

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: LUMARK

Report Number: P1068079

Luminaire Tested: **NAV-SA5C-830-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068079
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA5C-830-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 1050mA 5xLight Square PACKAGE
80CRI 3000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (70) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18954.1 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G3

Input Watts (W): 236
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

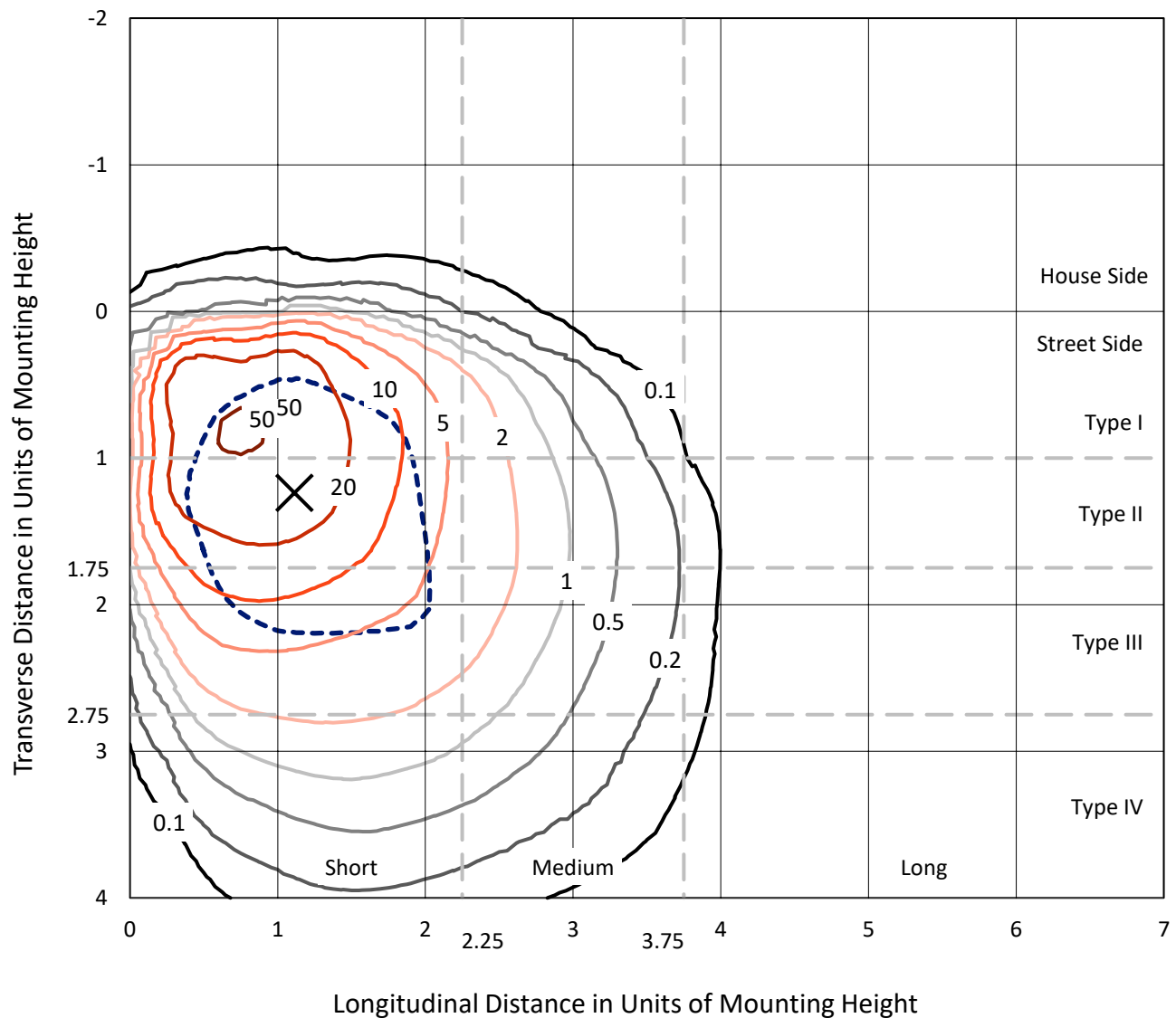


REPORT NUMBER: P1068079

CATALOG NUMBER: NAV-SA5C-830-U-LBC

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

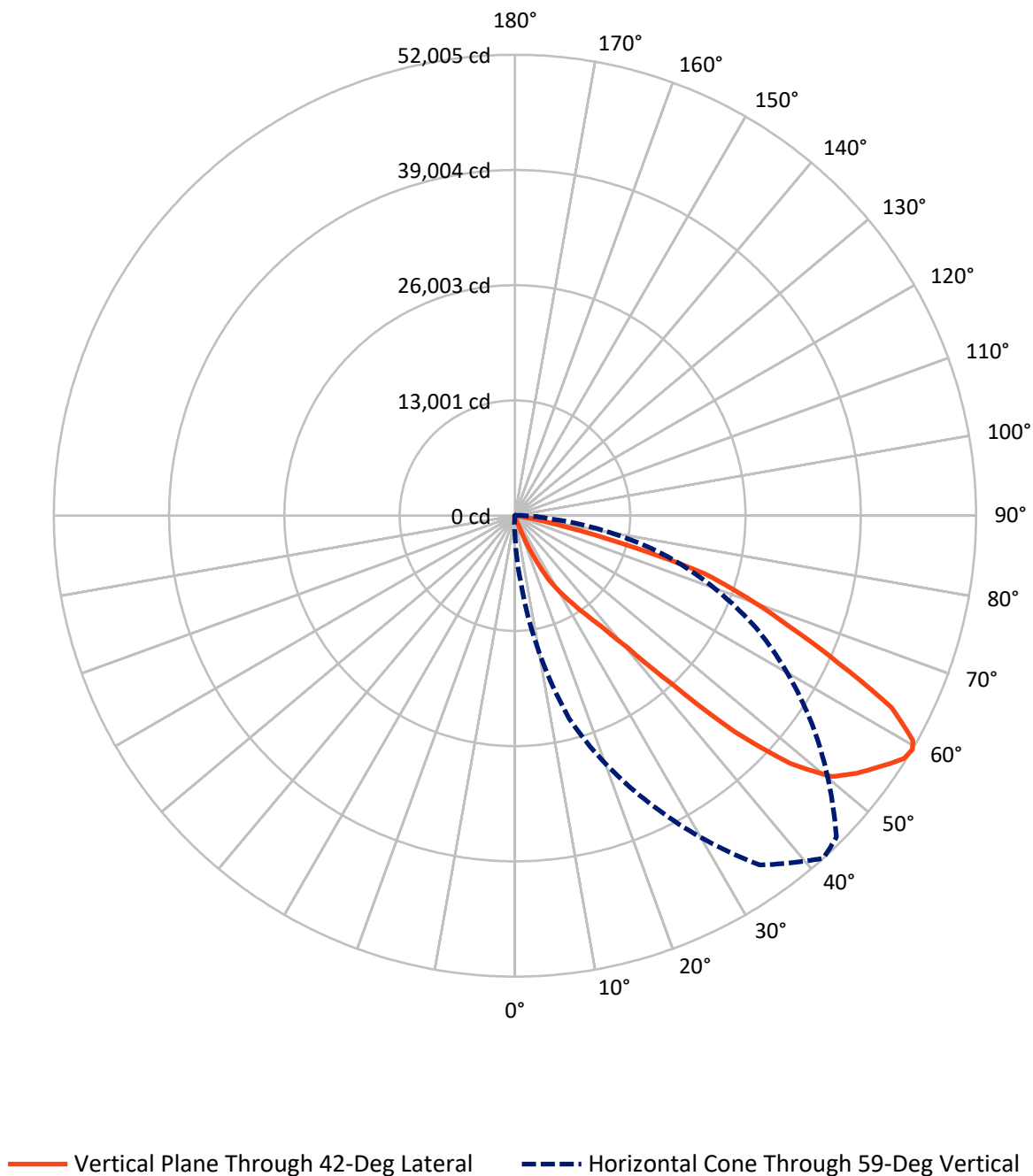


Based on 15 foot mounting height. Maximum calculated value = 56.3 fc
 Type III - Short - N/A

REPORT NUMBER: P1068079

CATALOG NUMBER: NAV-SA5C-830-U-LBC

Luminous Intensity Polar Plot



REPORT NUMBER: P1068079

