

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-08 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: P324318

Luminaire Tested: **GLEON-SA4B-830-U-SLL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324318
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-SA4B-830-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 800mA 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: 13580 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

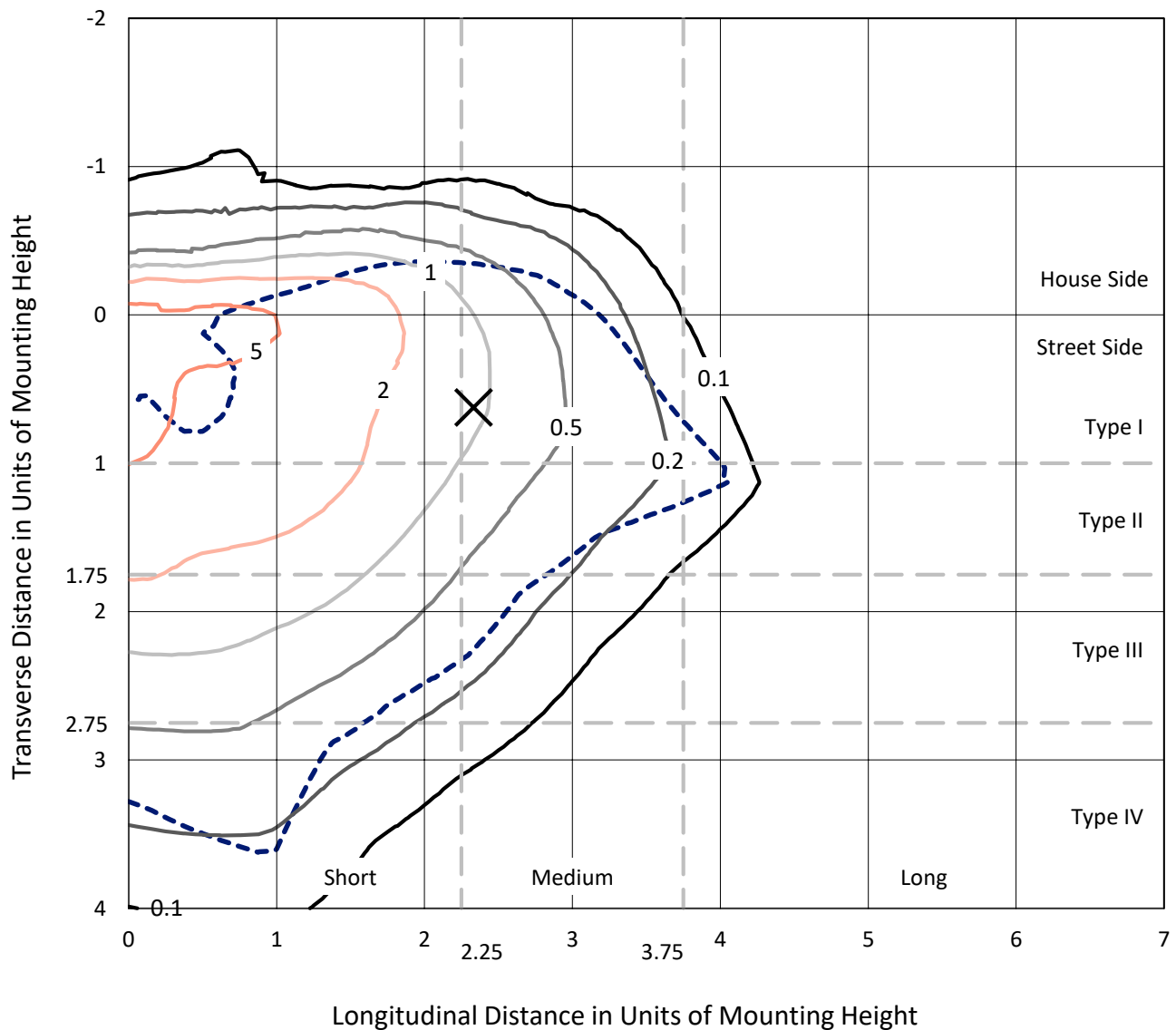
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P324318
 CATALOG NUMBER: GLEON-SA4B-830-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

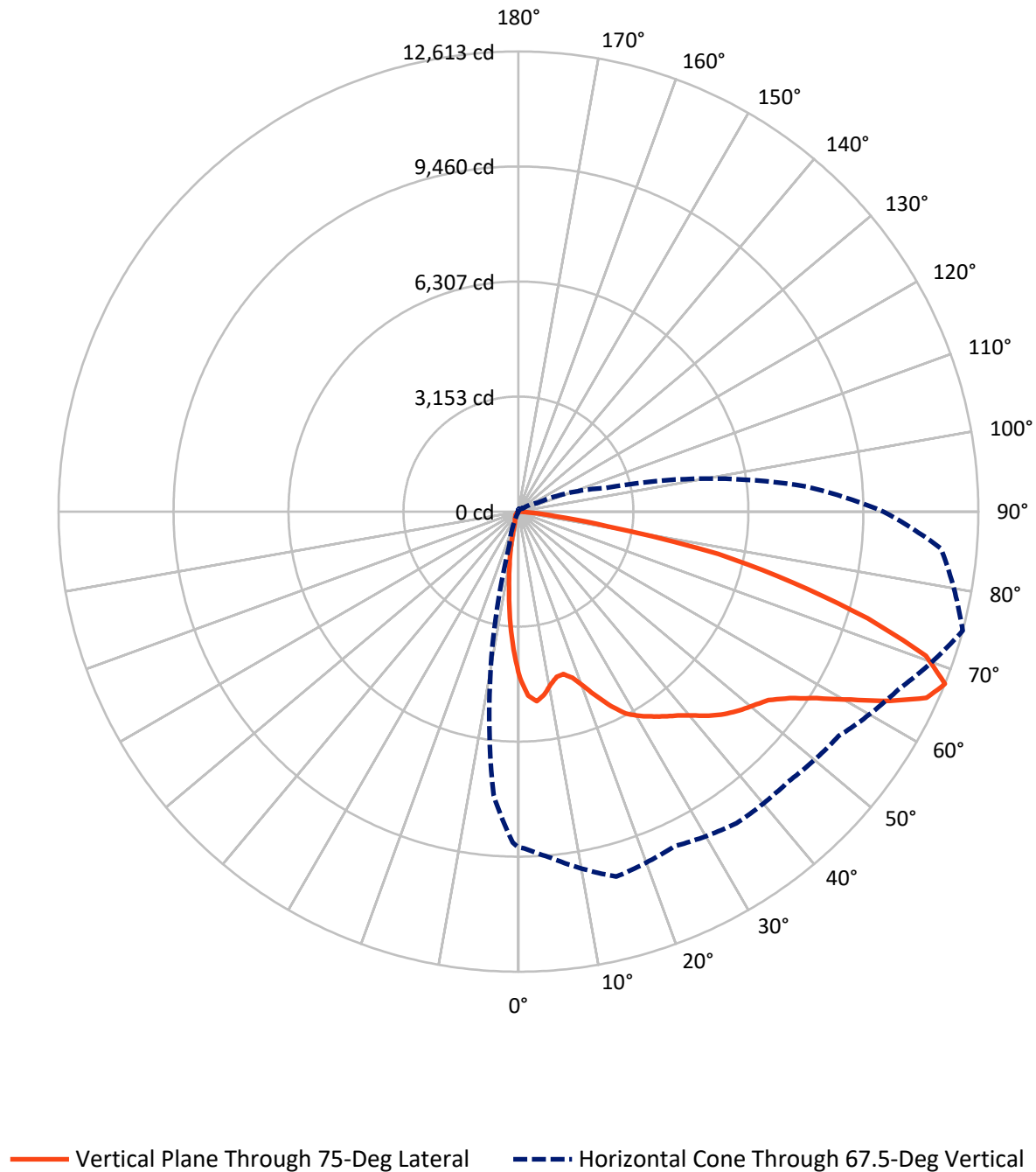
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type III - Medium - N/A

