

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: P324652

Luminaire Tested: **GLEON-SA8C-830-U-SLR-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324652
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-SA8C-830-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 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: 33392 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

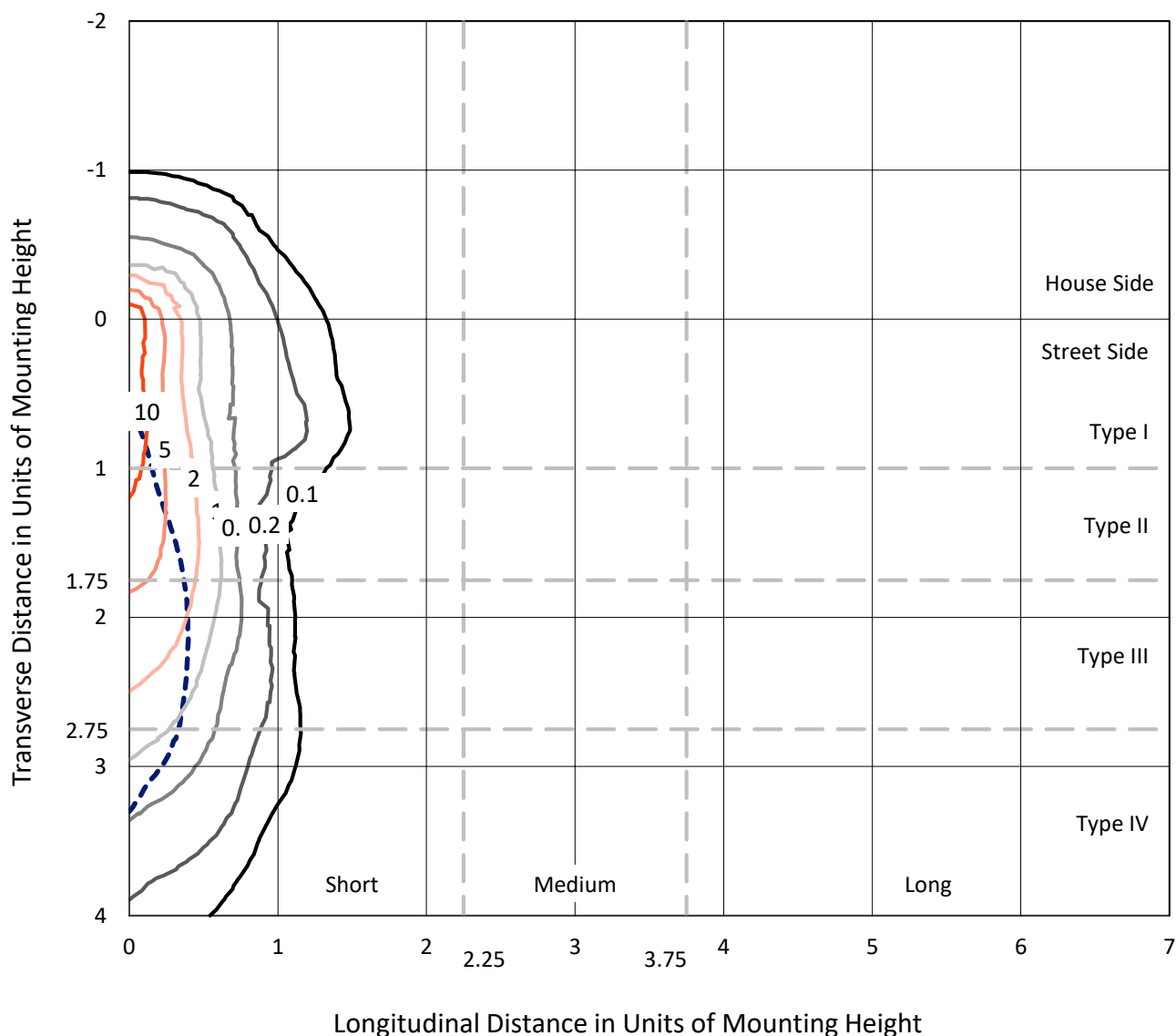
Input Watts (W): 445
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

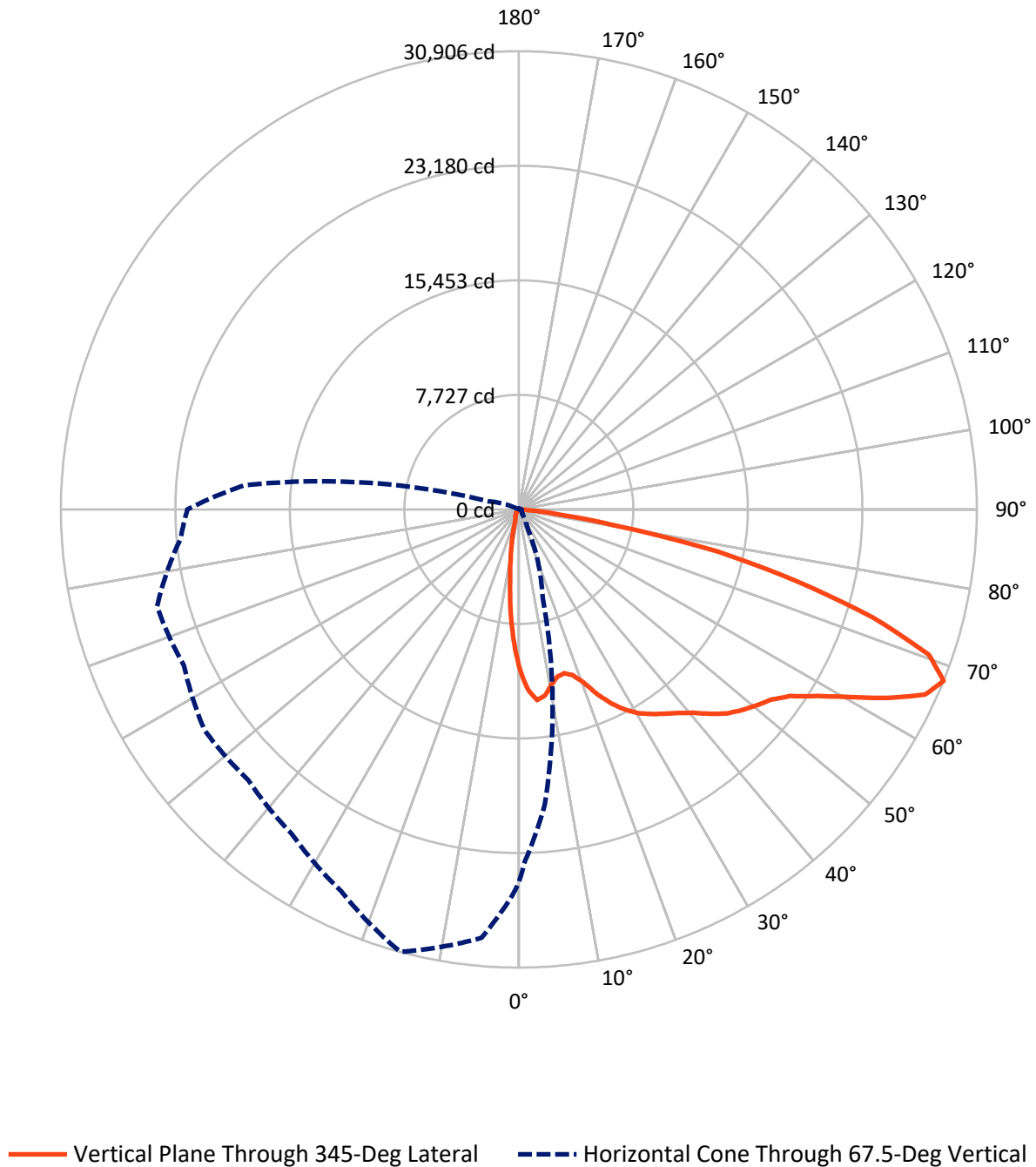
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.4 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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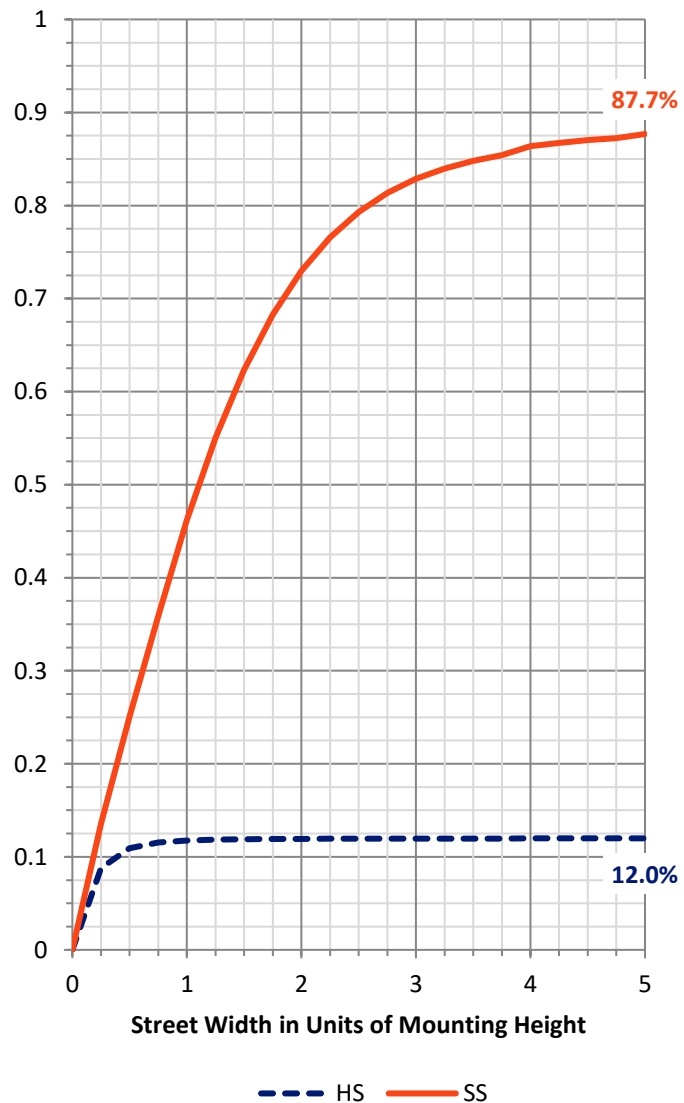
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4041.5	0.0	4041.5
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	29350.5	0.0	29350.5
	% Fixture	87.9	0.0	87.9
Total	Lumens	33392.0	0.0	33392.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	834.8	2.5
10°-20°	1661.7	5.0
20°-30°	2359.6	7.1
30°-40°	3485.3	10.4
40°-50°	5026.6	15.1
50°-60°	7056.3	21.1
60°-70°	8225.6	24.6
70°-80°	4205.1	12.6
80°-90°	537.0	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°	33392.0	100.0
0°-180°	33392.0	100.0