CATALOG NUMBER: NAV-SA5C-830-U-LBC

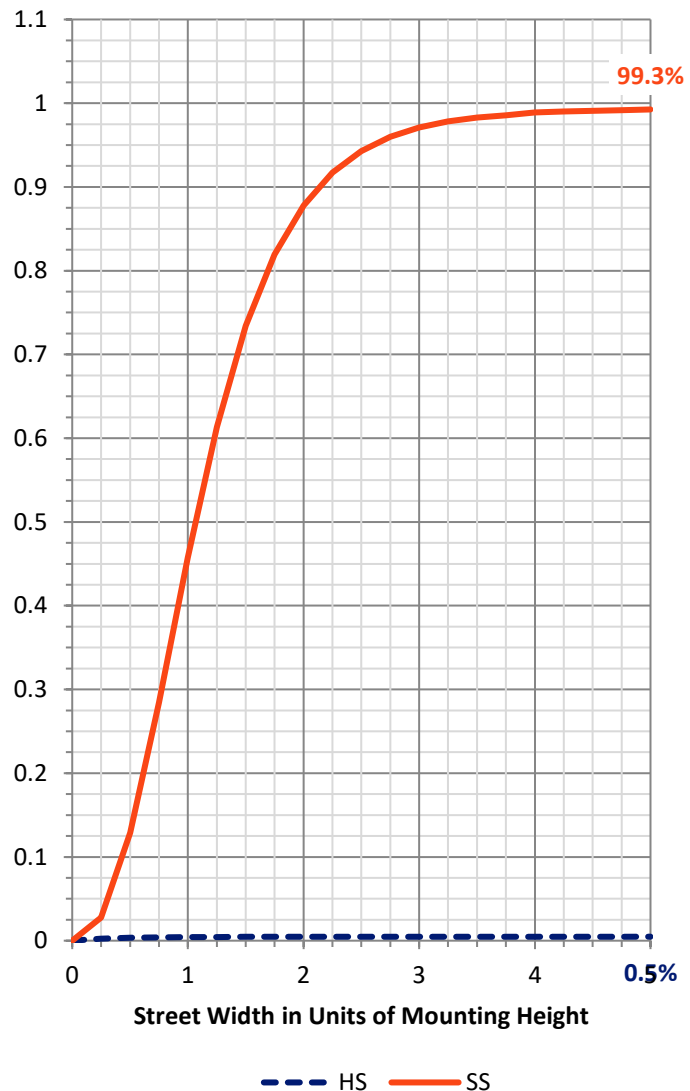
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	91.3	0.0	91.3
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	18862.8	0.0	18862.8
	% Fixture	99.5	0.0	99.5
Total	Lumens	18954.1	0.0	18954.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.6	0.0
10°-20°	27.6	0.1
20°-30°	353.5	1.9
30°-40°	1192.0	6.3
40°-50°	3600.3	19.0
50°-60°	6355.3	33.5
60°-70°	5596.0	29.5
70°-80°	1781.2	9.4
80°-90°	42.6	0.2
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°	18954.1	100.0
0°-180°	18954.1	100.0



REPORT NUMBER: P1068079

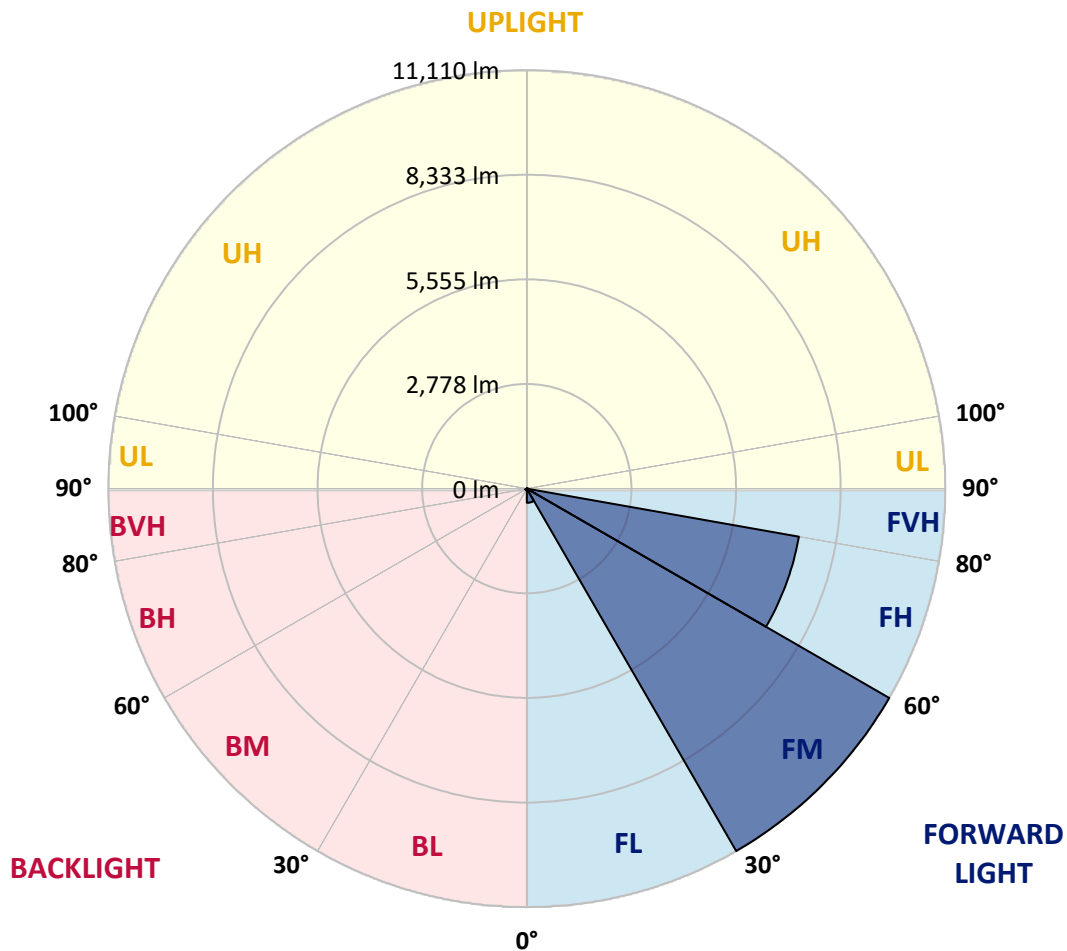
CATALOG NUMBER: NAV-SA5C-830-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	376.6	2.0			
FM	(30°-60°)	11110.3	58.6			
FH	(60°-80°)	7335.4	38.7			G3/7500
FVH	(80°-90°)	40.6	0.2			G1/100
BL	(0°-30°)	10.2	0.1	B0/110		
BM	(30°-60°)	37.3	0.2	B0/220		
BH	(60°-80°)	41.8	0.2	B0/110		G0/110
BVH	(80°-90°)	2.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G3

