

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: P1067960

Luminaire Tested: **NAV-SA5D-730-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1067960
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA5D-730-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 1200mA 5xLight Square PACKAGE
70CRI 3000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (70) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23947.1 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G4

Input Watts (W): 269.7
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



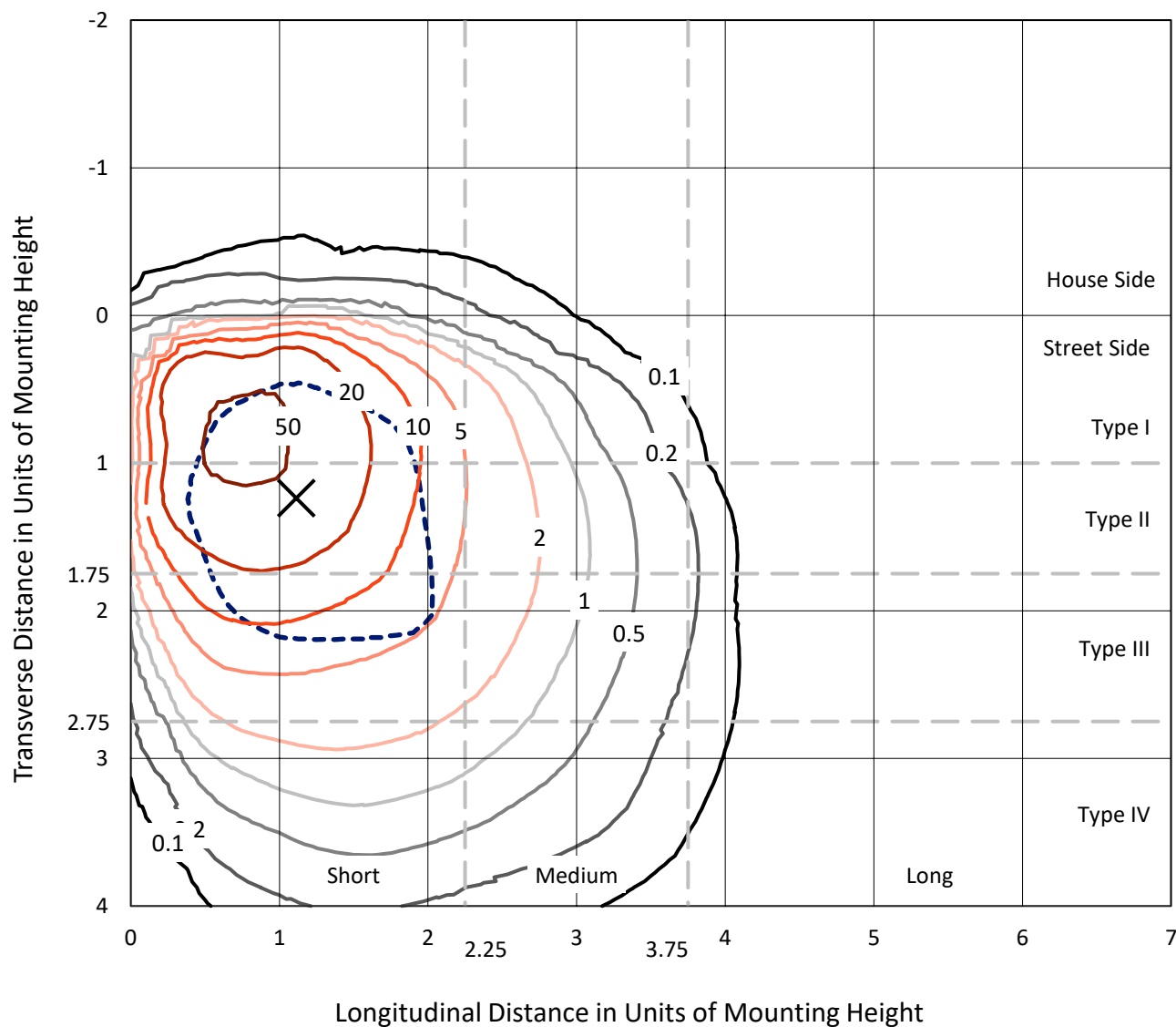
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