REPORT NUMBER: P324318
CATALOG NUMBER: GLEON-SA4B-830-U-SLL-HSS

Luminous Intensity Polar Plot



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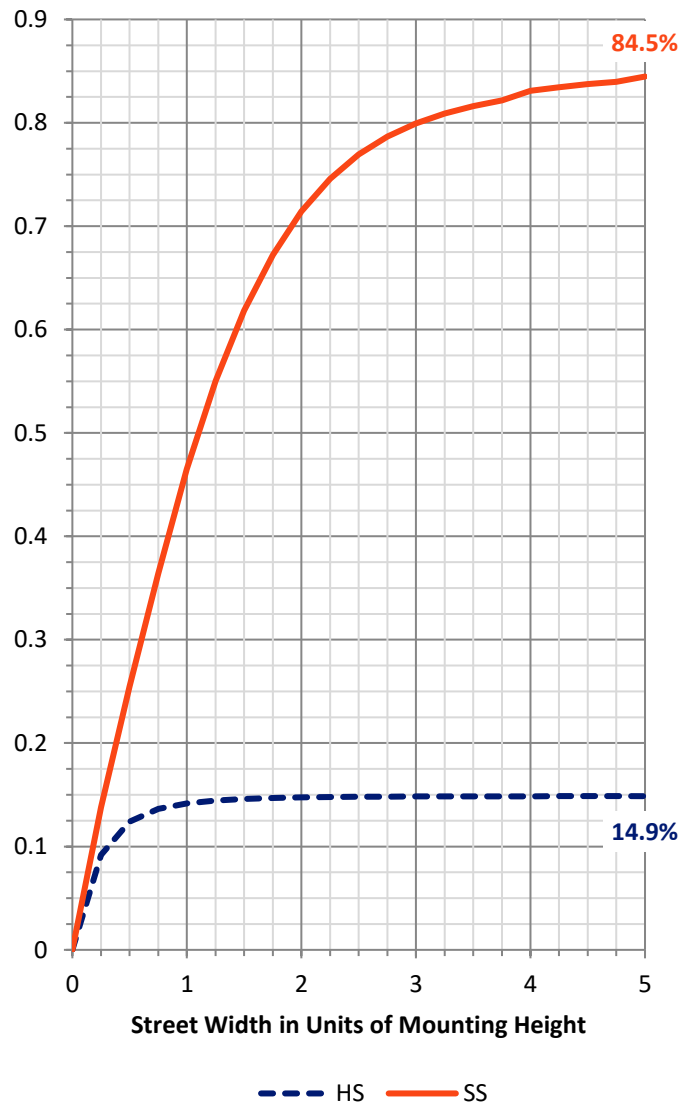
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2037.8	0.0	2037.8
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	11542.2	0.0	11542.2
	% Fixture	85.0	0.0	85.0
Total	Lumens	13580.0	0.0	13580.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.6	2.5
10°-20°	680.5	5.0
20°-30°	962.7	7.1
30°-40°	1415.4	10.4
40°-50°	2034.4	15.0
50°-60°	2863.8	21.1
60°-70°	3344.7	24.6
70°-80°	1706.4	12.6
80°-90°	226.7	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°	13580.0	100.0
0°-180°	13580.0	100.0

Coefficient of Utilization



REPORT NUMBER: P324318

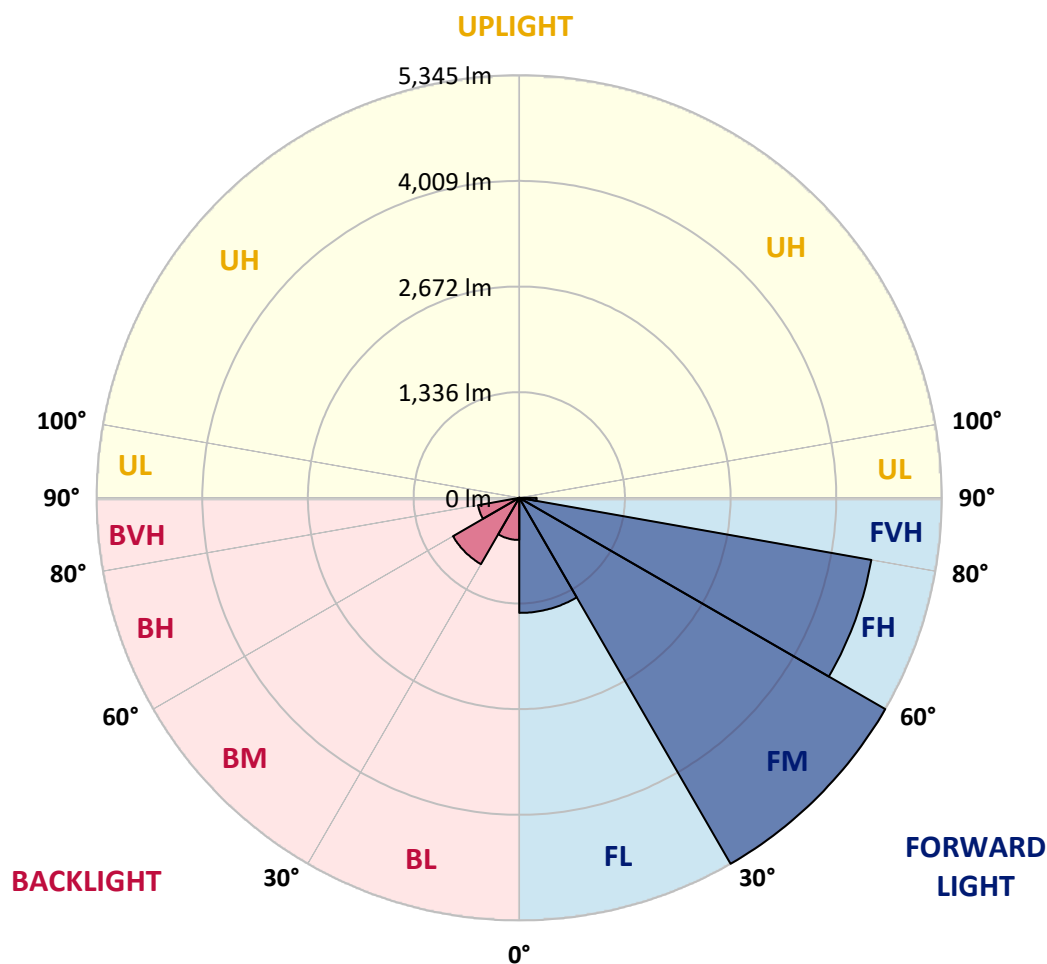
CATALOG NUMBER: GLEON-SA4B-830-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1455.8	10.7			
FM	(30°-60°)	5344.8	39.4			
FH	(60°-80°)	4521.8	33.3			G2/5000
FVH	(80°-90°)	219.8	1.6			G2/225
BL	(0°-30°)	532.9	3.9	B2/1000		
BM	(30°-60°)	968.7	7.1	B1/1000		
BH	(60°-80°)	529.3	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