Type III Short





REPORT NUMBER: P1068079

CATALOG NUMBER: NAV-SA5C-830-U-LBC

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
2.5°	83.2	83.2	77.3	71.3	65.4	59.4	59.4	59.4	53.5	53.5	47.5
5°	95.1	95.1	89.1	83.2	83.2	77.3	77.3	71.3	65.4	65.4	59.4
7.5°	101.0	101.0	101.0	101.0	95.1	95.1	95.1	89.1	83.2	77.3	71.3
10°	107.0	112.9	118.9	118.9	118.9	118.9	118.9	112.9	101.0	95.1	83.2
12.5°	118.9	124.8	136.7	148.6	148.6	154.5	148.6	142.6	130.7	112.9	95.1
15°	130.7	142.6	160.5	184.2	208.0	213.9	213.9	196.1	172.3	136.7	112.9
17.5°	148.6	166.4	213.9	291.2	374.4	439.8	439.8	392.2	273.4	178.3	130.7
20°	160.5	196.1	344.7	701.2	1069.7	1343.1	1289.6	1141.0	612.1	279.3	142.6
22.5°	178.3	249.6	731.0	1842.3	2852.5	3351.7	3232.9	2454.4	1372.8	499.2	172.3
25°	202.1	362.5	1450.0	3452.7	5300.9	5841.7	5764.5	4581.9	2501.9	837.9	219.9
27.5°	249.6	534.8	2323.6	5235.6	7820.7	8284.2	8254.5	6709.4	3999.5	1349.0	285.3
30°	315.0	778.5	3446.8	7113.5	9490.6	9960.0	9811.5	8266.4	5396.0	2062.1	368.5
32.5°	392.2	1087.5	4463.0	8498.1	11029.7	11647.8	11469.5	9621.3	6519.2	2668.3	546.7
35°	511.1	1390.6	5467.3	9722.3	12806.6	13591.1	13293.9	11017.9	7487.9	3351.7	659.6
37.5°	570.5	1568.9	6388.5	11053.5	14803.4	15873.1	15647.3	12782.9	8474.4	4225.3	808.2
40°	576.4	1782.8	7345.2	12788.8	17626.2	19533.8	19129.7	15813.7	10310.7	5348.5	1040.0
42.5°	594.3	2103.7	8587.3	15748.3	23170.8	25910.4	25452.8	21388.0	14476.5	7600.8	1473.8
45°	677.5	2709.9	11118.9	21281.0	30783.4	34800.7	34271.8	29155.1	20294.5	11838.0	2513.8
47.5°	968.7	4076.7	15558.1	27253.4	38568.4	41771.6	41640.8	35276.2	25565.7	16182.1	4261.0
50°	1557.0	6257.7	20609.5	32275.1	43524.7	46276.2	45949.3	37831.5	28572.7	19147.5	5461.4
52.5°	2080.0	8343.6	23782.9	34123.3	45004.4	48284.8	47886.7	38764.6	29363.1	20021.1	5794.2
55°	2210.7	9098.3	24727.8	34693.8	45985.0	49984.5	49408.0	39388.5	29464.2	19397.1	5241.5
57.5°	2145.3	8385.2	24115.7	35252.4	47351.8	51731.6	50965.0	40606.8	29802.9	18339.3	4362.0
59°	2032.4	7505.7	23735.3	35698.1	48106.6	52005.0	51285.9	40874.2	30028.7	17858.0	3827.1
60°	1901.7	6911.4	23438.2	35989.3	48059.0	51577.1	50834.3	40749.4	30117.9	17442.0	3571.6
62.5°	1467.9	5514.9	23010.3	35781.3	45057.9	47672.7	47250.8	37694.9	28810.5	16110.8	2816.9
65°	1141.0	4219.4	21441.4	31912.6	38342.6	40101.7	39970.9	31918.5	24246.4	13888.2	2032.4
67.5°	903.3	3078.3	18131.3	25845.0	30848.8	33350.7	33255.6	25910.4	18404.7	10613.8	1461.9
70°	736.9	2192.9	12432.2	19486.3	24674.3	27824.0	27687.3	20853.1	13638.6	6733.1	1063.8
72.5°	624.0	1402.5	7541.3	14690.5	20591.6	22392.3	21994.1	16823.9	9918.4	3666.7	843.9
75°	528.9	861.7	3738.0	9157.8	12265.8	12253.9	11855.8	8908.2	5324.7	1794.7	671.5
77.5°	427.9	606.2	1467.9	2513.8	3868.7	4789.9	4712.6	3155.6	1592.7	523.0	416.0
80°	279.3	285.3	392.2	689.4	1063.8	1176.7	1337.1	962.7	463.5	249.6	172.3
82.5°	124.8	136.7	178.3	225.8	225.8	208.0	184.2	136.7	101.0	83.2	41.6
85°	29.7	41.6	29.7	35.7	29.7	23.8	23.8	11.9	0.0	0.0	0.0
87.5°	5.9	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: P1068079

