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: P324664

Luminaire Tested: **GLEON-SA0D-830-U-SLR-HSS**

Issue Date: 3/3/2020

Report Generated By E0585644

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Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P324664
	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-SA0D-830-U-SLR-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(10) 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:	45240 lumens
Efficiency:	N/A
Efficacy:	70.7 lumens/watt
Luminous Opening:	Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification:	Type IV - Medium
BUG Rating:	B3 - U0 - G5

Input Watts (W):	640
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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REPORT NUMBER: P324664
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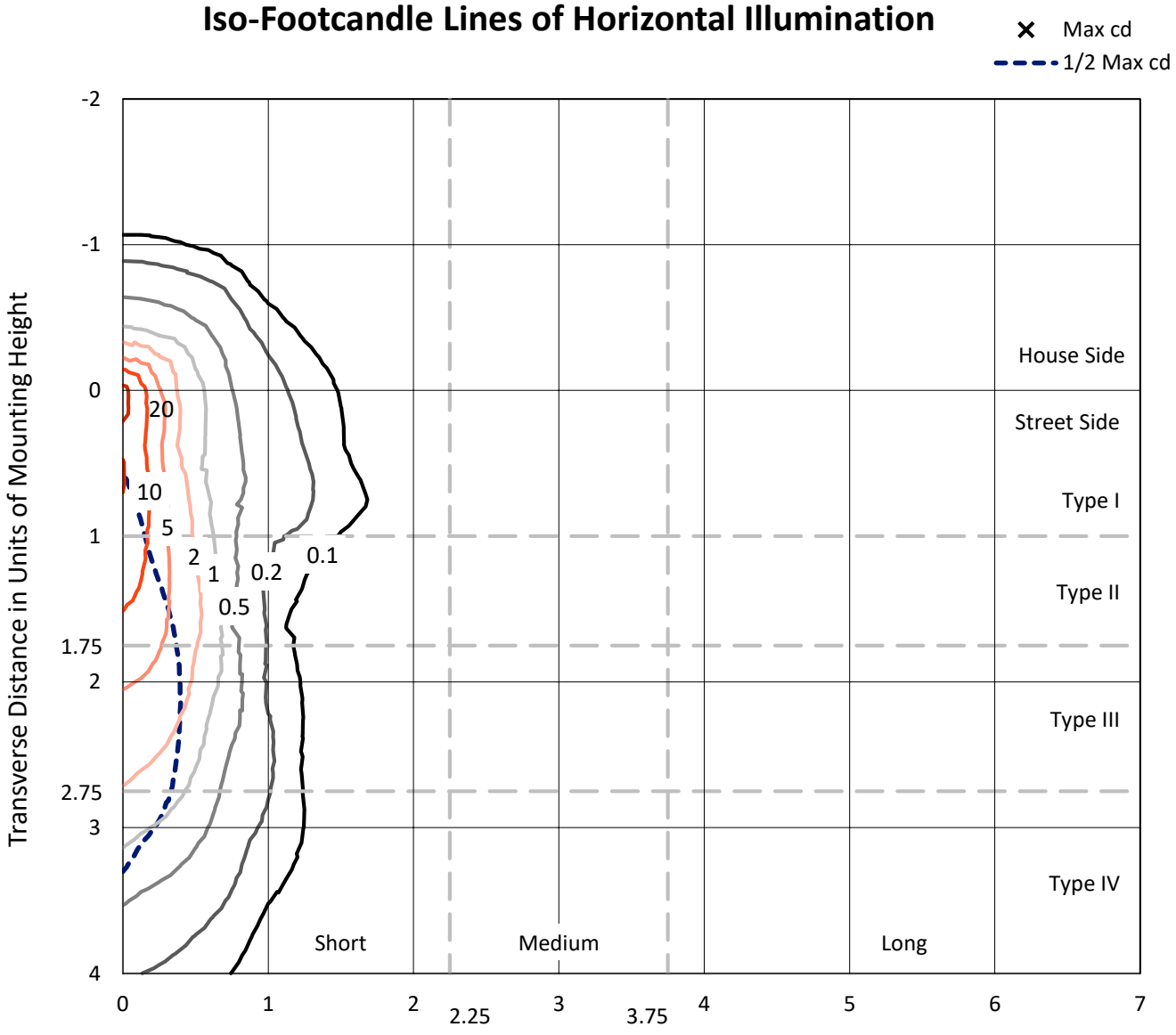
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 23.6 fc
Type IV - Medium - N/A

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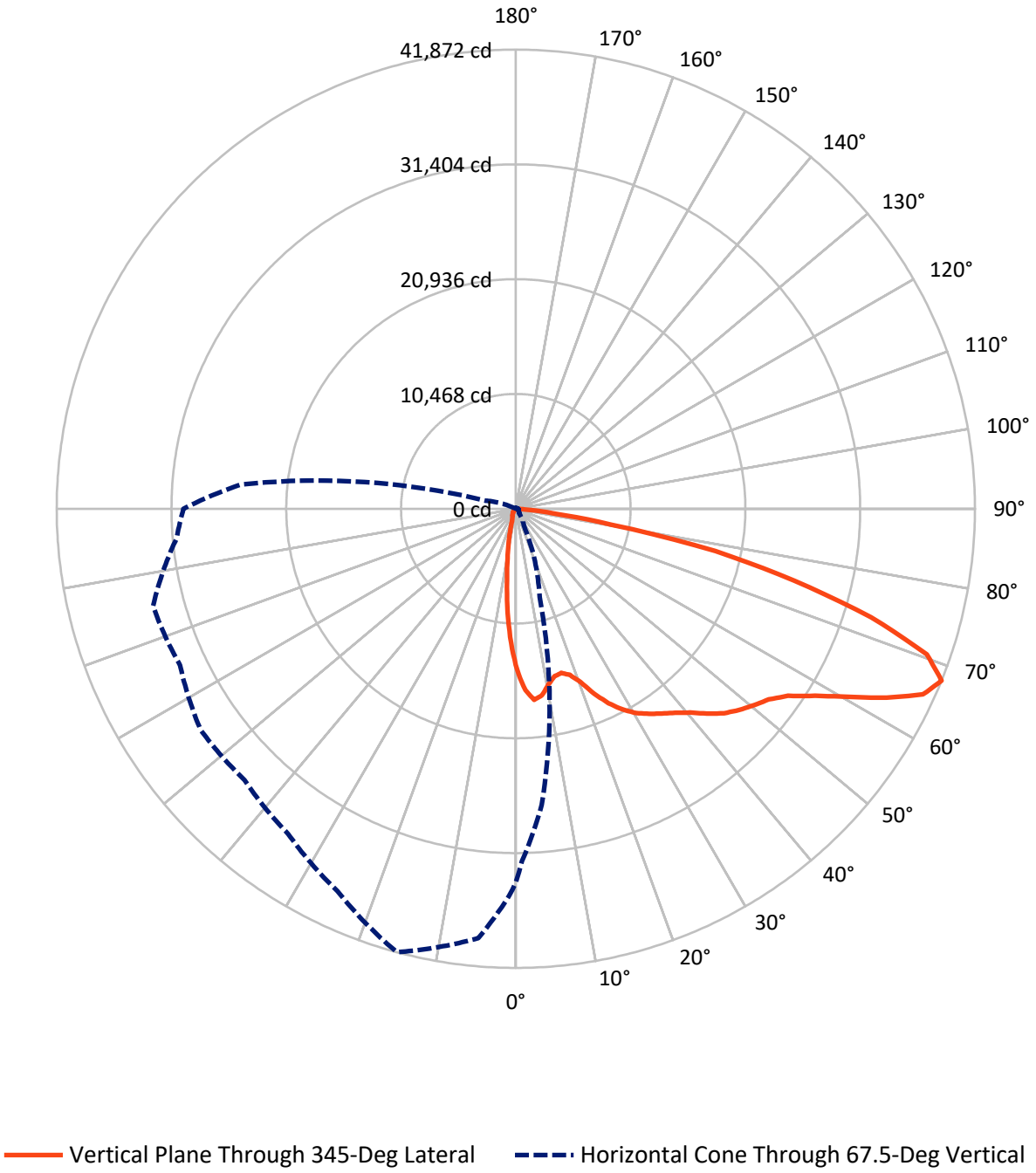
Luminous Intensity Polar Plot