REPORT NUMBER: P324318

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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9
2.5°	4938.6	4946.3	4986.2	5078.9	5179.9	5187.6	5255.8	5185.6	5161.8	5048.6	4931.5
5°	4975.9	5005.5	5142.5	5414.7	5650.8	5726.7	5780.7	5643.0	5498.3	5221.7	4926.4
7.5°	4675.5	4725.0	4940.6	5451.3	5873.3	6059.9	6095.3	5879.8	5525.3	5069.9	4626.0
10°	4290.8	4347.4	4607.3	5235.2	5814.8	6134.5	6183.4	5901.0	5391.5	4824.1	4301.1
12.5°	3979.5	4045.7	4311.4	4992.0	5613.4	5967.3	6063.8	5829.6	5275.7	4649.8	4079.2
15°	3836.0	3911.9	4191.1	4835.1	5390.2	5668.8	5748.5	5647.5	5211.4	4622.1	4027.7
17.5°	3918.3	4000.7	4288.9	4848.6	5180.5	5299.5	5363.8	5405.0	5211.4	4788.7	4178.2
20°	4256.1	4344.9	4649.8	4985.6	5006.8	4962.4	5031.3	5176.0	5271.9	5105.2	4539.8
22.5°	4723.1	4827.3	5171.5	5220.4	4921.9	4754.0	4763.0	4990.1	5381.9	5506.7	5041.6
25°	5292.4	5419.8	5769.8	5570.3	4957.3	4629.8	4626.6	4837.0	5489.3	5908.7	5600.6
27.5°	5857.9	5998.1	6305.6	5997.5	5103.3	4607.3	4600.9	4790.7	5594.1	6266.4	6211.1
30°	6332.0	6468.4	6733.4	6306.9	5260.9	4660.1	4629.2	4840.2	5656.5	6498.6	6656.2
32.5°	6718.0	6827.4	7041.6	6519.9	5429.5	4762.4	4695.5	4972.7	5762.7	6694.8	7065.4
35°	7142.6	7257.7	7343.3	6722.5	5618.6	4909.7	4813.8	5183.1	5926.1	6894.3	7513.8
37.5°	7627.0	7741.5	7731.2	6907.8	5858.5	5153.5	5092.4	5516.3	6180.2	7091.8	8014.2
40°	8101.1	8218.2	8134.5	7110.4	6140.3	5555.5	5510.5	6016.8	6520.5	7344.6	8600.9
42.5°	8545.0	8671.7	8492.9	7302.1	6476.1	6062.5	6139.7	6661.4	6946.4	7655.9	9106.6
45°	8902.6	9031.9	8793.3	7488.7	6829.9	6677.5	6909.7	7375.4	7458.4	7919.0	9448.2
47.5°	9162.5	9284.8	9001.7	7675.2	7282.8	7429.5	7834.1	8124.2	7921.0	8147.4	9690.7
50°	9328.5	9423.7	9062.8	7908.7	7877.2	8306.9	8797.1	8938.7	8356.5	8353.3	9985.3
52.5°	9434.0	9477.1	9107.9	8152.6	8497.4	9262.2	9740.2	9784.6	8804.9	8579.7	10382.2
55°	9797.5	9832.2	9426.9	8447.8	9010.1	10099.2	10593.2	10552.1	9312.4	9022.9	10850.6
57.5°	10417.6	10454.3	10086.3	8872.4	9425.0	10616.4	11211.4	11285.4	9907.5	9645.7	11352.3
60°	10729.0	10797.2	10665.9	9410.2	9827.1	10947.1	11632.8	11868.9	10651.1	10466.5	11838.7
62.5°	10446.6	10545.6	10736.1	10006.5	10226.6	11129.1	11764.0	12078.0	11412.8	11423.1	12138.4
65°	9883.0	9962.2	10285.1	10333.3	10458.1	11106.6	11439.8	11785.9	11879.2	12301.8	12122.4
67.5°	9202.4	9232.0	9506.1	10359.1	10122.3	10429.8	10465.9	10721.9	11510.6	12613.2	11635.4
70°	8222.7	8238.8	8478.1	9497.7	8698.7	8766.3	8712.9	8765.0	9895.9	11854.8	10406.0
72.5°	6617.6	6658.2	6998.5	7887.5	6337.2	6142.2	6561.7	6538.5	7621.2	10015.6	7728.6
75°	4872.4	4942.5	5456.5	6353.2	4447.8	4023.2	4329.4	4411.1	5417.9	7747.3	4833.1
77.5°	3411.4	3463.5	3961.4	4670.4	3219.1	2876.8	2766.2	2863.3	3576.1	5604.4	2434.9
80°	1965.3	1984.6	2302.4	2696.7	2169.2	2481.9	2248.3	2315.2	2142.8	2493.4	1047.3
82.5°	1286.0	1289.2	1413.3	1605.0	1350.9	1569.7	1161.8	1485.4	1318.1	1001.6	340.9
85°	694.8	698.6	819.6	1139.3	764.9	432.3	254.1	521.7	815.1	229.7	93.3
87.5°	76.6	70.1	247.0	414.3	212.3	39.2	13.5	58.5	130.6	14.8	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: P324318

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9
2.5°	4871.7	4818.3	4685.2	4544.3	4431.1	4324.9	4218.1	4087.5	3986.5	3966.0	3932.5
5°	4767.5	4598.3	4319.1	4038.6	3812.8	3527.9	3347.1	3206.2	3068.5	3060.2	3032.5
7.5°	4403.4	4180.8	3787.8	3399.8	3082.1	2810.6	2536.5	2353.2	2209.1	2158.3	2128.0
10°	4053.4	3803.2	3312.4	2869.8	2586.1	2346.1	2153.1	1961.4	1787.7	1668.1	1614.0
12.5°	3809.0	3532.4	2991.3	2609.9	2406.6	2178.9	1943.4	1704.1	1504.0	1359.9	1271.8
15°	3714.4	3419.1	2883.9	2506.9	2256.1	1967.9	1666.8	1393.4	1171.5	1040.9	961.7
17.5°	3827.0	3483.5	2875.6	2381.5	2030.9	1672.6	1340.0	1017.1	808.0	708.9	658.1
20°	4112.6	3688.0	2872.3	2227.8	1763.3	1322.6	907.7	669.0	542.3	487.0	463.2
22.5°	4516.6	3949.2	2898.1	2075.9	1484.7	945.0	626.6	491.5	426.5	396.9	383.4
25°	5036.4	4315.9	2970.8	1938.3	1222.9	705.1	488.3	411.7	366.0	342.9	333.2
27.5°	5590.3	4737.9	3084.0	1818.6	1010.0	562.2	418.1	352.5	319.7	303.6	294.6
30°	6047.0	5226.8	3198.5	1685.4	855.6	490.2	382.8	321.7	283.7	273.4	265.0
32.5°	6446.5	5596.7	3279.5	1565.2	754.6	435.5	346.1	287.6	261.8	241.9	232.9
35°	6860.2	5904.9	3277.0	1480.9	685.1	394.3	315.2	257.3	226.4	203.3	196.2
37.5°	7307.9	6252.9	3221.0	1408.8	654.9	361.5	297.8	241.2	210.4	187.2	178.2
40°	7832.2	6618.3	3163.8	1341.3	646.5	335.2	285.6	228.4	195.6	173.0	164.0
42.5°	8343.0	6947.7	3113.6	1291.1	610.5	334.5	274.7	218.7	184.0	162.1	151.8
45°	8751.5	7254.5	3103.9	1260.9	572.5	346.1	268.9	212.3	175.0	153.1	143.5
47.5°	9091.1	7587.7	3165.7	1239.6	536.5	315.9	283.1	207.8	166.6	145.4	134.4
50°	9495.1	7996.9	3311.1	1204.9	498.6	284.3	324.2	209.1	159.5	137.7	126.1
52.5°	10058.7	8563.0	3524.6	1146.4	446.5	255.4	319.1	210.4	151.8	129.3	117.7
55°	10690.4	9270.0	3754.3	1049.2	373.8	217.4	273.4	201.4	137.0	120.3	109.4
57.5°	11354.3	9911.3	3890.7	933.4	297.2	187.8	218.7	183.3	120.9	108.1	101.0
60°	11458.5	10155.1	3828.3	791.3	236.1	163.4	162.1	186.6	108.1	95.2	90.1
62.5°	11199.2	9848.9	3526.6	664.5	197.5	143.5	133.2	162.8	97.8	84.9	79.8
65°	10700.7	9021.0	3037.7	598.9	183.3	122.9	110.6	114.5	85.6	74.0	69.5
67.5°	10007.2	7915.8	2494.1	561.6	181.4	105.5	94.6	86.8	74.0	64.3	60.5
70°	8589.4	6594.5	1989.7	541.0	176.3	88.8	79.8	70.8	61.8	54.7	51.5
72.5°	6321.7	4672.9	1547.8	518.5	177.6	70.8	69.5	58.5	49.5	42.5	41.2
75°	3652.7	2669.7	1015.1	420.1	169.2	54.7	57.9	41.2	34.7	29.6	29.6
77.5°	1946.6	1628.2	386.6	175.0	61.8	34.7	32.8	24.4	21.9	18.0	17.4
80°	848.5	716.6	116.4	48.9	34.1	18.7	12.2	10.9	9.6	7.7	7.1
82.5°	300.4	259.3	38.0	23.8	14.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	68.2	48.9	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P324318