CATALOG NUMBER: NAV-SA5C-830-U-LBC

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
2.5°	47.5	47.5	47.5	41.6	41.6	41.6	35.7	35.7	35.7	29.7	29.7
5°	59.4	53.5	47.5	47.5	41.6	41.6	35.7	29.7	29.7	29.7	23.8
7.5°	65.4	59.4	53.5	47.5	41.6	35.7	35.7	29.7	23.8	23.8	23.8
10°	77.3	71.3	59.4	47.5	41.6	35.7	29.7	29.7	23.8	17.8	17.8
12.5°	89.1	77.3	65.4	53.5	41.6	35.7	29.7	29.7	23.8	17.8	11.9
15°	101.0	89.1	71.3	53.5	41.6	35.7	29.7	29.7	17.8	11.9	5.9
17.5°	112.9	95.1	71.3	59.4	41.6	35.7	29.7	23.8	11.9	5.9	0.0
20°	118.9	101.0	77.3	59.4	41.6	35.7	29.7	17.8	5.9	0.0	0.0
22.5°	130.7	112.9	83.2	59.4	41.6	29.7	17.8	5.9	0.0	0.0	0.0
25°	154.5	118.9	83.2	59.4	41.6	29.7	11.9	0.0	0.0	0.0	0.0
27.5°	172.3	130.7	83.2	59.4	41.6	23.8	5.9	0.0	0.0	0.0	0.0
30°	202.1	142.6	89.1	59.4	41.6	17.8	5.9	0.0	0.0	0.0	0.0
32.5°	249.6	154.5	89.1	59.4	35.7	17.8	0.0	0.0	0.0	0.0	0.0
35°	303.1	178.3	89.1	59.4	35.7	17.8	0.0	0.0	0.0	0.0	0.0
37.5°	309.0	190.2	89.1	59.4	35.7	11.9	0.0	0.0	0.0	0.0	0.0
40°	320.9	178.3	95.1	59.4	35.7	11.9	0.0	0.0	0.0	0.0	0.0
42.5°	368.5	166.4	101.0	59.4	35.7	11.9	0.0	0.0	0.0	0.0	0.0
45°	546.7	172.3	101.0	65.4	35.7	17.8	0.0	0.0	0.0	0.0	0.0
47.5°	950.8	178.3	95.1	65.4	35.7	17.8	0.0	0.0	0.0	0.0	0.0
50°	1218.3	208.0	95.1	71.3	41.6	11.9	0.0	0.0	0.0	0.0	0.0
52.5°	1295.5	243.7	95.1	77.3	53.5	5.9	0.0	0.0	0.0	0.0	0.0
55°	1259.9	285.3	101.0	83.2	65.4	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	1164.8	309.0	107.0	89.1	71.3	0.0	0.0	0.0	0.0	0.0	0.0
59°	1063.8	326.9	124.8	95.1	71.3	0.0	0.0	0.0	0.0	0.0	0.0
60°	980.6	344.7	130.7	101.0	71.3	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	790.4	368.5	142.6	118.9	59.4	0.0	0.0	0.0	0.0	0.0	0.0
65°	689.4	386.3	148.6	130.7	53.5	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	629.9	398.2	160.5	136.7	47.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	582.4	392.2	172.3	130.7	41.6	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	528.9	374.4	208.0	118.9	35.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	475.4	338.7	225.8	107.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	344.7	285.3	208.0	95.1	11.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	148.6	154.5	148.6	71.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	29.7	35.7	29.7	17.8	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: P1068079

CATALOG NUMBER: NAV-SA5C-830-U-LBC

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
2.5°	29.7	29.7	29.7	29.7	35.7	35.7	47.5	59.4	71.3	77.3	77.3
5°	23.8	23.8	23.8	23.8	23.8	29.7	35.7	47.5	65.4	71.3	71.3
7.5°	17.8	17.8	17.8	17.8	17.8	17.8	29.7	41.6	59.4	65.4	71.3
10°	17.8	11.9	11.9	5.9	5.9	11.9	17.8	35.7	53.5	59.4	65.4
12.5°	11.9	5.9	5.9	0.0	0.0	5.9	11.9	29.7	47.5	53.5	59.4
15°	5.9	0.0	0.0	0.0	0.0	0.0	5.9	23.8	41.6	47.5	59.4
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8	35.7	47.5	53.5
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	29.7	41.6	47.5
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	23.8	35.7	41.6
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8	23.8	29.7
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	17.8	23.8
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	17.8	23.8
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9	17.8
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9	17.8
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9	11.9
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9
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: P1068079

CATALOG NUMBER: NAV-SA5C-830-U-LBC

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	318°	325°	335°	345°	355°	360°
0°	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
2.5°	83.2	83.2	77.3	71.3	71.3	71.3	77.3	83.2	83.2	83.2
5°	77.3	77.3	71.3	71.3	71.3	71.3	77.3	89.1	95.1	95.1
7.5°	77.3	77.3	71.3	71.3	71.3	71.3	77.3	89.1	95.1	101.0
10°	71.3	71.3	71.3	71.3	65.4	71.3	77.3	89.1	107.0	107.0
12.5°	71.3	71.3	71.3	71.3	65.4	71.3	83.2	95.1	112.9	118.9
15°	71.3	71.3	71.3	65.4	65.4	71.3	83.2	101.0	118.9	130.7
17.5°	65.4	71.3	71.3	65.4	65.4	71.3	83.2	101.0	130.7	148.6
20°	59.4	65.4	71.3	65.4	65.4	65.4	83.2	101.0	136.7	160.5
22.5°	53.5	59.4	65.4	65.4	59.4	65.4	83.2	107.0	148.6	178.3
25°	47.5	53.5	53.5	59.4	59.4	65.4	83.2	107.0	154.5	202.1
27.5°	35.7	41.6	47.5	53.5	53.5	65.4	83.2	112.9	166.4	249.6
30°	29.7	35.7	41.6	47.5	53.5	65.4	83.2	112.9	178.3	315.0
32.5°	29.7	35.7	41.6	47.5	53.5	59.4	83.2	118.9	196.1	392.2
35°	23.8	29.7	35.7	47.5	47.5	59.4	83.2	118.9	213.9	511.1
37.5°	23.8	29.7	35.7	47.5	47.5	59.4	83.2	118.9	261.5	570.5
40°	17.8	23.8	29.7	47.5	47.5	59.4	89.1	124.8	267.4	576.4
42.5°	17.8	23.8	29.7	41.6	47.5	59.4	89.1	124.8	249.6	594.3
45°	17.8	23.8	29.7	47.5	53.5	65.4	89.1	130.7	243.7	677.5
47.5°	17.8	23.8	29.7	47.5	59.4	65.4	89.1	130.7	249.6	968.7
50°	17.8	23.8	29.7	47.5	65.4	65.4	89.1	130.7	273.4	1557.0
52.5°	11.9	17.8	23.8	41.6	53.5	71.3	95.1	124.8	291.2	2080.0
55°	11.9	11.9	17.8	35.7	47.5	77.3	101.0	124.8	338.7	2210.7
57.5°	11.9	11.9	17.8	29.7	41.6	83.2	107.0	124.8	392.2	2145.3
59°	11.9	11.9	11.9	23.8	35.7	83.2	107.0	130.7	398.2	2032.4
60°	11.9	11.9	11.9	23.8	35.7	83.2	112.9	136.7	404.1	1901.7
62.5°	5.9	5.9	5.9	23.8	29.7	83.2	124.8	166.4	416.0	1467.9
65°	11.9	11.9	5.9	17.8	29.7	71.3	142.6	178.3	421.9	1141.0
67.5°	11.9	11.9	11.9	23.8	29.7	71.3	148.6	184.2	421.9	903.3
70°	11.9	11.9	11.9	23.8	35.7	71.3	148.6	190.2	416.0	736.9
72.5°	11.9	11.9	11.9	23.8	35.7	65.4	136.7	196.1	398.2	624.0
75°	11.9	11.9	11.9	17.8	29.7	59.4	130.7	213.9	362.5	528.9
77.5°	11.9	11.9	11.9	11.9	23.8	47.5	118.9	237.7	320.9	427.9
80°	17.8	11.9	11.9	11.9	17.8	41.6	112.9	231.8	267.4	279.3
82.5°	17.8	11.9	11.9	5.9	11.9	29.7	89.1	178.3	136.7	124.8
85°	11.9	11.9	11.9	5.9	5.9	17.8	41.6	53.5	41.6	29.7
87.5°	11.9	11.9	11.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
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: SP1-2407-184-9