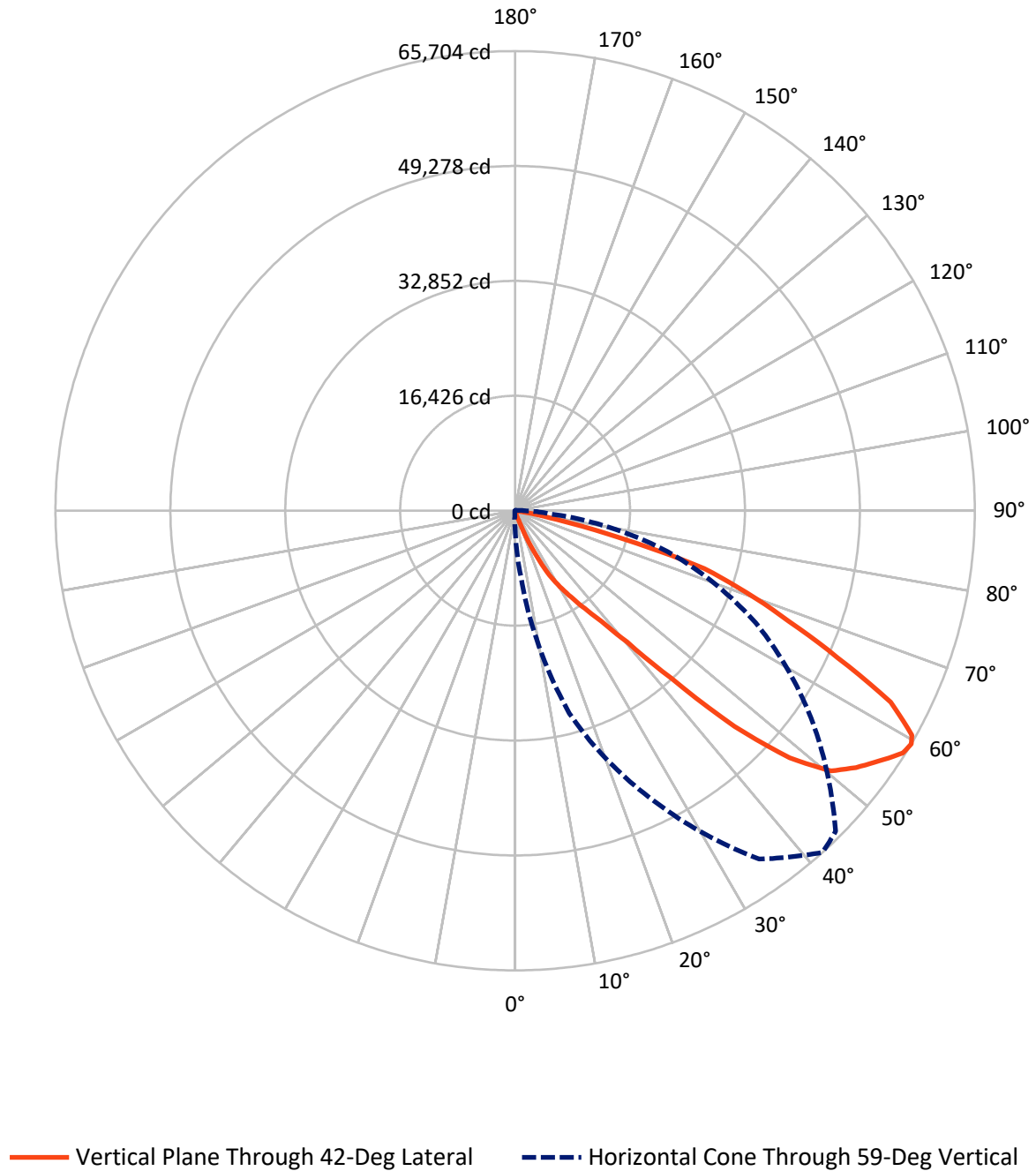


Based on 15 foot mounting height. Maximum calculated value = 71.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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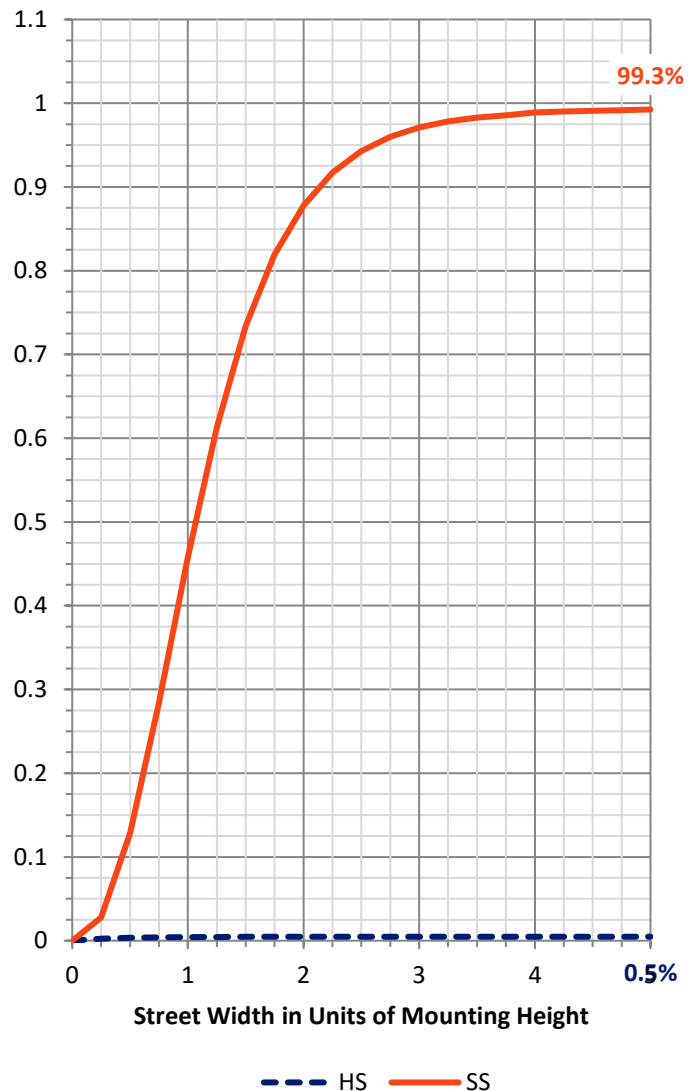
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	115.4	0.0	115.4
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	23831.7	0.0	23831.7
	% Fixture	99.5	0.0	99.5
Total	Lumens	23947.1	0.0	23947.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.0	0.0
10°-20°	34.9	0.1
20°-30°	446.7	1.9
30°-40°	1506.0	6.3
40°-50°	4548.7	19.0
50°-60°	8029.5	33.5
60°-70°	7070.1	29.5
70°-80°	2250.4	9.4
80°-90°	53.8	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°	23947.1	100.0
0°-180°	23947.1	100.0