Coefficient of Utilization



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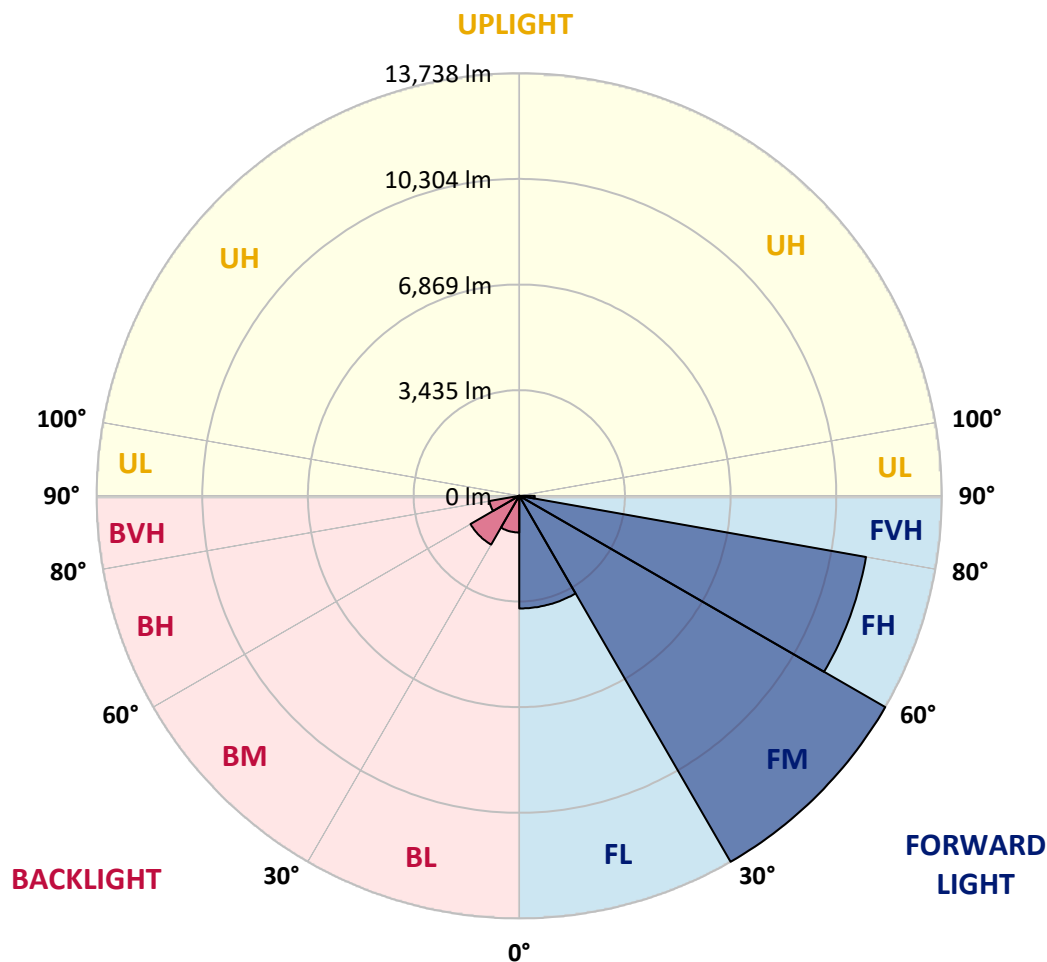
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3662.5	11.0			
FM	(30°-60°)	13738.0	41.1			
FH	(60°-80°)	11445.6	34.3			G4/12000
FVH	(80°-90°)	504.4	1.5			G4/750
BL	(0°-30°)	1193.7	3.6	B3/2500		
BM	(30°-60°)	1830.1	5.5	B2/2500		
BH	(60°-80°)	985.0	2.9	B2/1000		G2/1000
BVH	(80°-90°)	32.6	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-G4