Test Date: 10/10/2024

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

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

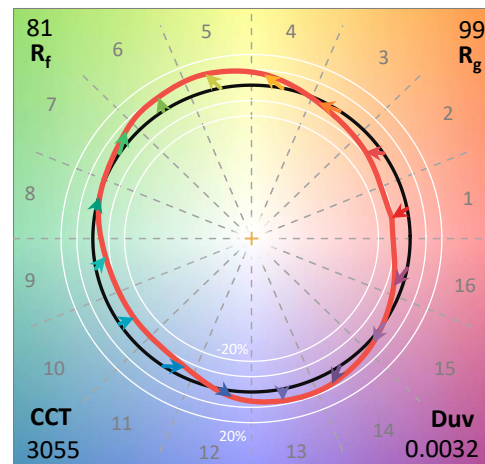
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/15/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: McGraw-Edison
 Catalog Number: **GSS-SB1A-830-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 3000K CCT 26 LEDS

Spectral Parameters

CCT (K): 3055
 CIE u' : 0.2475
 CIE v' : 0.5247
 Duv: 0.0032
 CIE x: 0.4377
 CIE y: 0.4124
 CIE z: 0.1499
 Peak Wavelength (nm): 604
 Dominant Wavelength (nm): 581
 Purity: 55.16339
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 80.9
 R1: 79.5
 R2: 85.6
 R3: 92.1
 R4: 82.4
 R5: 78.9
 R6: 81.7
 R7: 85.1
 R8: 61.9
 R9: 6.8
 R10: 67.1
 R11: 82.5
 R12: 63.4
 R13: 80.2
 R14: 95.1
 R15: 71.7



Test Conditions

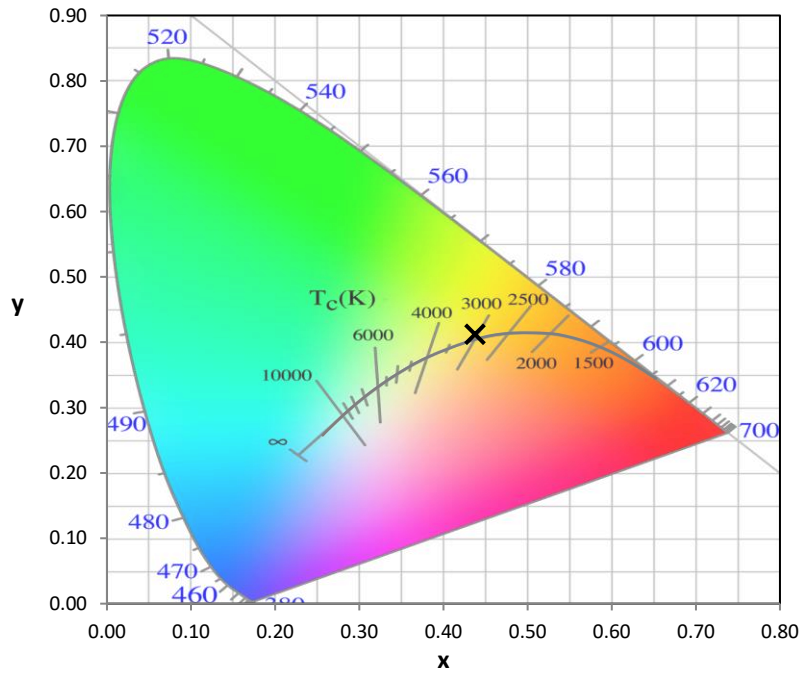
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-9

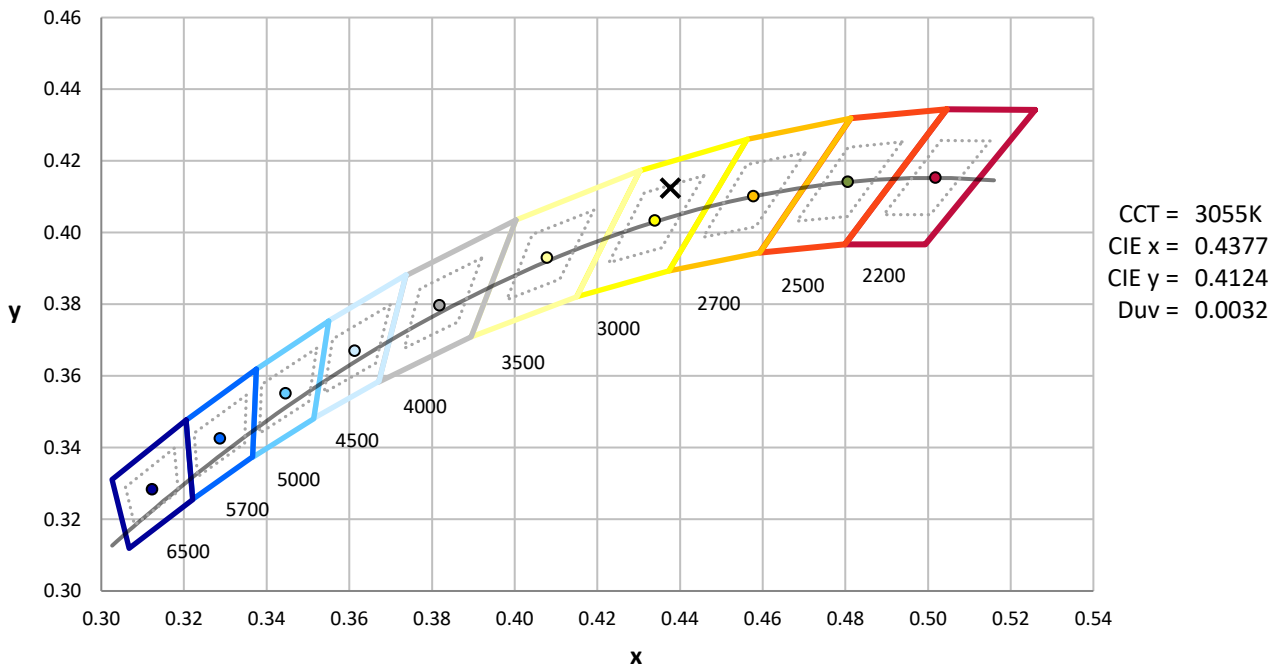
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-9