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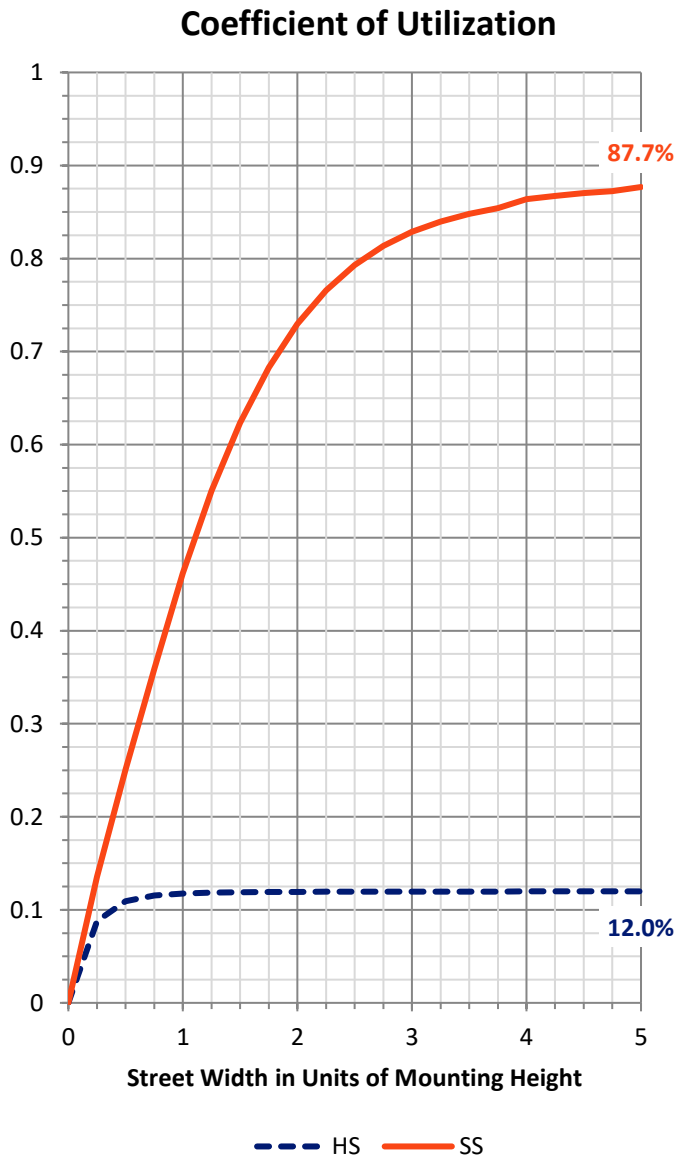
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5475.5	0.0	5475.5
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	39764.5	0.0	39764.5
	% Fixture	87.9	0.0	87.9
Total	Lumens	45240.0	0.0	45240.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1131.0	2.5
10°-20°	2251.3	5.0
20°-30°	3196.9	7.1
30°-40°	4722.0	10.4
40°-50°	6810.1	15.1
50°-60°	9559.9	21.1
60°-70°	11144.1	24.6
70°-80°	5697.1	12.6
80°-90°	727.6	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°	45240.0	100.0
0°-180°	45240.0	100.0



