

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: P324311

Luminaire Tested: **GLEON-SA7A-830-U-SLL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324311
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-SA7A-830-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 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: 19419 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

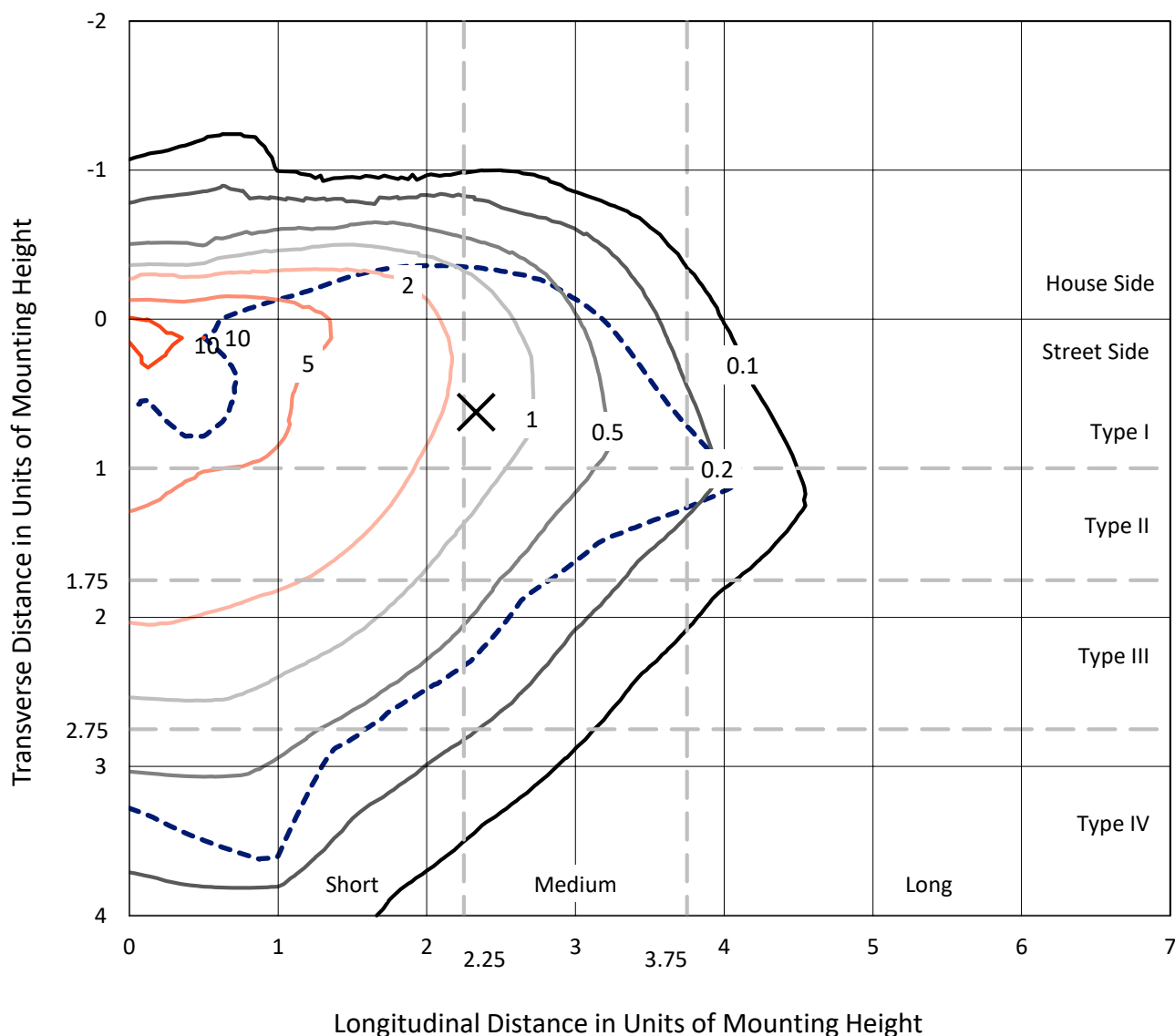
Input Watts (W): 226
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

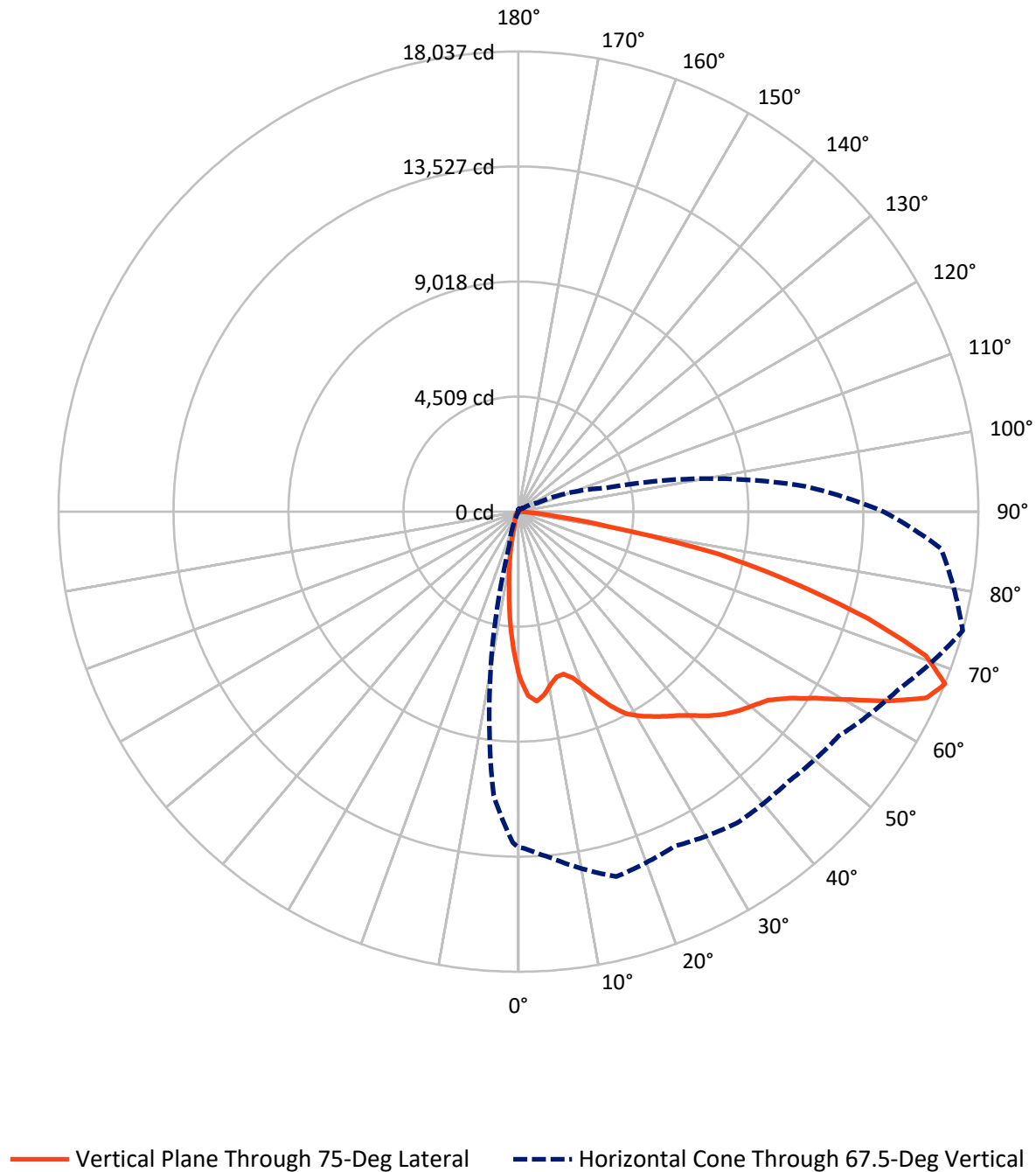
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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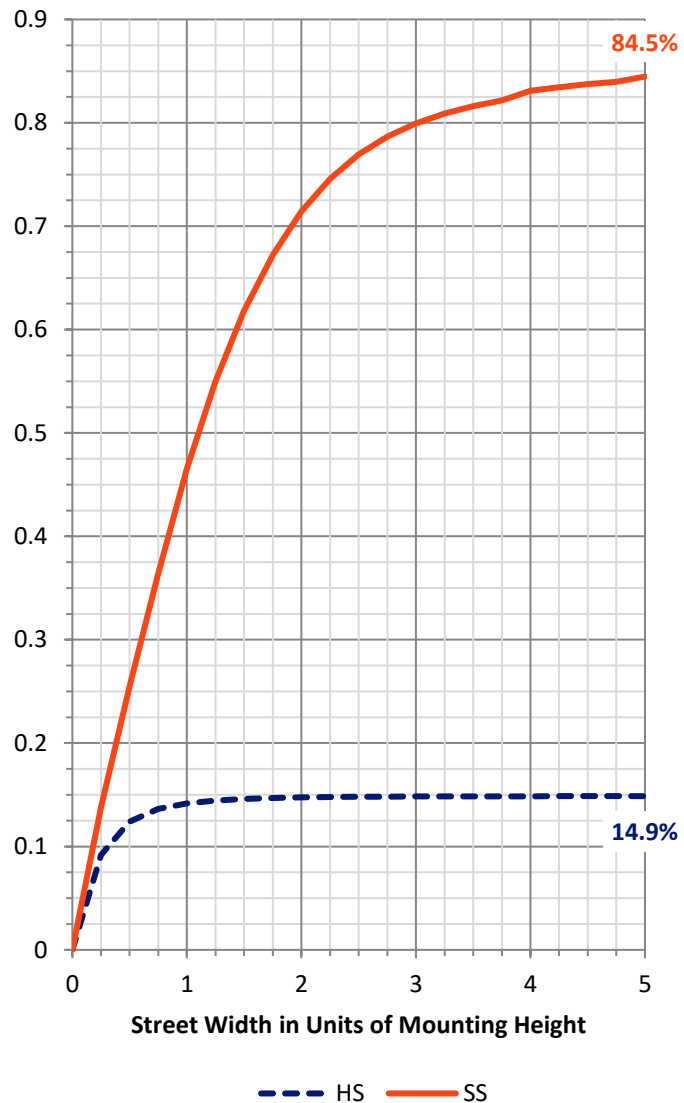
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2914.0	0.0	2914.0
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	16505.0	0.0	16505.0
	% Fixture	85.0	0.0	85.0
Total	Lumens	19419.0	0.0	19419.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	494.2	2.5
10°-20°	973.0	5.0
20°-30°	1376.6	7.1
30°-40°	2023.9	10.4
40°-50°	2909.1	15.0
50°-60°	4095.2	21.1
60°-70°	4782.8	24.6
70°-80°	2440.0	12.6
80°-90°	324.1	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°	19419.0	100.0
0°-180°	19419.0	100.0