CIE 1931 Chromaticity Diagram



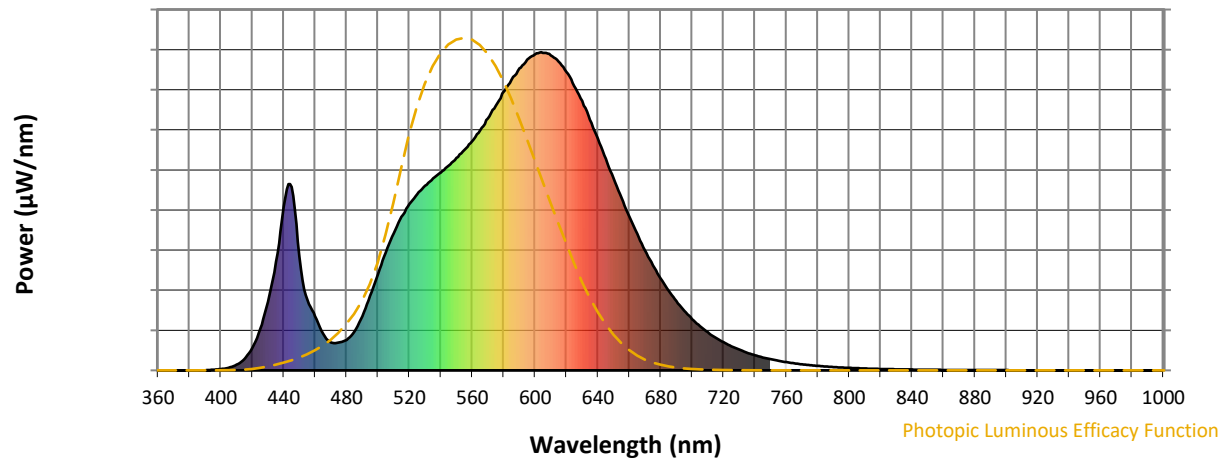
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-9

Photopic Flux vs. Wavelength

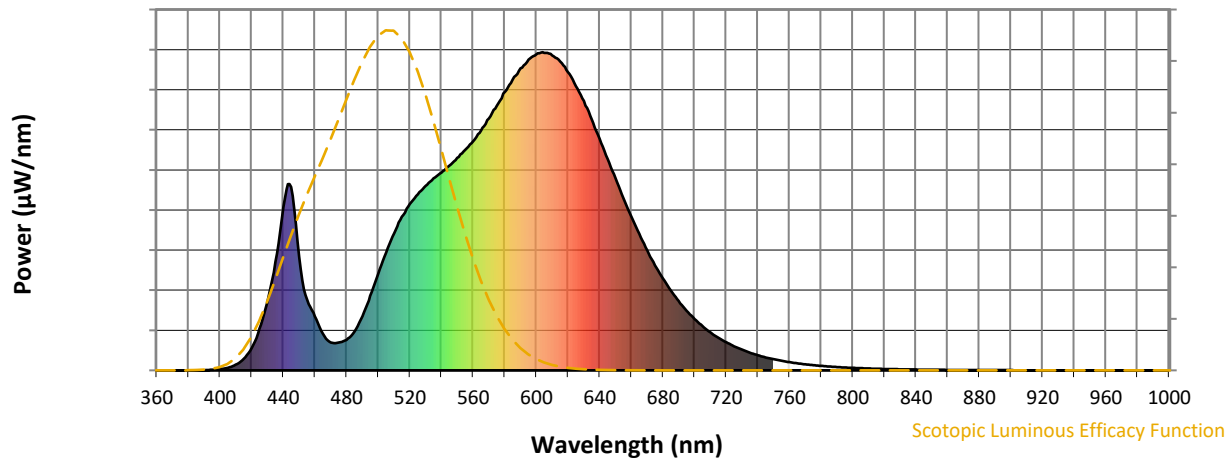


Photopic Lumens: NR

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	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-9

Scotopic Flux vs. Wavelength



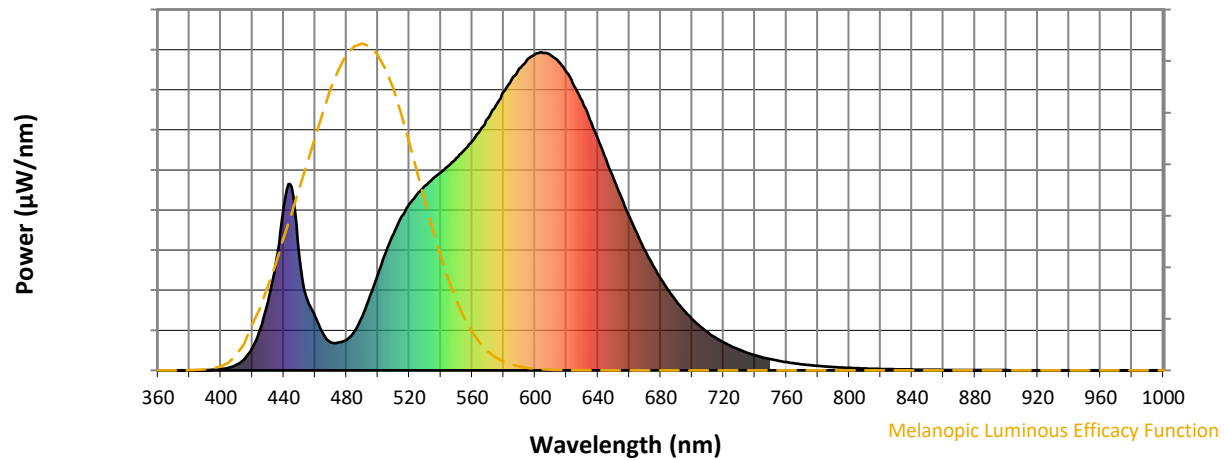
Scotopic Lumens: NR

S/P: 1.28

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	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-9

Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.33

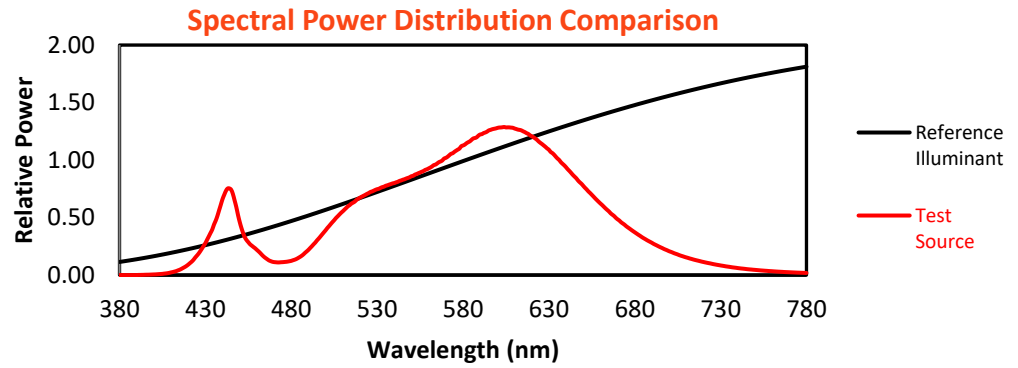
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-9

