.1	3561.8	1158.4	451.2	258.1	322.4	212.6	153.4	130.7	119.0
55°	10802.9	9367.6	3793.8	1060.3	377.7	219.7	276.3	203.5	138.5	121.6	110.5
57.5°	11473.8	10015.7	3931.7	943.3	300.3	189.8	221.0	185.3	122.2	109.2	102.1
60°	11579.1	10262.1	3868.6	799.6	238.6	165.1	163.8	188.5	109.2	96.2	91.0
62.5°	11317.2	9952.6	3563.7	671.5	199.6	145.0	134.6	164.5	98.8	85.8	80.6
65°	10813.3	9116.0	3069.7	605.2	185.3	124.2	111.8	115.7	86.5	74.8	70.2
67.5°	10112.6	7999.2	2520.3	567.5	183.3	106.6	95.6	87.8	74.8	65.0	61.1
70°	8679.8	6663.9	2010.7	546.7	178.1	89.7	80.6	71.5	62.4	55.3	52.0
72.5°	6388.3	4722.1	1564.1	524.0	179.4	71.5	70.2	59.2	50.1	42.9	41.6
75°	3691.1	2697.8	1025.8	424.5	171.0	55.3	58.5	41.6	35.1	29.9	29.9
77.5°	1967.1	1645.3	390.7	176.8	62.4	35.1	33.2	24.7	22.1	18.2	17.6
80°	857.4	724.2	117.7	49.4	34.5	18.9	12.4	11.1	9.8	7.8	7.2
82.5°	303.6	262.0	38.4	24.1	15.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	68.9	49.4	0.0	5.9	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°	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8
2.5°	3905.0	3890.7	3806.2	3809.4	3824.4	3845.8	3795.1	3818.5	3881.6	3942.1	3964.8
5°	3019.6	3022.8	2971.5	3003.3	3032.0	3051.5	2969.5	2970.8	3020.9	3089.2	3124.9
7.5°	2127.7	2122.5	2125.1	2201.2	2255.1	2216.1	2246.7	2140.7	2147.2	2196.0	2159.5
10°	1581.6	1510.1	1469.8	1527.0	1586.2	1564.7	1512.1	1477.6	1501.7	1555.6	1551.7
12.5°	1242.9	1140.2	1079.8	1038.8	1087.6	1047.3	1046.0	1016.1	983.6	989.4	1075.9
15°	934.8	860.0	788.5	722.9	721.6	707.9	638.4	560.4	553.9	557.8	602.6
17.5°	642.9	617.6	588.3	531.8	516.8	459.6	392.0	360.8	345.2	352.3	367.3
20°	451.8	442.1	445.3	414.7	393.3	338.7	299.0	286.7	284.1	291.2	298.4
22.5°	374.4	356.9	354.9	341.3	319.8	280.2	258.7	251.6	248.3	254.8	260.0
25°	327.6	310.1	302.9	294.5	271.7	244.4	231.4	224.9	221.7	225.6	228.8
27.5°	288.6	272.4	265.9	260.0	237.9	218.4	208.0	202.2	199.6	200.9	204.1
30°	259.4	245.1	236.6	229.5	210.6	197.0	187.9	182.0	179.4	179.4	182.7
32.5°	228.8	221.0	213.2	204.1	186.6	177.5	168.4	161.9	159.3	159.9	162.5
35°	190.5	187.9	189.8	181.4	166.4	158.6	149.5	142.4	140.4	141.1	143.7
37.5°	169.0	157.3	164.5	159.9	151.5	141.1	129.4	122.9	119.6	121.6	122.9
40°	155.4	141.1	135.9	140.4	139.1	122.2	111.8	105.3	102.7	103.4	104.7
42.5°	143.7	126.8	115.1	114.4	122.2	106.6	95.6	89.7	86.5	86.5	87.8
45°	132.6	114.4	100.1	89.1	102.7	90.4	80.0	74.8	70.9	70.9	71.5
47.5°	124.2	104.0	87.1	72.8	77.4	74.1	65.7	60.5	56.6	56.6	57.2
50°	116.4	93.6	75.4	61.1	57.9	61.1	53.3	47.5	44.9	44.2	45.5
52.5°	107.9	83.2	64.4	52.0	45.5	46.2	41.6	37.7	34.5	34.5	35.8
55°	99.5	74.8	55.9	44.2	37.7	34.5	33.2	30.6	28.0	28.0	29.3
57.5°	91.0	65.7	47.5	36.4	29.9	27.3	27.3	25.4	23.4	23.4	24.7
60°	83.2	56.6	39.0	29.9	23.4	22.8	23.4	21.5	20.2	20.2	21.5
62.5°	74.1	48.1	31.9	24.7	18.9	18.2	20.2	18.9	17.6	17.6	18.9