Coefficient of Utilization



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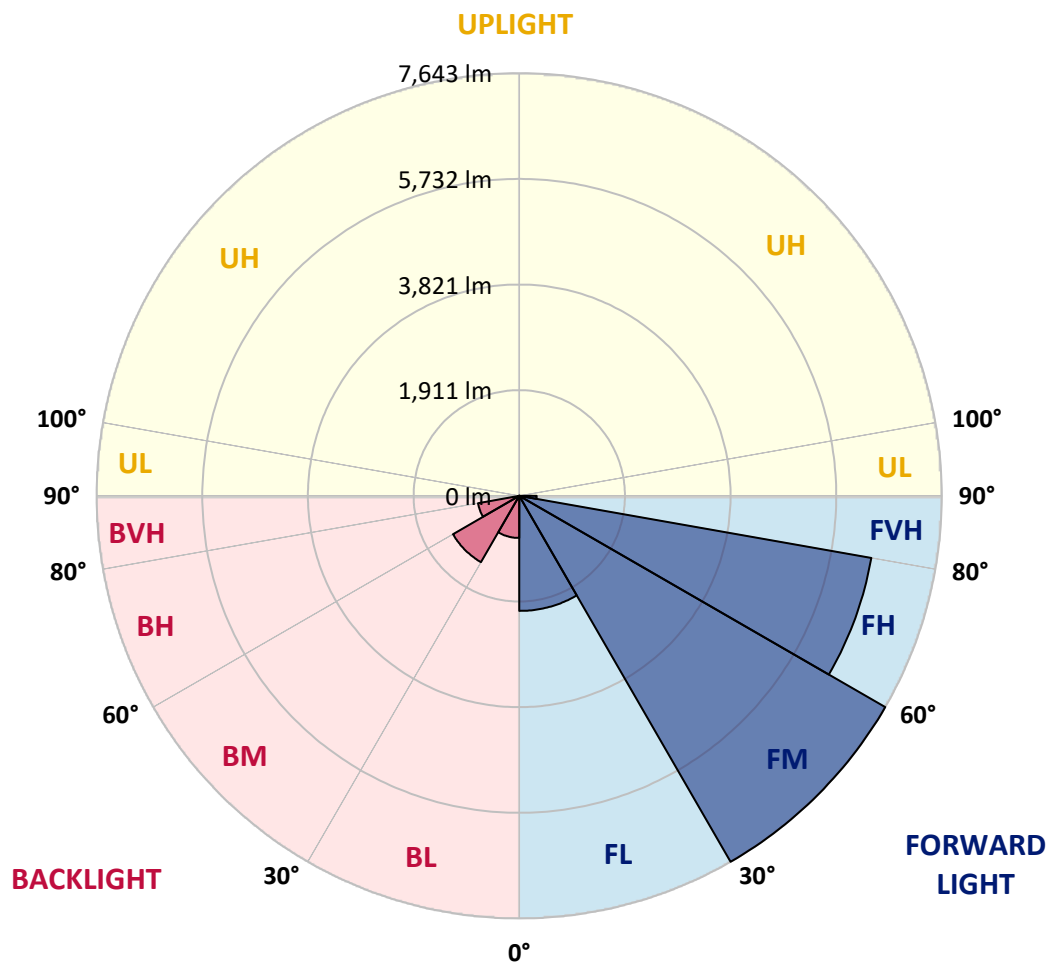
CATALOG NUMBER: GLEON-SA7A-830-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2081.7	10.7			
FM	(30°-60°)	7643.0	39.4			
FH	(60°-80°)	6466.0	33.3			G3/7500
FVH	(80°-90°)	314.3	1.6			G3/500
BL	(0°-30°)	762.1	3.9	B2/1000		
BM	(30°-60°)	1385.2	7.1	B2/2500		
BH	(60°-80°)	756.9	3.9	B2/1000		G2/1000
BVH	(80°-90°)	9.8	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-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7
2.5°	7062.1	7073.1	7130.2	7262.6	7407.0	7418.1	7515.6	7415.3	7381.3	7219.4	7052.0
5°	7115.4	7157.8	7353.7	7742.8	8080.4	8189.0	8266.2	8069.4	7862.4	7466.8	7044.6
7.5°	6685.8	6756.7	7064.8	7795.2	8398.7	8665.5	8716.1	8407.9	7901.0	7249.7	6615.0
10°	6135.7	6216.7	6588.3	7486.2	8315.0	8772.2	8842.1	8438.3	7709.7	6898.3	6150.5
12.5°	5690.5	5785.3	6165.2	7138.4	8027.1	8533.0	8671.0	8336.1	7544.1	6649.0	5833.1
15°	5485.4	5593.9	5993.2	6914.0	7707.9	8106.2	8220.2	8075.8	7452.1	6609.5	5759.5
17.5°	5603.1	5720.9	6133.0	6933.3	7408.0	7578.1	7670.1	7729.0	7452.1	6847.7	5974.8
20°	6086.1	6213.0	6649.0	7129.2	7159.6	7096.1	7194.5	7401.5	7538.6	7300.3	6491.7
22.5°	6753.9	6902.9	7395.1	7465.0	7038.2	6798.1	6811.0	7135.7	7695.9	7874.4	7209.3
25°	7568.0	7750.2	8250.6	7965.4	7088.8	6620.5	6615.9	6916.7	7849.5	8449.3	8008.7
27.5°	8376.6	8577.2	9016.9	8576.2	7297.6	6588.3	6579.1	6850.5	7999.5	8960.8	8881.6
30°	9054.6	9249.6	9628.6	9018.7	7523.0	6663.8	6619.6	6921.3	8088.7	9292.8	9518.2
32.5°	9606.5	9762.9	10069.2	9323.2	7764.0	6810.0	6714.4	7110.8	8240.5	9573.4	10103.3
35°	10213.7	10378.3	10500.7	9613.0	8034.4	7020.7	6883.6	7411.6	8474.1	9858.6	10744.4
37.5°	10906.4	11070.1	11055.4	9877.9	8377.5	7369.3	7281.9	7888.2	8837.5	10141.0	11460.1
40°	11584.3	11751.7	11632.2	10167.7	8780.5	7944.3	7879.9	8603.8	9324.1	10502.5	12299.1
42.5°	12219.1	12400.3	12144.5	10441.8	9260.6	8669.2	8779.5	9525.6	9933.1	10947.7	13022.1
45°	12730.5	12915.4	12574.1	10708.6	9766.6	9548.6	9880.7	10546.7	10665.3	11324.0	13510.6
47.5°	13102.2	13276.9	12872.2	10975.3	10414.2	10623.9	11202.6	11617.4	11326.7	11650.6	13857.4
50°	13339.5	13475.6	12959.6	11309.3	11264.2	11878.7	12579.7	12782.0	11949.5	11944.9	14278.7
52.5°	13490.4	13552.0	13024.0	11657.9	12151.0	13244.7	13928.2	13991.7	12590.7	12268.7	14846.3
55°	14010.1	14059.8	13480.2	12080.1	12884.1	14441.5	15148.0	15089.1	13316.5	12902.5	15516.0
57.5°	14896.9	14949.3	14423.1	12687.3	13477.5	15181.1	16032.0	16137.8	14167.4	13793.0	16233.5
60°	15342.1	15439.6	15252.0	13456.3	14052.4	15654.0	16634.6	16972.2	15230.8	14966.8	16928.9
62.5°	14938.3	15079.9	15352.2	14309.1	14623.7	15914.3	16822.2	17271.2	16320.0	16334.7	17357.6
65°	14132.4	14245.6	14707.4	14776.4	14954.8	15882.1	16358.6	16853.5	16986.9	17591.3	17334.6
67.5°	13159.2	13201.5	13593.4	14813.2	14474.7	14914.4	14965.9	15332.0	16459.8	18036.5	16638.3
70°	11758.2	11781.2	12123.4	13581.4	12438.9	12535.5	12459.1	12533.7	14150.8	16951.9	14880.3
72.5°	9463.0	9521.0	10007.6	11278.9	9061.9	8783.2	9383.0	9349.9	10898.1	14321.9	11051.7
75°	6967.3	7067.6	7802.6	9084.9	6360.2	5753.1	6190.9	6307.8	7747.4	11078.4	6911.2
77.5°	4878.2	4952.7	5664.8	6678.5	4603.2	4113.8	3955.6	4094.5	5113.7	8014.2	3481.8
80°	2810.3	2837.9	3292.3	3856.2	3101.9	3549.0	3215.1	3310.7	3064.2	3565.5	1497.6
82.5°	1838.9	1843.5	2021.0	2295.2	1931.8	2244.6	1661.3	2124.1	1884.9	1432.3	487.5
85°	993.5	999.0	1172.0	1629.1	1093.8	618.2	363.4	746.0	1165.5	328.4	133.4
87.5°	109.5	100.3	353.2	592.4	303.6	56.1	19.3	83.7	186.7	21.2	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°	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7
2.5°	6966.4	6890.1	6699.6	6498.2	6336.3	6184.5	6031.8	5845.1	5700.6	5671.2	5623.4
5°	6817.4	6575.5	6176.2	5775.1	5452.3	5044.7	4786.2	4584.8	4387.9	4376.0	4336.4
7.5°	6296.7	5978.4	5416.4	4861.7	4407.2	4019.0	3627.2	3365.0	3158.9	3086.3	3043.0
10°	5796.3	5438.5	4736.6	4103.7	3698.0	3354.9	3078.9	2804.8	2556.4	2385.3	2308.0
12.5°	5446.7	5051.2	4277.5	3732.0	3441.4	3115.7	2779.0	2436.8	2150.7	1944.7	1818.6
15°	5311.5	4889.3	4123.9	3584.9	3226.1	2814.0	2383.5	1992.5	1675.1	1488.4	1375.3
17.5°	5472.5	4981.3	4112.0	3405.5	2904.1	2391.7	1916.2	1454.4	1155.4	1013.7	941.1