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4
2.5°	11910.4	11818.6	11717.4	11386.8	11079.9	10728.7	10442.4	10243.0	9993.1	9668.8	9586.5
5°	11825.0	11726.9	11408.9	10673.3	10029.5	9403.0	8798.7	8444.4	8004.6	7558.5	7447.7
7.5°	10966.0	10863.1	10404.4	9396.7	8529.8	7624.9	6840.3	6354.6	5857.9	5449.8	5233.0
10°	10072.2	9959.9	9444.1	8221.3	7153.5	6335.6	5759.8	5296.3	4826.5	4389.9	4041.8
12.5°	9456.8	9309.7	8749.7	7363.9	6433.7	5878.5	5340.6	4785.4	4149.4	3681.2	3298.3
15°	9198.9	9031.3	8439.6	7033.3	6179.0	5527.3	4826.5	4144.7	3399.6	2863.3	2512.1
17.5°	9398.3	9180.0	8545.6	7011.1	5859.5	4972.0	4086.1	3285.7	2477.3	1934.7	1684.8
20°	10075.3	9789.0	8983.8	7004.8	5471.9	4312.4	3189.2	2284.3	1632.6	1313.0	1181.7
22.5°	11141.6	10763.5	9613.4	7055.4	5071.7	3619.5	2303.3	1551.9	1226.0	1059.9	982.4
25°	12429.3	11991.1	10519.9	7234.2	4720.5	2945.6	1673.7	1226.0	1034.6	912.8	847.9
27.5°	13653.7	13297.7	11665.2	7492.0	4448.4	2401.4	1358.9	1039.3	884.3	803.6	751.4
30°	14876.5	14428.8	12840.6	7798.9	4120.9	2032.8	1194.4	947.6	792.5	707.1	673.9
32.5°	15765.6	15393.8	13761.2	8020.4	3771.3	1792.3	1067.8	866.9	740.3	653.3	604.3
35°	16811.2	16390.4	14550.6	8069.4	3546.7	1640.5	960.2	779.9	642.3	564.8	512.5
37.5°	17940.7	17417.1	15461.8	7961.9	3371.1	1566.1	879.6	740.3	599.6	520.5	465.1
40°	19190.4	18598.8	16336.6	7806.8	3198.7	1540.8	817.9	710.3	566.3	485.7	428.7
42.5°	20506.6	19809.0	17094.4	7643.9	3089.5	1453.8	811.5	680.2	541.0	454.0	397.1
45°	21612.4	20905.3	17872.7	7590.1	3012.0	1358.9	838.4	659.7	523.6	428.7	373.3
47.5°	22493.5	21824.4	18670.0	7710.3	2967.7	1271.9	764.1	686.6	514.1	406.6	352.8
50°	23545.5	22787.8	19793.2	8069.4	2902.8	1184.9	691.3	786.2	514.1	392.3	335.4
52.5°	24864.8	24115.0	21046.1	8626.3	2773.1	1064.6	621.7	787.8	518.9	373.3	313.2
55°	26524.3	25980.1	22835.2	9236.9	2565.9	887.5	537.9	677.1	499.9	338.5	292.7
57.5°	28115.7	27671.2	24466.2	9654.5	2289.1	692.9	468.3	545.8	457.2	297.4	261.0
59°	28550.8	28065.1	25064.2	9673.5	2081.8	604.3	433.5	450.9	447.7	278.4	242.0
60°	28550.8	28035.0	25236.6	9572.3	1931.5	555.3	411.3	401.8	466.7	265.8	231.0
62.5°	28033.5	27308.9	24676.6	8887.3	1575.6	473.0	359.1	332.2	419.2	238.9	204.1
65°	26957.7	25902.6	22768.8	7648.7	1404.8	433.5	310.1	272.1	291.1	210.4	178.8
67.5°	25163.8	23733.8	20017.8	6179.0	1336.7	422.4	267.3	231.0	219.9	180.3	156.6
70°	22004.7	20418.0	16678.3	4858.1	1278.2	417.6	224.6	194.6	177.2	151.9	132.9
72.5°	16015.5	14360.8	11840.8	3798.2	1243.4	427.1	180.3	162.9	145.5	118.6	102.8
75°	9161.0	8077.4	6655.2	2508.9	1059.9	408.1	139.2	136.0	104.4	85.4	71.2
77.5°	4733.1	4589.2	3988.1	963.4	507.8	178.8	91.8	79.1	61.7	52.2	42.7
80°	2042.3	2020.1	1748.0	278.4	134.5	99.7	52.2	33.2	28.5	22.1	17.4
82.5°	705.5	705.5	621.7	93.3	60.1	49.0	6.3	0.0	0.0	0.0	0.0
85°	142.4	159.8	112.3	0.0	20.6	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°	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4
2.5°	9486.9	9295.4	9282.8	9162.6	9012.3	8944.3	8904.7	8974.3	9059.7	9069.2	9197.4
5°	7363.9	7163.0	7246.8	7033.3	7076.0	7033.3	6963.7	6976.3	7014.3	6895.7	7042.8
7.5°	5171.3	5019.5	5116.0	5059.0	5135.0	5165.0	5122.3	5059.0	4872.4	4850.2	4978.3
10°	3897.9	3725.5	3622.6	3515.1	3538.8	3587.8	3572.0	3526.1	3407.5	3413.8	3537.2
12.5°	3132.2	2939.2	2735.2	2471.0	2406.1	2442.5	2406.1	2379.2	2265.3	2274.8	2384.0
15°	2376.1	2217.9	2004.3	1792.3	1676.9	1687.9	1586.7	1515.5	1444.3	1358.9	1425.3
17.5°	1604.1	1507.6	1444.3	1381.0	1243.4	1211.8	1083.6	946.0	892.2	852.7	881.1
20°	1135.8	1083.6	1058.3	1055.2	976.1	936.5	811.5	726.1	699.2	691.3	708.7
22.5°	949.2	911.2	874.8	854.2	814.7	768.8	673.9	631.2	612.2	602.7	615.4
25°	825.8	797.3	759.3	724.5	708.7	659.7	591.6	560.0	547.3	537.9	544.2
27.5°	734.0	708.7	664.4	642.3	629.6	586.9	528.4	503.1	492.0	488.8	487.2
30°	661.2	637.5	596.4	571.1	548.9	511.0	476.2	450.9	439.8	436.6	433.5
32.5°	588.5	569.5	542.6	517.3	493.6	458.8	428.7	408.1	390.7	387.6	386.0
35°	496.7	477.7	463.5	461.9	439.8	406.6	384.4	357.5	343.3	338.5	340.1
37.5°	441.4	416.0	384.4	395.5	389.2	365.4	335.4	308.5	294.2	291.1	291.1
40°	406.6	379.7	343.3	324.3	343.3	338.5	291.1	264.2	249.9	248.4	245.2
42.5°	373.3	346.4	305.3	273.7	283.2	297.4	251.5	226.2	212.0	208.8	204.1
45°	349.6	321.1	275.3	238.9	219.9	249.9	215.1	183.5	175.6	169.3	166.1
47.5°	327.5	300.6	248.4	207.2	175.6	180.3	172.4	150.3	140.8	134.5	132.9
50°	308.5	280.0	224.6	177.2	145.5	132.9	139.2	118.6	110.7	104.4	101.2
52.5°	286.3	259.4	199.3	153.4	121.8	104.4	106.0	93.3	85.4	80.7	79.1
55°	268.9	242.0	178.8	134.5	107.6	85.4	75.9	72.8	68.0	64.9	63.3
57.5°	245.2	219.9	158.2	113.9	91.8	69.6	58.5	58.5	56.9	53.8	52.2
59°	231.0	208.8	145.5	102.8	83.8	60.1	52.2	53.8	52.2	49.0	47.5
60°	219.9	199.3	136.0	94.9	79.1	55.4	47.5	50.6	49.0	45.9	44.3
62.5°	194.6	180.3	117.1	79.1	69.6	44.3	39.5	42.7	42.7	41.1	39.5
65°	170.8	155.0	99.7	66.4	64.9	38.0	31.6	38.0	39.5	36.4	33.2
67.5°	148.7	132.9	87.0	53.8	60.1	30.1	23.7	31.6	42.7	33.2	30.1
70°	126.6	110.7	68.0	42.7	63.3	20.6	19.0	28.5	50.6	36.4	28.5
72.5°	98.1	85.4	47.5	31.6	68.0	14.2	14.2	23.7	56.9	39.5	26.9
75°	68.0	55.4	28.5	19.0	55.4	9.5	9.5	22.1	53.8	36.4	25.3
77.5°	39.5	30.1	9.5	1.6	28.5	0.0	1.6	15.8	38.0	22.1	11.1
80°	14.2	6.3	0.0	0.0	17.4	0.0	0.0	0.0	3.2	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°	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4
2.5°	9230.6	9444.1	9635.6	9925.1	10268.3	10663.8	11003.9	11369.4	11712.6	11855.0	11953.1
5°	7072.8	7337.0	7645.5	8071.0	8637.4	9335.0	9988.3	10727.1	11521.2	11918.3	12291.6
7.5°	5000.5	5269.4	5652.3	6104.7	6789.7	7620.2	8474.4	9494.8	10570.5	11198.5	11817.1
10°	3595.7	3926.4	4283.9	4902.4	5598.5	6386.3	7265.8	8404.8	9603.9	10300.0	11045.1
12.5°	2447.3	2823.8	3364.8	4057.7	4875.5	5647.5	6411.6	7498.4	8890.5	9580.2	10379.1
15°	1468.0	1676.9	2249.5	3051.6	4054.5	5016.3	5853.2	6943.1	8427.0	9271.7	10102.2
17.5°	904.9	1001.4	1313.0	1971.1	3024.7	4241.2	5388.1	6754.9	8493.4	9521.7	10410.7
20°	721.4	759.3	859.0	1164.3	2004.3	3386.9	4864.4	6716.9	9036.0	10301.6	11255.5
22.5°	626.4	662.8	729.3	846.3	1260.8	2535.8	4367.7	6751.7	9814.3	11470.6	12584.3
25°	552.1	583.7	647.0	743.5	923.8	1786.0	3836.2	6906.7	10828.3	12921.2	14104.5
27.5°	493.6	520.5	579.0	667.6	792.5	1246.6	3233.5	7095.0	12030.6	14405.1	15572.6
30°	439.8	463.5	515.7	598.0	688.1	958.7	2572.2	7223.1	13234.5	15572.6	16621.4
32.5°	393.9	411.3	458.8	528.4	598.0	764.1	1955.3	7202.5	14128.3	16543.9	17376.0
35°	346.4	363.8	405.0	465.1	520.5	631.2	1537.6	6818.1	14906.6	17551.6	18239.7
37.5°	294.2	316.4	355.9	409.7	447.7	555.3	1243.4	6354.6	15696.0	18703.2	19203.1
40°	249.9	272.1	306.9	365.4	389.2	526.8	955.5	5789.9	16583.4	19990.9	20259.8
42.5°	207.2	227.8	264.2	314.8	367.0	454.0	707.1	5144.5	17436.1	21091.9	21223.2
45°	167.7	188.3	226.2	276.8	392.3	376.5	547.3	4453.1	18124.2	22007.9	22050.6
47.5°	132.9	151.9	191.4	261.0	365.4	300.6	390.7	3910.5	18701.6	22722.9	22610.6
50°	102.8	118.6	159.8	299.0	319.6	248.4	295.8	3730.2	19218.9	23165.8	22874.8
52.5°	80.7	94.9	131.3	280.0	248.4	205.7	248.4	3899.5	19927.6	23532.9	23023.5
55°	64.9	79.1	102.8	159.8	169.3	174.0	212.0	4057.7	21150.5	24393.4	23901.4
57.5°	53.8	68.0	83.8	112.3	128.1	147.1	188.3	4075.1	22591.6	25823.5	25358.4
59°	49.0	61.7	75.9	99.7	112.3	134.5	177.2	3980.1	23099.4	26344.0	26111.4
60°	45.9	58.5	71.2	91.8	104.4	126.6	170.8	3890.0	23121.6	26325.0	26432.5
62.5°	39.5	52.2	63.3	77.5	88.6	107.6	153.4	3556.2	22185.1	25462.8	26239.5
65°	34.8	45.9	56.9	66.4	75.9	96.5	139.2	2947.1	20585.7	24072.3	24918.6
67.5°	31.6	39.5	52.2	58.5	68.0	85.4	123.4	2100.8	18587.7	22371.7	22920.6
70°	28.5	38.0	47.5	53.8	61.7	74.4	106.0	1207.0	15696.0	19881.8	20272.5
72.5°	26.9	36.4	42.7	50.6	55.4	66.4	96.5	567.9	11492.8	15926.9	16947.3
75°	23.7	33.2	39.5	47.5	52.2	60.1	82.3	272.1	7643.9	11526.0	12685.5
77.5°	14.2	26.9	36.4	42.7	45.9	52.2	68.0	156.6	4878.7	7977.7	9396.7
80°	0.0	9.5	26.9	36.4	39.5	44.3	52.2	123.4	2610.2	4557.6	5470.3
82.5°	0.0	0.0	19.0	28.5	26.9	30.1	39.5	77.5	1177.0	2978.8	3356.9
85°	0.0	0.0	6.3	22.1	19.0	14.2	26.9	26.9	257.9	1507.6	1880.9
87.5°	0.0	0.0	0.0	1.6	9.5	6.3	11.1	3.2	1.6	112.3	455.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P324652