CATALOG NUMBER: GLEON-SA4B-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9
2.5°	3864.3	3850.2	3766.5	3769.7	3784.5	3805.8	3755.6	3778.8	3841.2	3901.0	3923.5
5°	2988.1	2991.3	2940.5	2972.1	3000.4	3019.7	2938.6	2939.9	2989.4	3057.0	3092.3
7.5°	2105.5	2100.4	2103.0	2178.2	2231.6	2193.0	2223.2	2118.4	2124.8	2173.1	2137.0
10°	1565.2	1494.4	1454.5	1511.1	1569.7	1548.4	1496.3	1462.2	1486.0	1539.4	1535.6
12.5°	1230.0	1128.3	1068.5	1028.0	1076.2	1036.4	1035.1	1005.5	973.3	979.1	1064.7
15°	925.1	851.1	780.3	715.4	714.1	700.6	631.7	554.5	548.1	552.0	596.3
17.5°	636.2	611.1	582.2	526.2	511.4	454.8	387.9	357.0	341.6	348.7	363.5
20°	447.1	437.4	440.7	410.4	389.2	335.2	295.9	283.7	281.1	288.2	295.3
22.5°	370.5	353.2	351.2	337.7	316.5	277.3	256.0	249.0	245.7	252.2	257.3
25°	324.2	306.9	299.8	291.4	268.9	241.9	229.0	222.6	219.4	223.2	226.4
27.5°	285.6	269.5	263.1	257.3	235.4	216.1	205.9	200.1	197.5	198.8	202.0
30°	256.7	242.5	234.2	227.1	208.4	194.9	185.9	180.1	177.6	177.6	180.8
32.5°	226.4	218.7	211.0	202.0	184.6	175.6	166.6	160.2	157.6	158.3	160.8
35°	188.5	185.9	187.8	179.5	164.7	157.0	148.0	140.9	139.0	139.6	142.2
37.5°	167.3	155.7	162.8	158.3	149.9	139.6	128.0	121.6	118.4	120.3	121.6
40°	153.7	139.6	134.4	139.0	137.7	120.9	110.6	104.2	101.6	102.3	103.6
42.5°	142.2	125.4	113.9	113.2	120.9	105.5	94.6	88.8	85.6	85.6	86.8
45°	131.2	113.2	99.1	88.1	101.6	89.4	79.1	74.0	70.1	70.1	70.8
47.5°	122.9	102.9	86.2	72.0	76.6	73.3	65.0	59.8	56.0	56.0	56.6
50°	115.2	92.6	74.6	60.5	57.3	60.5	52.8	47.0	44.4	43.7	45.0
52.5°	106.8	82.3	63.7	51.5	45.0	45.7	41.2	37.3	34.1	34.1	35.4
55°	98.4	74.0	55.3	43.7	37.3	34.1	32.8	30.2	27.7	27.7	28.9
57.5°	90.1	65.0	47.0	36.0	29.6	27.0	27.0	25.1	23.2	23.2	24.4
60°	82.3	56.0	38.6	29.6	23.2	22.5	23.2	21.2	19.9	19.9	21.2
62.5°	73.3	47.6	31.5	24.4	18.7	18.0	19.9	18.7	17.4	17.4	18.7
65°	62.4	40.5	25.1	18.7	14.2	14.2	16.7	15.4	14.2	14.2	15.4
67.5°	52.8	34.1	19.3	13.5	10.3	10.9	14.2	12.9	12.2	12.2	13.5
70°	43.7	26.4	13.5	8.4	5.8	8.4	10.9	10.9	10.9	10.9	12.2
72.5°	32.8	18.0	7.7	3.2	2.6	5.8	9.0	10.3	9.6	9.6	11.6
75°	21.2	10.3	2.6	0.0	0.0	3.2	7.1	8.4	8.4	7.7	9.6
77.5°	12.2	3.2	0.0	0.0	0.0	0.0	4.5	3.9	3.2	2.6	4.5
80°	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P324318