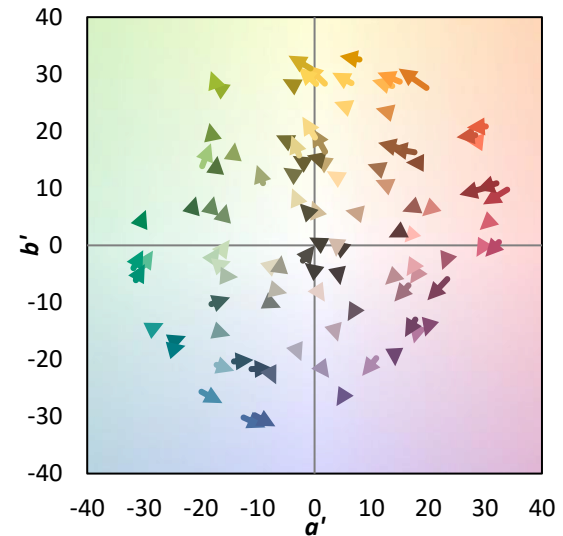
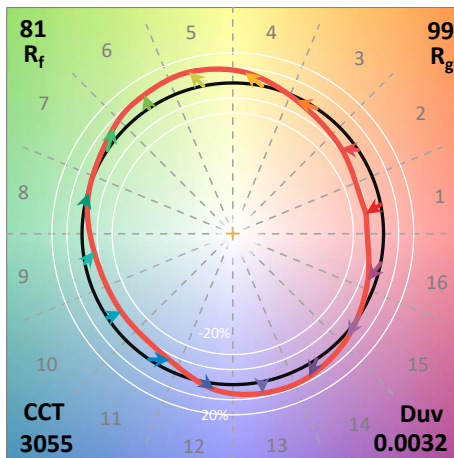
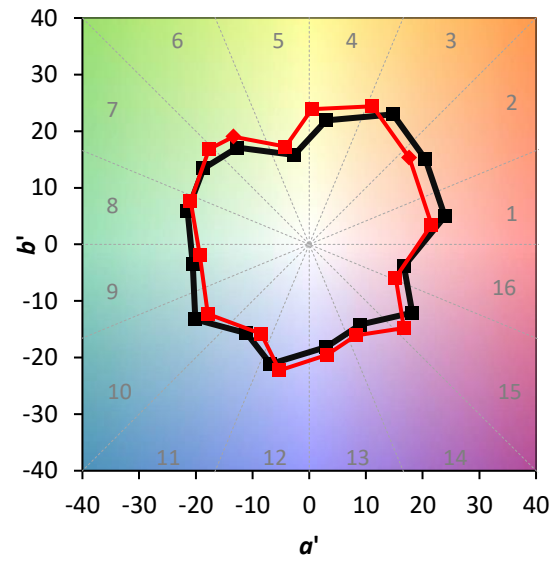
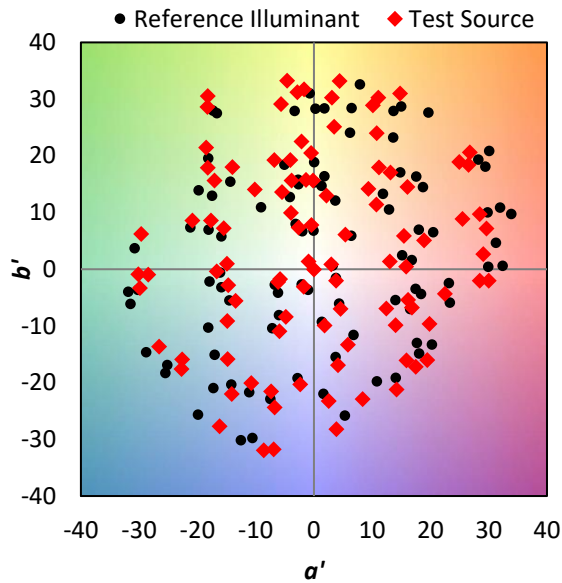
TM-30-18