CATALOG NUMBER: GLEON-SA8C-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4	10877.4
2.5°	12296.4	12413.4	12611.2	12704.5	12658.6	12464.1	12231.5	11994.2	11855.0	11910.4
5°	13052.5	13655.3	14003.3	14118.8	13925.8	13489.2	12918.1	12165.1	11897.7	11825.0
7.5°	13052.5	14186.8	14905.0	15031.5	14601.3	13745.4	12674.5	11499.1	11108.3	10966.0
10°	12593.8	14137.7	15139.1	15340.0	14738.9	13459.1	12024.3	10682.8	10219.3	10072.2
12.5°	12076.5	13739.1	14794.3	15071.1	14577.5	13174.4	11573.4	10130.7	9584.9	9456.8
15°	11758.5	13248.7	14121.9	14322.8	14114.0	13008.2	11465.9	9964.6	9322.3	9198.9
17.5°	11872.4	12869.0	13183.8	13300.9	13441.7	12949.7	11758.5	10328.5	9515.3	9398.3
20°	12301.1	12468.8	12305.9	12453.0	12832.7	13006.7	12456.2	11208.0	10232.0	10075.3
22.5°	13028.8	12261.6	11804.4	11862.9	12324.9	13194.9	13522.4	12464.1	11337.7	11141.6
25°	13876.7	12429.3	11526.0	11473.8	11948.4	13443.3	14496.8	13830.9	12646.0	12429.3
27.5°	14943.0	12805.8	11469.0	11416.8	11817.1	13675.8	15306.8	15181.8	14023.8	13653.7
30°	15765.6	13175.9	11638.3	11518.1	11948.4	13837.2	15957.0	16328.7	15121.7	14876.5
32.5°	16355.6	13612.5	11913.5	11739.5	12318.5	14115.6	16458.4	17379.1	16137.3	15765.6
35°	16804.9	14087.1	12358.1	12071.7	12827.9	14538.0	16928.3	18497.6	17217.8	16811.2
37.5°	17225.7	14753.1	13052.5	12710.8	13626.8	15218.2	17425.0	19766.3	18426.4	17940.7
40°	17812.6	15507.7	14123.5	13819.8	14969.8	16145.2	18045.1	21088.8	19801.1	19190.4
42.5°	18399.5	16317.7	15219.8	15302.1	16645.1	17271.6	18845.6	22487.2	21158.4	20506.6
45°	18935.8	17152.9	16781.2	17160.8	18200.2	18507.1	19641.3	23295.6	22242.0	21612.4
47.5°	19413.5	18197.0	18333.0	19343.9	19968.8	19625.5	20236.1	23993.2	23048.8	22493.5
50°	19968.8	19548.0	20378.5	21808.5	22004.7	20637.9	20777.1	24819.0	23991.6	23545.5
52.5°	20576.2	20971.7	22643.8	23904.6	23841.3	21737.4	21321.3	25744.4	25284.1	24864.8
55°	21265.9	22121.8	24638.6	25866.2	25812.4	22964.9	22223.0	26888.1	26904.0	26524.3
57.5°	22289.5	23112.1	25992.8	27452.9	27543.1	24382.4	23751.2	28169.5	28368.8	28115.7
59°	23023.5	23754.3	26529.0	28115.7	28482.7	25478.6	24868.0	28913.0	28781.7	28550.8
60°	23567.7	24162.5	26794.8	28462.2	29028.5	26222.1	25692.2	29349.6	28830.8	28550.8
62.5°	24913.9	25051.5	27274.1	28854.5	29656.5	27873.7	28011.3	30093.1	28490.6	28033.5
65°	25541.9	25613.1	27267.8	28152.1	29049.1	29159.8	30115.3	30115.3	27660.1	26957.7
67.5°	25279.3	24936.0	25915.3	25823.5	26718.9	28395.7	30906.3	29011.1	26071.9	25163.8
70°	23143.7	21822.8	21387.8	21427.3	22112.3	24698.7	29340.1	25761.8	23066.2	22004.7
72.5°	19256.9	16088.3	15014.1	16240.1	16418.9	18981.6	25004.1	19400.8	17010.5	16015.5
75°	15488.7	11340.9	9594.4	10888.5	11192.2	13891.0	19342.3	12082.8	9936.1	9161.0
77.5°	11127.3	8140.6	6884.6	6794.4	7186.7	8809.8	13724.9	6081.0	5071.7	4733.1
80°	6321.4	5358.0	5769.3	5443.4	5641.2	5508.3	6520.7	2667.1	2184.7	2042.3
82.5°	3815.6	3167.0	3429.6	2855.4	3613.1	3146.5	2512.1	854.2	741.9	705.5
85°	2482.1	1730.6	901.7	604.3	1245.0	2010.6	561.6	232.5	178.8	142.4
87.5°	855.8	441.4	44.3	19.0	132.9	374.9	20.6	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.