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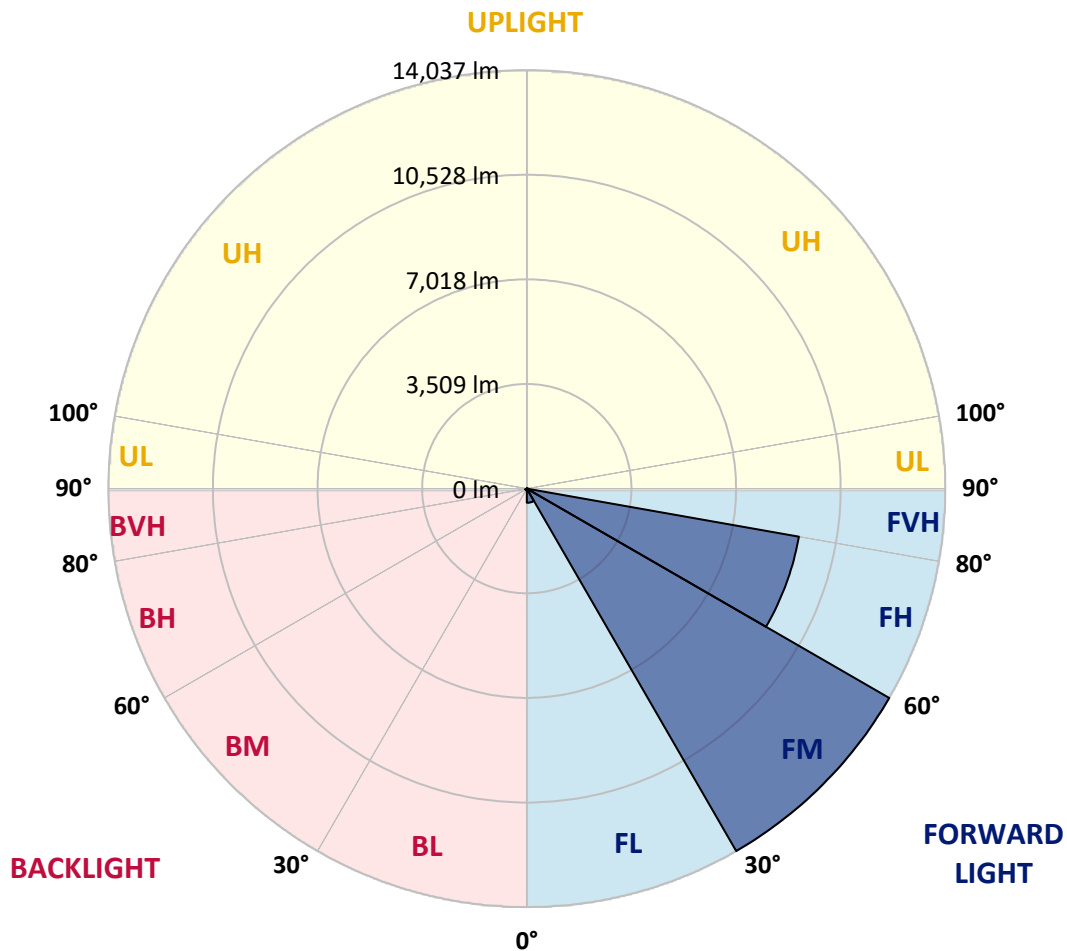
CATALOG NUMBER: NAV-SA5D-730-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	475.7	2.0			
FM	(30°-60°)	14037.0	58.6			
FH	(60°-80°)	9267.8	38.7			G4/12000
FVH	(80°-90°)	51.2	0.2			G1/100
BL	(0°-30°)	12.9	0.1	B0/110		
BM	(30°-60°)	47.1	0.2	B0/220		
BH	(60°-80°)	52.8	0.2	B0/110		G0/110
BVH	(80°-90°)	2.6	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-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
2.5°	105.1	105.1	97.6	90.1	82.6	75.1	75.1	75.1	67.6	67.6	60.1
5°	120.1	120.1	112.6	105.1	105.1	97.6	97.6	90.1	82.6	82.6	75.1
7.5°	127.6	127.6	127.6	127.6	120.1	120.1	120.1	112.6	105.1	97.6	90.1
10°	135.1	142.7	150.2	150.2	150.2	150.2	150.2	142.7	127.6	120.1	105.1
12.5°	150.2	157.7	172.7	187.7	187.7	187.7	187.7	180.2	165.2	142.7	120.1
15°	165.2	180.2	202.7	232.8	262.8	270.3	270.3	247.8	217.7	172.7	142.7
17.5°	187.7	210.2	270.3	367.9	473.0	555.6	555.6	495.5	345.4	225.2	165.2
20°	202.7	247.8	435.5	886.0	1351.5	1696.9	1629.3	1441.6	773.3	352.9	180.2
22.5°	225.2	315.3	923.5	2327.5	3603.9	4234.6	4084.5	3100.9	1734.4	630.7	217.7
25°	255.3	458.0	1832.0	4362.3	6697.3	7380.6	7283.0	5788.8	3161.0	1058.7	277.8
27.5°	315.3	675.7	2935.7	6614.7	9880.8	10466.5	10428.9	8476.8	5053.0	1704.4	360.4
30°	397.9	983.6	4354.8	8987.3	11990.6	12583.8	12396.1	10443.9	6817.5	2605.4	465.5
32.5°	495.5	1374.0	5638.7	10736.8	13935.3	14716.1	14490.9	12155.8	8236.5	3371.2	690.8
35°	645.7	1756.9	6907.6	12283.4	16180.2	17171.3	16795.9	13920.2	9460.4	4234.6	833.4
37.5°	720.8	1982.2	8071.3	13965.3	18703.0	20054.5	19769.1	16150.2	10706.7	5338.3	1021.1
40°	728.3	2252.5	9280.2	16157.7	22269.4	24679.5	24169.0	19979.4	13026.8	6757.4	1313.9
42.5°	750.8	2657.9	10849.4	19896.8	29274.5	32735.8	32157.7	27022.1	18290.0	9603.0	1862.0
45°	855.9	3423.7	14047.9	26886.9	38892.6	43968.1	43299.9	36835.3	25640.6	14956.4	3176.0
47.5°	1223.8	5150.6	19656.5	34432.7	48728.3	52775.3	52610.1	44568.8	32300.4	20444.9	5383.4
50°	1967.2	7906.2	26038.5	40777.1	54990.2	58466.5	58053.5	47797.3	36099.5	24191.5	6900.1
52.5°	2627.9	10541.5	30047.9	43112.2	56859.7	61004.3	60501.2	48976.1	37098.1	25295.2	7320.5
55°	2793.1	11495.1	31241.7	43833.0	58098.6	63151.6	62423.3	49764.5	37225.7	24506.8	6622.2
57.5°	2710.5	10594.1	30468.4	44538.8	59825.5	65359.0	64390.5	51303.7	37653.7	23170.4	5511.0
59°	2567.8	9482.9	29987.8	45101.9	60779.0	65704.4	64795.9	51641.5	37939.0	22562.2	4835.3
60°	2402.6	8732.1	29612.4	45469.8	60719.0	65163.8	64225.3	51483.9	38051.7	22036.6	4512.4
62.5°	1854.5	6967.6	29071.8	45207.0	56927.3	60230.9	59697.8	47624.6	36399.8	20354.8	3558.9
65°	1441.6	5330.8	27089.7	40319.1	48443.0	50665.5	50500.3	40326.6	30633.5	17546.7	2567.8
67.5°	1141.2	3889.3	22907.6	32653.2	38975.2	42136.1	42016.0	32735.8	23253.0	13409.7	1847.0
70°	931.0	2770.5	15707.2	24619.4	31174.1	35153.5	34980.8	26346.3	17231.4	8506.8	1344.0
72.5°	788.4	1771.9	9527.9	18560.3	26016.0	28291.0	27787.9	21255.8	12531.2	4632.6	1066.2
75°	668.2	1088.7	4722.7	11570.2	15497.0	15481.9	14978.9	11254.8	6727.4	2267.5	848.4
77.5°	540.6	765.8	1854.5	3176.0	4887.9	6051.6	5954.0	3986.9	2012.2	660.7	525.6
80°	352.9	360.4	495.5	871.0	1344.0	1486.6	1689.3	1216.3	585.6	315.3	217.7
82.5°	157.7	172.7	225.2	285.3	285.3	262.8	232.8	172.7	127.6	105.1	52.6
85°	37.5	52.6	37.5	45.0	37.5	30.0	30.0	15.0	0.0	0.0	0.0
87.5°	7.5	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°	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
2.5°	60.1	60.1	60.1	52.6	52.6	52.6	45.0	45.0	45.0	37.5	37.5
5°	75.1	67.6	60.1	60.1	52.6	52.6	45.0	37.5	37.5	37.5	30.0
7.5°	82.6	75.1	67.6	60.1	52.6	45.0	45.0	37.5	30.0	30.0	30.0
10°	97.6	90.1	75.1	60.1	52.6	45.0	37.5	37.5	30.0	22.5	22.5
12.5°	112.6	97.6	82.6	67.6	52.6	45.0	37.5	37.5	30.0	22.5	15.0
15°	127.6	112.6	90.1	67.6	52.6	45.0	37.5	37.5	22.5	15.0	7.5
17.5°	142.7	120.1	90.1	75.1	52.6	45.0	37.5	30.0	15.0	7.5	0.0
20°	150.2	127.6	97.6	75.1	52.6	45.0	37.5	22.5	7.5	0.0	0.0
22.5°	165.2	142.7	105.1	75.1	52.6	37.5	22.5	7.5	0.0	0.0	0.0
25°	195.2	150.2	105.1	75.1	52.6	37.5	15.0	0.0	0.0	0.0	0.0
27.5°	217.7	165.2	105.1	75.1	52.6	30.0	7.5	0.0	0.0	0.0	0.0
30°	255.3	180.2	112.6	75.1	52.6	22.5	7.5	0.0	0.0	0.0	0.0
32.5°	315.3	195.2	112.6	75.1	45.0	22.5	0.0	0.0	0.0	0.0	0.0
35°	382.9	225.2	112.6	75.1	45.0	22.5	0.0	0.0	0.0	0.0	0.0
37.5°	390.4	240.3	112.6	75.1	45.0	15.0	0.0	0.0	0.0	0.0	0.0
40°	405.4	225.2	120.1	75.1	45.0	15.0	0.0	0.0	0.0	0.0	0.0
42.5°	465.5	210.2	127.6	75.1	45.0	15.0	0.0	0.0	0.0	0.0	0.0
45°	690.8	217.7	127.6	82.6	45.0	22.5	0.0	0.0	0.0	0.0	0.0
47.5°	1201.3	225.2	120.1	82.6	45.0	22.5	0.0	0.0	0.0	0.0	0.0
50°	1539.2	262.8	120.1	90.1	52.6	15.0	0.0	0.0	0.0	0.0	0.0
52.5°	1636.8	307.8	120.1	97.6	67.6	7.5	0.0	0.0	0.0	0.0	0.0
55°	1591.7	360.4	127.6	105.1	82.6	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	1471.6	390.4	135.1	112.6	90.1	0.0	0.0	0.0	0.0	0.0	0.0
59°	1344.0	413.0	157.7	120.1	90.1	0.0	0.0	0.0	0.0	0.0	0.0
60°	1238.9	435.5	165.2	127.6	90.1	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	998.6	465.5	180.2	150.2	75.1	0.0	0.0	0.0	0.0	0.0	0.0
65°	871.0	488.0	187.7	165.2	67.6	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	795.9	503.1	202.7	172.7	60.1	0.0	0.0	0.0	0.0	0.0	0.0
70°	735.8	495.5	217.7	165.2	52.6	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	668.2	473.0	262.8	150.2	45.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	600.7	428.0	285.3	135.1	30.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	435.5	360.4	262.8	120.1	15.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	187.7	195.2	187.7	90.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	37.5	45.0	37.5	22.5	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°	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
2.5°	37.5	37.5	37.5	37.5	45.0	45.0	60.1	75.1	90.1	97.6	97.6
5°	30.0	30.0	30.0	30.0	30.0	37.5	45.0	60.1	82.6	90.1	90.1
7.5°	22.5	22.5	22.5	22.5	22.5	22.5	37.5	52.6	75.1	82.6	90.1
10°	22.5	15.0	15.0	7.5	7.5	15.0	22.5	45.0	67.6	75.1	82.6
12.5°	15.0	7.5	7.5	0.0	0.0	7.5	15.0	37.5	60.1	67.6	75.1
15°	7.5	0.0	0.0	0.0	0.0	0.0	7.5	30.0	52.6	60.1	75.1
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5	45.0	60.1	67.6
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	37.5	52.6	60.1
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	30.0	45.0	52.6
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5	30.0	37.5
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	22.5	30.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	22.5	30.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0	22.5
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0	22.5
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0	15.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	7.5
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	7.5
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	7.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	7.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	7.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	7.5
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):

