

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: P324659

Luminaire Tested: **GLEON-SA5D-830-U-SLR-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324659
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-SA5D-830-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 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: 22844 lumens
Efficiency: N/A
Efficacy: 71.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G4

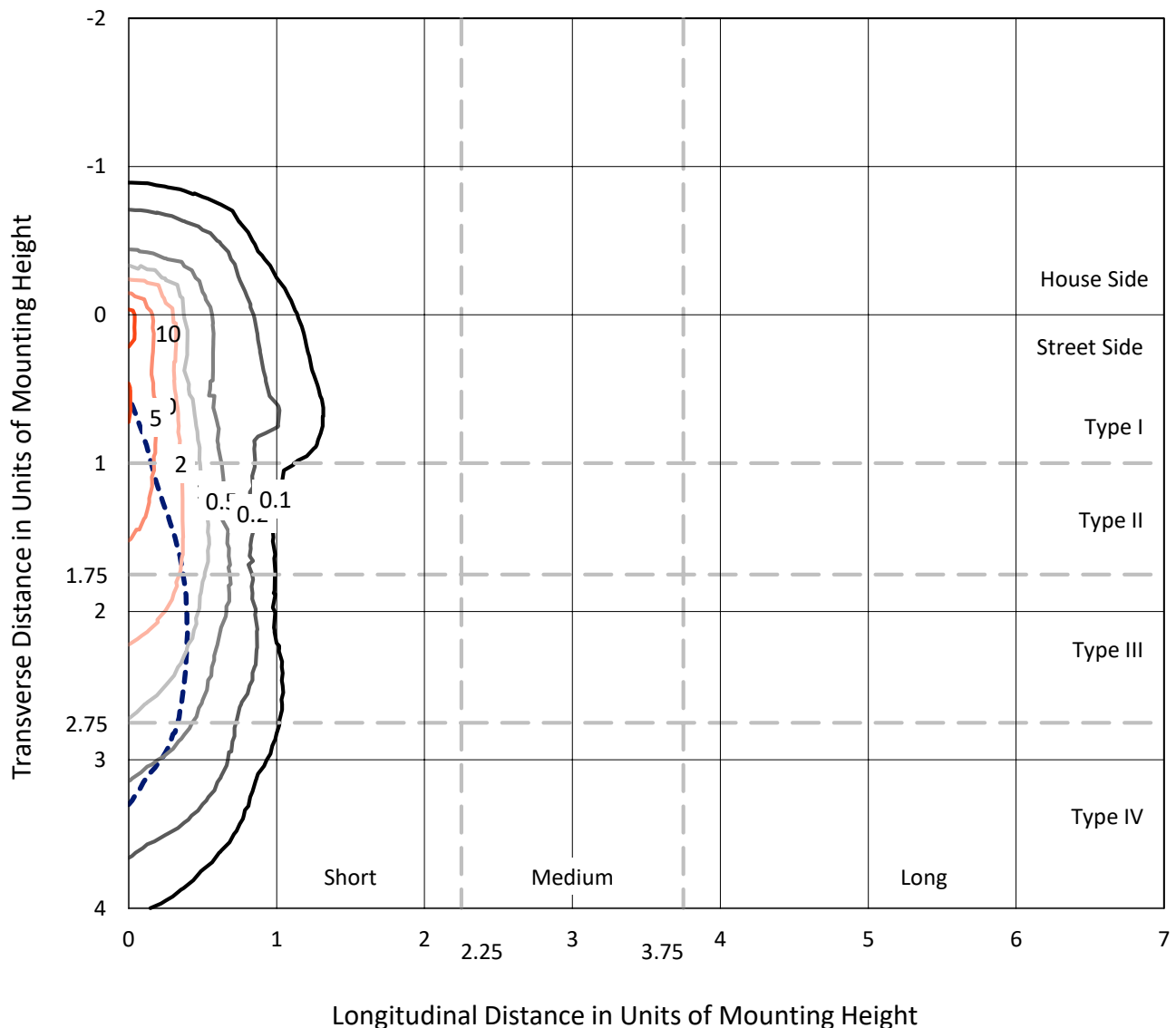
Input Watts (W): 320
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