CATALOG NUMBER: GLEON-SA4B-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9	4555.9
2.5°	4014.2	4090.1	4196.9	4310.1	4484.5	4622.8	4758.5	4874.9	4920.0	4938.6
5°	3177.3	3288.6	3444.9	3645.6	3960.2	4243.2	4530.1	4819.0	4944.4	4975.9
7.5°	2279.9	2422.0	2620.8	2872.3	3241.0	3607.6	4008.4	4432.3	4626.6	4675.5
10°	1687.4	1861.1	2088.8	2353.8	2705.7	3082.7	3519.5	4003.9	4225.8	4290.8
12.5°	1197.2	1432.0	1736.9	2059.2	2364.1	2700.6	3142.5	3676.5	3909.3	3979.5
15°	703.1	930.2	1291.1	1722.8	2113.2	2454.2	2903.2	3508.6	3765.2	3836.0
17.5°	403.3	516.6	789.3	1270.5	1800.6	2272.8	2828.0	3550.4	3852.7	3918.3
20°	308.1	344.2	454.8	818.3	1435.2	2094.6	2828.0	3787.1	4159.6	4256.1
22.5°	269.5	295.9	340.9	488.3	1056.3	1903.5	2860.8	4129.3	4616.3	4723.1
25°	239.3	263.1	301.7	367.3	720.5	1676.4	2938.6	4549.4	5154.1	5292.4
27.5°	214.2	236.7	271.5	321.7	492.8	1402.4	3043.5	5042.2	5747.3	5857.9
30°	191.7	212.9	244.5	279.8	380.2	1091.7	3132.9	5506.7	6213.0	6332.0
32.5°	170.5	189.8	218.1	244.5	311.4	807.3	3142.5	5874.6	6599.6	6718.0
35°	150.5	167.9	193.6	214.2	258.0	637.5	2992.6	6193.7	6986.2	7142.6
37.5°	131.2	148.0	170.5	185.9	227.1	519.8	2763.6	6549.4	7482.2	7627.0
40°	113.2	128.0	151.2	161.5	214.9	399.5	2514.7	6922.6	7968.6	8101.1
42.5°	96.5	110.6	133.2	153.1	188.5	298.5	2245.8	7272.5	8406.0	8545.0
45°	80.4	95.2	117.7	162.1	156.3	223.2	1958.2	7504.7	8751.5	8902.6
47.5°	65.0	81.7	112.6	154.4	124.8	164.0	1730.5	7724.8	9013.3	9162.5
50°	52.1	68.8	126.7	137.7	102.3	125.4	1635.3	7921.6	9185.1	9328.5
52.5°	42.5	57.9	119.7	105.5	85.6	103.6	1686.7	8240.7	9343.9	9434.0
55°	35.4	45.7	72.0	73.3	72.7	88.1	1750.4	8698.7	9755.0	9797.5
57.5°	30.9	36.7	50.2	56.6	61.1	78.5	1751.7	9356.2	10391.2	10417.6
60°	26.4	32.2	41.8	45.7	52.8	70.1	1688.0	9585.8	10641.5	10729.0
62.5°	23.2	28.3	34.7	38.0	44.4	63.0	1538.8	9253.2	10298.0	10446.6
65°	20.6	25.7	28.9	32.2	39.2	56.6	1293.0	8588.1	9728.0	9883.0
67.5°	18.0	22.5	25.7	28.9	35.4	50.2	952.1	7815.5	9073.8	9202.4
70°	16.1	19.9	23.2	25.7	30.9	42.5	577.7	6631.8	8169.3	8222.7
72.5°	15.4	18.0	21.2	23.2	27.0	37.3	292.7	4873.6	6530.8	6617.6
75°	13.5	16.1	19.3	20.6	23.8	32.2	119.0	3201.1	4732.8	4872.4
77.5°	10.9	14.8	17.4	18.7	20.6	26.4	60.5	2045.7	3321.4	3411.4
80°	3.9	10.9	14.8	15.4	17.4	19.3	39.9	1120.0	1926.7	1965.3
82.5°	0.0	7.1	11.6	10.9	12.2	14.8	25.7	532.7	1271.8	1286.0
85°	0.0	3.2	9.0	7.1	5.1	10.3	9.0	116.4	667.1	694.8
87.5°	0.0	0.0	0.6	3.2	2.6	3.9	1.3	0.6	60.5	76.6
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.

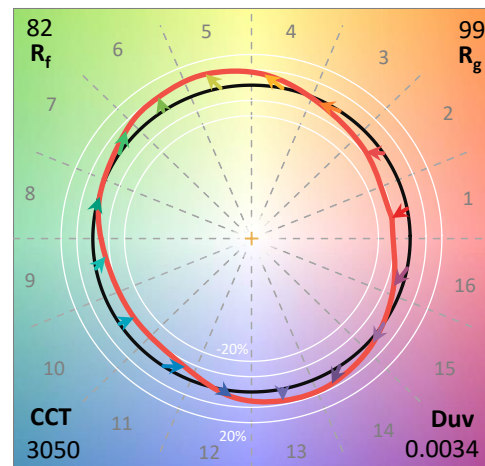
Test Information

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

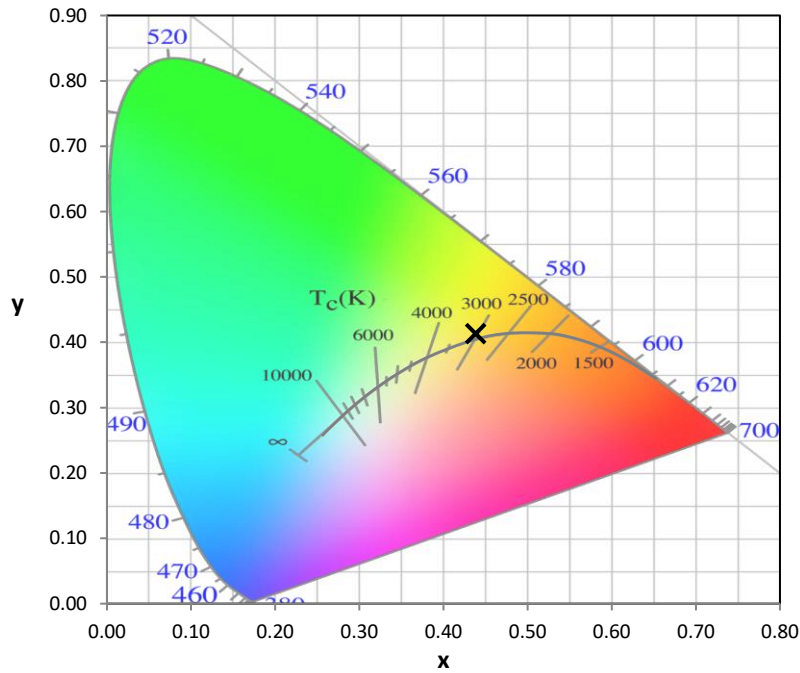
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

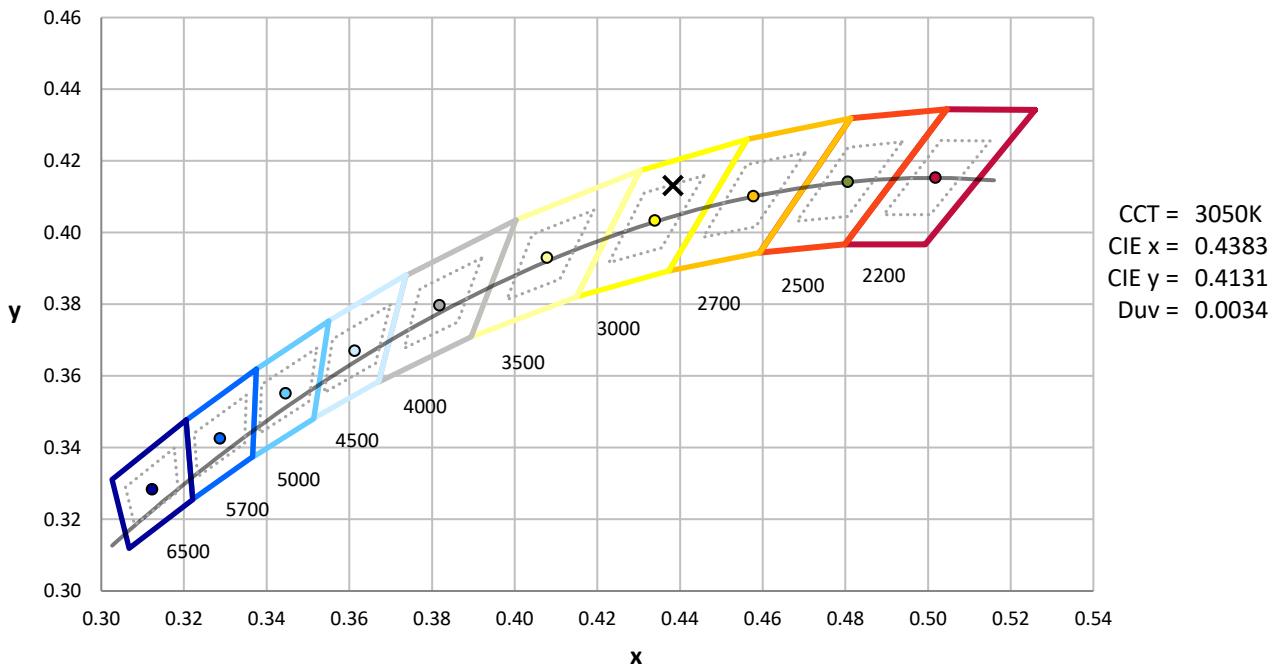
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram

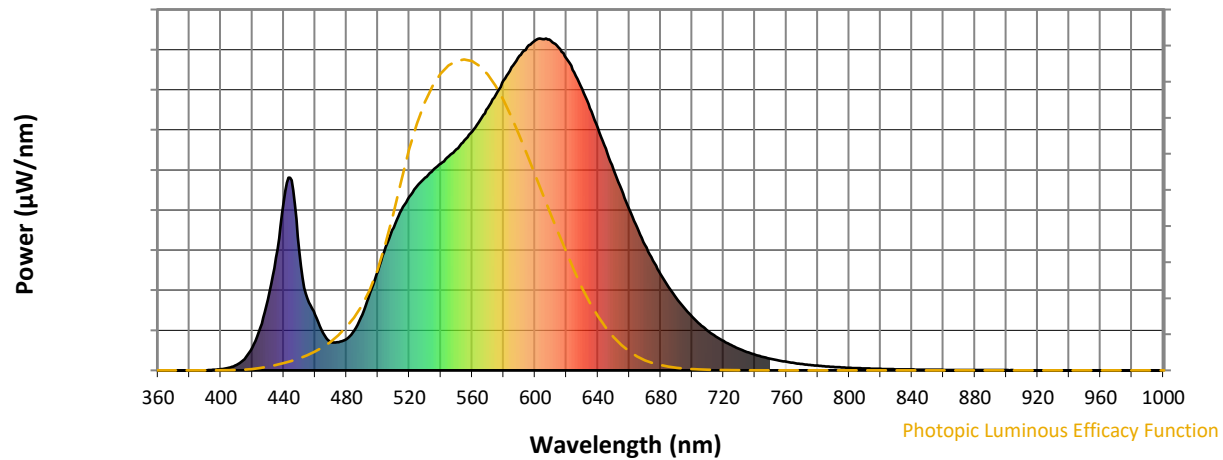


CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

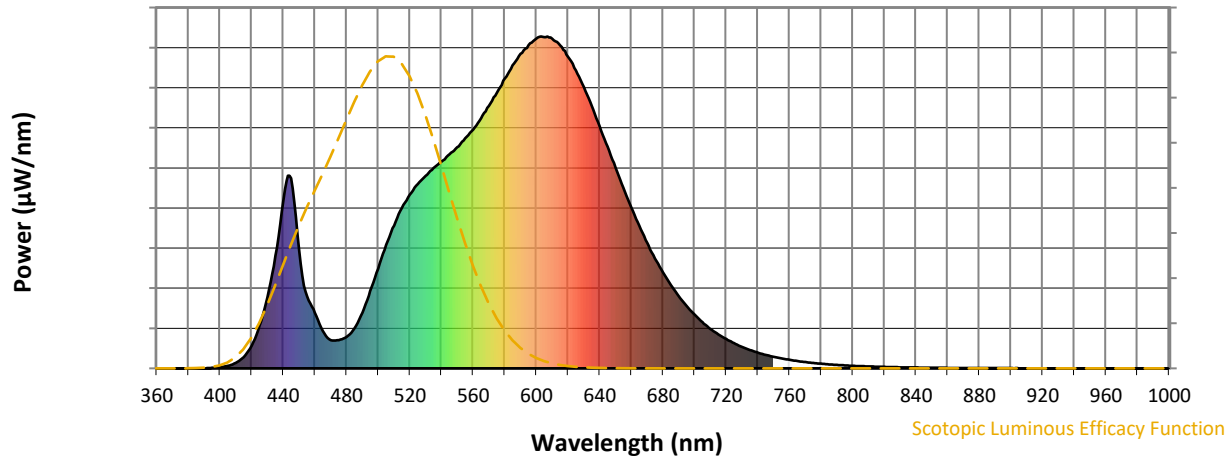


Photopic Lumens: NR

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			

REPORT NUMBER: SP1-2408-195-9

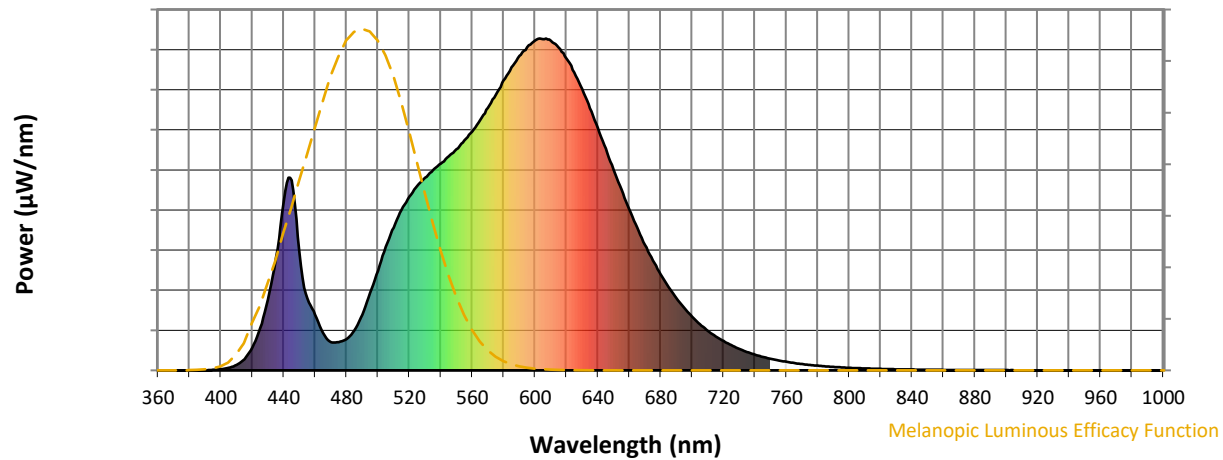
Scotopic Flux vs. Wavelength


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

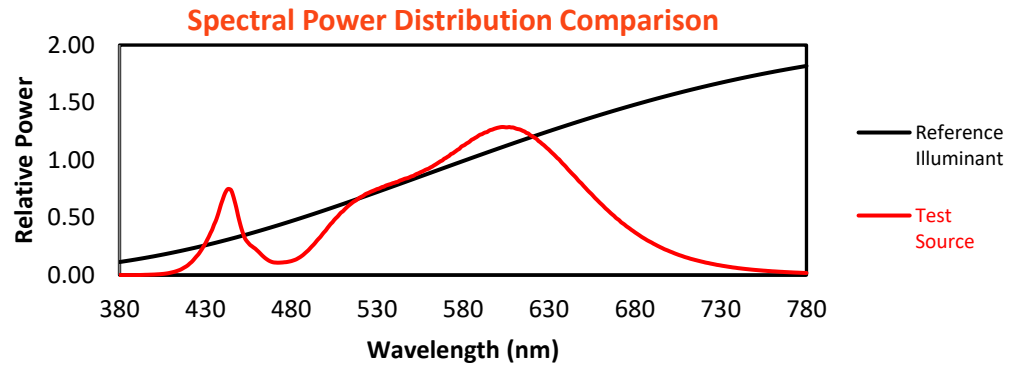
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	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