	285°	295°	305°	315°	318°	325°	335°	345°	355°	360°
0°	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
2.5°	105.1	105.1	97.6	90.1	90.1	90.1	97.6	105.1	105.1	105.1
5°	97.6	97.6	90.1	90.1	90.1	90.1	97.6	112.6	120.1	120.1
7.5°	97.6	97.6	90.1	90.1	90.1	90.1	97.6	112.6	120.1	127.6
10°	90.1	90.1	90.1	90.1	82.6	90.1	97.6	112.6	135.1	135.1
12.5°	90.1	90.1	90.1	90.1	82.6	90.1	105.1	120.1	142.7	150.2
15°	90.1	90.1	90.1	82.6	82.6	90.1	105.1	127.6	150.2	165.2
17.5°	82.6	90.1	90.1	82.6	82.6	90.1	105.1	127.6	165.2	187.7
20°	75.1	82.6	90.1	82.6	82.6	82.6	105.1	127.6	172.7	202.7
22.5°	67.6	75.1	82.6	82.6	75.1	82.6	105.1	135.1	187.7	225.2
25°	60.1	67.6	67.6	75.1	75.1	82.6	105.1	135.1	195.2	255.3
27.5°	45.0	52.6	60.1	67.6	67.6	82.6	105.1	142.7	210.2	315.3
30°	37.5	45.0	52.6	60.1	67.6	82.6	105.1	142.7	225.2	397.9
32.5°	37.5	45.0	52.6	60.1	67.6	75.1	105.1	150.2	247.8	495.5
35°	30.0	37.5	45.0	60.1	60.1	75.1	105.1	150.2	270.3	645.7
37.5°	30.0	37.5	45.0	60.1	60.1	75.1	105.1	150.2	330.4	720.8
40°	22.5	30.0	37.5	60.1	60.1	75.1	112.6	157.7	337.9	728.3
42.5°	22.5	30.0	37.5	52.6	60.1	75.1	112.6	157.7	315.3	750.8
45°	22.5	30.0	37.5	60.1	67.6	82.6	112.6	165.2	307.8	855.9
47.5°	22.5	30.0	37.5	60.1	75.1	82.6	112.6	165.2	315.3	1223.8
50°	22.5	30.0	37.5	60.1	82.6	82.6	112.6	165.2	345.4	1967.2
52.5°	15.0	22.5	30.0	52.6	67.6	90.1	120.1	157.7	367.9	2627.9
55°	15.0	15.0	22.5	45.0	60.1	97.6	127.6	157.7	428.0	2793.1
57.5°	15.0	15.0	22.5	37.5	52.6	105.1	135.1	157.7	495.5	2710.5
59°	15.0	15.0	15.0	30.0	45.0	105.1	142.7	172.7	510.6	2402.6
60°	15.0	15.0	15.0	30.0	45.0	105.1	142.7	172.7	510.6	2402.6
62.5°	7.5	7.5	7.5	30.0	37.5	105.1	157.7	210.2	525.6	1854.5
65°	15.0	15.0	7.5	22.5	37.5	90.1	180.2	225.2	533.1	1441.6
67.5°	15.0	15.0	15.0	30.0	37.5	90.1	187.7	232.8	533.1	1141.2
70°	15.0	15.0	15.0	30.0	45.0	90.1	187.7	240.3	525.6	931.0
72.5°	15.0	15.0	15.0	30.0	45.0	82.6	172.7	247.8	503.1	788.4
75°	15.0	15.0	15.0	22.5	37.5	75.1	165.2	270.3	458.0	668.2
77.5°	15.0	15.0	15.0	15.0	30.0	60.1	150.2	300.3	405.4	540.6
80°	22.5	15.0	15.0	15.0	22.5	52.6	142.7	292.8	337.9	352.9
82.5°	22.5	15.0	15.0	7.5	15.0	37.5	112.6	225.2	172.7	157.7
85°	15.0	15.0	15.0	7.5	7.5	22.5	52.6	67.6	52.6	37.5
87.5°	15.0	15.0	15.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5
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: SP1-2407-184-4

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-730-U-5WQ

Data in this report applies to families of products including GSS-SB1A-730-U-5WQ

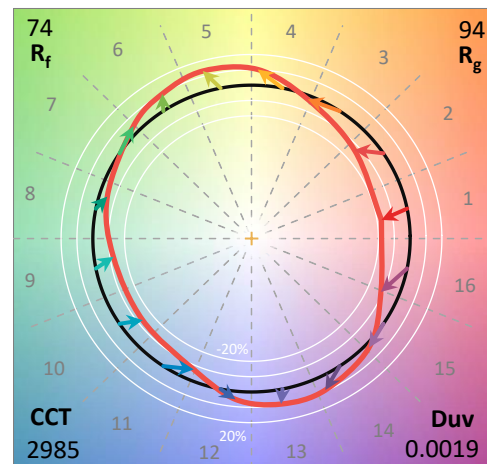
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-4
 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-730-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI
 3000K CCT 26 LEDS

Spectral Parameters

CCT (K): 2985
 CIE u' : 0.2504
 CIE v' : 0.5243
 Duv: 0.0019
 CIE x: 0.4408
 CIE y: 0.4101
 CIE z: 0.1491
 Peak Wavelength (nm): 595
 Dominant Wavelength (nm): 582
 Purity: 55.41818
 R_f: 73.8
 R_g: 94.4

CRI (Ra): 70.8
 R1: 66.3
 R2: 80.6
 R3: 94.5
 R4: 68.2
 R5: 66.5
 R6: 74.7
 R7: 76.2
 R8: 39.6
 R9: -43.2
 R10: 57.6
 R11: 64.8
 R12: 53.5
 R13: 68.7
 R14: 97.0
 R15: 56.4



Test Conditions

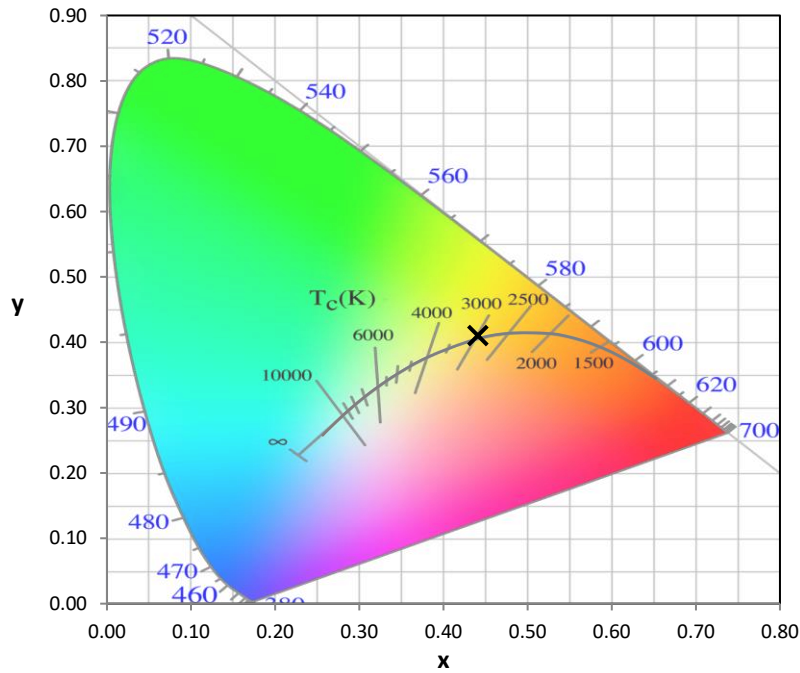
Stabilization Time: 36M
 Operation Time: 1H 36M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-4