20°	5880.9	5273.8	4107.4	3185.6	2521.4	1891.3	1298.0	956.7	775.5	696.4	662.3
22.5°	6458.6	5647.3	4144.2	2968.5	2123.1	1351.3	896.0	702.8	609.9	567.6	548.3
25°	7201.9	6171.6	4248.1	2771.7	1748.7	1008.2	698.2	588.7	523.4	490.3	476.5
27.5°	7993.9	6775.1	4410.0	2600.6	1444.2	804.0	597.9	504.1	457.2	434.2	421.3
30°	8647.1	7474.2	4573.8	2410.1	1223.5	701.0	547.3	460.0	405.7	391.0	379.0
32.5°	9218.3	8003.1	4689.7	2238.1	1079.0	622.8	494.9	411.2	374.4	345.9	333.0
35°	9809.8	8443.8	4686.0	2117.6	979.7	563.9	450.8	368.0	323.8	290.7	280.6
37.5°	10450.1	8941.4	4605.9	2014.6	936.5	517.0	425.9	345.0	300.8	267.7	254.8
40°	11199.8	9463.9	4524.1	1918.0	924.5	479.3	408.4	326.6	279.7	247.5	234.6
42.5°	11930.2	9934.9	4452.3	1846.2	873.0	478.3	392.8	312.8	263.1	231.8	217.1
45°	12514.3	10373.7	4438.5	1803.0	818.7	494.9	384.5	303.6	250.2	218.9	205.1
47.5°	13000.0	10850.2	4526.8	1772.7	767.2	451.7	404.8	297.1	238.3	207.9	192.3
50°	13577.7	11435.3	4734.7	1723.0	712.9	406.6	463.6	299.0	228.1	196.9	180.3
52.5°	14383.6	12244.8	5040.1	1639.3	638.4	365.2	456.3	300.8	217.1	184.9	168.3
55°	15286.9	13255.8	5368.5	1500.4	534.5	310.9	391.0	287.9	195.9	172.0	156.4
57.5°	16236.3	14172.9	5563.6	1334.8	425.0	268.6	312.8	262.2	172.9	154.5	144.4
60°	16385.3	14521.6	5474.3	1131.5	337.6	233.7	231.8	266.8	154.5	136.1	128.8
62.5°	16014.6	14083.7	5042.9	950.3	282.4	205.1	190.4	232.7	139.8	121.4	114.1
65°	15301.6	12899.8	4343.8	856.4	262.2	175.7	158.2	163.7	122.3	105.8	99.3
67.5°	14310.0	11319.4	3566.5	803.1	259.4	150.9	135.2	124.2	105.8	92.0	86.5
70°	12282.5	9429.9	2845.3	773.6	252.1	126.9	114.1	101.2	88.3	78.2	73.6
72.5°	9039.9	6682.2	2213.3	741.4	253.9	101.2	99.3	83.7	70.8	60.7	58.9
75°	5223.2	3817.6	1451.6	600.7	241.9	78.2	82.8	58.9	49.7	42.3	42.3
77.5°	2783.6	2328.3	552.9	250.2	88.3	49.7	46.9	35.0	31.3	25.8	24.8
80°	1213.4	1024.8	166.5	69.9	48.8	26.7	17.5	15.6	13.8	11.0	10.1
82.5°	429.6	370.7	54.3	34.0	21.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	97.5	69.9	0.0	8.3	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°	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7
2.5°	5525.8	5505.6	5386.0	5390.6	5411.8	5442.1	5370.4	5403.5	5492.7	5578.3	5610.5
5°	4272.9	4277.5	4204.9	4249.9	4290.4	4318.0	4202.1	4203.9	4274.8	4371.4	4422.0
7.5°	3010.8	3003.5	3007.2	3114.8	3191.1	3135.9	3179.2	3029.2	3038.4	3107.4	3055.9
10°	2238.1	2136.9	2079.9	2160.8	2244.6	2214.2	2139.7	2090.9	2125.0	2201.3	2195.8
12.5°	1758.9	1613.5	1528.0	1470.0	1539.0	1482.0	1480.1	1437.8	1391.8	1400.1	1522.4
15°	1322.8	1217.0	1115.8	1022.9	1021.1	1001.8	903.3	793.0	783.8	789.3	852.7
17.5°	909.8	873.9	832.5	752.5	731.3	650.4	554.7	510.5	488.5	498.6	519.7
20°	639.3	625.5	630.1	586.9	556.5	479.3	423.2	405.7	402.0	412.1	422.2
22.5°	529.9	505.0	502.3	482.9	452.6	396.5	366.1	356.0	351.4	360.6	368.0
25°	463.6	438.8	428.7	416.7	384.5	345.9	327.5	318.3	313.7	319.2	323.8
27.5°	408.4	385.4	376.2	368.0	336.7	309.1	294.4	286.1	282.4	284.2	288.8
30°	367.0	346.8	334.8	324.7	298.0	278.7	265.9	257.6	253.9	253.9	258.5
32.5°	323.8	312.8	301.7	288.8	264.0	251.1	238.3	229.1	225.4	226.3	230.0
35°	269.5	265.9	268.6	256.7	235.5	224.5	211.6	201.5	198.7	199.6	203.3
37.5°	239.2	222.6	232.7	226.3	214.3	199.6	183.1	173.9	169.3	172.0	173.9
40°	219.9	199.6	192.3	198.7	196.9	172.9	158.2	149.0	145.3	146.3	148.1
42.5°	203.3	179.4	162.8	161.9	172.9	150.9	135.2	126.9	122.3	122.3	124.2
45°	187.7	161.9	141.7	126.0	145.3	127.9	113.1	105.8	100.3	100.3	101.2
47.5°	175.7	147.2	123.3	103.0	109.5	104.9	92.9	85.6	80.0	80.0	81.0
50°	164.7	132.5	106.7	86.5	81.9	86.5	75.4	67.2	63.5	62.6	64.4
52.5°	152.7	117.7	91.1	73.6	64.4	65.3	58.9	53.4	48.8	48.8	50.6
55°	140.7	105.8	79.1	62.6	53.4	48.8	46.9	43.2	39.6	39.6	41.4
57.5°	128.8	92.9	67.2	51.5	42.3	38.6	38.6	35.9	33.1	33.1	35.0
60°	117.7	80.0	55.2	42.3	33.1	32.2	33.1	30.4	28.5	28.5	30.4
62.5°	104.9	68.1	45.1	35.0	26.7	25.8	28.5	26.7	24.8	24.8	26.7
65°	89.2	58.0	35.9	26.7	20.2	20.2	23.9	22.1	20.2	20.2	22.1
67.5°	75.4	48.8	27.6	19.3	14.7	15.6	20.2	18.4	17.5	17.5	19.3
70°	62.6	37.7	19.3	12.0	8.3	12.0	15.6	15.6	15.6	15.6	17.5
72.5°	46.9	25.8	11.0	4.6	3.7	8.3	12.9	14.7	13.8	13.8	16.6
75°	30.4	14.7	3.7	0.0	0.0	4.6	10.1	12.0	12.0	11.0	13.8
77.5°	17.5	4.6	0.0	0.0	0.0	0.0	6.4	5.5	4.6	3.7	6.4
80°	4.6	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: P324311