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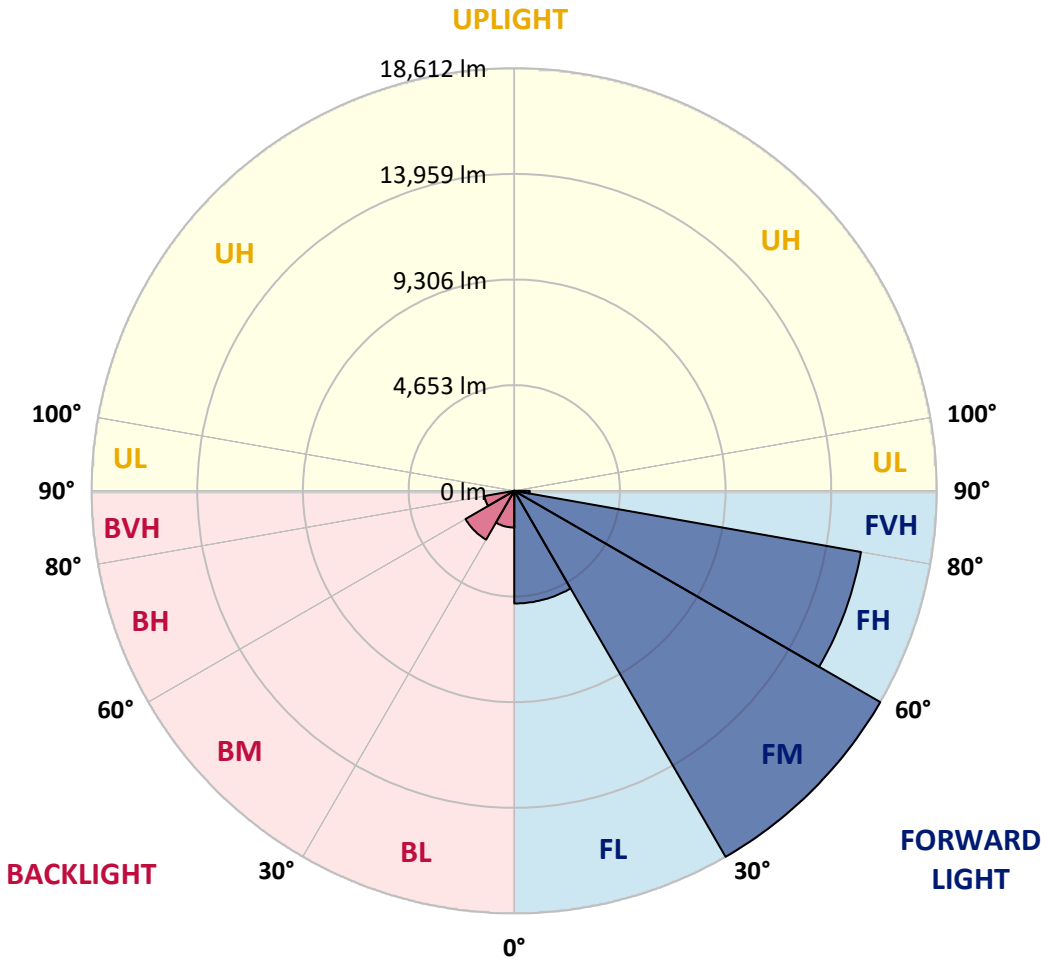
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	4961.9	11.0			
FM	(30°-60°)	18612.5	41.1			
FH	(60°-80°)	15506.7	34.3			G5
FVH	(80°-90°)	683.4	1.5			G4/750
BL	(0°-30°)	1617.3	3.6	B3/2500		
BM	(30°-60°)	2479.5	5.5	B2/2500		
BH	(60°-80°)	1334.5	2.9	B3/2500		G3/2500
BVH	(80°-90°)	44.2	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-G5
Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8
2.5°	16136.4	16012.1	15874.9	15427.0	15011.2	14535.4	14147.5	13877.4	13538.8	13099.4	12988.0
5°	16020.6	15887.8	15457.0	14460.4	13588.1	12739.4	11920.6	11440.6	10844.7	10240.4	10090.3
7.5°	14856.9	14717.6	14096.0	12730.8	11556.3	10330.4	9267.3	8609.4	7936.4	7383.4	7089.8
10°	13645.9	13493.8	12795.1	11138.4	9691.7	8583.6	7803.5	7175.5	6539.0	5947.5	5476.0
12.5°	12812.2	12612.9	11854.2	9976.7	8716.5	7964.2	7235.5	6483.3	5621.7	4987.3	4468.6
15°	12462.9	12235.7	11434.1	9528.8	8371.5	7488.4	6539.0	5615.3	4605.8	3879.2	3403.4
17.5°	12732.9	12437.2	11577.7	9498.8	7938.5	6736.2	5536.0	4451.5	3356.3	2621.2	2282.5
20°	13650.2	13262.3	12171.4	9490.2	7413.4	5842.4	4320.8	3094.8	2211.8	1778.9	1601.0
22.5°	15094.8	14582.5	13024.4	9558.8	6871.2	4903.7	3120.5	2102.5	1661.0	1436.0	1330.9
25°	16839.4	16245.7	14252.5	9801.0	6395.4	3990.7	2267.5	1661.0	1401.7	1236.6	1148.8
27.5°	18498.2	18016.0	15804.2	10150.3	6026.8	3253.4	1841.0	1408.1	1198.1	1088.8	1018.0
30°	20154.9	19548.4	17396.6	10566.1	5583.1	2754.0	1618.1	1283.8	1073.8	958.0	913.0
32.5°	21359.4	20855.8	18644.0	10866.2	5109.5	2428.3	1446.7	1174.5	1003.0	885.2	818.7
35°	22776.1	22206.0	19713.4	10932.6	4805.1	2222.5	1300.9	1056.6	870.2	765.1	694.4
37.5°	24306.4	23597.0	20947.9	10786.9	4567.2	2121.8	1191.6	1003.0	812.3	705.1	630.1
40°	25999.5	25197.9	22133.1	10576.8	4333.6	2087.5	1108.0	962.3	767.3	658.0	580.8
42.5°	27782.7	26837.5	23159.7	10356.1	4185.7	1969.6	1099.5	921.6	733.0	615.1	538.0
45°	29280.8	28322.8	24214.2	10283.2	4080.7	1841.0	1135.9	893.7	709.4	580.8	505.8
47.5°	30474.6	29568.0	25294.4	10446.1	4020.7	1723.2	1035.2	930.2	696.5	550.8	477.9
50°	31899.8	30873.2	26816.1	10932.6	3932.8	1605.3	936.6	1065.2	696.5	531.5	454.4
52.5°	33687.3	32671.4	28513.5	11687.0	3757.1	1442.4	842.3	1067.3	703.0	505.8	424.4
55°	35935.5	35198.3	30937.5	12514.3	3476.3	1202.4	728.7	917.3	677.3	458.7	396.5
57.5°	38091.6	37489.4	33147.2	13080.1	3101.3	938.7	634.4	739.4	619.4	402.9	353.6
59°	38681.0	38023.0	33957.3	13105.8	2820.5	818.7	587.2	610.8	606.5	377.2	327.9
60°	38681.0	37982.3	34190.9	12968.7	2616.9	752.3	557.2	544.4	632.3	360.1	312.9
62.5°	37980.2	36998.6	33432.2	12040.7	2134.7	640.8	486.5	450.1	568.0	323.6	276.5
65°	36522.8	35093.2	30847.5	10362.5	1903.2	587.2	420.1	368.6	394.4	285.0	242.2
67.5°	*34092.4*	*32154.9*	*27120.4*	*8371.5*	*1811.0*	*572.2*	*362.2*	*312.9*	*297.9*	*244.3*	*212.2*
70°	29812.3	27662.7	22596.1	6581.9	1731.7	565.8	304.3	263.6	240.0	205.8	180.0
72.5°	21698.1	19456.2	16042.1	5145.9	1684.6	578.7	244.3	220.8	197.2	160.7	139.3
75°	12411.4	10943.3	9016.6	3399.2	1436.0	553.0	188.6	184.3	141.5	115.7	96.4
77.5°	6412.5	6217.5	5403.1	1305.2	688.0	242.2	124.3	107.2	83.6	70.7	57.9
80°	2766.9	2736.9	2368.3	377.2	182.2	135.0	70.7	45.0	38.6	30.0	23.6
82.5°	955.9	955.9	842.3	126.5	81.4	66.4	8.6	0.0	0.0	0.0	0.0
85°	192.9	216.5	152.2	0.0	27.9	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°	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8
2.5°	12852.9	12593.6	12576.5	12413.6	12210.0	12117.8	12064.2	12158.5	12274.3	12287.1	12460.7
5°	9976.7	9704.5	9818.1	9528.8	9586.7	9528.8	9434.5	9451.6	9503.1	9342.3	9541.7
7.5°	7006.2	6800.5	6931.2	6854.0	6956.9	6997.6	6939.8	6854.0	6601.1	6571.1	6744.7
10°	5280.9	5047.3	4908.0	4762.3	4794.4	4860.8	4839.4	4777.3	4616.5	4625.1	4792.3
12.5°	4243.6	3982.1	3705.6	3347.7	3259.9	3309.1	3259.9	3223.4	3069.1	3082.0	3229.8
15°	3219.1	3004.8	2715.5	2428.3	2271.8	2286.8	2149.7	2053.2	1956.8	1841.0	1931.0
17.5°	2173.2	2042.5	1956.8	1871.0	1684.6	1641.7	1468.1	1281.7	1208.8	1155.2	1193.8
20°	1538.8	1468.1	1433.8	1429.5	1322.4	1268.8	1099.5	983.7	947.3	936.6	960.2
22.5°	1285.9	1234.5	1185.2	1157.3	1103.8	1041.6	913.0	855.1	829.4	816.6	833.7
25°	1118.8	1080.2	1028.8	981.6	960.2	893.7	801.6	758.7	741.6	728.7	737.3
27.5°	994.5	960.2	900.2	870.2	853.0	795.1	715.8	681.5	666.5	662.3	660.1
30°	895.9	863.7	808.0	773.7	743.7	692.3	645.1	610.8	595.8	591.5	587.2
32.5°	797.3	771.6	735.1	700.8	668.7	621.5	580.8	553.0	529.4	525.1	522.9
35°	673.0	647.3	628.0	625.8	595.8	550.8	520.8	484.4	465.1	458.7	460.8
37.5°	598.0	563.7	520.8	535.8	527.2	495.1	454.4	417.9	398.6	394.4	394.4
40°	550.8	514.4	465.1	439.4	465.1	458.7	394.4	357.9	338.6	336.5	332.2
42.5°	505.8	469.4	413.6	370.8	383.6	402.9	340.8	306.5	287.2	282.9	276.5
45°	473.7	435.1	372.9	323.6	297.9	338.6	291.5	248.6	237.9	229.3	225.0
47.5°	443.6	407.2	336.5	280.8	237.9	244.3	233.6	203.6	190.7	182.2	180.0
50°	417.9	379.4	304.3	240.0	197.2	180.0	188.6	160.7	150.0	141.5	137.2
52.5°	387.9	351.5	270.0	207.9	165.0	141.5	143.6	126.5	115.7	109.3	107.2
55°	364.3	327.9	242.2	182.2	145.7	115.7	102.9	98.6	92.2	87.9	85.7
57.5°	332.2	297.9	214.3	154.3	124.3	94.3	79.3	79.3	77.2	72.9	70.7
59°	312.9	282.9	197.2	139.3	113.6	81.4	70.7	72.9	70.7	66.4	64.3
60°	297.9	270.0	184.3	128.6	107.2	75.0	64.3	68.6	66.4	62.2	60.0
62.5°	263.6	244.3	158.6	107.2	94.3	60.0	53.6	57.9	57.9	55.7	53.6
65°	231.5	210.0	135.0	90.0	87.9	51.4	42.9	51.4	53.6	49.3	45.0
67.5°	*201.5*	*180.0*	*117.9*	*72.9*	*81.4*	*40.7*	*32.1*	*42.9*	*57.9*	*45.0*	*40.7*
70°	171.5	150.0	92.2	57.9	85.7	27.9	25.7	38.6	68.6	49.3	38.6
72.5°	132.9	115.7	64.3	42.9	92.2	19.3	19.3	32.1	77.2	53.6	36.4
75°	92.2	75.0	38.6	25.7	75.0	12.9	12.9	30.0	72.9	49.3	34.3
77.5°	53.6	40.7	12.9	2.1	38.6	0.0	2.1	21.4	51.4	30.0	15.0
80°	19.3	8.6	0.0	0.0	23.6	0.0	0.0	0.0	4.3	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°	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8
2.5°	12505.7	12795.1	13054.4	13446.6	13911.7	14447.5	14908.3	15403.4	15868.5	16061.4	16194.2