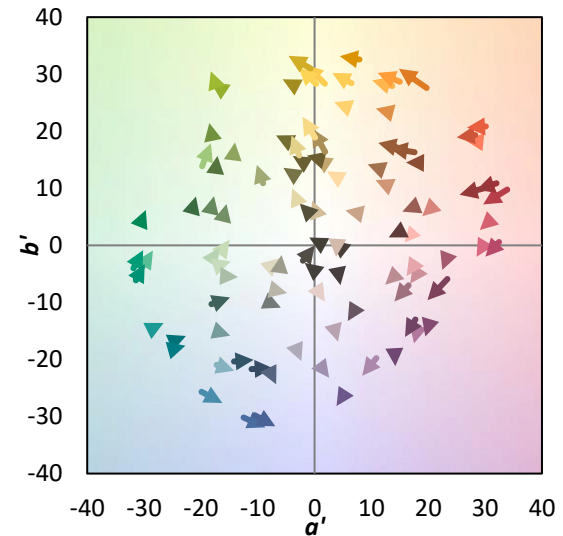
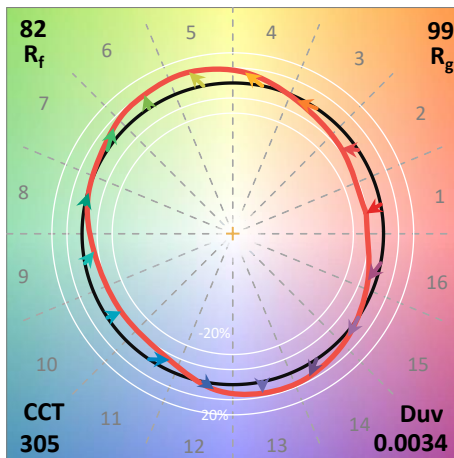
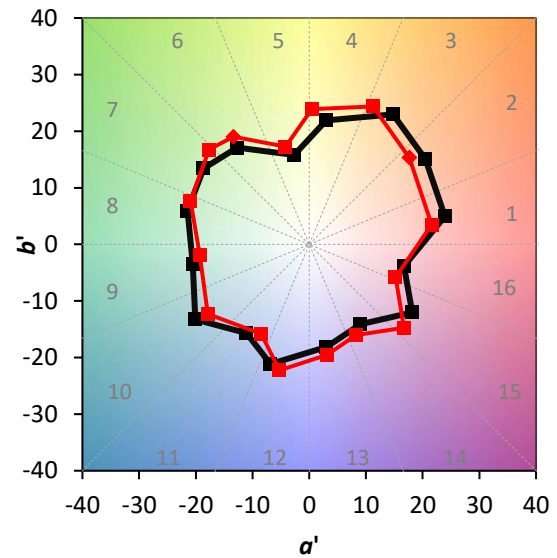
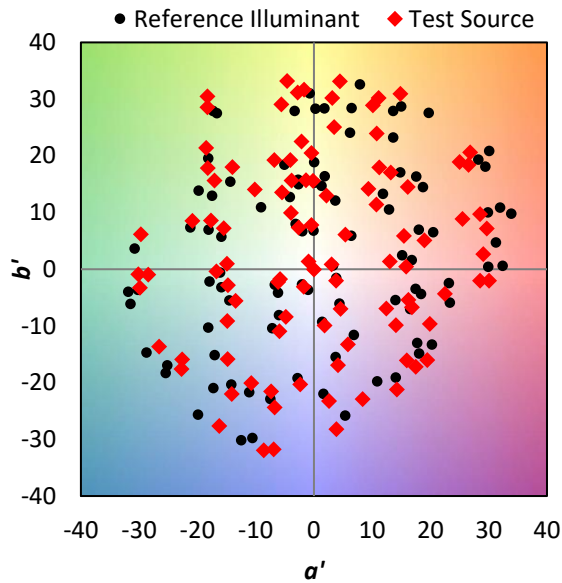
TM-30-18