CATALOG NUMBER: GLEON-SA7A-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7	6514.7
2.5°	5740.2	5848.7	6001.4	6163.3	6412.6	6610.4	6804.5	6971.0	7035.4	7062.1
5°	4543.4	4702.5	4926.1	5213.1	5662.9	6067.7	6477.9	6891.0	7070.4	7115.4
7.5°	3260.1	3463.4	3747.7	4107.4	4634.5	5158.8	5731.9	6338.1	6615.9	6685.8
10°	2412.9	2661.3	2986.9	3365.9	3869.1	4408.2	5032.8	5725.5	6042.8	6135.7
12.5°	1711.9	2047.7	2483.7	2944.6	3380.6	3861.7	4493.7	5257.2	5590.2	5690.5
15°	1005.5	1330.2	1846.2	2463.5	3021.9	3509.4	4151.5	5017.1	5384.2	5485.4
17.5°	576.8	738.7	1128.7	1816.8	2574.8	3250.0	4043.9	5076.9	5509.3	5603.1
20°	440.6	492.1	650.4	1170.1	2052.3	2995.2	4043.9	5415.5	5948.1	6086.1
22.5°	385.4	423.2	487.5	698.2	1510.5	2722.0	4090.8	5904.8	6601.2	6753.9
25°	342.2	376.2	431.4	525.3	1030.3	2397.3	4202.1	6505.5	7370.3	7568.0
27.5°	306.3	338.5	388.2	460.0	704.6	2005.4	4352.1	7210.2	8218.4	8376.6
30°	274.1	304.5	349.6	400.2	543.7	1561.1	4479.9	7874.4	8884.4	9054.6
32.5°	243.8	271.4	311.8	349.6	445.2	1154.5	4493.7	8400.5	9437.3	9606.5
35°	215.3	240.1	276.9	306.3	368.9	911.6	4279.4	8856.8	9990.1	10213.7
37.5°	187.7	211.6	243.8	265.9	324.7	743.3	3951.9	9365.5	10699.4	10906.4
40°	161.9	183.1	216.2	230.9	307.2	571.3	3595.9	9899.1	11394.8	11584.3
42.5°	138.0	158.2	190.4	218.9	269.5	426.8	3211.4	10399.5	12020.4	12219.1
45°	115.0	136.1	168.3	231.8	223.5	319.2	2800.2	10731.6	12514.3	12730.5
47.5°	92.9	116.8	161.0	220.8	178.5	234.6	2474.5	11046.2	12888.7	13102.2
50°	74.5	98.4	181.2	196.9	146.3	179.4	2338.4	11327.7	13134.4	13339.5
52.5°	60.7	82.8	171.1	150.9	122.3	148.1	2412.0	11783.9	13361.6	13490.4
55°	50.6	65.3	103.0	104.9	103.9	126.0	2503.1	12438.9	13949.4	14010.1
57.5°	44.2	52.4	71.8	81.0	87.4	112.2	2504.9	13379.0	14859.2	14896.9
60°	37.7	46.0	59.8	65.3	75.4	100.3	2413.8	13707.5	15217.0	15342.1
62.5°	33.1	40.5	49.7	54.3	63.5	90.2	2200.4	13231.9	14725.8	14938.3
65°	29.4	36.8	41.4	46.0	56.1	81.0	1849.0	12280.7	13910.8	14132.4
67.5°	25.8	32.2	36.8	41.4	50.6	71.8	1361.5	11175.9	12975.2	13159.2
70°	23.0	28.5	33.1	36.8	44.2	60.7	826.1	9483.3	11681.8	11758.2
72.5°	22.1	25.8	30.4	33.1	38.6	53.4	418.6	6969.2	9338.8	9463.0
75°	19.3	23.0	27.6	29.4	34.0	46.0	170.2	4577.4	6767.7	6967.3
77.5°	15.6	21.2	24.8	26.7	29.4	37.7	86.5	2925.3	4749.5	4878.2
80°	5.5	15.6	21.2	22.1	24.8	27.6	57.0	1601.5	2755.1	2810.3
82.5°	0.0	10.1	16.6	15.6	17.5	21.2	36.8	761.7	1818.6	1838.9
85°	0.0	4.6	12.9	10.1	7.4	14.7	12.9	166.5	953.9	993.5
87.5°	0.0	0.0	0.9	4.6	3.7	5.5	1.8	0.9	86.5	109.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