5°	9582.4	9940.3	10358.2	10934.8	11702.0	12647.2	13532.4	14533.2	15609.1	16147.1	16652.9
7.5°	6774.7	7139.1	7657.8	8270.7	9198.7	10323.9	11481.3	12863.7	14321.1	15171.9	16009.9
10°	4871.6	5319.5	5803.9	6641.9	7584.9	8652.2	9843.9	11387.0	13011.5	13954.6	14964.0
12.5°	3315.6	3825.7	4558.6	5497.4	6605.4	7651.3	8686.5	10158.9	12044.9	12979.4	14061.7
15°	1988.9	2271.8	3047.7	4134.3	5493.1	6796.2	7929.9	9406.6	11417.0	12561.5	13686.7
17.5°	1225.9	1356.7	1778.9	2670.5	4097.9	5746.0	7299.8	9151.6	11507.0	12900.1	14104.6
20°	977.3	1028.8	1163.8	1577.4	2715.5	4588.7	6590.4	9100.2	12242.1	13956.7	15249.1
22.5°	848.7	898.0	988.0	1146.6	1708.2	3435.6	5917.5	9147.3	13296.6	15540.6	17049.4
25°	748.0	790.9	876.6	1007.3	1251.6	2419.7	5197.3	9357.3	14670.4	17505.9	19109.0
27.5°	668.7	705.1	784.4	904.4	1073.8	1688.9	4380.8	9612.4	16299.3	19516.2	21098.0
30°	595.8	628.0	698.7	810.1	932.3	1298.8	3484.9	9786.0	17930.3	21098.0	22518.9
32.5°	533.7	557.2	621.5	715.8	810.1	1035.2	2649.0	9758.1	19141.2	22413.9	23541.2
35°	469.4	492.9	548.7	630.1	705.1	855.1	2083.2	9237.3	20195.7	23779.1	24711.4
37.5°	398.6	428.6	482.2	555.1	606.5	752.3	1684.6	8609.4	21265.1	25339.4	26016.7
40°	338.6	368.6	415.8	495.1	527.2	713.7	1294.5	7844.2	22467.5	27084.0	27448.3
42.5°	280.8	308.6	357.9	426.5	497.2	615.1	958.0	6969.8	23622.7	28575.7	28753.6
45°	227.2	255.0	306.5	375.1	531.5	510.1	741.6	6033.2	24555.0	29816.6	29874.5
47.5°	180.0	205.8	259.3	353.6	495.1	407.2	529.4	5298.1	25337.3	30785.3	30633.2
50°	139.3	160.7	216.5	405.1	432.9	336.5	400.8	5053.7	26038.1	31385.5	30991.1
52.5°	109.3	128.6	177.9	379.4	336.5	278.6	336.5	5283.1	26998.3	31882.7	31192.6
55°	87.9	107.2	139.3	216.5	229.3	235.8	287.2	5497.4	28655.0	33048.6	32382.1
57.5°	72.9	92.2	113.6	152.2	173.6	199.3	255.0	5521.0	30607.5	34986.1	34356.0
59°	66.4	83.6	102.9	135.0	152.2	182.2	240.0	5392.4	31295.4	35691.2	35376.1
60°	62.2	79.3	96.4	124.3	141.5	171.5	231.5	5270.2	31325.4	35665.5	35811.2
62.5°	53.6	70.7	85.7	105.0	120.0	145.7	207.9	4818.0	30056.7	34497.4	35549.7
65°	47.2	62.2	77.2	90.0	102.9	130.7	188.6	3992.8	27889.8	32613.5	33760.2
67.5°	*42.9*	*53.6*	*70.7*	*79.3*	*92.2*	*115.7*	*167.2*	*2846.2*	*25182.9*	*30309.6*	*31053.3*
70°	38.6	51.4	64.3	72.9	83.6	100.7	143.6	1635.3	21265.1	26936.1	27465.5
72.5°	36.4	49.3	57.9	68.6	75.0	90.0	130.7	769.4	15570.6	21578.0	22960.4
75°	32.1	45.0	53.6	64.3	70.7	81.4	111.4	368.6	10356.1	15615.6	17186.6
77.5°	19.3	36.4	49.3	57.9	62.2	70.7	92.2	212.2	6609.7	10808.3	12730.8
80°	0.0	12.9	36.4	49.3	53.6	60.0	70.7	167.2	3536.3	6174.6	7411.3
82.5°	0.0	0.0	25.7	38.6	36.4	40.7	53.6	105.0	1594.6	4035.7	4547.9
85°	0.0	0.0	8.6	30.0	25.7	19.3	36.4	36.4	349.3	2042.5	2548.3
87.5°	0.0	0.0	0.0	2.1	12.9	8.6	15.0	4.3	2.1	152.2	617.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P324664
CATALOG NUMBER: GLEON-SA0D-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	14736.8	14736.8	14736.8	14736.8	14736.8	14736.8	*14736.8*	14736.8	14736.8	14736.8
2.5°	16659.3	16817.9	17085.8	17212.3	17150.1	16886.5	*16571.5*	16250.0	16061.4	16136.4
5°	17683.8	18500.4	18971.9	19128.3	18866.8	18275.3	*17501.6*	16481.4	16119.2	16020.6
7.5°	17683.8	19220.5	20193.5	20365.0	19782.0	18622.5	*17171.6*	15579.1	15049.8	14856.9
10°	17062.3	19154.0	20510.7	20782.9	19968.5	18234.6	*16290.7*	14473.2	13845.3	13645.9
12.5°	16361.4	18613.9	20043.5	20418.5	19749.9	17848.8	*15679.9*	13725.2	12985.8	12812.2
15°	15930.6	17949.5	19132.6	19404.8	19121.9	17623.8	*15534.1*	13500.2	12630.1	12462.9
17.5°	16084.9	17435.2	17861.7	18020.3	18211.0	17544.5	*15930.6*	13993.1	12891.5	12732.9
20°	16665.8	16892.9	16672.2	16871.5	17385.9	17621.6	*16875.8*	15184.8	13862.4	13650.2
22.5°	17651.6	16612.2	15992.8	16072.1	16697.9	17876.7	*18320.3*	16886.5	15360.5	15094.8
25°	18800.4	16839.4	15615.6	15544.8	16187.8	18213.2	*19640.6*	18738.3	17133.0	16839.4
27.5°	20244.9	17349.4	15538.4	15467.7	16009.9	18528.2	*20737.9*	20568.6	18999.7	18498.2
30°	21359.4	17851.0	15767.7	15604.9	16187.8	18746.8	*21618.8*	22122.4	20487.1	20154.9
32.5°	22158.8	18442.5	16140.7	15904.9	16689.3	19124.0	*22298.2*	23545.5	21863.1	21359.4
35°	22767.5	19085.5	16742.9	16355.0	17379.4	19696.3	*22934.7*	25060.8	23326.9	22776.1
37.5°	23337.6	19987.8	17683.8	17220.8	18461.8	20617.9	*23607.7*	26779.7	24964.3	24306.4
40°	24132.8	21010.1	19134.8	18723.3	20281.4	21873.8	*24447.8*	28571.4	26826.8	25999.5
42.5°	24927.9	22107.4	20620.0	20731.5	22551.1	23399.8	*25532.3*	30466.0	28665.7	27782.7
45°	25654.5	23239.0	22735.4	23249.8	24657.9	25073.6	*26610.3*	31561.2	30133.8	29280.8
47.5°	26301.7	24653.6	24837.9	26207.4	27054.0	26588.9	*27416.2*	32506.4	31226.9	30474.6
50°	27054.0	26483.9	27609.1	29546.6	29812.3	27960.6	*28149.2*	33625.1	32504.2	31899.8
52.5°	27877.0	28412.8	30678.2	32386.3	32300.6	29450.1	*28886.4*	34878.9	34255.2	33687.3
55°	28811.4	29970.9	33380.8	35043.9	34971.1	31113.3	*30108.1*	36428.5	36449.9	35935.5
57.5°	30198.1	31312.6	35215.4	37193.6	37315.8	33033.6	*32178.4*	38164.5	38434.5	38091.6
59°	31192.6	32182.7	35942.0	38091.6	38588.8	34518.9	*33691.6*	39171.8	38993.9	38681.0
60°	31929.8	32735.7	36302.0	38561.0	39328.3	35526.2	*34808.2*	39763.3	39060.4	38681.0
62.5°	33753.7	33940.2	36951.4	39092.5	40179.1	37763.7	*37950.2*	40770.7	38599.6	37980.2
65°	34604.6	34701.0	36942.8	38140.9	39356.1	39506.1	*40800.7*	40800.7	37474.4	36522.8
67.5°	*34248.8*	*33783.7*	*35110.4*	*34986.1*	*36199.1*	*38471.0*	*41872.3*	*39304.7*	*35322.6*	*34092.4*
70°	31355.4	29565.9	28976.5	29030.0	29958.1	33462.2	*39750.5*	34902.5	31250.4	29812.3
72.5°	26089.5	21796.6	20341.4	22002.4	22244.6	25716.6	*33875.9*	26284.6	23046.1	21698.1
75°	20984.4	15364.8	12998.7	14751.8	15163.3	18819.7	*26205.3*	16370.0	13461.6	12411.4
77.5°	15075.5	11029.1	9327.3	9205.2	9736.7	11935.6	*18594.7*	8238.6	6871.2	6412.5
80°	8564.3	7259.1	7816.4	7374.9	7642.8	7462.7	*8834.4*	3613.5	2959.8	2766.9
82.5°	5169.5	4290.7	4646.5	3868.5	4895.1	4262.9	*3403.4*	1157.3	1005.2	955.9
85°	3362.7	2344.7	1221.6	818.7	1686.7	2724.0	*760.8*	315.1	242.2	192.9
87.5°	1159.5	598.0	60.0	25.7	180.0	507.9	*27.9*	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