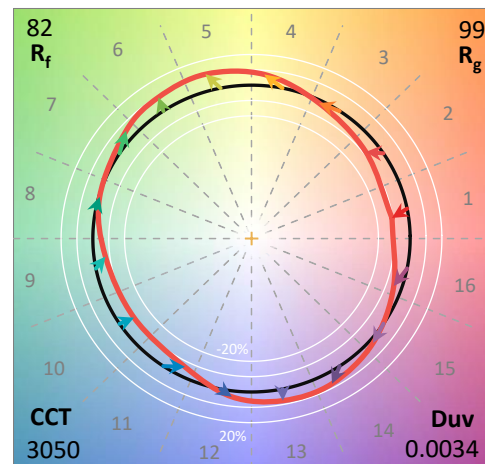
Test Information

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

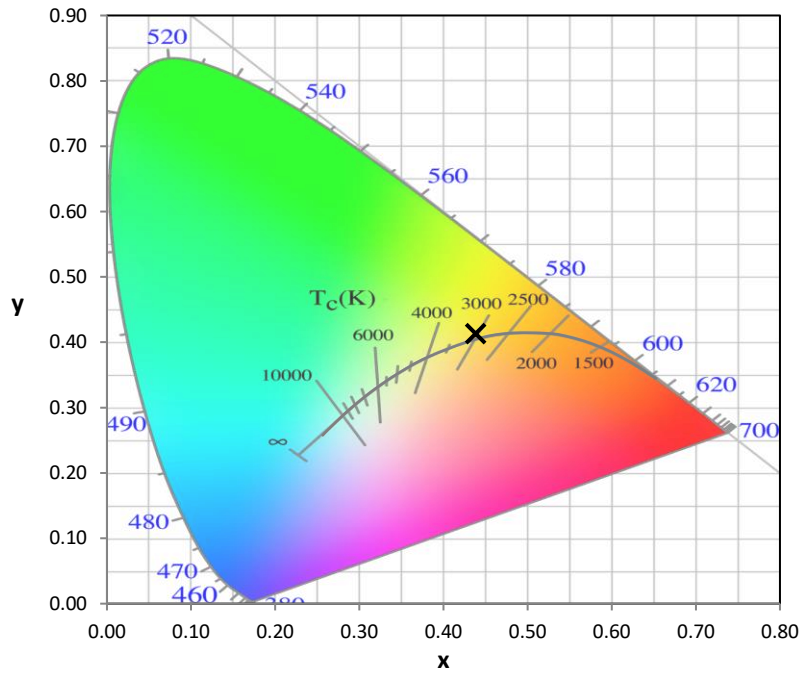
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

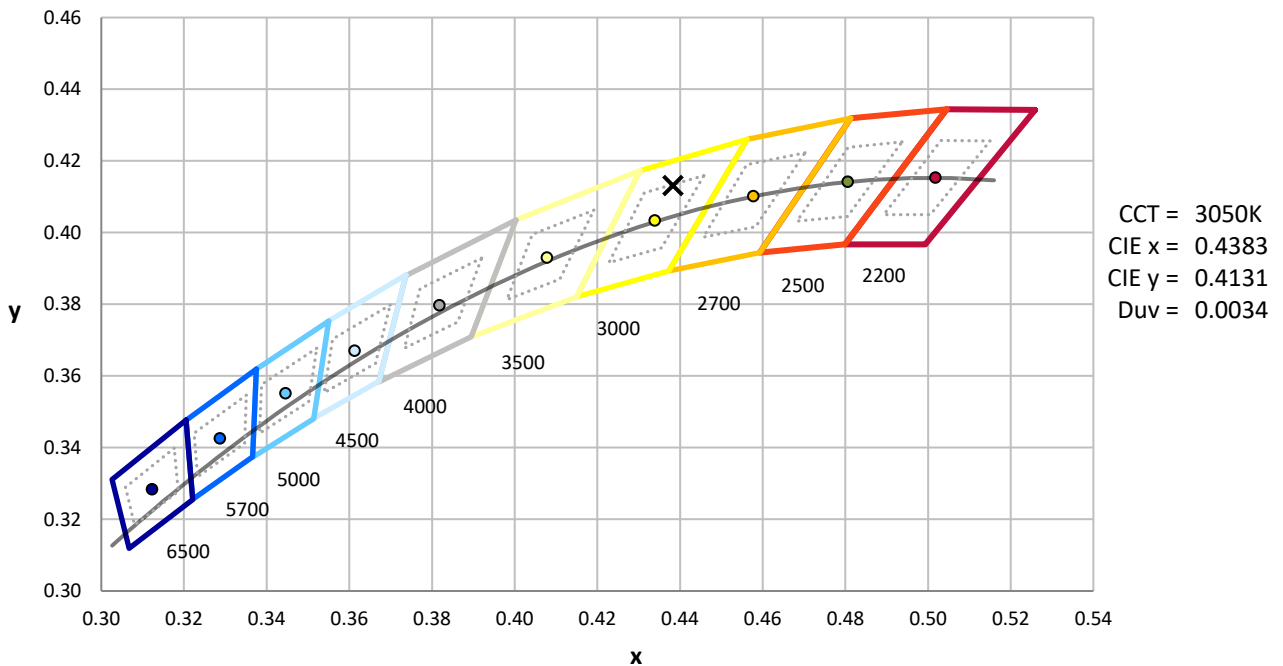
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