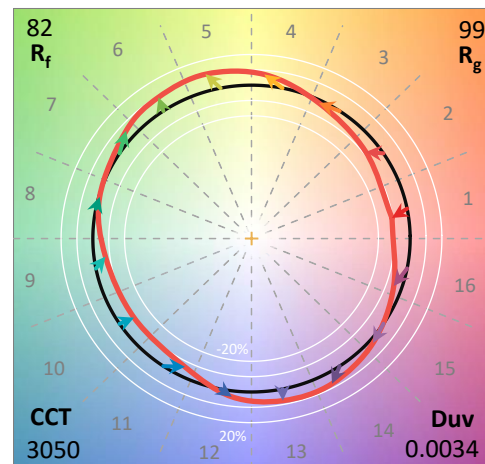
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2408-195-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/07/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **GALN-SB1A-830-U-5WQ**
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K): 3050
 CIE u' : 0.2476
 CIE v' : 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 81.0
 R1: 79.6
 R2: 85.6
 R3: 92.0
 R4: 82.6
 R5: 78.9
 R6: 81.7
 R7: 85.2
 R8: 62.0
 R9: 7.1
 R10: 67.0
 R11: 82.7
 R12: 63.2
 R13: 80.3
 R14: 95.0
 R15: 71.7



Test Conditions

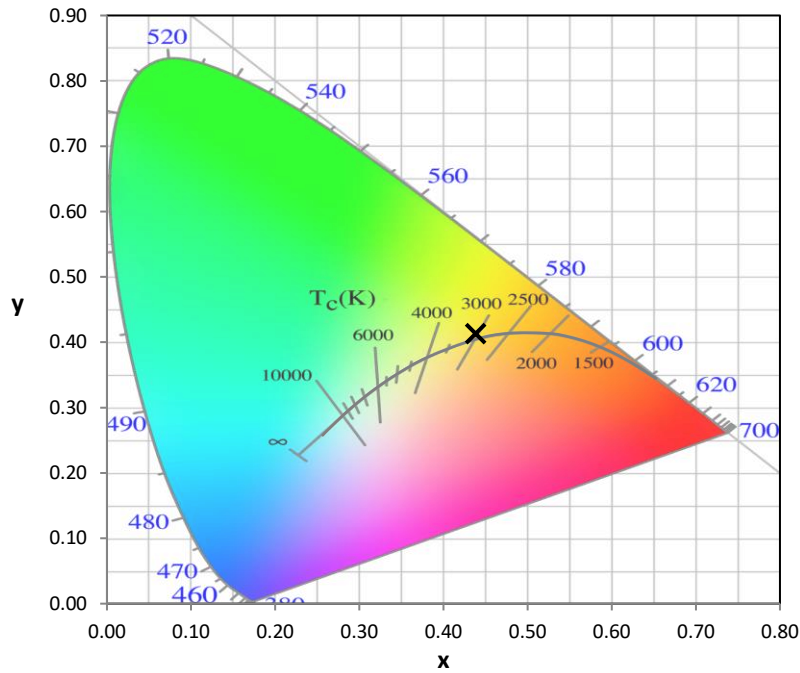
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

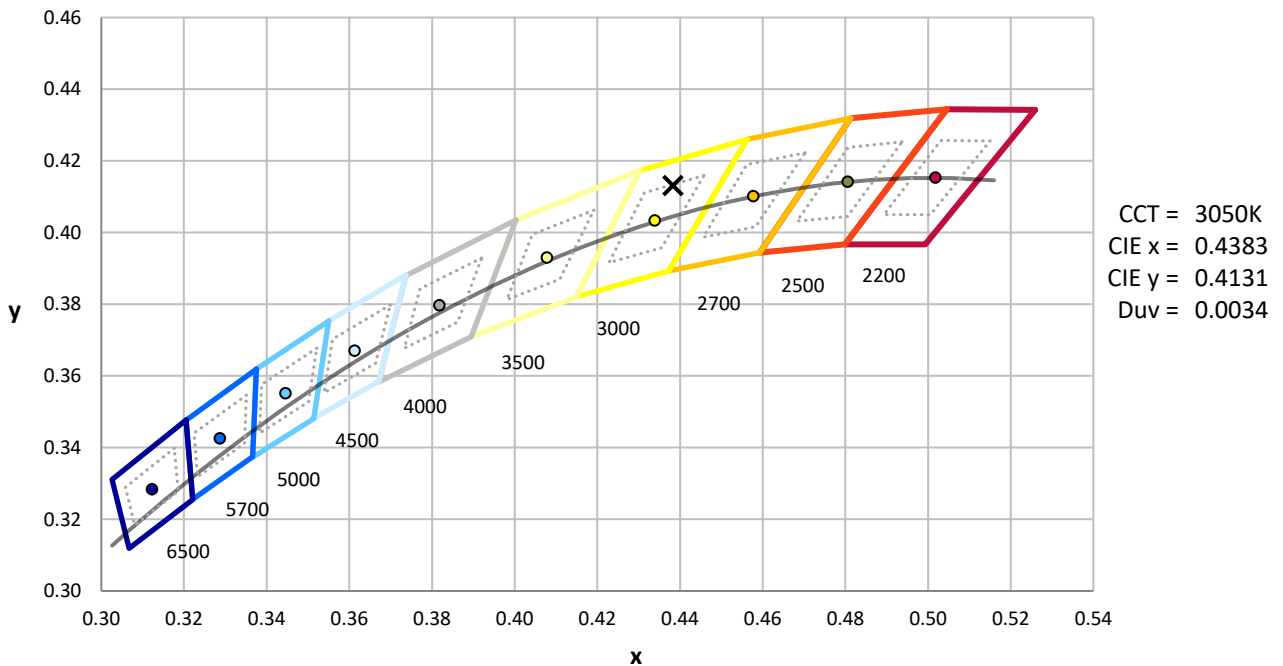
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