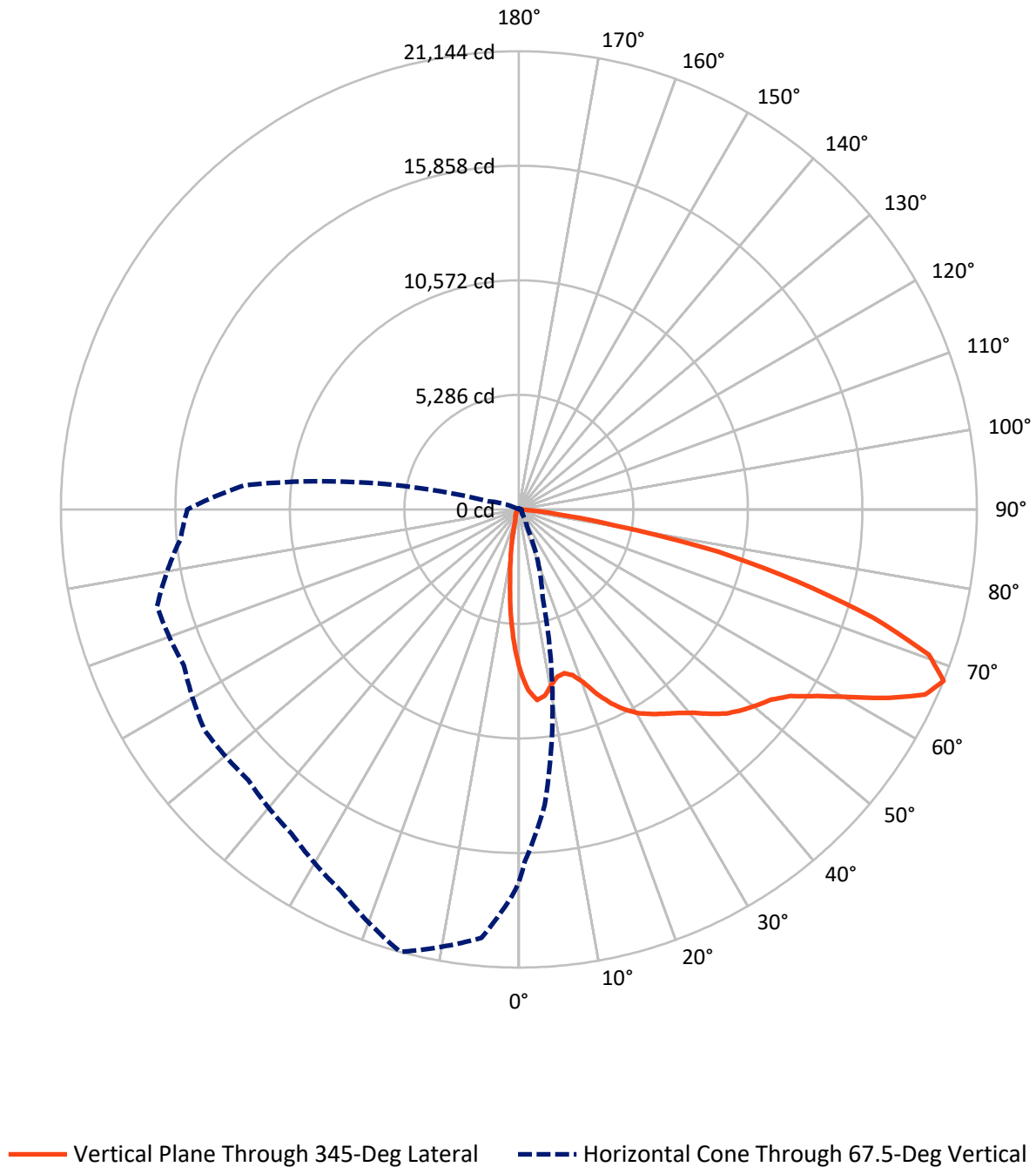
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.9 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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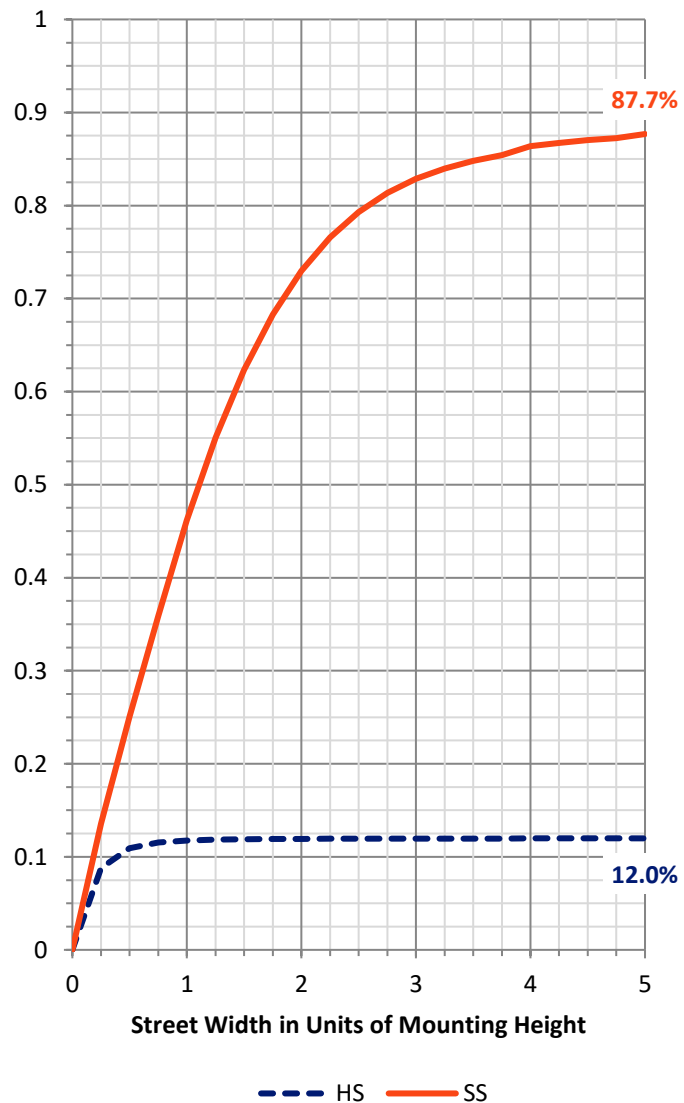
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2764.9	0.0	2764.9
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	20079.1	0.0	20079.1
	% Fixture	87.9	0.0	87.9
Total	Lumens	22844.0	0.0	22844.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	571.1	2.5
10°-20°	1136.8	5.0
20°-30°	1614.3	7.1
30°-40°	2384.4	10.4
40°-50°	3438.8	15.1
50°-60°	4827.3	21.1
60°-70°	5627.2	24.6
70°-80°	2876.8	12.6
80°-90°	367.4	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°	22844.0	100.0
0°-180°	22844.0	100.0