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

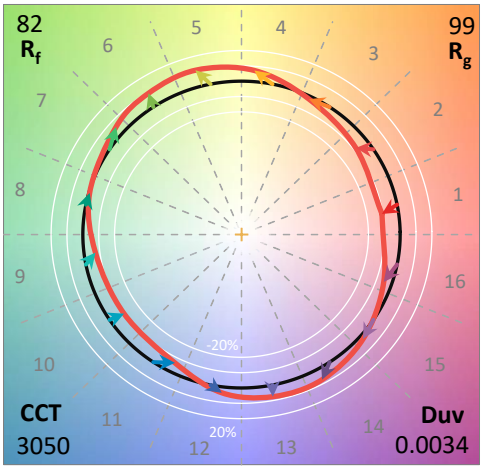
Test Information

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	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

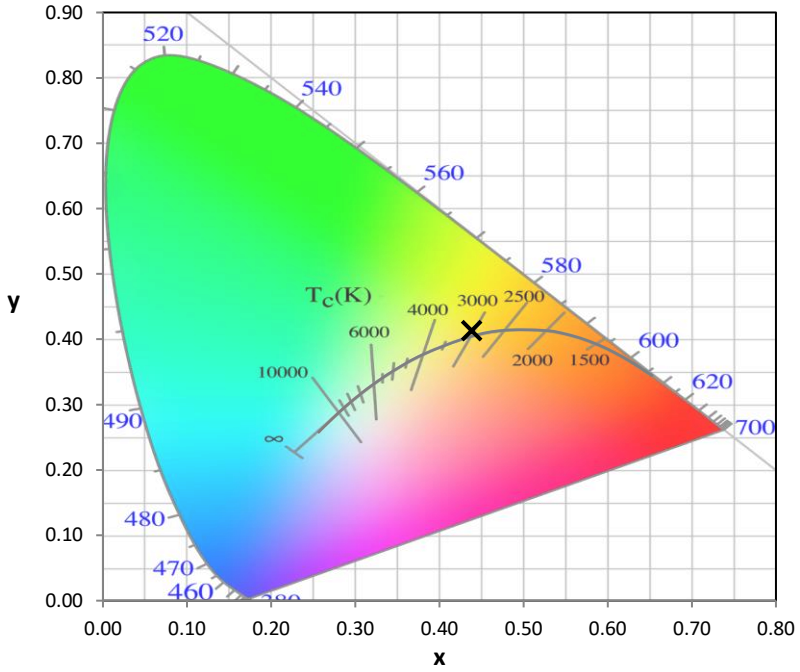
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

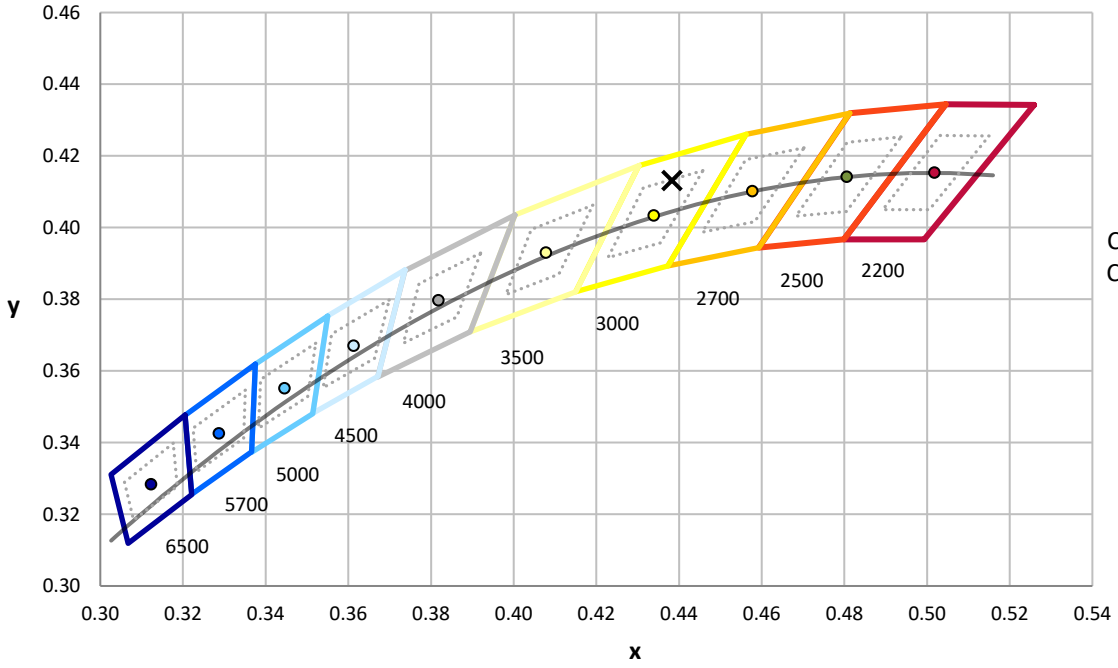
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