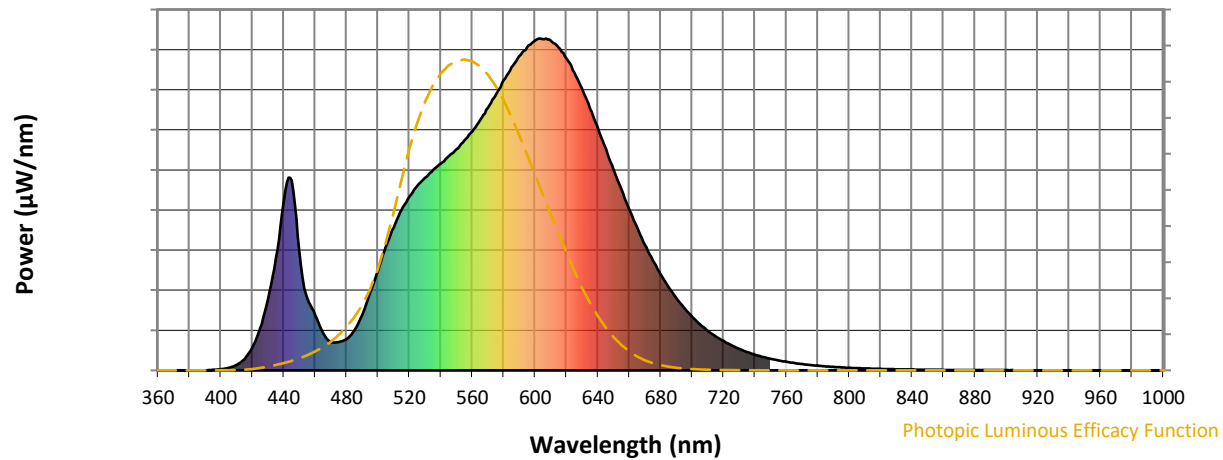
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

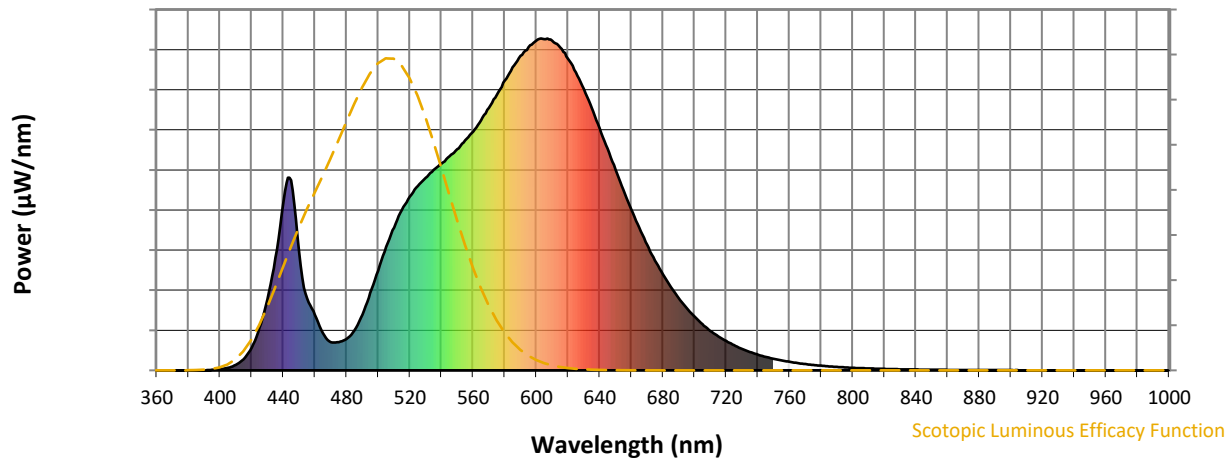


Photopic Lumens: NR

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



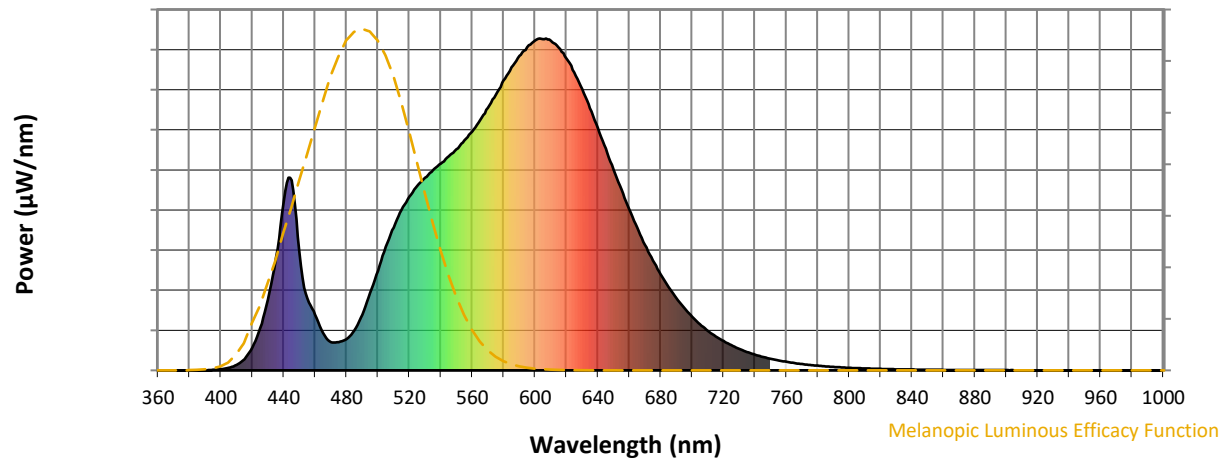
Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W ^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			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

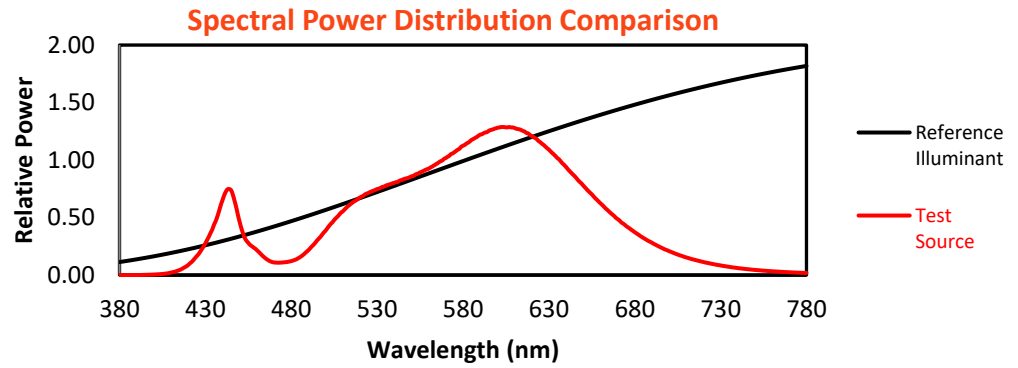
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168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