Summary

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

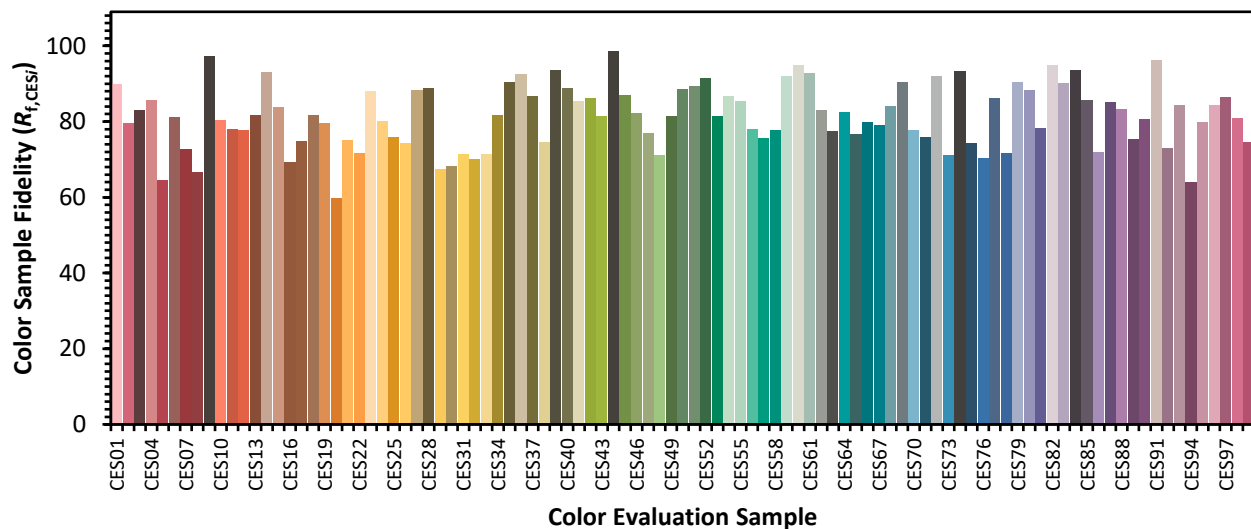


Color Vector Graphics

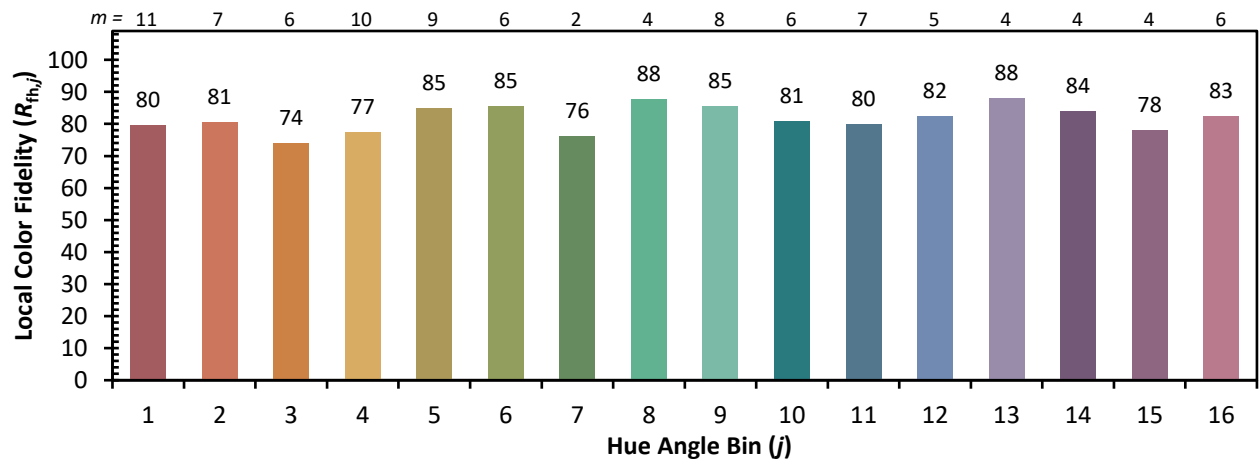
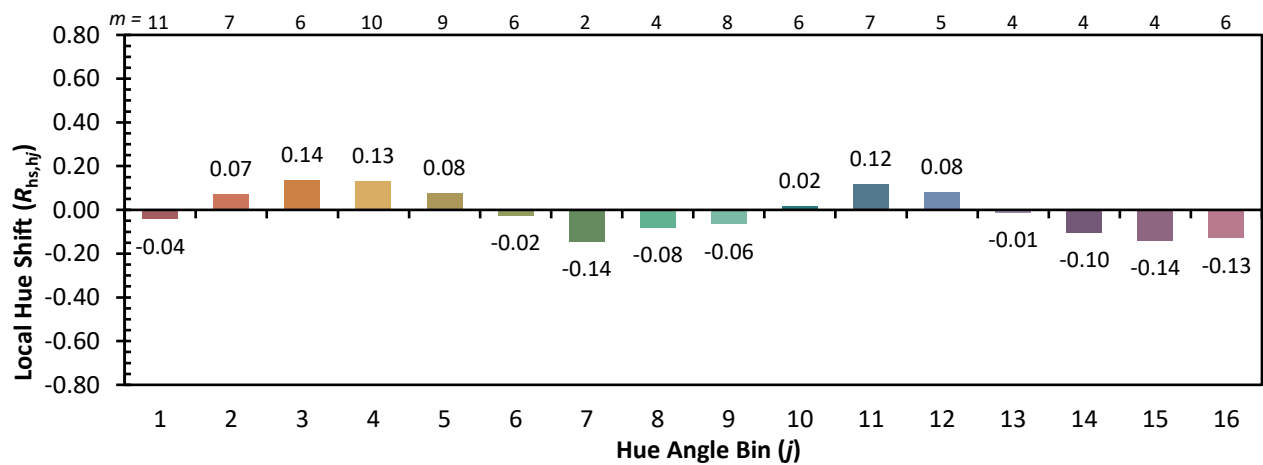
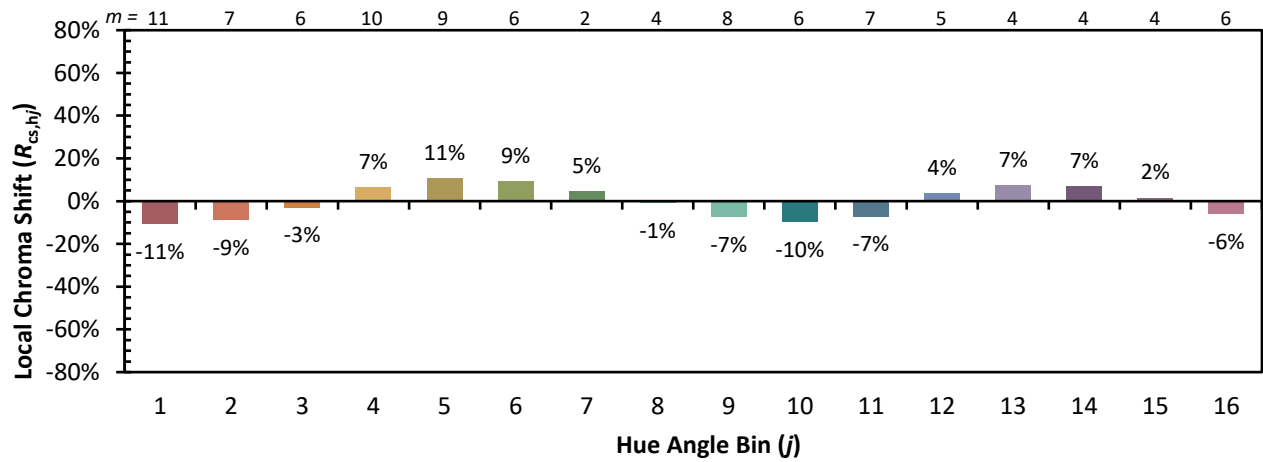


Individual Sample Fidelity Index ($R_{f,i}$)

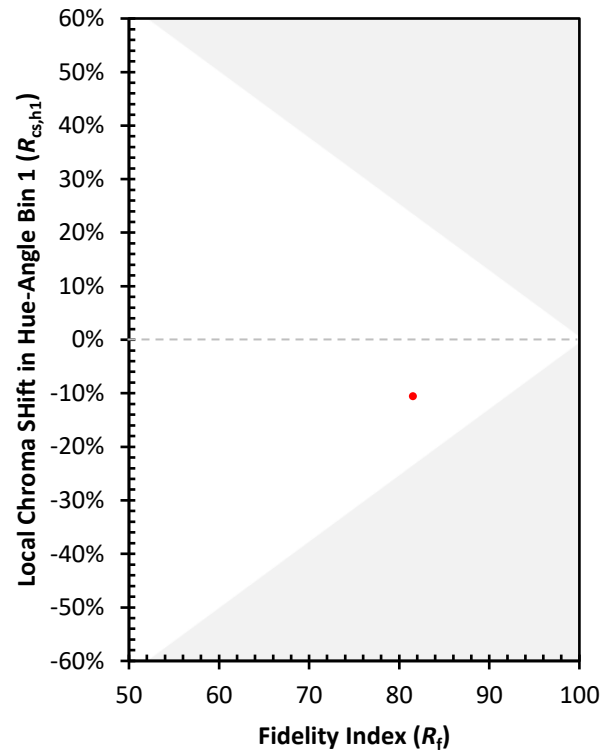
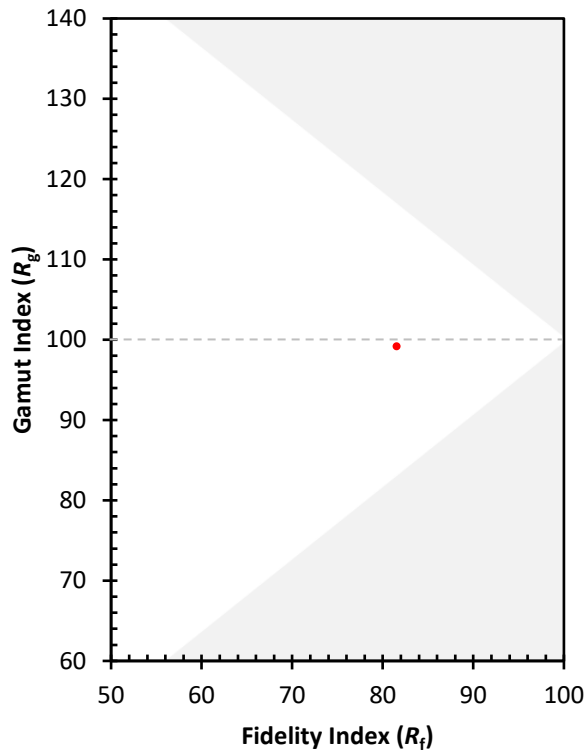
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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