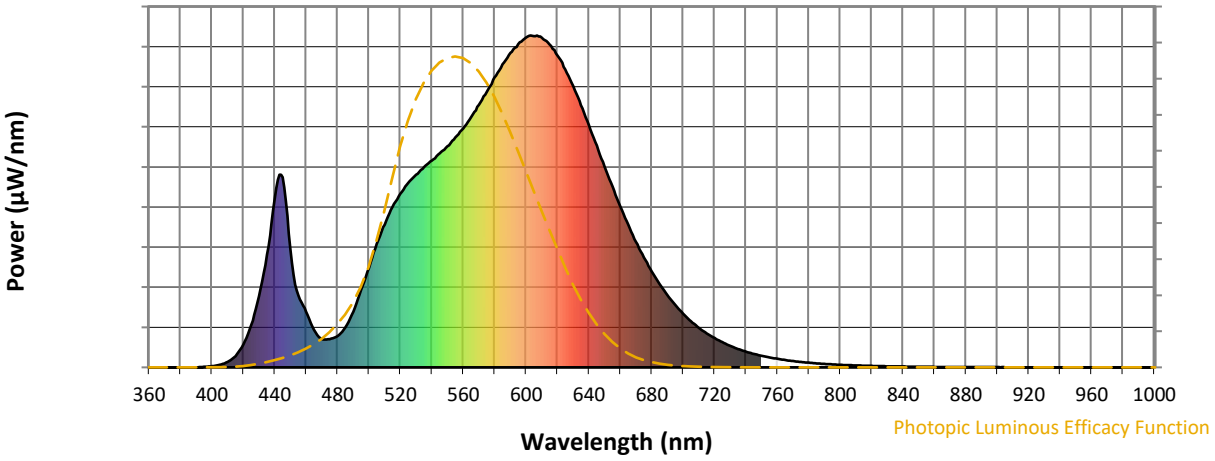


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

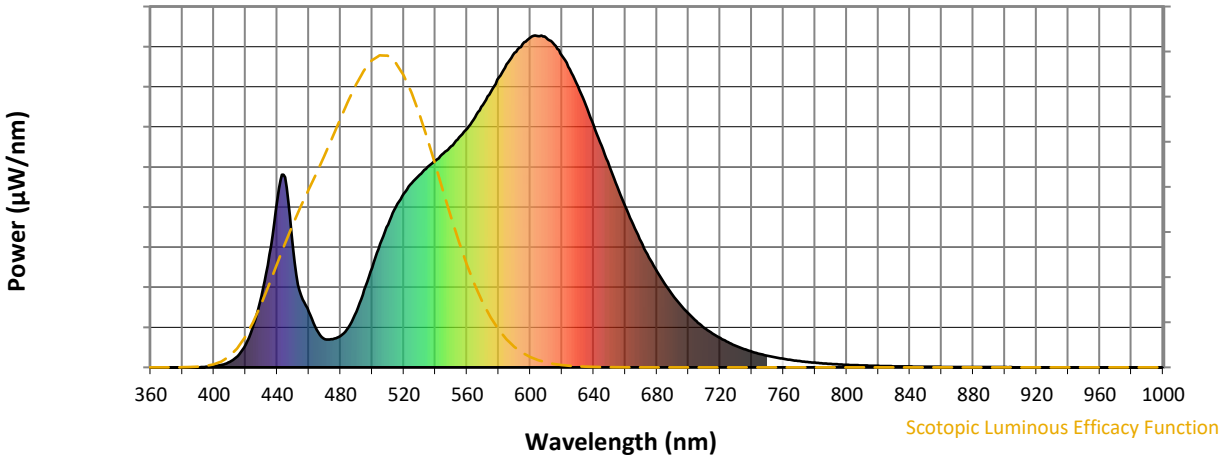


Photopic Lumens: NR

λ (nm)	Power 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

Scotopic Flux vs. Wavelength

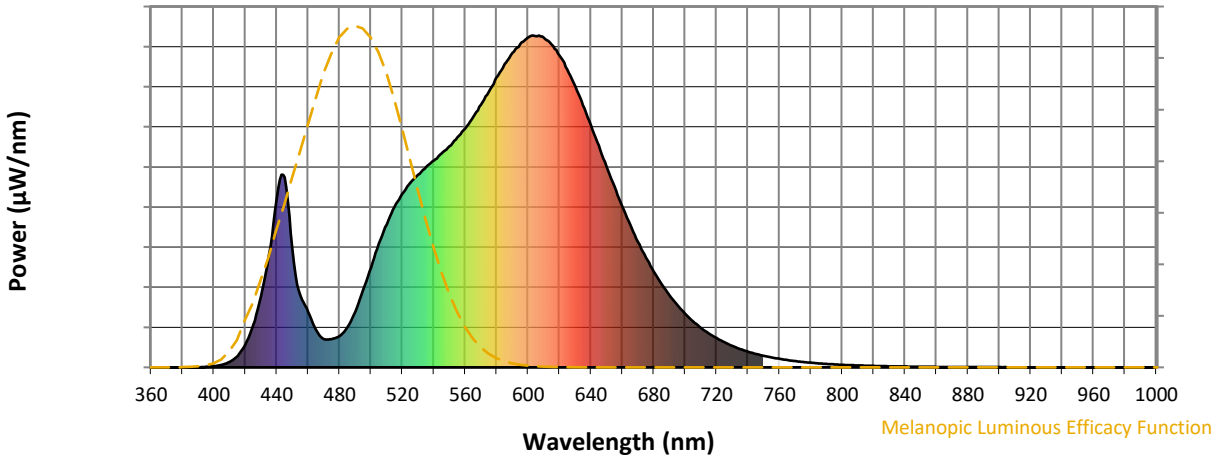


Scotopic Lumens: NR **S/P: 1.27**

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 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			