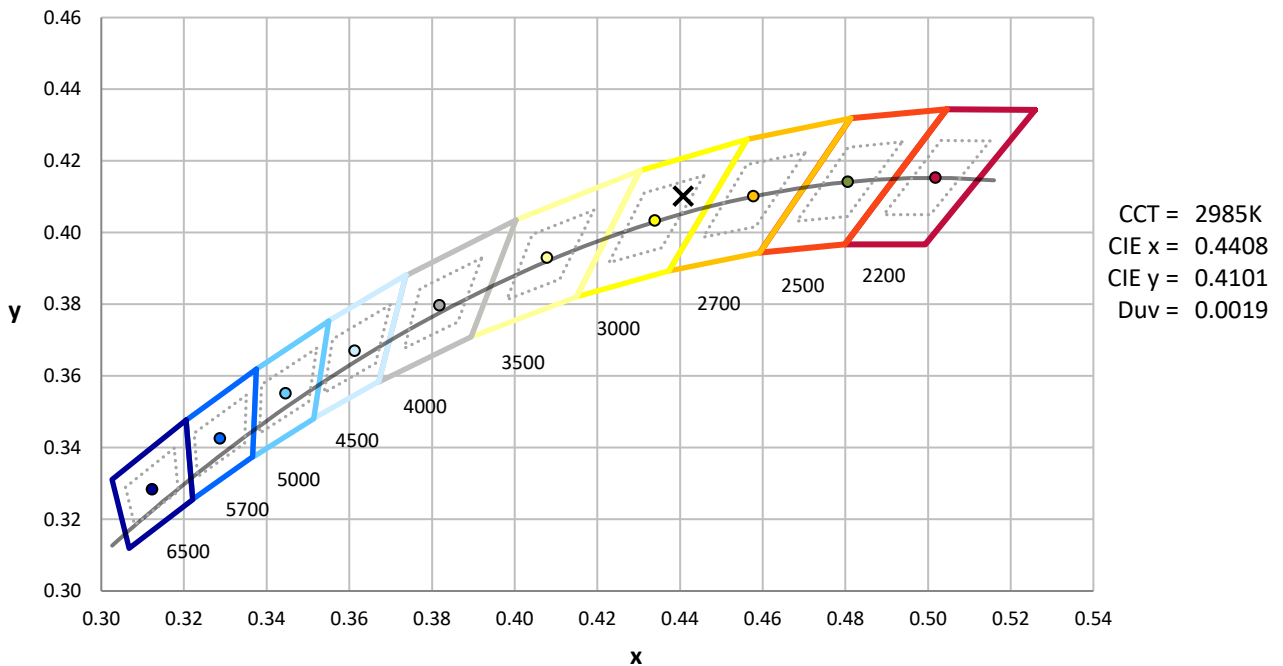
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



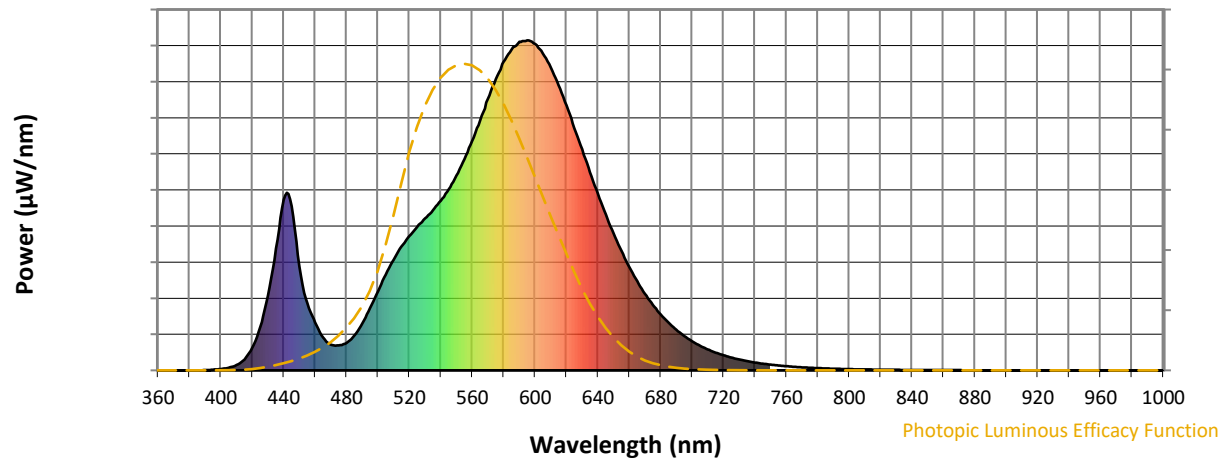
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-4

Photopic Flux vs. Wavelength

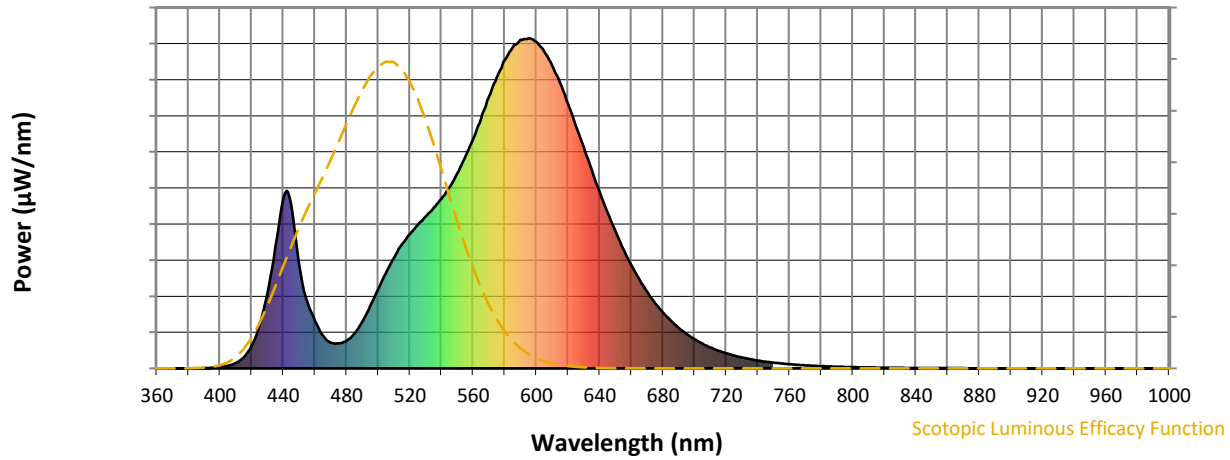


Photopic Lumens: NR

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	142	NR	620	803	NR	750	17	NR	880	0	NR
365	0	NR	495	189	NR	625	734	NR	755	15	NR	885	0	NR
370	0	NR	500	240	NR	630	670	NR	760	13	NR	890	0	NR
375	0	NR	505	290	NR	635	600	NR	765	11	NR	895	0	NR
380	0	NR	510	335	NR	640	535	NR	770	9	NR	900	0	NR
385	0	NR	515	375	NR	645	473	NR	775	8	NR	905	0	NR
390	1	NR	520	408	NR	650	415	NR	780	7	NR	910	0	NR
395	2	NR	525	434	NR	655	362	NR	785	6	NR	915	0	NR
400	4	NR	530	461	NR	660	313	NR	790	5	NR	920	0	NR
405	8	NR	535	486	NR	665	271	NR	795	4	NR	925	0	NR
410	16	NR	540	514	NR	670	231	NR	800	4	NR	930	0	NR
415	33	NR	545	549	NR	675	198	NR	805	3	NR	935	0	NR
420	69	NR	550	591	NR	680	169	NR	810	3	NR	940	0	NR
425	131	NR	555	640	NR	685	144	NR	815	2	NR	945	0	NR
430	227	NR	560	695	NR	690	123	NR	820	2	NR	950	0	NR
435	369	NR	565	757	NR	695	104	NR	825	2	NR	955	0	NR
440	517	NR	570	822	NR	700	88	NR	830	2	NR	960	0	NR
445	498	NR	575	882	NR	705	75	NR	835	1	NR	965	0	NR
450	315	NR	580	935	NR	710	63	NR	840	1	NR	970	0	NR
455	204	NR	585	972	NR	715	54	NR	845	1	NR	975	0	NR
460	145	NR	590	996	NR	720	46	NR	850	1	NR	980	0	NR
465	100	NR	595	1000	NR	725	39	NR	855	1	NR	985	0	NR
470	78	NR	600	989	NR	730	33	NR	860	1	NR	990	0	NR
475	76	NR	605	960	NR	735	28	NR	865	1	NR	995	0	NR
480	83	NR	610	918	NR	740	24	NR	870	1	NR	1000	0	NR
485	105	NR	615	864	NR	745	20	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-4