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 80.9$
 $R_9 = 6.8$

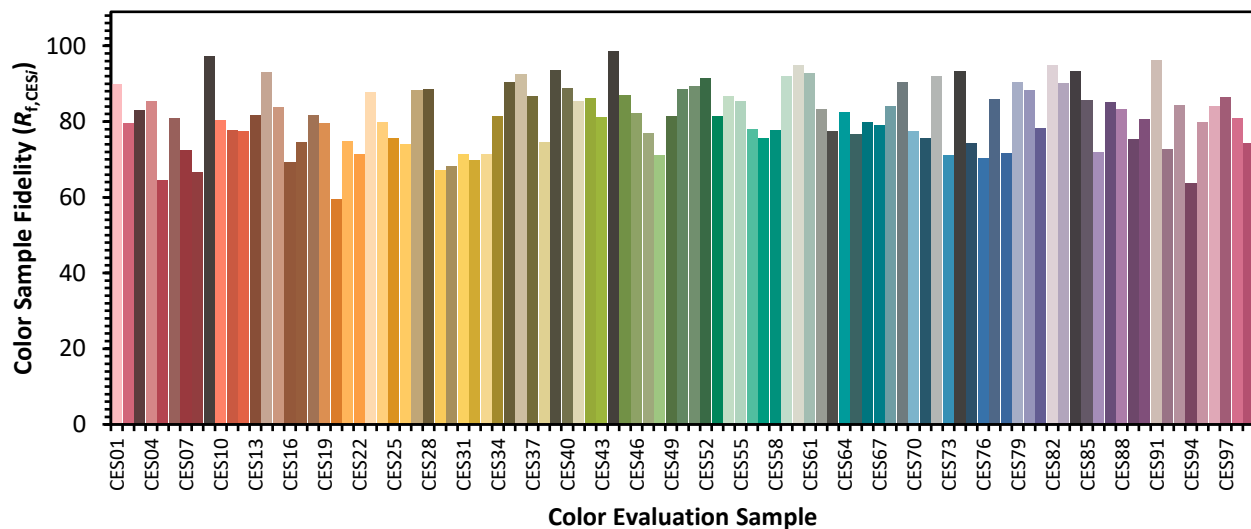


Color Vector Graphics

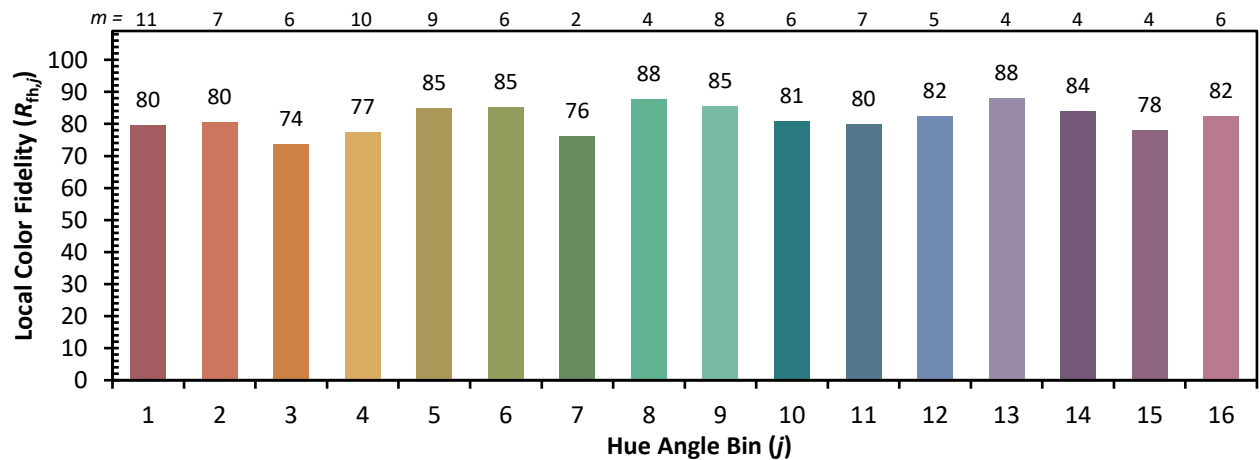
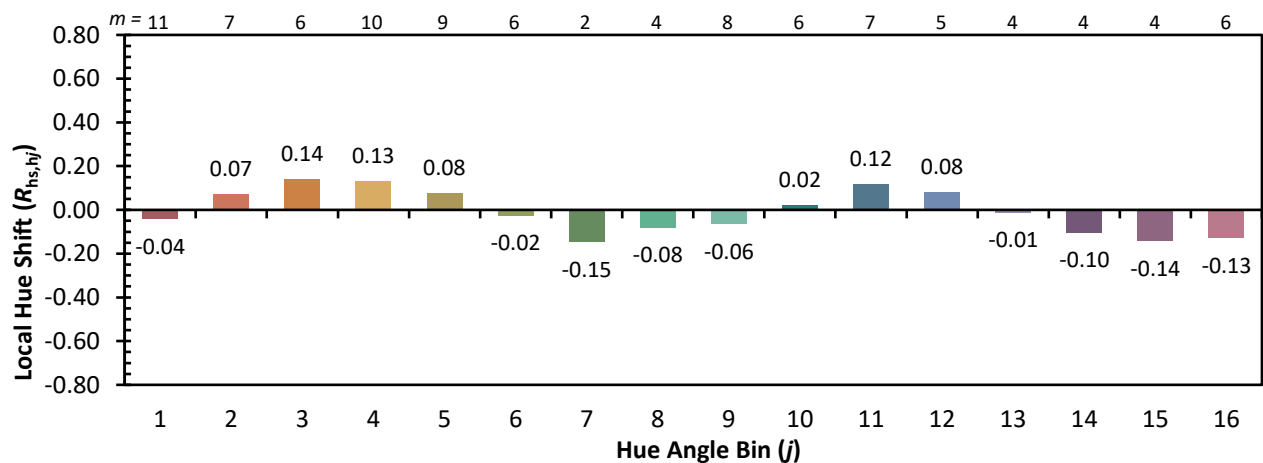
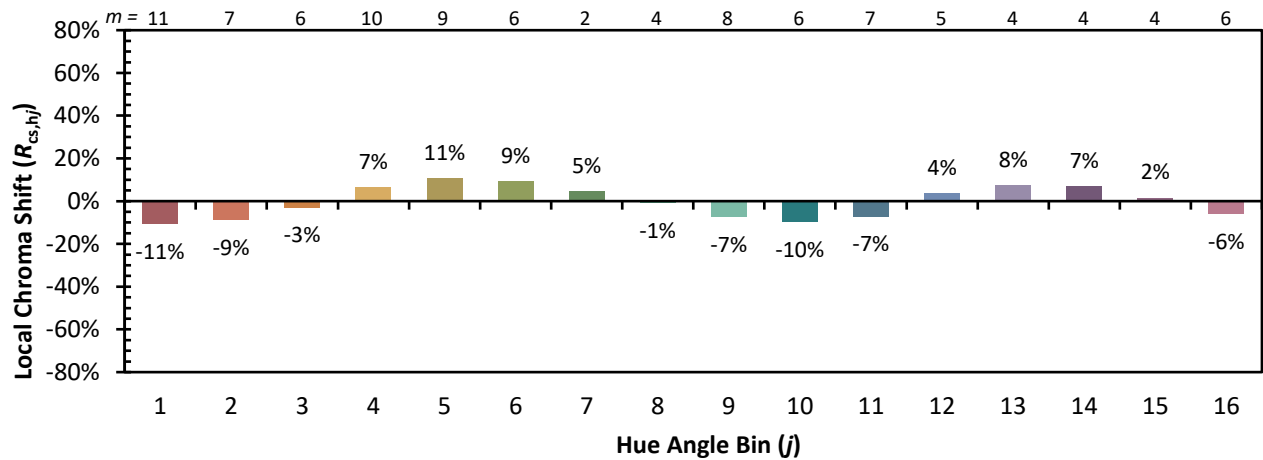


Individual Sample Fidelity Index ($R_{f,i}$)

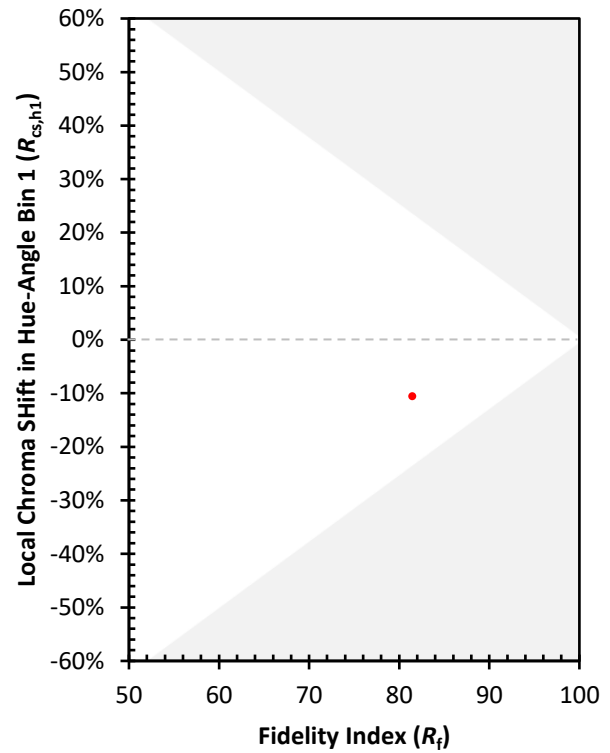
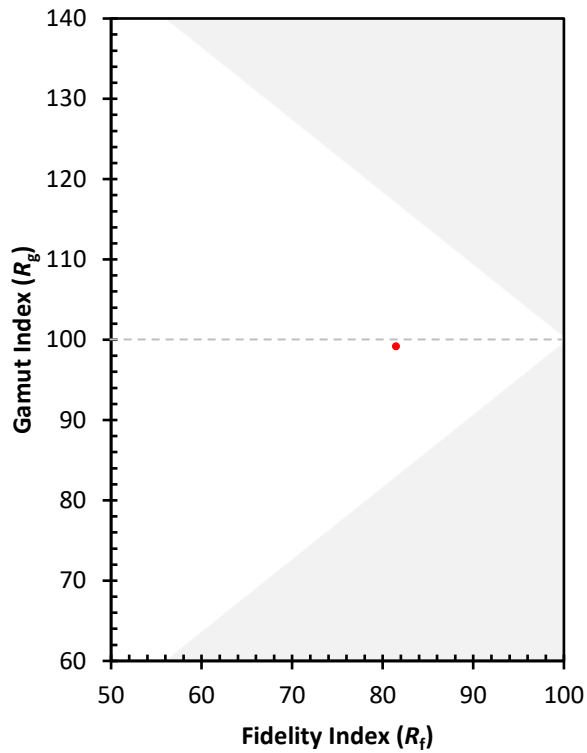
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 91	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 93
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 = 90	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 77	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)