65°	63.1	41.0	25.4	18.9	14.3	14.3	16.9	15.6	14.3	14.3	15.6
67.5°	53.3	34.5	19.5	13.7	10.4	11.1	14.3	13.0	12.4	12.4	13.7
70°	44.2	26.7	13.7	8.5	5.9	8.5	11.1	11.1	11.1	11.1	12.4
72.5°	33.2	18.2	7.8	3.3	2.6	5.9	9.1	10.4	9.8	9.8	11.7
75°	21.5	10.4	2.6	0.0	0.0	3.3	7.2	8.5	8.5	7.8	9.8
77.5°	12.4	3.3	0.0	0.0	0.0	0.0	4.6	3.9	3.3	2.6	4.6
80°	3.3	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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8	4603.8
2.5°	4056.5	4133.2	4241.1	4355.5	4531.7	4671.4	4808.6	4926.3	4971.8	4990.6
5°	3210.7	3323.2	3481.2	3684.0	4001.9	4287.9	4577.8	4869.7	4996.5	5028.3
7.5°	2303.9	2447.5	2648.4	2902.6	3275.1	3645.6	4050.6	4479.0	4675.3	4724.7
10°	1705.1	1880.7	2110.8	2378.6	2734.2	3115.2	3556.6	4046.1	4270.3	4336.0
12.5°	1209.8	1447.1	1755.2	2080.9	2389.0	2729.0	3175.6	3715.2	3950.5	4021.4
15°	710.5	940.0	1304.7	1740.9	2135.5	2480.0	2933.8	3545.5	3804.9	3876.4
17.5°	407.6	522.0	797.6	1283.9	1819.6	2296.7	2857.7	3587.8	3893.3	3959.6
20°	311.4	347.8	459.6	826.9	1450.3	2116.6	2857.7	3827.0	4203.4	4300.9
22.5°	272.4	299.0	344.5	493.4	1067.4	1923.6	2890.9	4172.8	4664.9	4772.9
25°	241.8	265.9	304.9	371.2	728.1	1694.1	2969.5	4597.3	5208.4	5348.2
27.5°	216.5	239.2	274.3	325.0	498.0	1417.2	3075.5	5095.3	5807.8	5919.6
30°	193.7	215.2	247.0	282.8	384.2	1103.2	3165.9	5564.6	6278.4	6398.7
32.5°	172.3	191.8	220.4	247.0	314.6	815.8	3175.6	5936.5	6669.1	6788.7
35°	152.1	169.7	195.7	216.5	260.7	644.2	3024.1	6258.9	7059.8	7217.8
37.5°	132.6	149.5	172.3	187.9	229.5	525.3	2792.7	6618.4	7561.0	7707.3
40°	114.4	129.4	152.8	163.2	217.1	403.7	2541.1	6995.5	8052.5	8186.4
42.5°	97.5	111.8	134.6	154.7	190.5	301.6	2269.4	7349.1	8494.5	8634.9
45°	81.3	96.2	119.0	163.8	158.0	225.6	1978.8	7583.8	8843.6	8996.4
47.5°	65.7	82.6	113.8	156.0	126.1	165.8	1748.7	7806.1	9108.2	9259.0
50°	52.7	69.6	128.1	139.1	103.4	126.8	1652.5	8005.0	9281.8	9426.7
52.5°	42.9	58.5	120.9	106.6	86.5	104.7	1704.5	8327.5	9442.3	9533.4
55°	35.8	46.2	72.8	74.1	73.5	89.1	1768.9	8790.3	9857.7	9900.6
57.5°	31.2	37.1	50.7	57.2	61.8	79.3	1770.2	9454.7	10500.7	10527.3
60°	26.7	32.5	42.3	46.2	53.3	70.9	1705.8	9686.8	10753.5	10842.0
62.5°	23.4	28.6	35.1	38.4	44.9	63.7	1555.0	9350.7	10406.4	10556.6
65°	20.8	26.0	29.3	32.5	39.7	57.2	1306.7	8678.5	9830.4	9987.1
67.5°	18.2	22.8	26.0	29.3	35.8	50.7	962.1	7897.8	9169.3	9299.3
70°	16.3	20.2	23.4	26.0	31.2	42.9	583.8	6701.6	8255.3	8309.3
72.5°	15.6	18.2	21.5	23.4	27.3	37.7	295.8	4925.0	6599.6	6687.3
75°	13.7	16.3	19.5	20.8	24.1	32.5	120.3	3234.8	4782.6	4923.7
77.5°	11.1	15.0	17.6	18.9	20.8	26.7	61.1	2067.2	3356.3	3447.3
80°	3.9	11.1	15.0	15.6	17.6	19.5	40.3	1131.8	1947.0	1986.0
82.5°	0.0	7.2	11.7	11.1	12.4	15.0	26.0	538.3	1285.2	1299.5
85°	0.0	3.3	9.1	7.2	5.2	10.4	9.1	117.7	674.1	702.1
87.5°	0.0	0.0	0.7	3.3	2.6	3.9	1.3	0.7	61.1	77.4
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