Coefficient of Utilization



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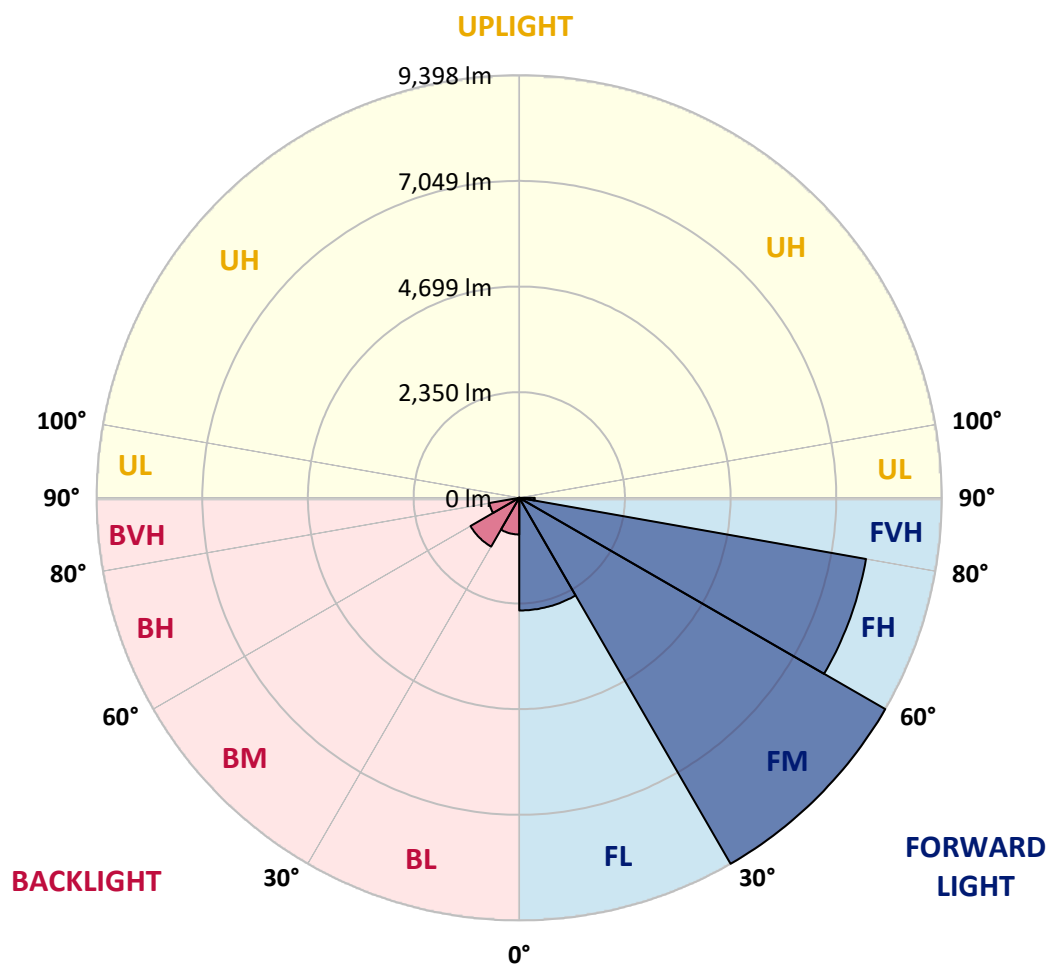
CATALOG NUMBER: GLEON-SA5D-830-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2505.5	11.0			
FM	(30°-60°)	9398.4	41.1			
FH	(60°-80°)	7830.1	34.3			G4/12000
FVH	(80°-90°)	345.1	1.5			G3/500
BL	(0°-30°)	816.6	3.6	B2/1000		
BM	(30°-60°)	1252.0	5.5	B2/2500		
BH	(60°-80°)	673.9	2.9	B2/1000		G2/1000
BVH	(80°-90°)	22.3	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4
2.5°	8148.1	8085.3	8016.1	7789.9	7579.9	7339.7	7143.8	7007.4	6836.4	6614.6	6558.3
5°	8089.6	8022.5	7805.0	7301.8	6861.3	6432.8	6019.3	5776.9	5476.1	5170.9	5095.1
7.5°	7502.0	7431.7	7117.8	6428.4	5835.4	5216.3	4679.5	4347.3	4007.5	3728.3	3580.0
10°	6890.5	6813.7	6460.9	5624.3	4893.8	4334.3	3940.4	3623.3	3301.9	3003.2	2765.1
12.5°	6469.6	6368.9	5985.8	5037.8	4401.4	4021.6	3653.6	3273.7	2838.7	2518.3	2256.4
15°	6293.1	6178.4	5773.7	4811.6	4227.2	3781.3	3301.9	2835.4	2325.7	1958.8	1718.6
17.5°	6429.5	6280.2	5846.2	4796.4	4008.6	3401.4	2795.4	2247.8	1694.8	1323.6	1152.6
20°	6892.7	6696.8	6146.0	4792.1	3743.4	2950.1	2181.8	1562.7	1116.9	898.2	808.4
22.5°	7622.1	7363.5	6576.7	4826.7	3469.6	2476.1	1575.7	1061.7	838.7	725.1	672.1
25°	8503.1	8203.3	7196.8	4949.0	3229.4	2015.1	1145.0	838.7	707.8	624.4	580.1
27.5°	9340.7	9097.2	7980.3	5125.4	3043.2	1642.8	929.6	711.0	605.0	549.8	514.1
30°	10177.3	9871.0	8784.4	5335.4	2819.2	1390.7	817.1	648.3	542.2	483.8	461.0
32.5°	10785.5	10531.1	9414.3	5486.9	2580.0	1226.2	730.5	593.1	506.5	447.0	413.4
35°	11500.8	11213.0	9954.3	5520.4	2426.4	1122.3	656.9	533.5	439.4	386.4	350.6
37.5°	12273.5	11915.3	10577.7	5446.8	2306.2	1071.4	601.7	506.5	410.2	356.1	318.2
40°	13128.5	12723.7	11176.2	5340.8	2188.3	1054.1	559.5	485.9	387.4	332.2	293.3
42.5°	14028.9	13551.6	11694.5	5229.3	2113.6	994.6	555.2	465.4	370.1	310.6	271.6
45°	14785.4	14301.6	12227.0	5192.5	2060.6	929.6	573.6	451.3	358.2	293.3	255.4
47.5°	15388.2	14930.4	12772.4	5274.8	2030.3	870.1	522.7	469.7	351.7	278.1	241.3
50°	16107.9	15589.5	13540.8	5520.4	1985.9	810.6	472.9	537.9	351.7	268.4	229.4
52.5°	17010.4	16497.5	14397.9	5901.4	1897.1	728.3	425.3	538.9	355.0	255.4	214.3
55°	18145.7	17773.4	15621.9	6319.1	1755.4	607.1	368.0	463.2	342.0	231.6	200.2
57.5°	19234.4	18930.3	16737.7	6604.8	1566.0	474.0	320.3	373.4	312.8	203.5	178.6
59°	19532.0	19199.8	17146.8	6617.8	1424.2	413.4	296.5	308.4	306.3	190.5	165.6
60°	19532.0	19179.2	17264.8	6548.6	1321.4	379.9	281.4	274.9	319.3	181.8	158.0
62.5°	19178.1	18682.5	16881.7	6079.9	1077.9	323.6	245.7	227.3	286.8	163.4	139.6
65°	18442.2	17720.4	15576.5	5232.6	961.0	296.5	212.1	186.1	199.1	143.9	122.3
67.5°	17215.0	16236.6	13694.5	4227.2	914.5	289.0	182.9	158.0	150.4	123.4	107.1
70°	15053.8	13968.3	11409.9	3323.5	874.4	285.7	153.7	133.1	121.2	103.9	90.9
72.5°	10956.5	9824.5	8100.5	2598.4	850.6	292.2	123.4	111.5	99.6	81.2	70.3
75°	6267.2	5525.8	4552.9	1716.4	725.1	279.2	95.2	93.1	71.4	58.4	48.7
77.5°	3238.0	3139.5	2728.3	659.1	347.4	122.3	62.8	54.1	42.2	35.7	29.2
80°	1397.2	1382.0	1195.9	190.5	92.0	68.2	35.7	22.7	19.5	15.2	11.9
82.5°	482.7	482.7	425.3	63.9	41.1	33.5	4.3	0.0	0.0	0.0	0.0
85°	97.4	109.3	76.8	0.0	14.1	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°	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4
2.5°	6490.1	6359.2	6350.5	6268.3	6165.4	6118.9	6091.9	6139.5	6197.9	6204.4	6292.1
5°	5037.8	4900.3	4957.7	4811.6	4840.8	4811.6	4764.0	4772.6	4798.6	4717.4	4818.1
7.5°	3537.8	3433.9	3499.9	3461.0	3512.9	3533.5	3504.2	3461.0	3333.3	3318.1	3405.8
10°	2666.6	2548.6	2478.3	2404.7	2420.9	2454.5	2443.7	2412.3	2331.1	2335.4	2419.9
12.5°	2142.8	2010.8	1871.2	1690.4	1646.1	1671.0	1646.1	1627.7	1549.7	1556.2	1630.9
15°	1625.5	1517.3	1371.2	1226.2	1147.2	1154.7	1085.5	1036.8	988.1	929.6	975.1
17.5°	1097.4	1031.4	988.1	944.8	850.6	829.0	741.3	647.2	610.4	583.3	602.8
20°	777.0	741.3	724.0	721.8	667.7	640.7	555.2	496.7	478.3	472.9	484.8
22.5°	649.3	623.4	598.5	584.4	557.3	526.0	461.0	431.8	418.8	412.3	421.0
25°	564.9	545.4	519.5	495.7	484.8	451.3	404.8	383.1	374.5	368.0	372.3
27.5°	502.2	484.8	454.5	439.4	430.7	401.5	361.5	344.1	336.6	334.4	333.3
30°	452.4	436.1	408.0	390.7	375.5	349.6	325.8	308.4	300.9	298.7	296.5
32.5°	402.6	389.6	371.2	353.9	337.7	313.8	293.3	279.2	267.3	265.1	264.1
35°	339.8	326.8	317.1	316.0	300.9	278.1	263.0	244.6	234.8	231.6	232.7
37.5°	301.9	284.6	263.0	270.6	266.2	250.0	229.4	211.0	201.3	199.1	199.1
40°	278.1	259.7	234.8	221.9	234.8	231.6	199.1	180.7	171.0	169.9	167.7
42.5°	255.4	237.0	208.9	187.2	193.7	203.5	172.1	154.8	145.0	142.9	139.6
45°	239.2	219.7	188.3	163.4	150.4	171.0	147.2	125.5	120.1	115.8	113.6
47.5°	224.0	205.6	169.9	141.8	120.1	123.4	118.0	102.8	96.3	92.0	90.9
50°	211.0	191.6	153.7	121.2	99.6	90.9	95.2	81.2	75.8	71.4	69.3
52.5°	195.9	177.5	136.4	105.0	83.3	71.4	72.5	63.9	58.4	55.2	54.1
55°	184.0	165.6	122.3	92.0	73.6	58.4	51.9	49.8	46.5	44.4	43.3
57.5°	167.7	150.4	108.2	77.9	62.8	47.6	40.0	40.0	39.0	36.8	35.7
59°	158.0	142.9	99.6	70.3	57.4	41.1	35.7	36.8	35.7	33.5	32.5
60°	150.4	136.4	93.1	64.9	54.1	37.9	32.5	34.6	33.5	31.4	30.3
62.5°	133.1	123.4	80.1	54.1	47.6	30.3	27.1	29.2	29.2	28.1	27.1
65°	116.9	106.1	68.2	45.5	44.4	26.0	21.6	26.0	27.1	24.9	22.7
67.5°	101.7	90.9	59.5	36.8	41.1	20.6	16.2	21.6	29.2	22.7	20.6
70°	86.6	75.8	46.5	29.2	43.3	14.1	13.0	19.5	34.6	24.9	19.5
72.5°	67.1	58.4	32.5	21.6	46.5	9.7	9.7	16.2	39.0	27.1	18.4
75°	46.5	37.9	19.5	13.0	37.9	6.5	6.5	15.2	36.8	24.9	17.3
77.5°	27.1	20.6	6.5	1.1	19.5	0.0	1.1	10.8	26.0	15.2	7.6
80°	9.7	4.3	0.0	0.0	11.9	0.0	0.0	0.0	2.2	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°	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4