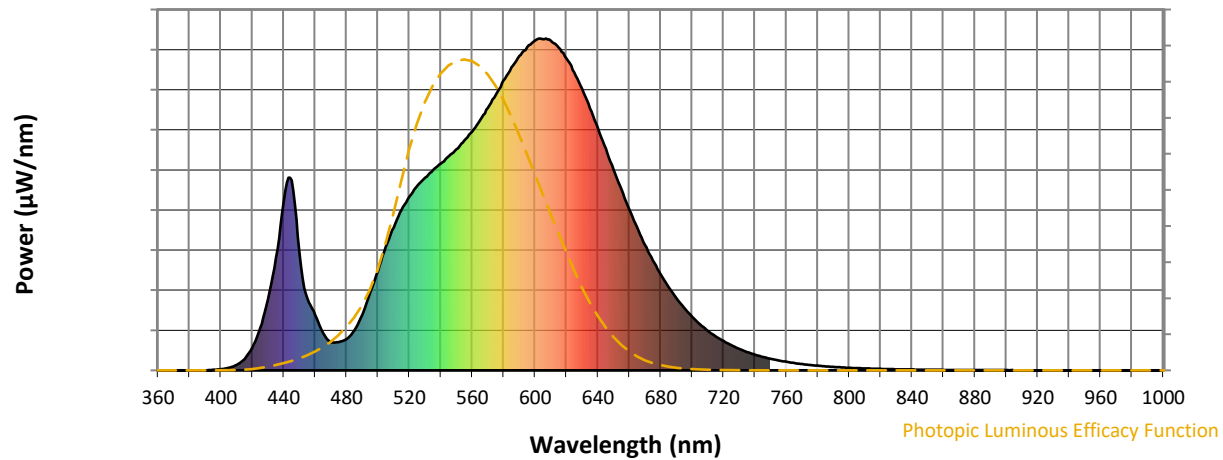
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

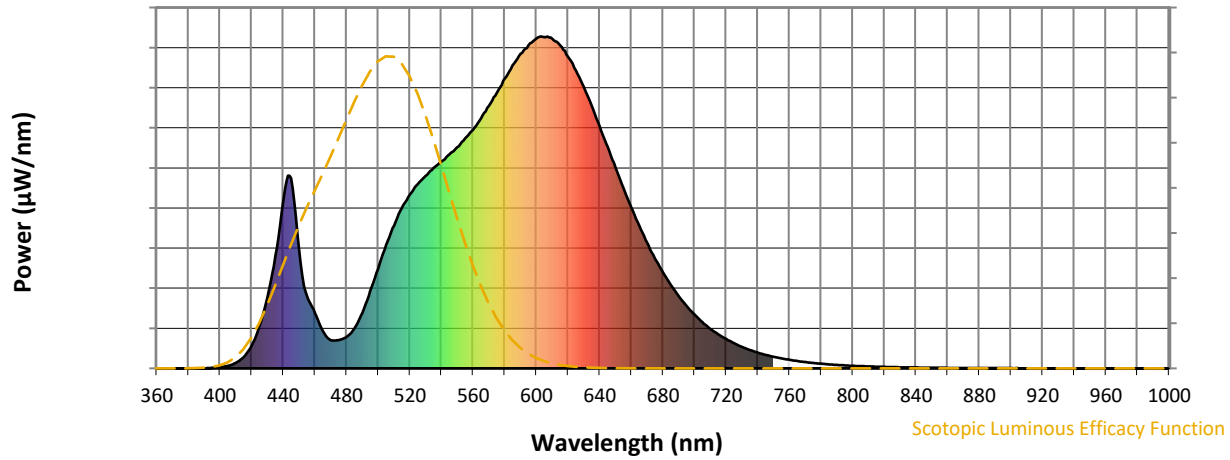


Photopic Lumens: NR

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



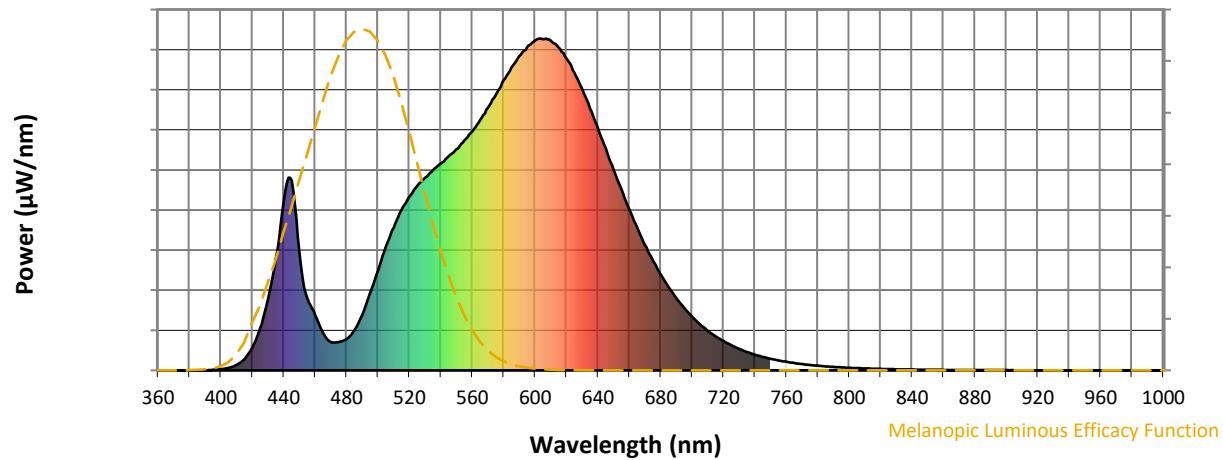
Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power 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

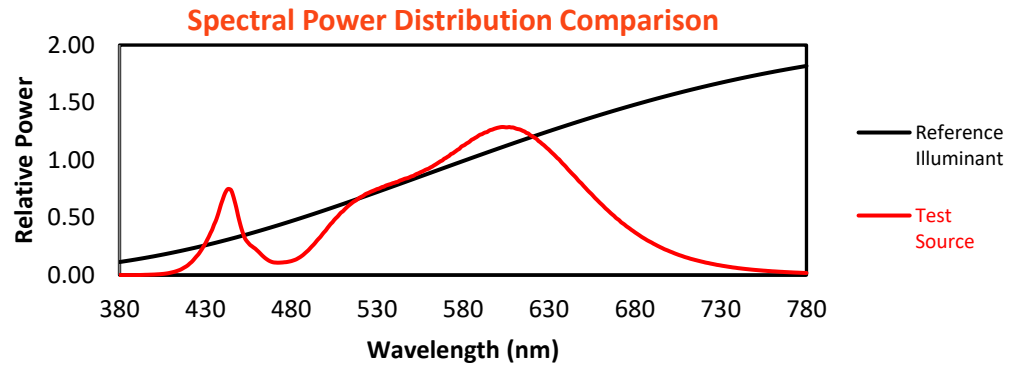
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	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			