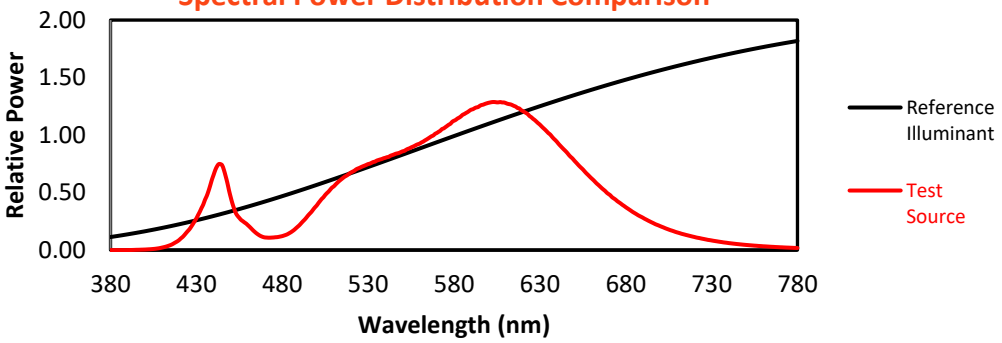
REPORT NUMBER: SP1-2408-195-9

TM-30-18

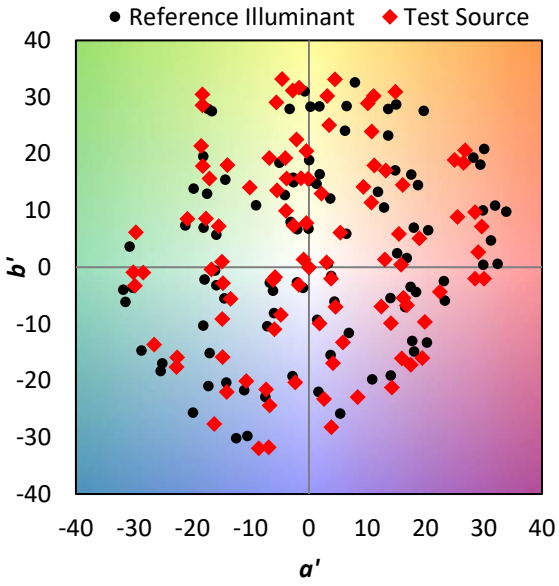
Summary

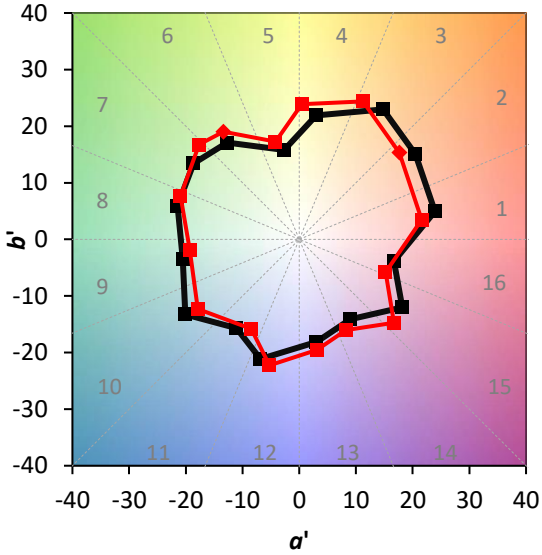
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

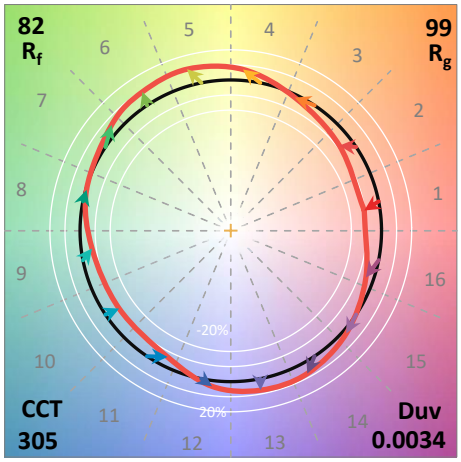
Spectral Power Distribution Comparison

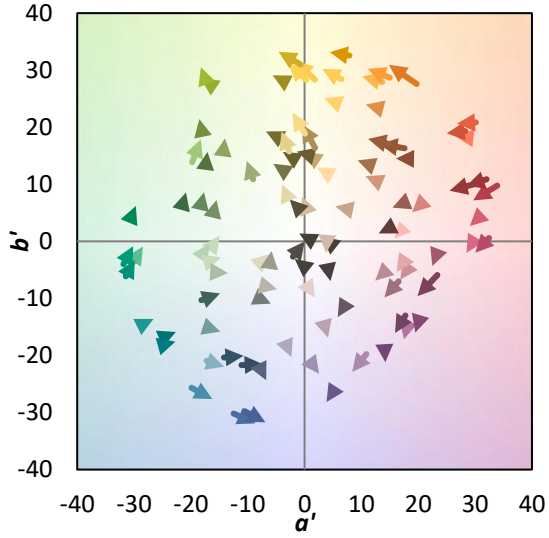


Color Vector Graphics









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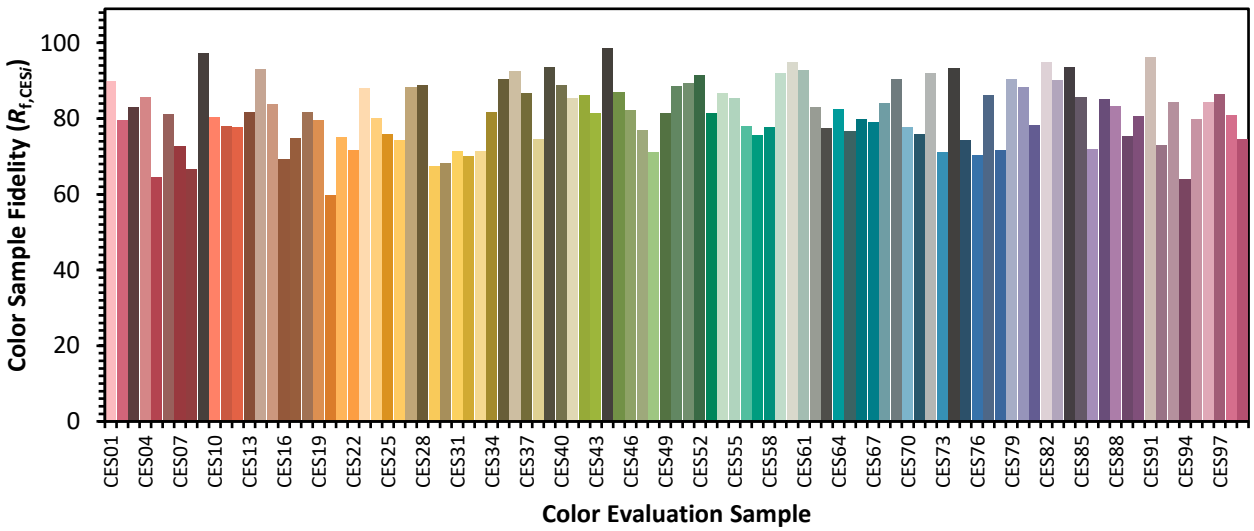
Individual Sample Fidelity Index ($R_{f,i}$)