2.5°	6314.8	6460.9	6591.8	6789.9	7024.7	7295.3	7528.0	7778.0	8012.8	8110.2	8177.3
5°	4838.6	5019.4	5230.4	5521.5	5909.0	6386.2	6833.2	7338.6	7881.9	8153.5	8408.9
7.5°	3420.9	3604.9	3866.8	4176.3	4644.9	5213.1	5797.5	6495.5	7231.4	7661.1	8084.2
10°	2459.9	2686.1	2930.7	3353.8	3830.0	4368.9	4970.7	5749.9	6570.2	7046.4	7556.1
12.5°	1674.2	1931.8	2301.9	2775.9	3335.4	3863.5	4386.3	5129.8	6082.1	6554.0	7100.5
15°	1004.3	1147.2	1538.9	2087.6	2773.7	3431.7	4004.2	4749.9	5765.0	6342.9	6911.1
17.5°	619.0	685.0	898.2	1348.5	2069.2	2901.4	3686.1	4621.1	5810.5	6513.9	7122.1
20°	493.5	519.5	587.6	796.5	1371.2	2317.0	3327.8	4595.1	6181.7	7047.5	7700.0
22.5°	428.6	453.5	498.9	579.0	862.5	1734.8	2988.0	4618.9	6714.1	7847.2	8609.1
25°	377.7	399.3	442.6	508.6	632.0	1221.8	2624.4	4725.0	7407.8	8839.6	9649.1
27.5°	337.7	356.1	396.1	456.7	542.2	852.8	2212.1	4853.8	8230.3	9854.8	10653.4
30°	300.9	317.1	352.8	409.1	470.8	655.8	1759.7	4941.4	9053.9	10653.4	11371.0
32.5°	269.5	281.4	313.8	361.5	409.1	522.7	1337.6	4927.4	9665.4	11317.9	11887.2
35°	237.0	248.9	277.1	318.2	356.1	431.8	1051.9	4664.4	10197.8	12007.3	12478.1
37.5°	201.3	216.4	243.5	280.3	306.3	379.9	850.6	4347.3	10737.9	12795.2	13137.1
40°	171.0	186.1	210.0	250.0	266.2	360.4	653.7	3960.9	11345.0	13676.1	13860.1
42.5°	141.8	155.8	180.7	215.4	251.1	310.6	483.8	3519.4	11928.3	14429.3	14519.2
45°	114.7	128.8	154.8	189.4	268.4	257.6	374.5	3046.5	12399.1	15055.9	15085.2
47.5°	90.9	103.9	130.9	178.6	250.0	205.6	267.3	2675.3	12794.1	15545.1	15468.3
50°	70.3	81.2	109.3	204.5	218.6	169.9	202.4	2551.9	13148.0	15848.1	15649.0
52.5°	55.2	64.9	89.8	191.6	169.9	140.7	169.9	2667.7	13632.8	16099.2	15750.7
55°	44.4	54.1	70.3	109.3	115.8	119.0	145.0	2775.9	14469.4	16687.9	16351.4
57.5°	36.8	46.5	57.4	76.8	87.7	100.6	128.8	2787.8	15455.3	17666.3	17348.1
59°	33.5	42.2	51.9	68.2	76.8	92.0	121.2	2722.9	15802.7	18022.3	17863.2
60°	31.4	40.0	48.7	62.8	71.4	86.6	116.9	2661.2	15817.8	18009.3	18082.9
62.5°	27.1	35.7	43.3	53.0	60.6	73.6	105.0	2432.8	15177.1	17419.5	17950.9
65°	23.8	31.4	39.0	45.5	51.9	66.0	95.2	2016.2	14083.0	16468.2	17047.2
67.5°	21.6	27.1	35.7	40.0	46.5	58.4	84.4	1437.2	12716.2	15304.8	15680.4
70°	19.5	26.0	32.5	36.8	42.2	50.9	72.5	825.7	10737.9	13601.4	13868.7
72.5°	18.4	24.9	29.2	34.6	37.9	45.5	66.0	388.5	7862.4	10895.9	11593.9
75°	16.2	22.7	27.1	32.5	35.7	41.1	56.3	186.1	5229.3	7885.1	8678.4
77.5°	9.7	18.4	24.9	29.2	31.4	35.7	46.5	107.1	3337.6	5457.7	6428.4
80°	0.0	6.5	18.4	24.9	27.1	30.3	35.7	84.4	1785.7	3117.9	3742.3
82.5°	0.0	0.0	13.0	19.5	18.4	20.6	27.1	53.0	805.2	2037.8	2296.5
85°	0.0	0.0	4.3	15.2	13.0	9.7	18.4	18.4	176.4	1031.4	1286.8
87.5°	0.0	0.0	0.0	1.1	6.5	4.3	7.6	2.2	1.1	76.8	311.7
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-SA5D-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4	7441.4
2.5°	8412.1	8492.2	8627.5	8691.4	8660.0	8526.9	8367.8	8205.4	8110.2	8148.1
5°	8929.5	9341.8	9579.9	9658.9	9526.8	9228.1	8837.5	8322.3	8139.4	8089.6
7.5°	8929.5	9705.4	10196.7	10283.3	9989.0	9403.5	8670.8	7866.7	7599.4	7502.0
10°	8615.6	9671.9	10356.9	10494.4	10083.1	9207.6	8226.0	7308.3	6991.2	6890.5
12.5°	8261.7	9399.1	10121.0	10310.4	9972.7	9012.8	7917.6	6930.6	6557.2	6469.6
15°	8044.2	9063.6	9661.0	9798.5	9655.6	8899.1	7844.0	6816.9	6377.6	6293.1
17.5°	8122.1	8803.9	9019.3	9099.4	9195.7	8859.1	8044.2	7065.9	6509.6	6429.5
20°	8415.4	8530.1	8418.6	8519.3	8779.0	8898.1	8521.5	7667.6	6999.8	6892.7
22.5°	8913.2	8388.3	8075.6	8115.6	8431.6	9026.9	9250.9	8526.9	7756.3	7622.1
25°	9493.3	8503.1	7885.1	7849.4	8174.1	9196.8	9917.5	9461.9	8651.3	8503.1
27.5°	10222.7	8760.6	7846.1	7810.4	8084.2	9355.8	10471.6	10386.1	9593.9	9340.7
30°	10785.5	9013.9	7961.9	7879.7	8174.1	9466.2	10916.4	11170.7	10345.0	10177.3
32.5°	11189.1	9312.6	8150.2	8031.2	8427.3	9656.7	11259.5	11889.3	11039.8	10785.5
35°	11496.5	9637.2	8454.4	8258.5	8775.8	9945.7	11580.9	12654.5	11779.0	11500.8
37.5°	11784.4	10092.8	8929.5	8695.7	9322.3	10411.0	11920.7	13522.4	12605.8	12273.5
40°	12185.9	10609.1	9662.1	9454.3	10241.1	11045.2	12345.0	14427.2	13546.2	13128.5
42.5°	12587.4	11163.2	10412.1	10468.4	11387.2	11815.8	12892.6	15383.9	14474.8	14028.9
45°	12954.3	11734.6	11480.3	11740.0	12451.0	12661.0	13436.9	15936.9	15216.1	14785.4
47.5°	13281.1	12448.9	12541.9	13233.5	13660.9	13426.1	13843.8	16414.1	15768.0	15388.2
50°	13660.9	13373.1	13941.2	14919.6	15053.8	14118.7	14214.0	16979.1	16413.0	16107.9
52.5°	14076.5	14347.1	15491.0	16353.5	16310.2	14870.9	14586.3	17612.2	17297.2	17010.4
55°	14548.4	15133.9	16855.7	17695.5	17658.7	15710.7	15203.1	18394.6	18405.4	18145.7
57.5°	15248.6	15811.3	17782.1	18781.0	18842.6	16680.4	16248.6	19271.2	19407.6	19234.4
59°	15750.7	16250.7	18148.9	19234.4	19485.5	17430.3	17012.6	19779.9	19690.0	19532.0
60°	16123.0	16529.9	18330.8	19471.4	19858.9	17939.0	17576.4	20078.6	19723.6	19532.0
62.5°	17044.0	17138.1	18658.7	19739.8	20288.5	19068.8	19163.0	20587.2	19490.9	19178.1
65°	17473.6	17522.3	18654.3	19259.3	19872.9	19948.7	20602.3	20602.3	18922.7	18442.2
67.5°	17294.0	17059.1	17729.0	17666.3	18278.8	19426.0	21143.5	19847.0	17836.2	17215.0
70°	15833.0	14929.3	14631.7	14658.8	15127.4	16896.8	20072.1	17624.1	15779.9	15053.8
72.5°	13173.9	11006.2	10271.4	11110.1	11232.4	12985.6	17105.7	13272.4	11637.2	10956.5
75°	10596.1	7758.5	6563.7	7449.0	7656.8	9503.0	13232.4	8266.0	6797.5	6267.2
77.5°	7612.4	5569.1	4709.9	4648.2	4916.6	6026.9	9389.4	4160.1	3469.6	3238.0
80°	4324.6	3665.5	3946.9	3723.9	3859.2	3768.3	4460.9	1824.6	1494.6	1397.2
82.5°	2610.3	2166.6	2346.3	1953.4	2471.8	2152.5	1718.6	584.4	507.6	482.7
85°	1698.0	1184.0	616.9	413.4	851.7	1375.5	384.2	159.1	122.3	97.4
87.5°	585.5	301.9	30.3	13.0	90.9	256.5	14.1	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.