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CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength



Photopic Lumens: NR

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

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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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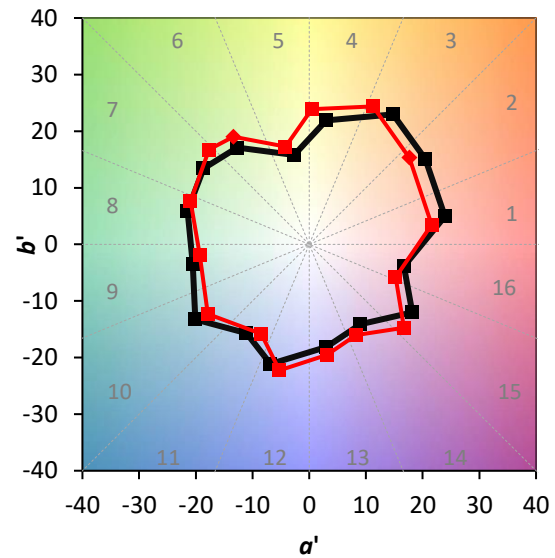
TM-30-18

Summary

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



Color Vector Graphics

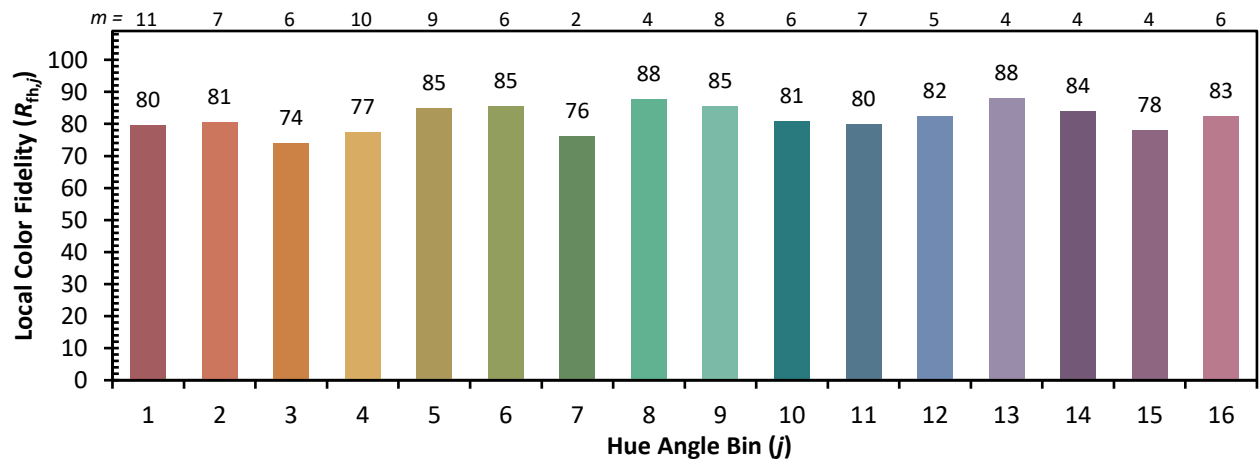
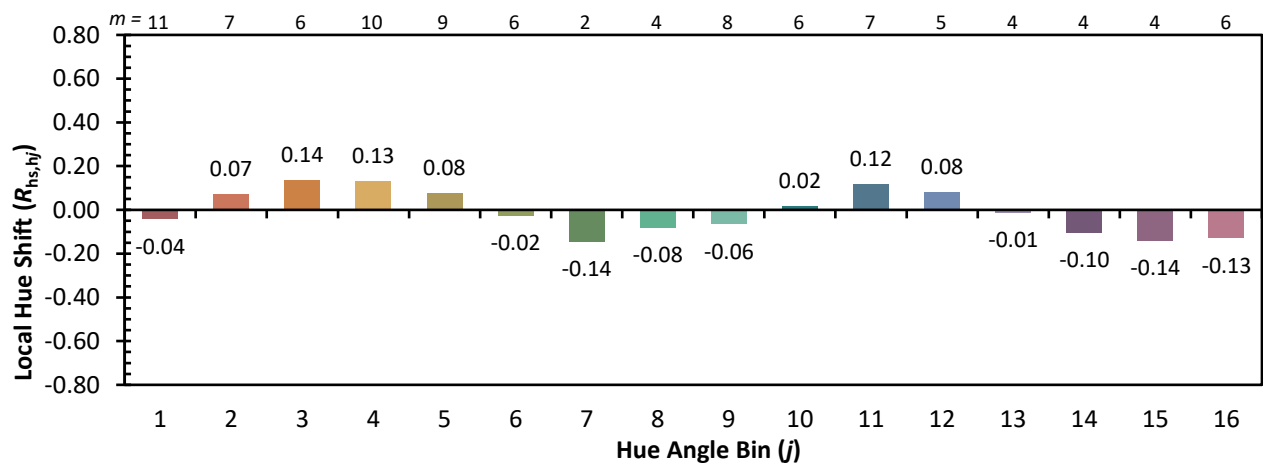
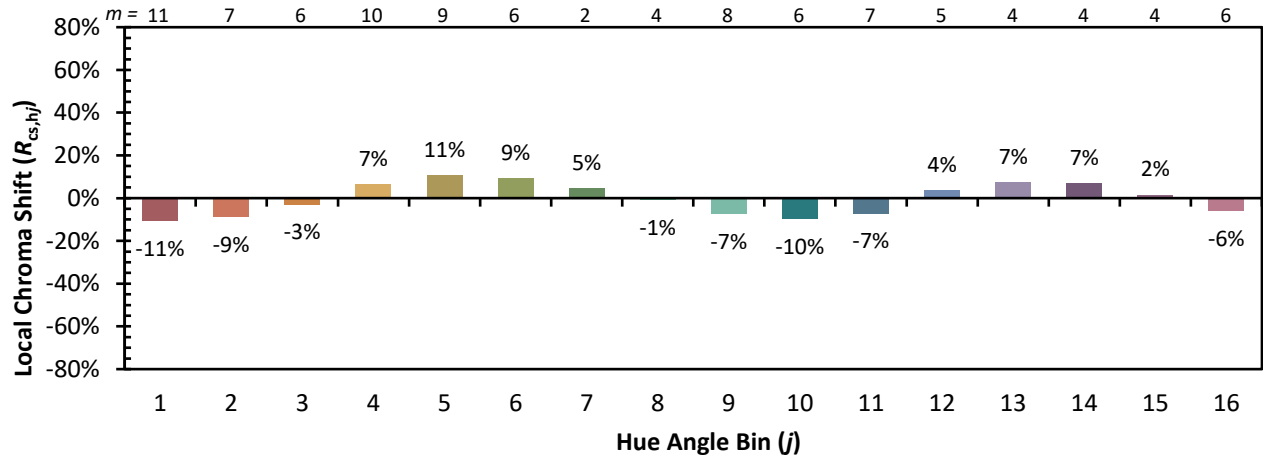


Individual Sample Fidelity Index ($R_{f,i}$)

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)