Scotopic Flux vs. Wavelength



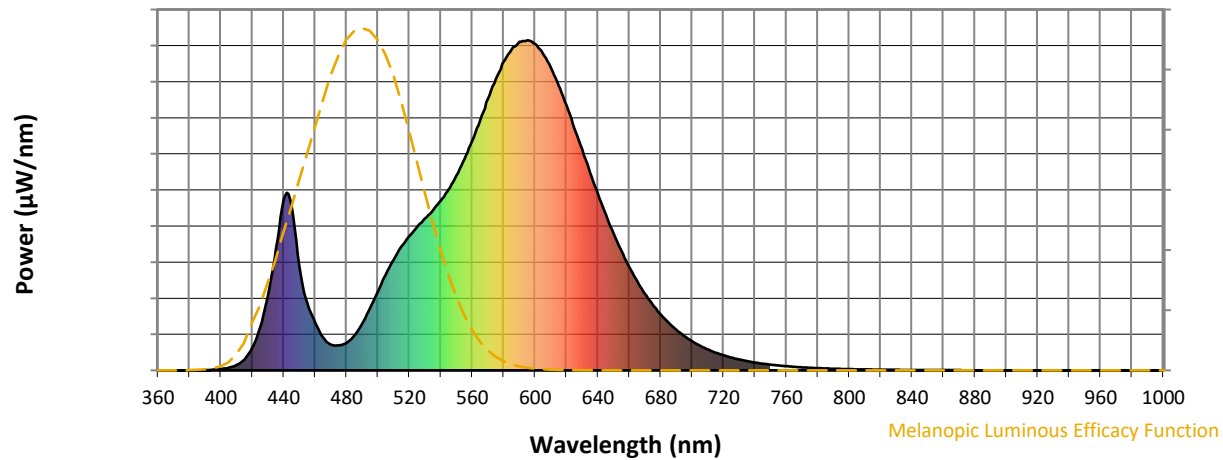
Scotopic Lumens: NR

S/P: 1.19

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	142	NR	620	803	NR	750	17	NR	880	0	NR
365	0	NR	495	189	NR	625	734	NR	755	15	NR	885	0	NR
370	0	NR	500	240	NR	630	670	NR	760	13	NR	890	0	NR
375	0	NR	505	290	NR	635	600	NR	765	11	NR	895	0	NR
380	0	NR	510	335	NR	640	535	NR	770	9	NR	900	0	NR
385	0	NR	515	375	NR	645	473	NR	775	8	NR	905	0	NR
390	1	NR	520	408	NR	650	415	NR	780	7	NR	910	0	NR
395	2	NR	525	434	NR	655	362	NR	785	6	NR	915	0	NR
400	4	NR	530	461	NR	660	313	NR	790	5	NR	920	0	NR
405	8	NR	535	486	NR	665	271	NR	795	4	NR	925	0	NR
410	16	NR	540	514	NR	670	231	NR	800	4	NR	930	0	NR
415	33	NR	545	549	NR	675	198	NR	805	3	NR	935	0	NR
420	69	NR	550	591	NR	680	169	NR	810	3	NR	940	0	NR
425	131	NR	555	640	NR	685	144	NR	815	2	NR	945	0	NR
430	227	NR	560	695	NR	690	123	NR	820	2	NR	950	0	NR
435	369	NR	565	757	NR	695	104	NR	825	2	NR	955	0	NR
440	517	NR	570	822	NR	700	88	NR	830	2	NR	960	0	NR
445	498	NR	575	882	NR	705	75	NR	835	1	NR	965	0	NR
450	315	NR	580	935	NR	710	63	NR	840	1	NR	970	0	NR
455	204	NR	585	972	NR	715	54	NR	845	1	NR	975	0	NR
460	145	NR	590	996	NR	720	46	NR	850	1	NR	980	0	NR
465	100	NR	595	1000	NR	725	39	NR	855	1	NR	985	0	NR
470	78	NR	600	989	NR	730	33	NR	860	1	NR	990	0	NR
475	76	NR	605	960	NR	735	28	NR	865	1	NR	995	0	NR
480	83	NR	610	918	NR	740	24	NR	870	1	NR	1000	0	NR
485	105	NR	615	864	NR	745	20	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.13

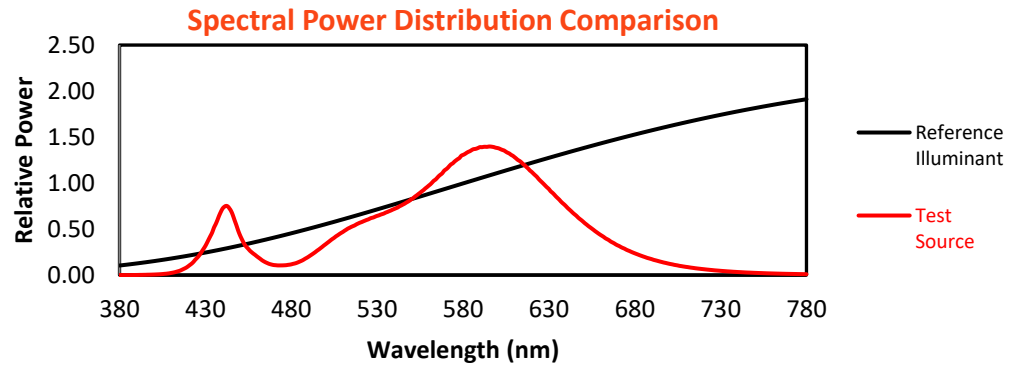
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	142	NR	620	803	NR	750	17	NR	880	0	NR
365	0	NR	495	189	NR	625	734	NR	755	15	NR	885	0	NR
370	0	NR	500	240	NR	630	670	NR	760	13	NR	890	0	NR
375	0	NR	505	290	NR	635	600	NR	765	11	NR	895	0	NR
380	0	NR	510	335	NR	640	535	NR	770	9	NR	900	0	NR
385	0	NR	515	375	NR	645	473	NR	775	8	NR	905	0	NR
390	1	NR	520	408	NR	650	415	NR	780	7	NR	910	0	NR
395	2	NR	525	434	NR	655	362	NR	785	6	NR	915	0	NR
400	4	NR	530	461	NR	660	313	NR	790	5	NR	920	0	NR
405	8	NR	535	486	NR	665	271	NR	795	4	NR	925	0	NR
410	16	NR	540	514	NR	670	231	NR	800	4	NR	930	0	NR
415	33	NR	545	549	NR	675	198	NR	805	3	NR	935	0	NR
420	69	NR	550	591	NR	680	169	NR	810	3	NR	940	0	NR
425	131	NR	555	640	NR	685	144	NR	815	2	NR	945	0	NR
430	227	NR	560	695	NR	690	123	NR	820	2	NR	950	0	NR
435	369	NR	565	757	NR	695	104	NR	825	2	NR	955	0	NR
440	517	NR	570	822	NR	700	88	NR	830	2	NR	960	0	NR
445	498	NR	575	882	NR	705	75	NR	835	1	NR	965	0	NR
450	315	NR	580	935	NR	710	63	NR	840	1	NR	970	0	NR
455	204	NR	585	972	NR	715	54	NR	845	1	NR	975	0	NR
460	145	NR	590	996	NR	720	46	NR	850	1	NR	980	0	NR
465	100	NR	595	1000	NR	725	39	NR	855	1	NR	985	0	NR
470	78	NR	600	989	NR	730	33	NR	860	1	NR	990	0	NR
475	76	NR	605	960	NR	735	28	NR	865	1	NR	995	0	NR
480	83	NR	610	918	NR	740	24	NR	870	1	NR	1000	0	NR
485	105	NR	615	864	NR	745	20	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-4