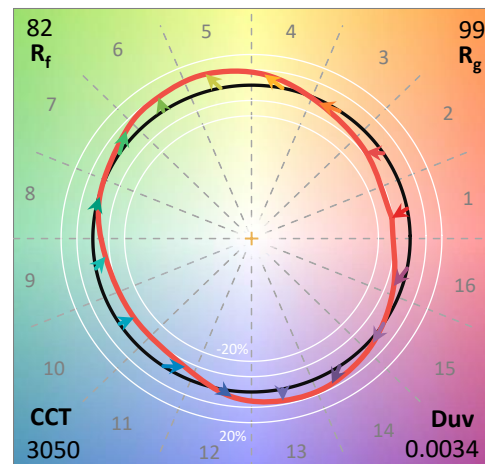
Test Information

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
 Rf: 81.5
 Rg: 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

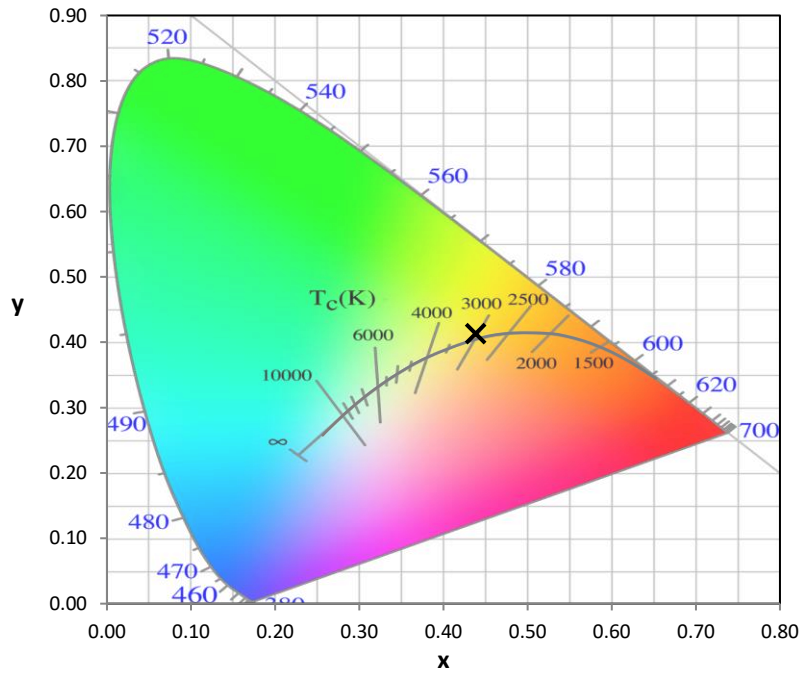
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

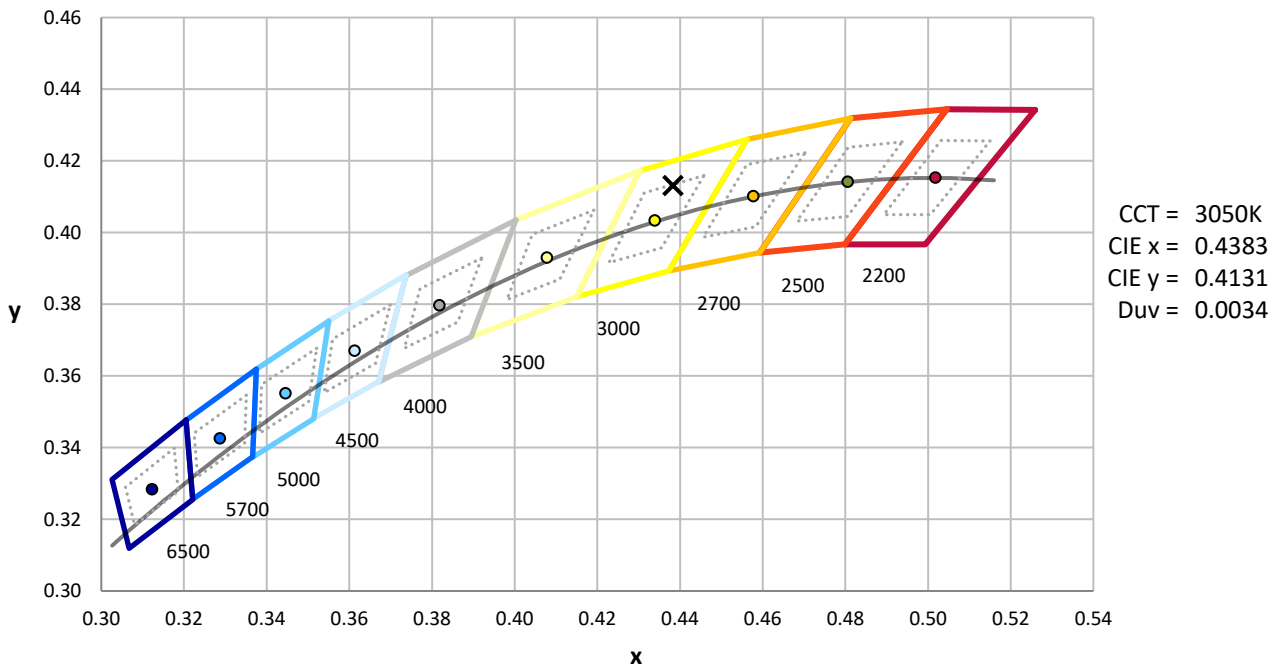
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