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	



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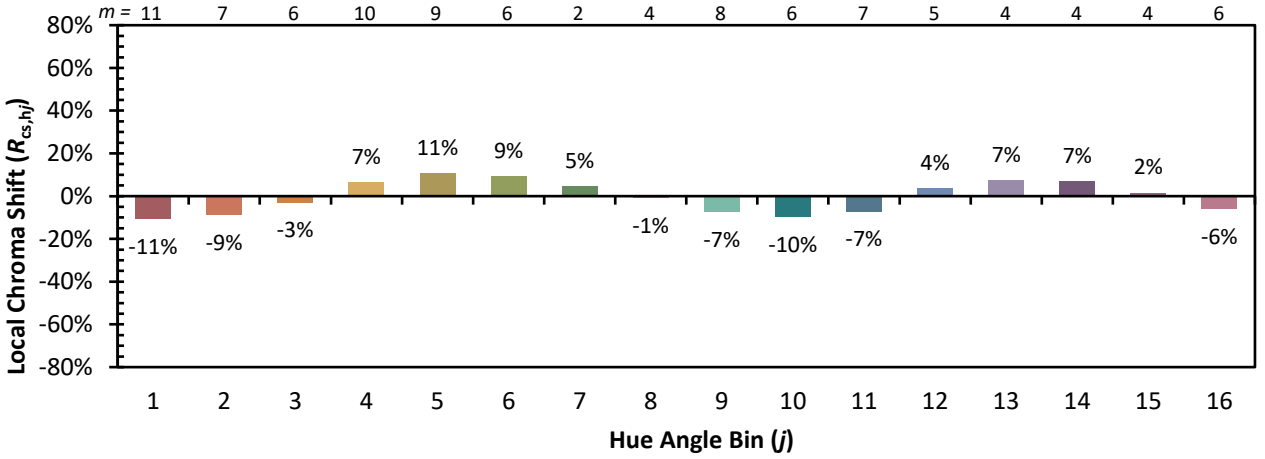
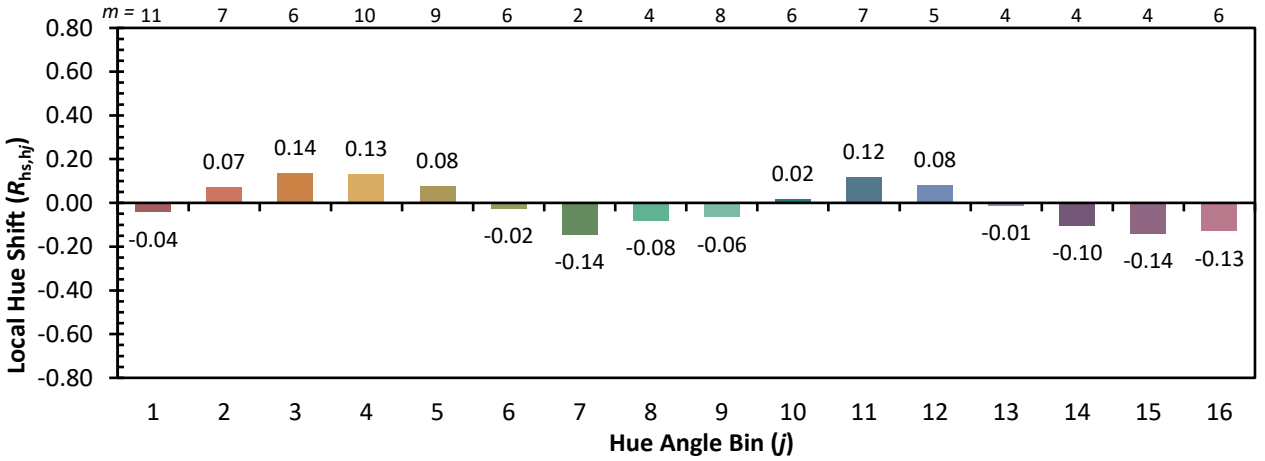
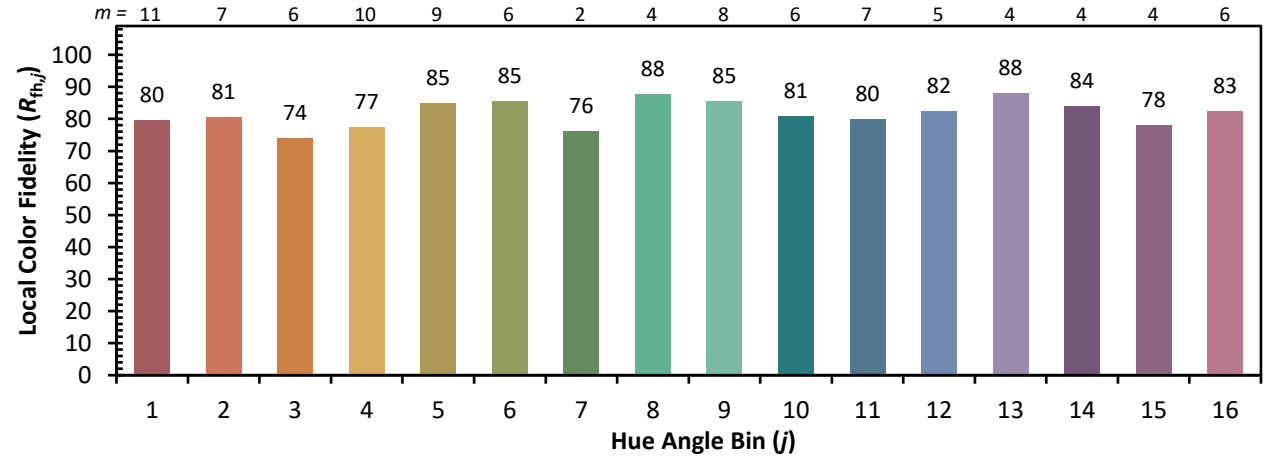
Color Rendition by Hue-Angle Bin







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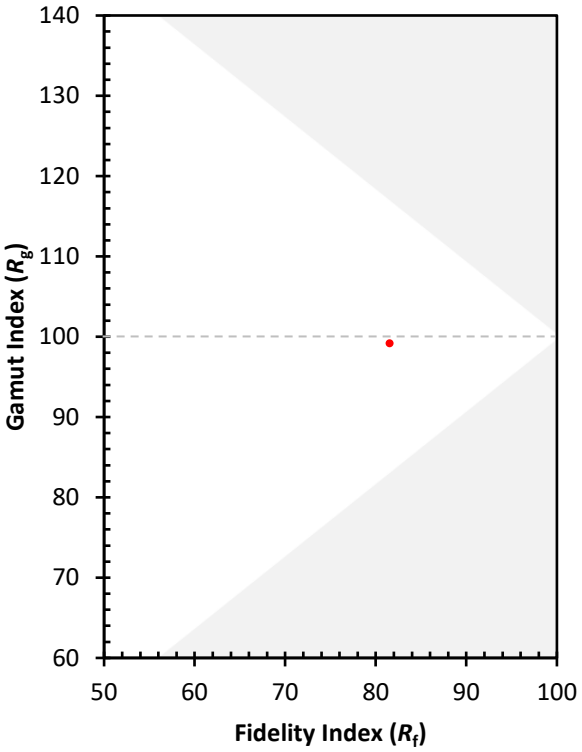
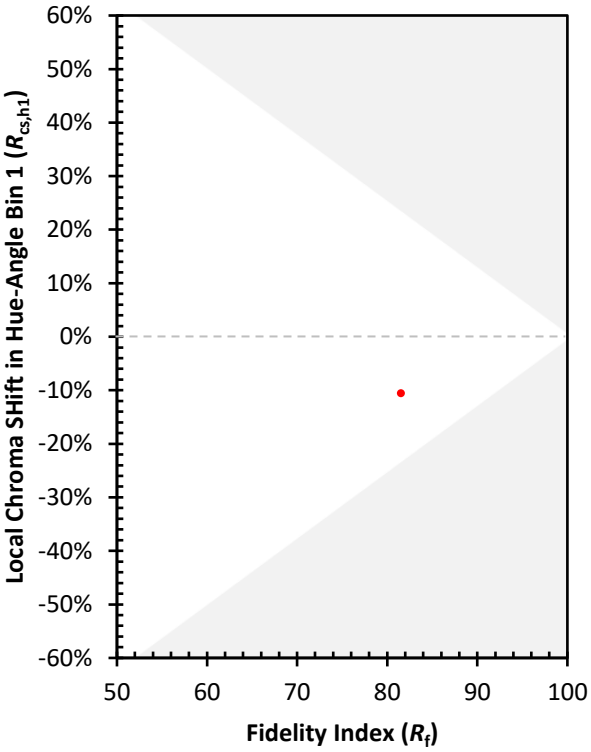
Measure Comparisons





(END OF REPORT)