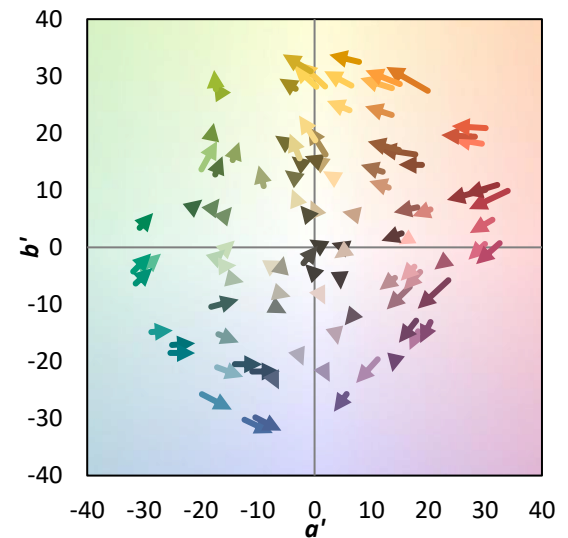
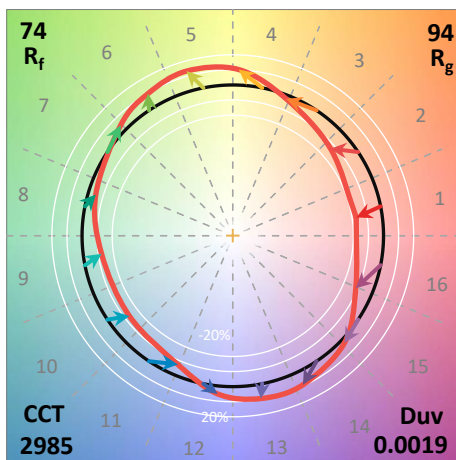
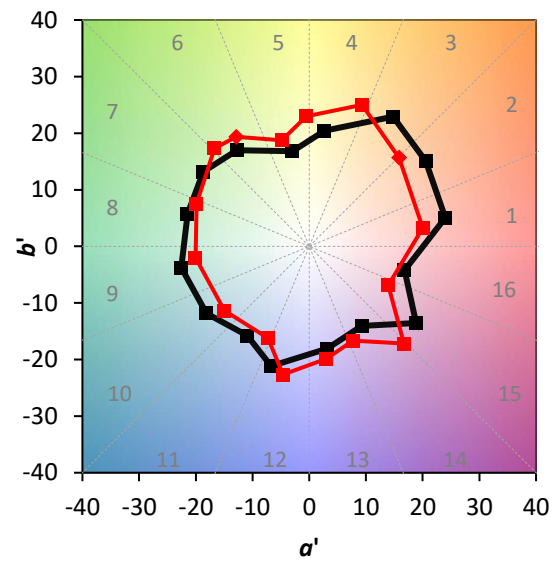
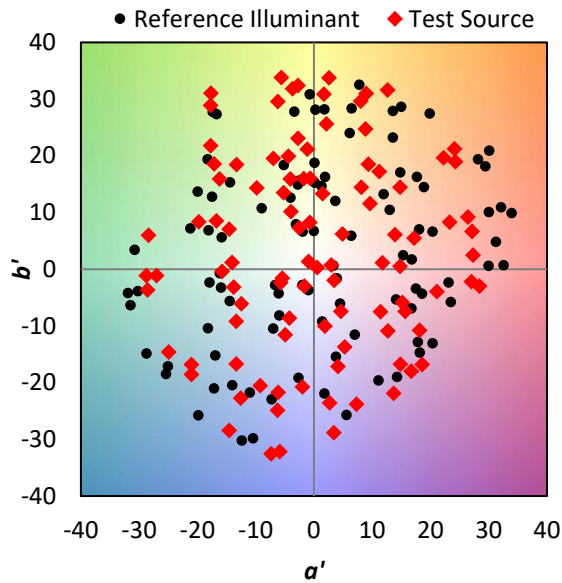
TM-30-18