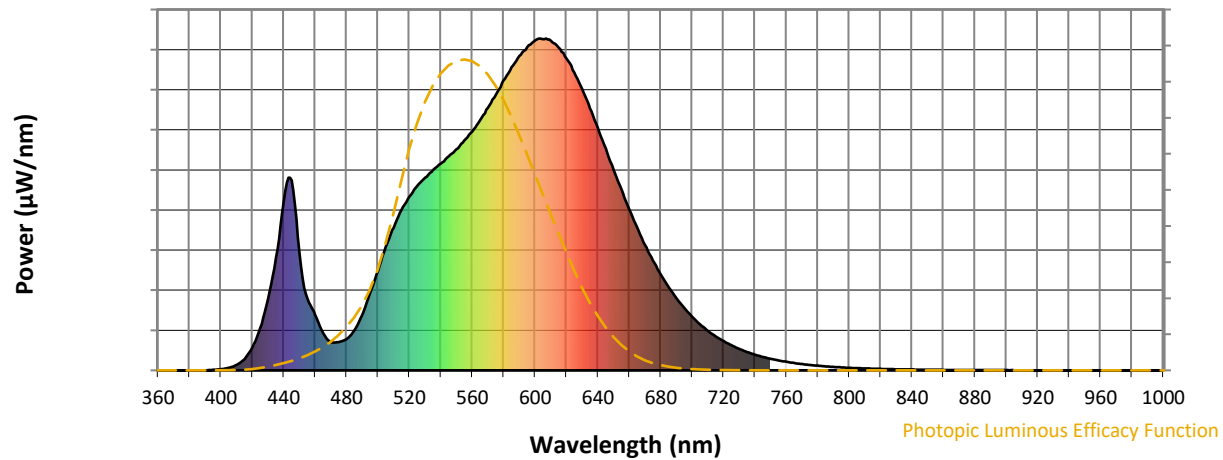
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

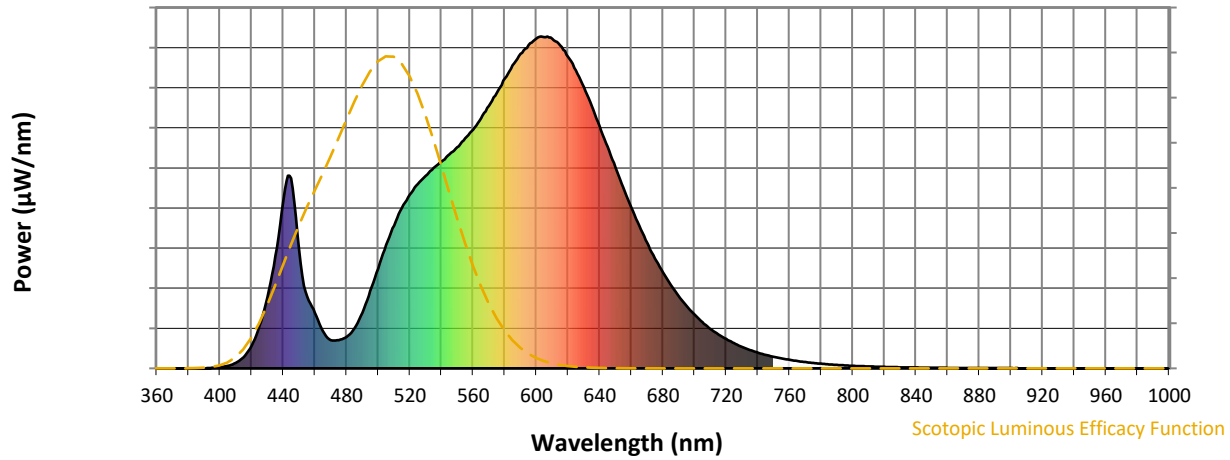


Photopic Lumens: NR

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



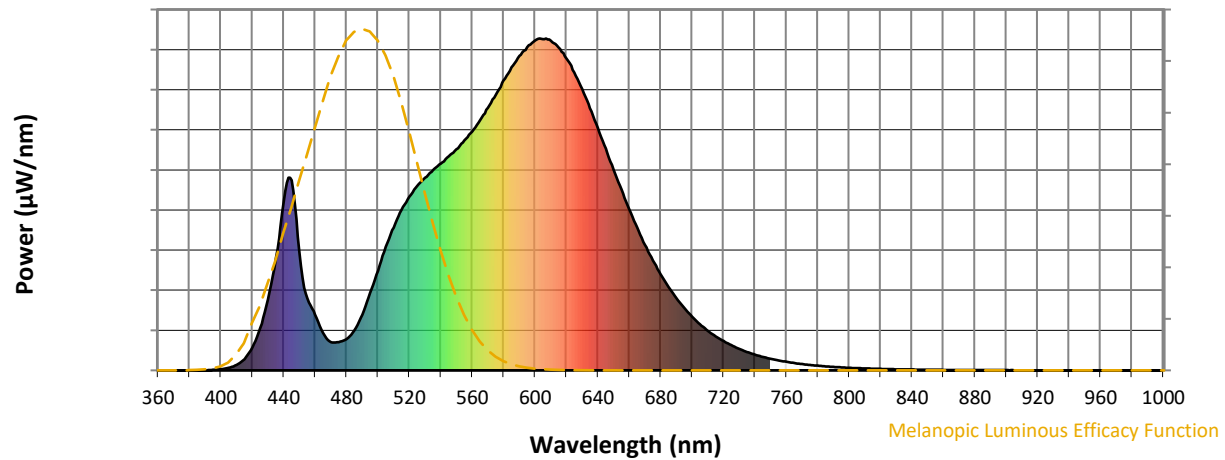
Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

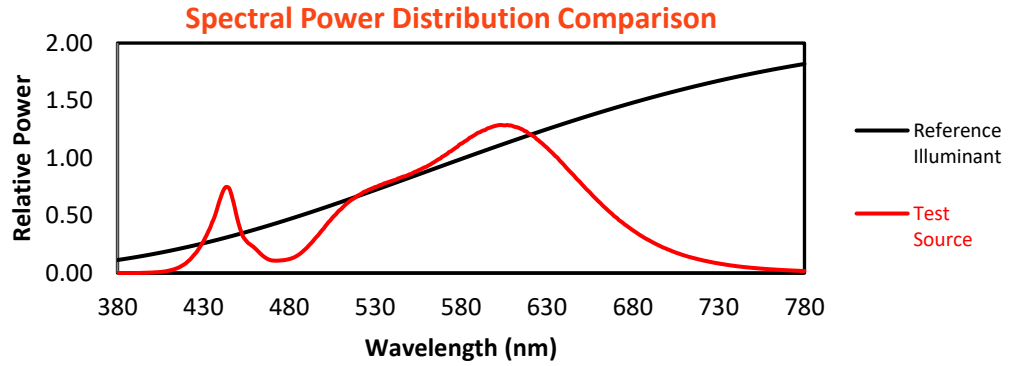
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168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