REPORT NUMBER: SP1-2408-195-9

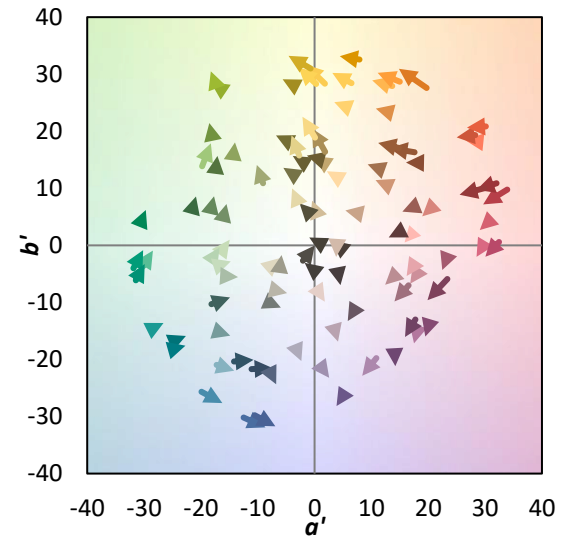
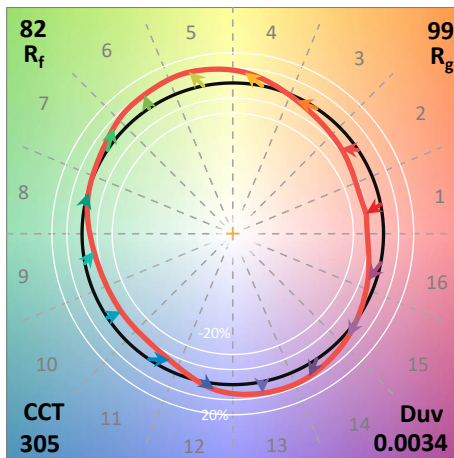
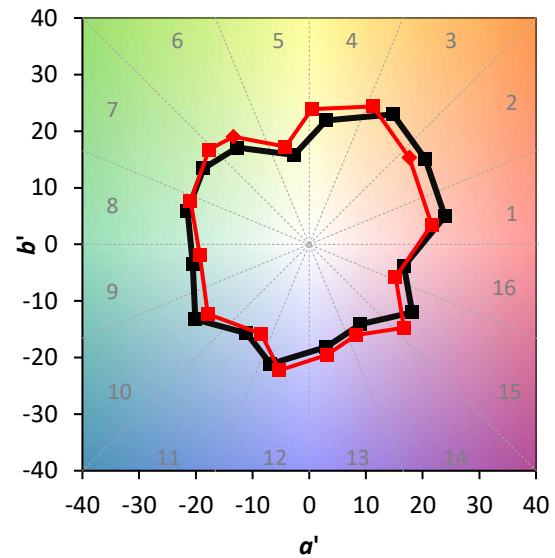
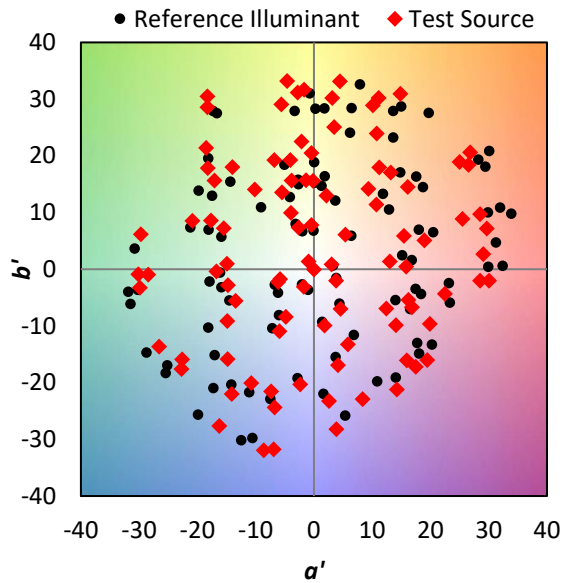
TM-30-18