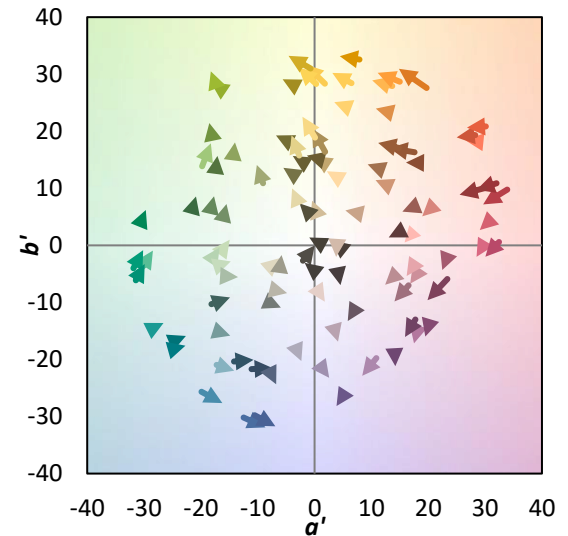
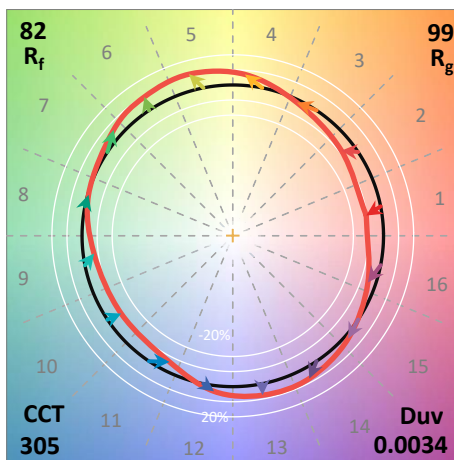
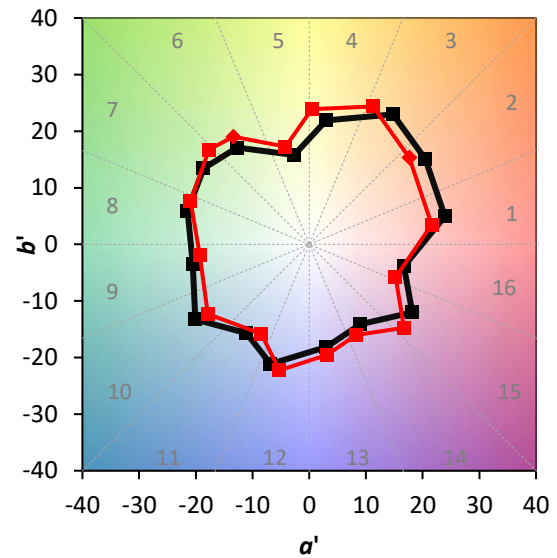
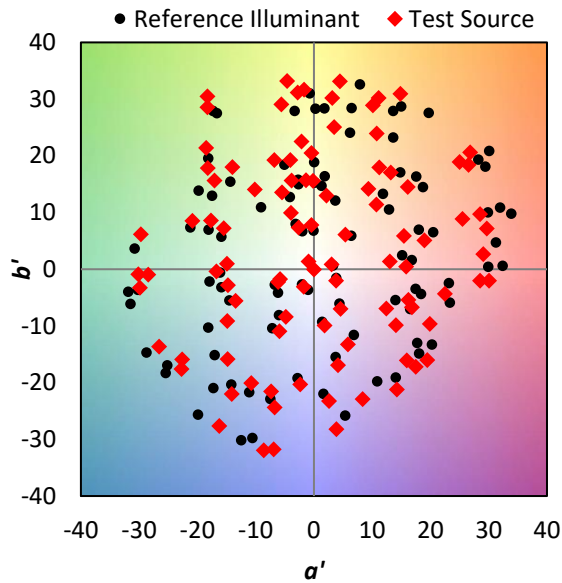
TM-30-18