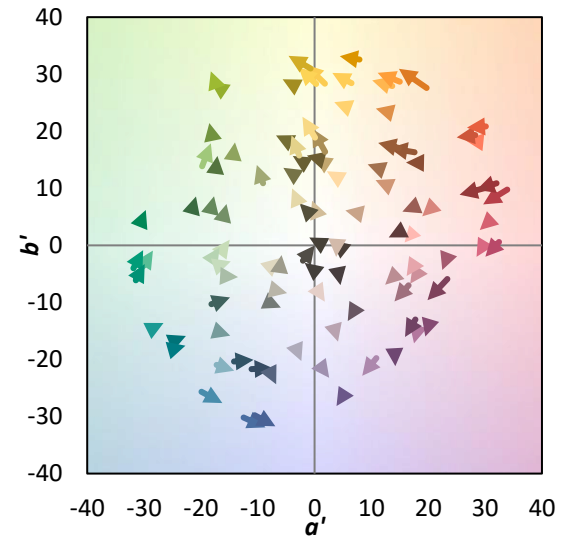
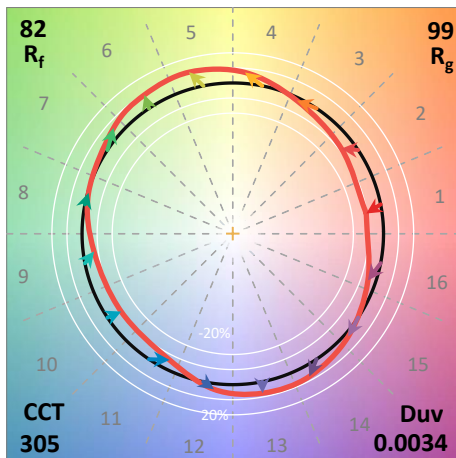
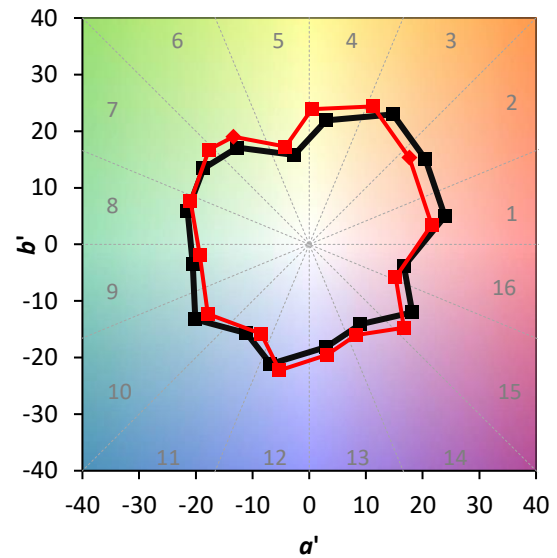
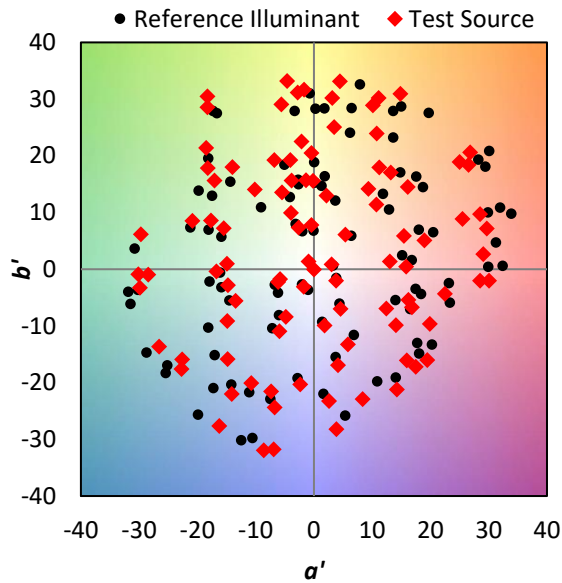
TM-30-18