Summary

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

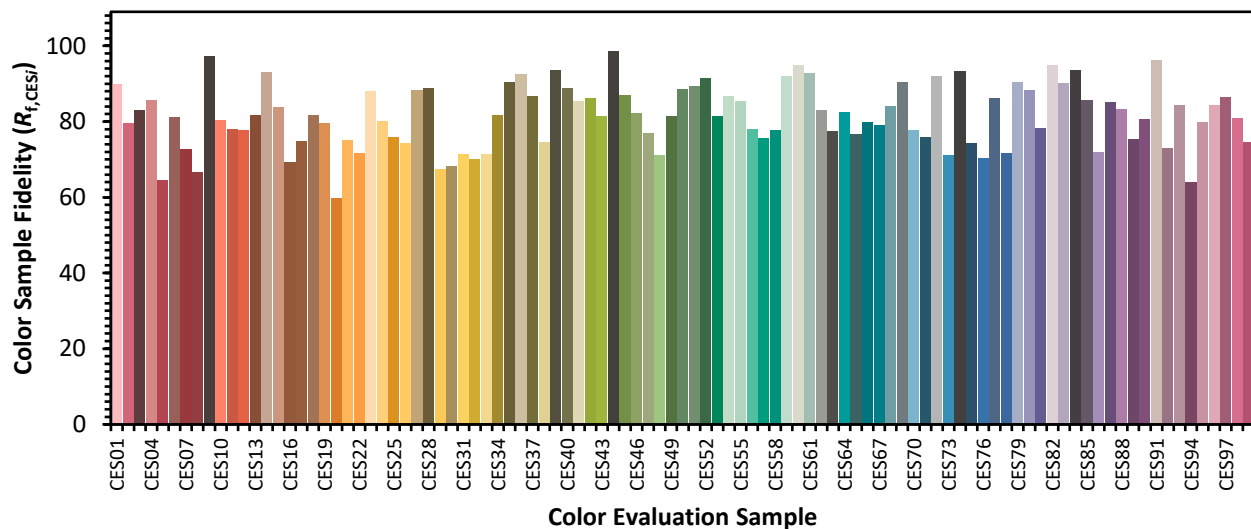


Color Vector Graphics

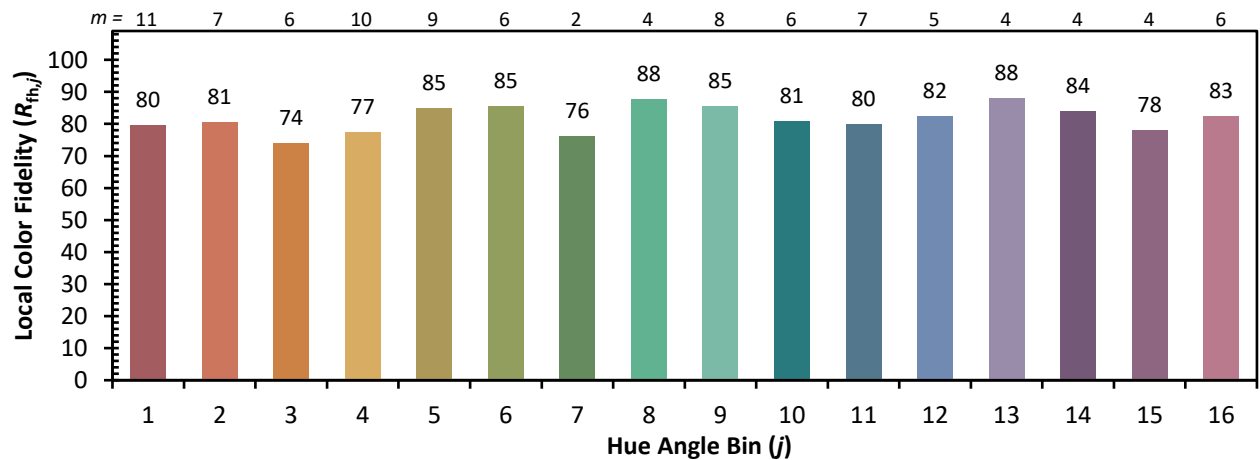
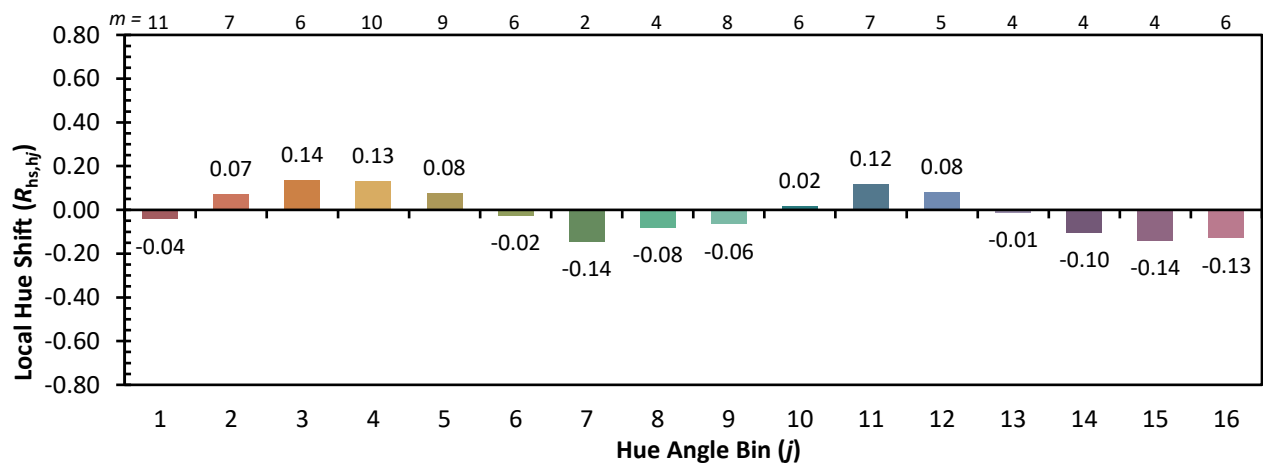
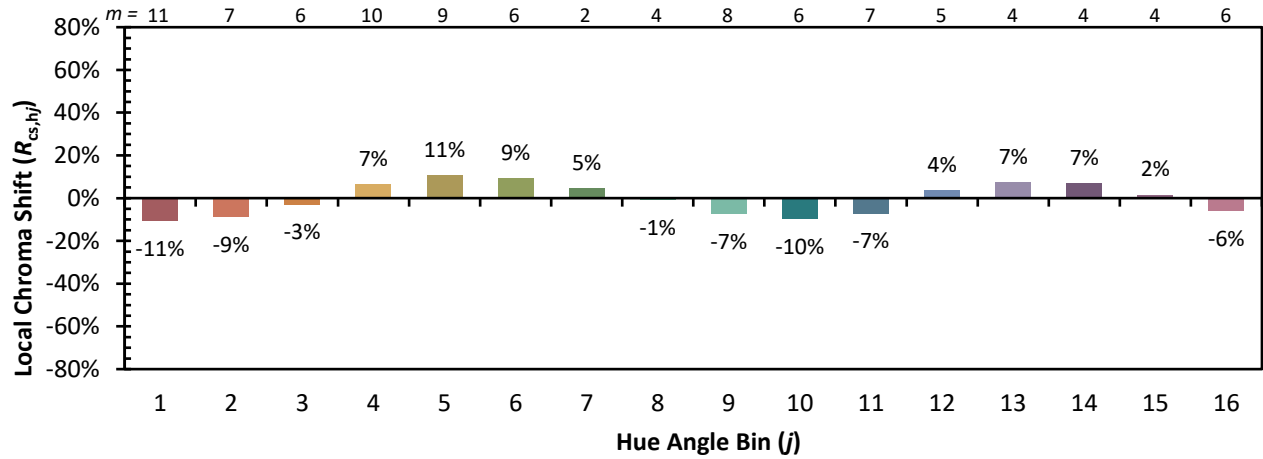


Individual Sample Fidelity Index ($R_{f,i}$)

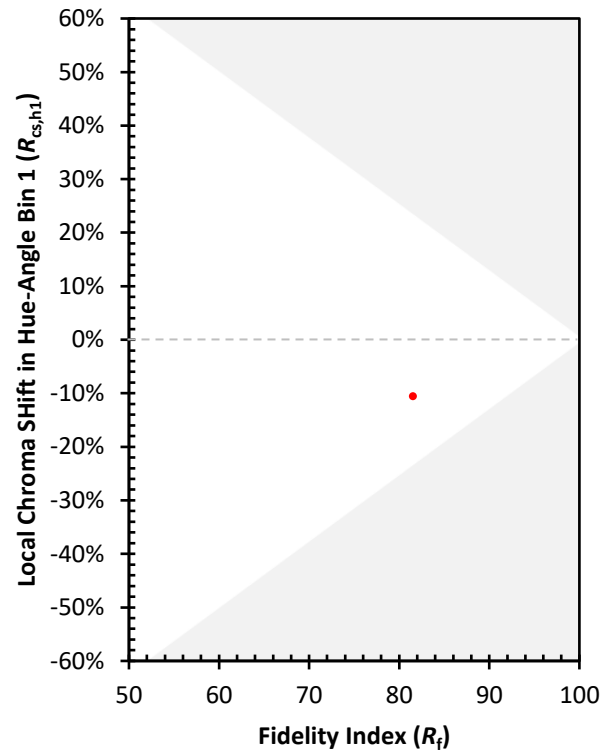
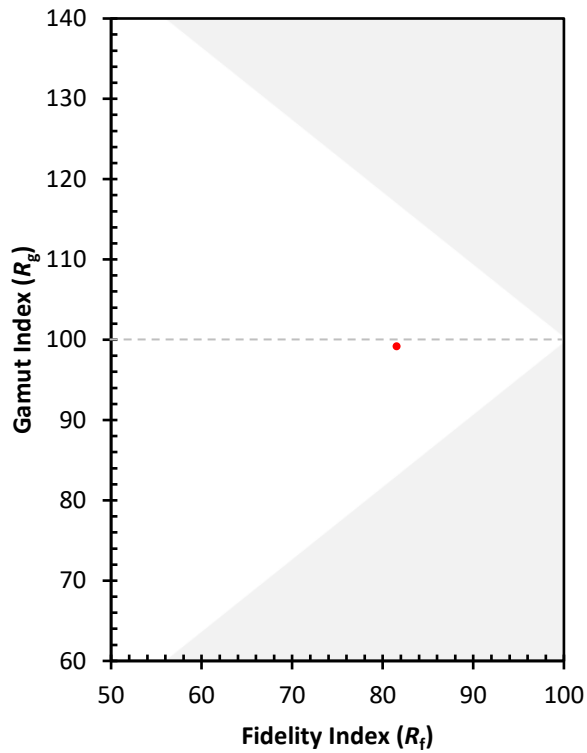
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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