Summary

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

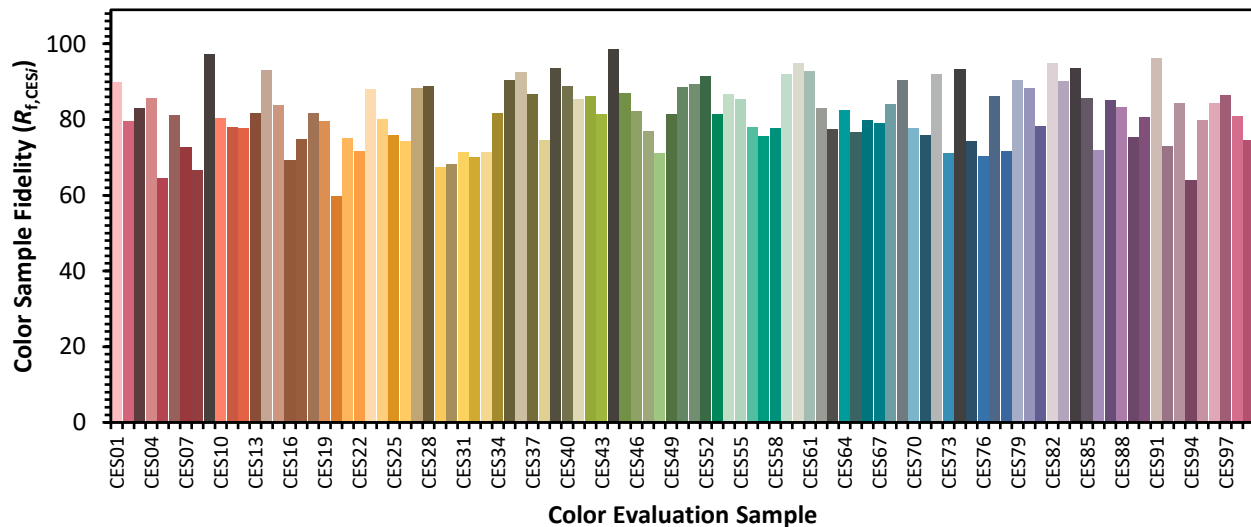


Color Vector Graphics

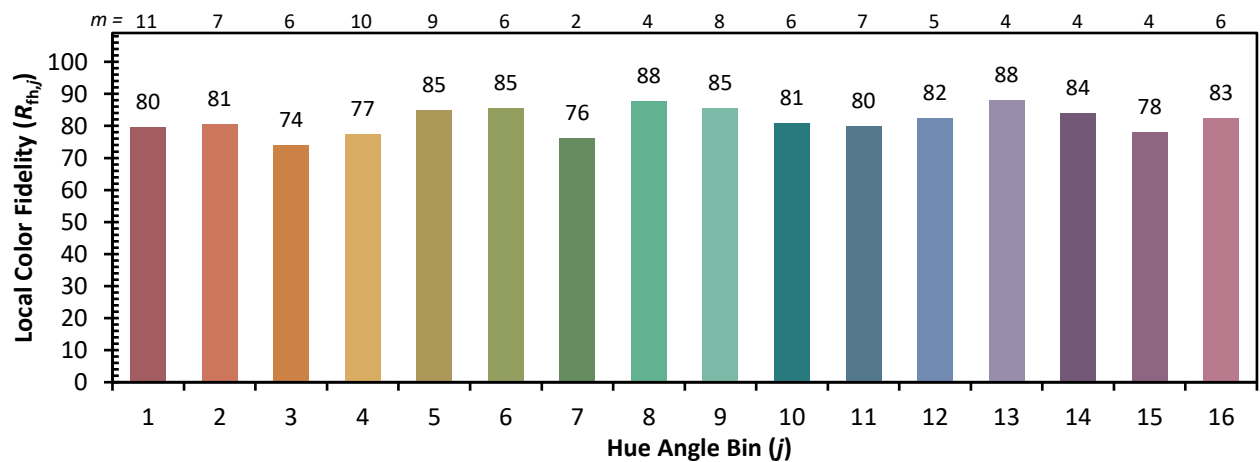
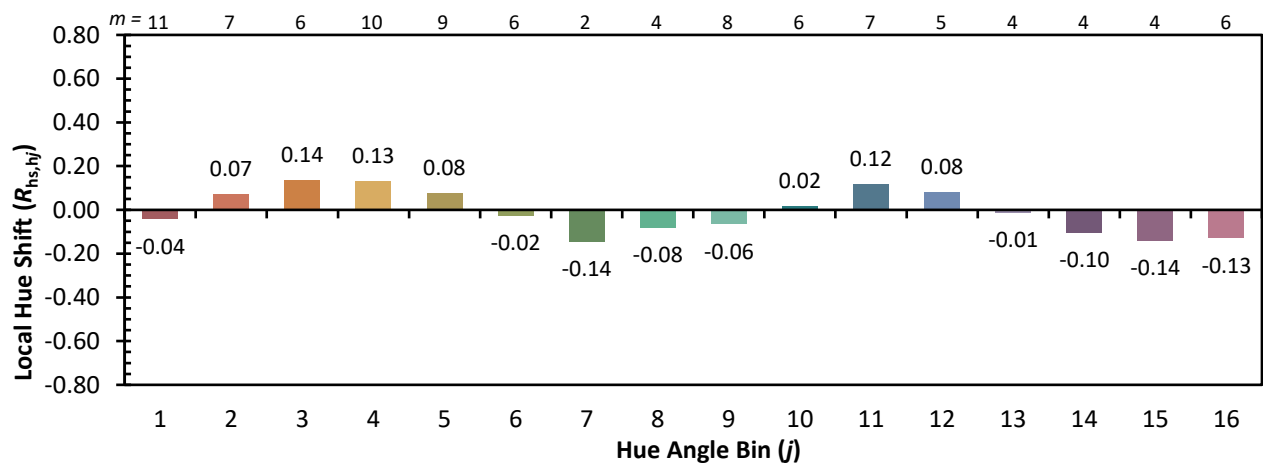
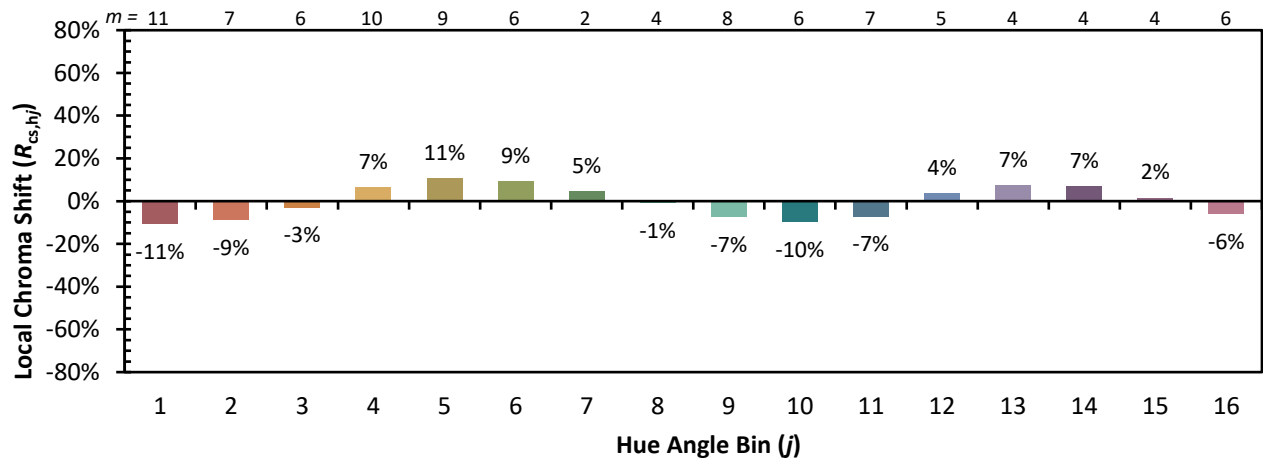


Individual Sample Fidelity Index ($R_{f,i}$)

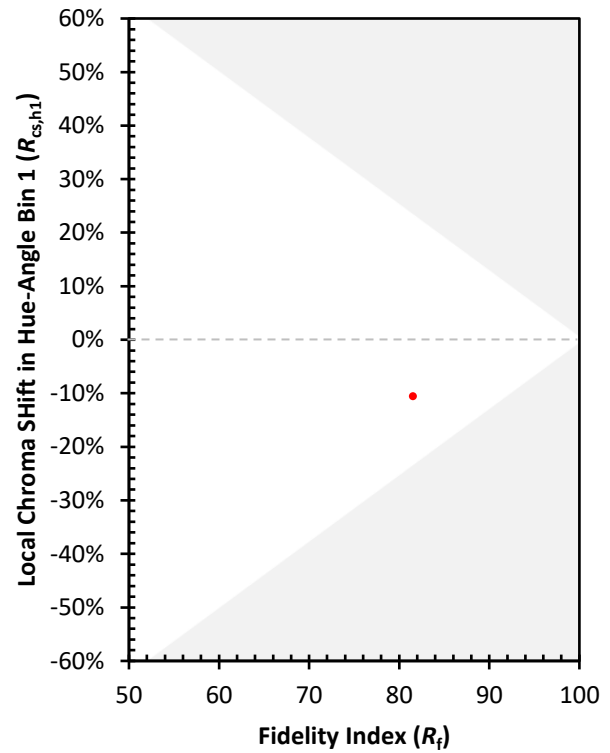
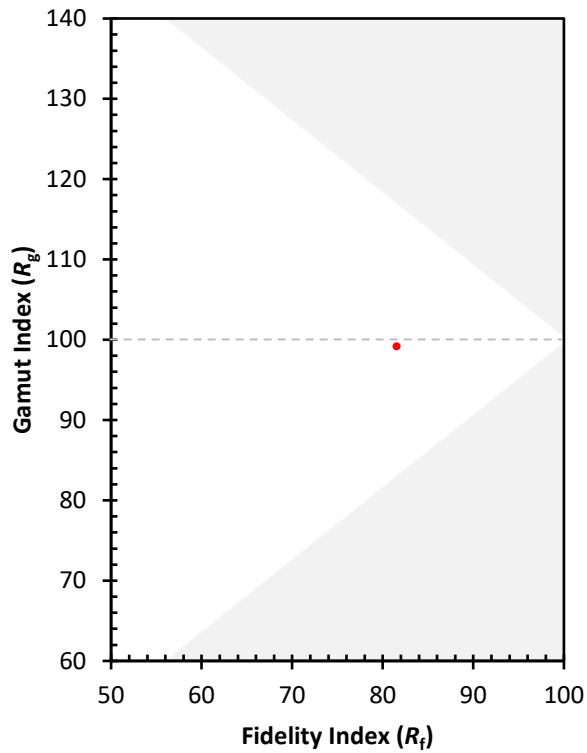
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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