Summary

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

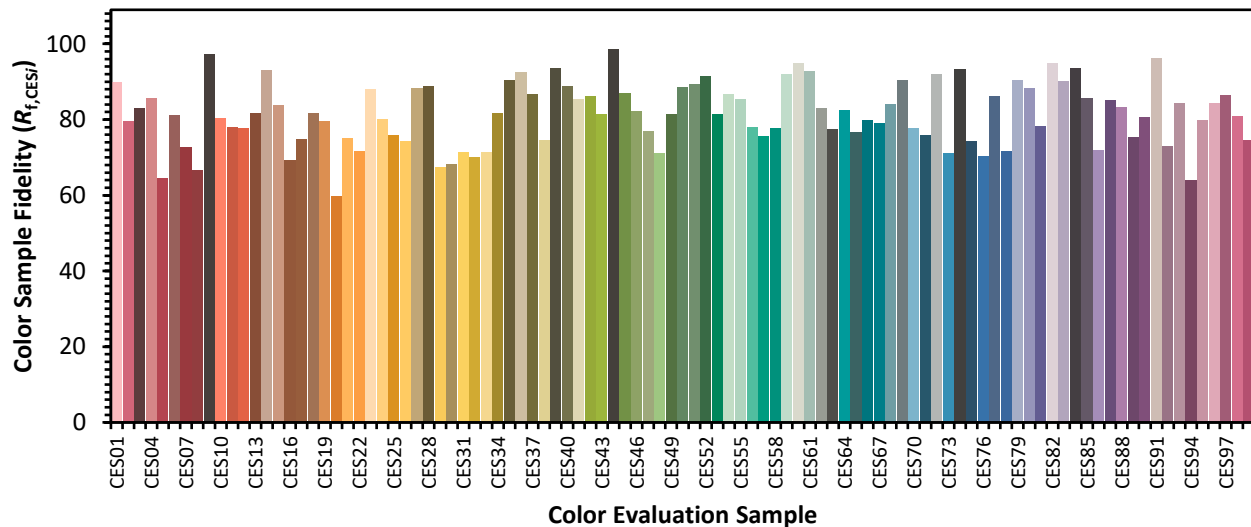


Color Vector Graphics

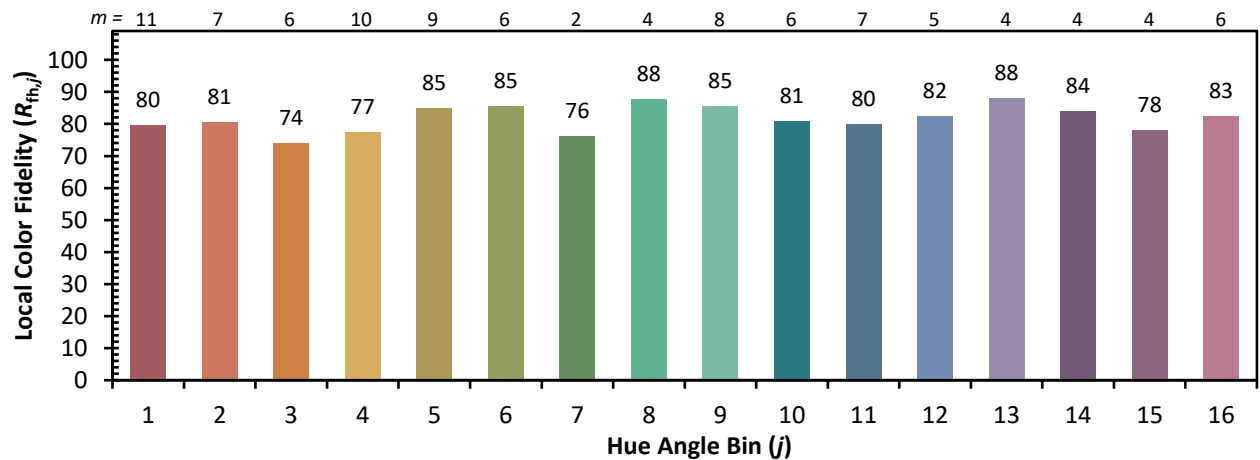
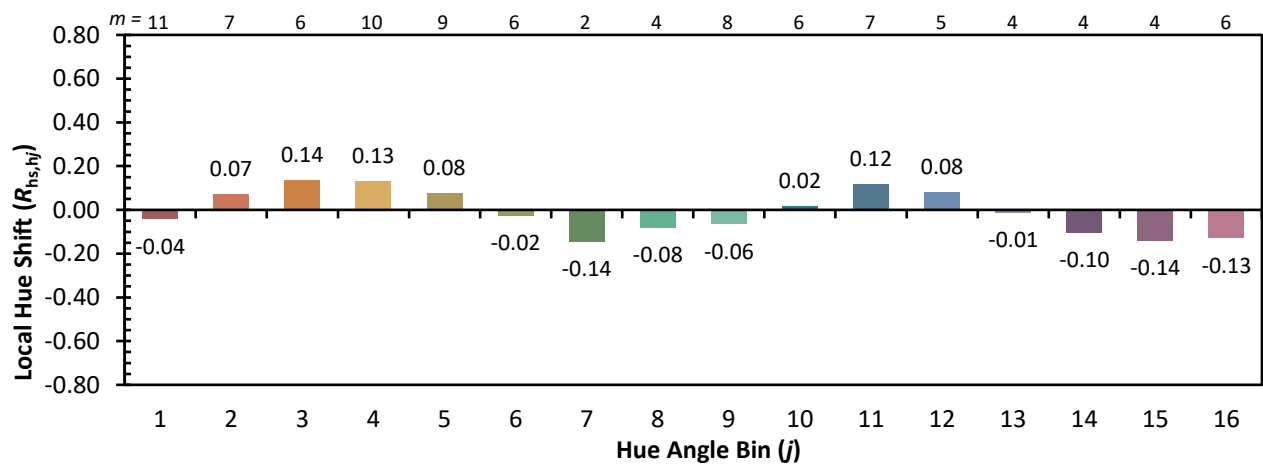
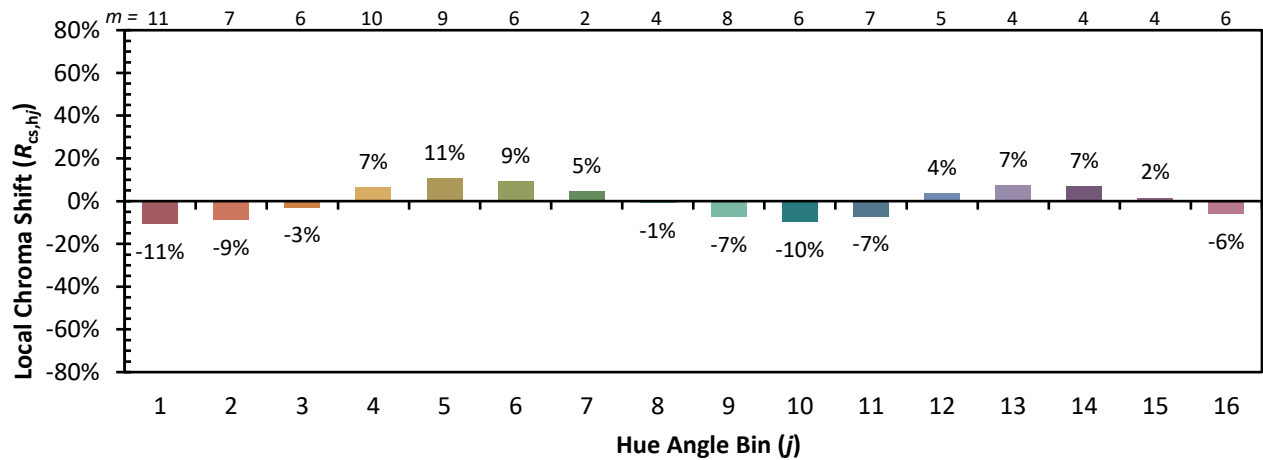


Individual Sample Fidelity Index ($R_{f,i}$)

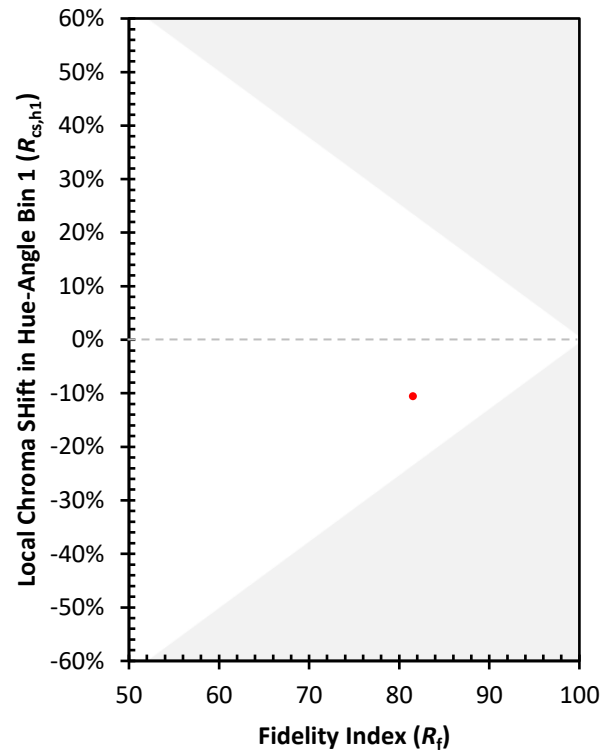
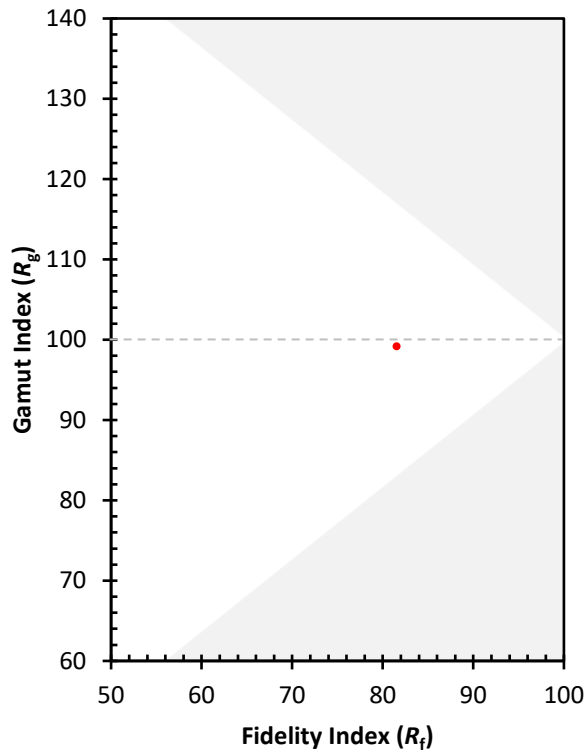
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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