Summary

$R_f = 73.8$
 $R_g = 94.4$
 $\text{CIE } R_a = 70.8$
 $R_g = -43.2$

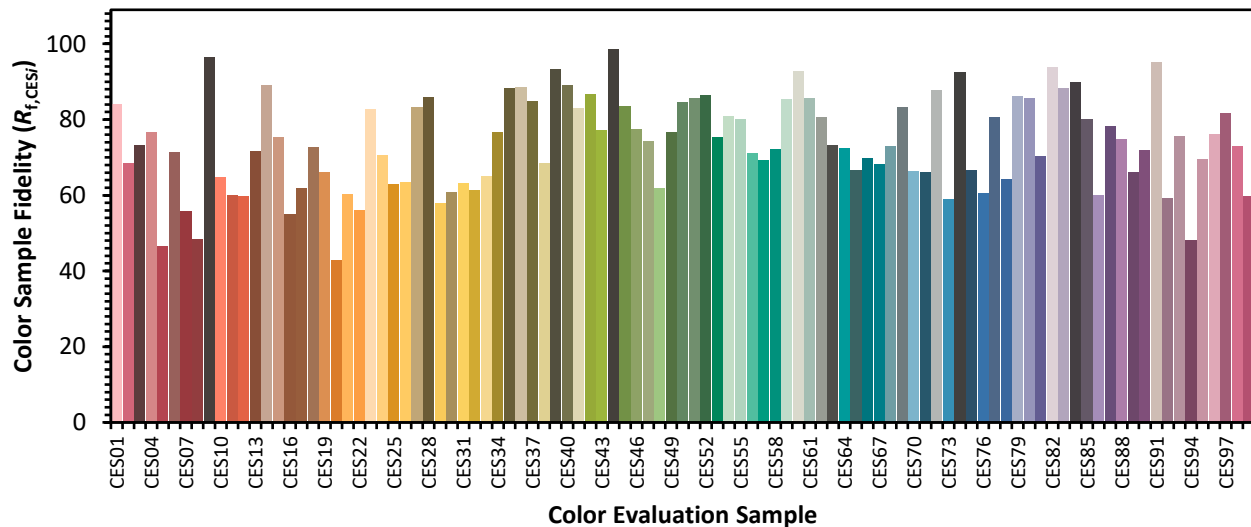


Color Vector Graphics

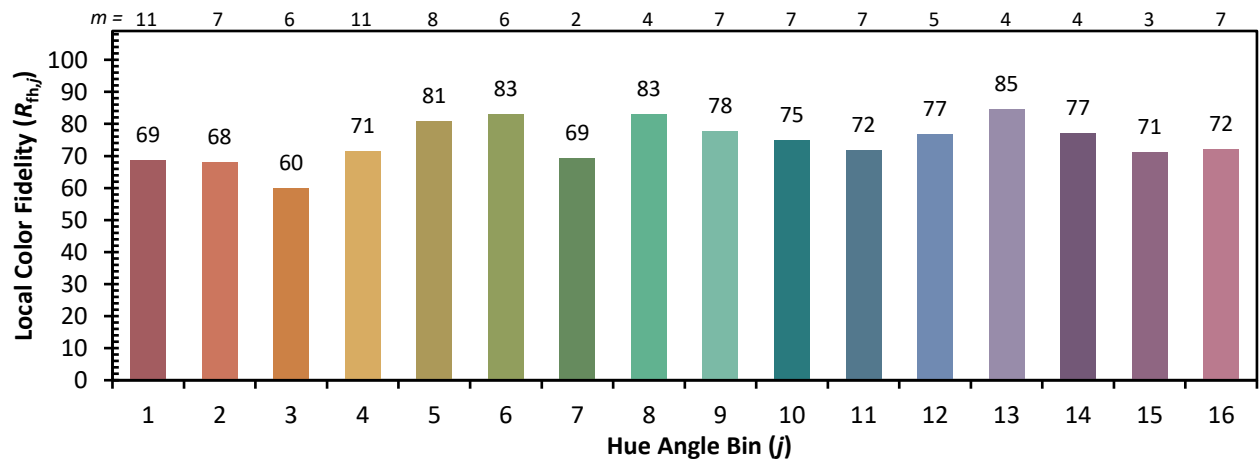
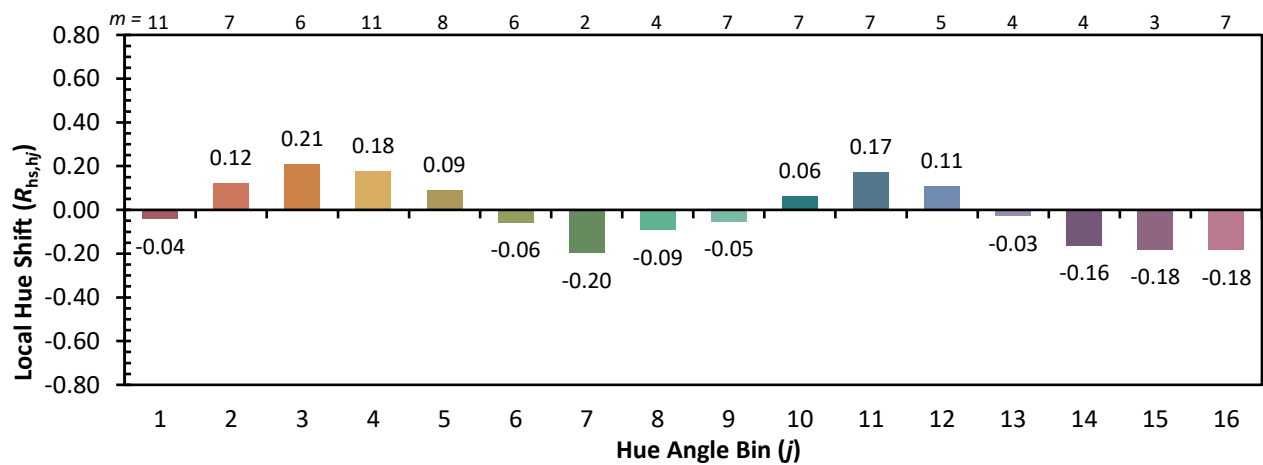
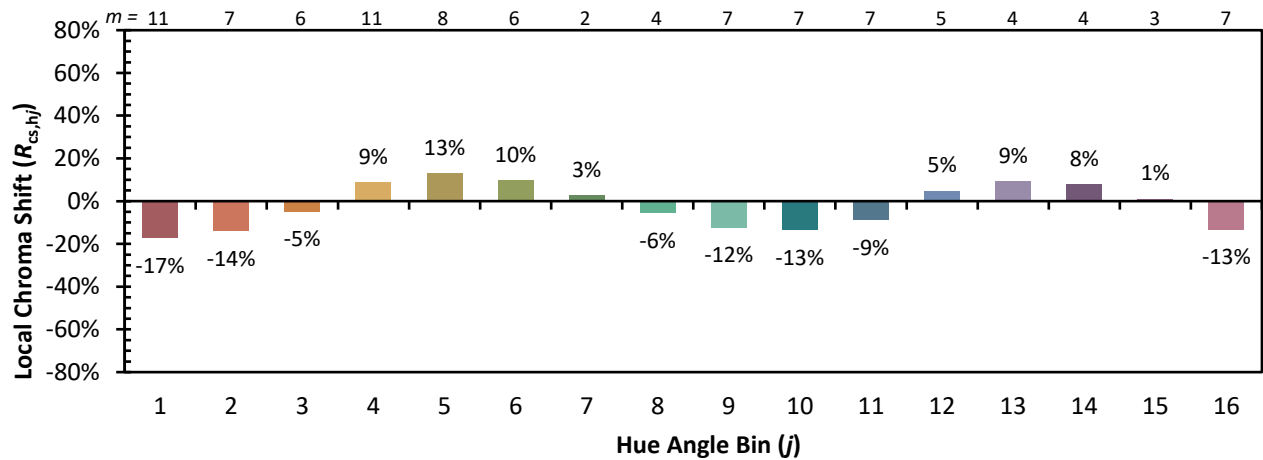


Individual Sample Fidelity Index ($R_{f,i}$)

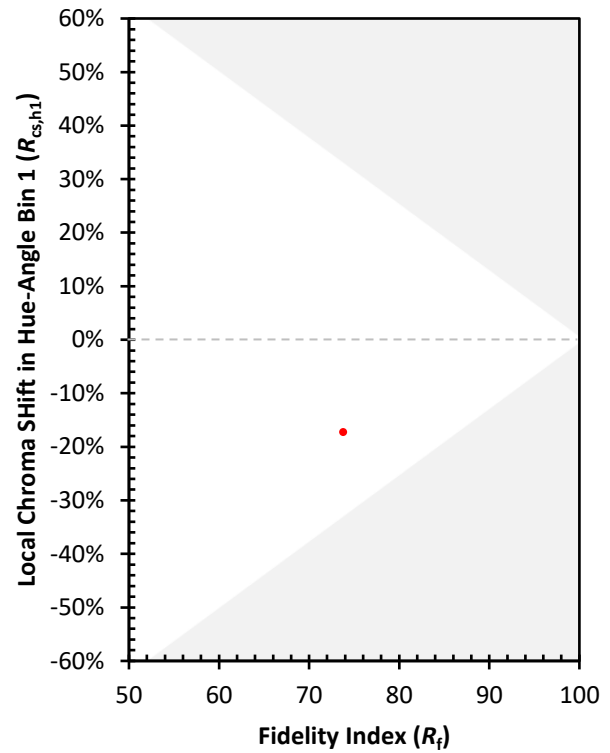
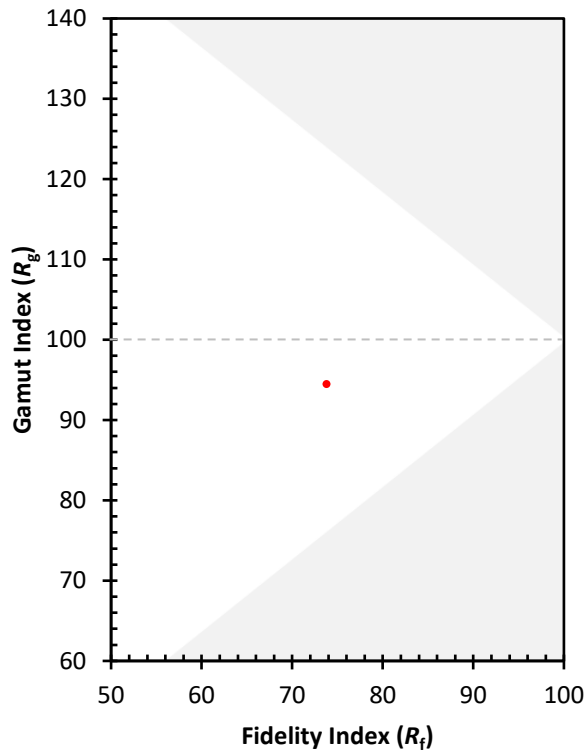
CES01 = 86	CES26 = 63	CES51 = 86	CES76 = 61
CES02 = 62	CES27 = 83	CES52 = 86	CES77 = 81
CES03 = 31	CES28 = 86	CES53 = 75	CES78 = 64
CES04 = 71	CES29 = 58	CES54 = 81	CES79 = 86
CES05 = 49	CES30 = 61	CES55 = 80	CES80 = 86
CES06 = 51	CES31 = 63	CES56 = 71	CES81 = 70
CES07 = 41	CES32 = 61	CES57 = 69	CES82 = 94
CES08 = 40	CES33 = 65	CES58 = 72	CES83 = 88
CES09 = 29	CES34 = 77	CES59 = 85	CES84 = 90
CES10 = 76	CES35 = 88	CES60 = 93	CES85 = 80
CES11 = 59	CES36 = 89	CES61 = 86	CES86 = 60
CES12 = 65	CES37 = 85	CES62 = 81	CES87 = 78
CES13 = 43	CES38 = 69	CES63 = 73	CES88 = 75
CES14 = 74	CES39 = 93	CES64 = 72	CES89 = 66
CES15 = 71	CES40 = 89	CES65 = 67	CES90 = 72
CES16 = 47	CES41 = 83	CES66 = 70	CES91 = 95
CES17 = 50	CES42 = 87	CES67 = 68	CES92 = 59
CES18 = 56	CES43 = 77	CES68 = 73	CES93 = 76
CES19 = 73	CES44 = 99	CES69 = 83	CES94 = 48
CES20 = 66	CES45 = 83	CES70 = 66	CES95 = 70
CES21 = 87	CES46 = 77	CES71 = 66	CES96 = 76
CES22 = 79	CES47 = 74	CES72 = 88	CES97 = 82
CES23 = 92	CES48 = 62	CES73 = 59	CES98 = 73
CES24 = 91	CES49 = 77	CES74 = 93	CES99 = 60
CES25 = 73	CES50 = 85	CES75 = 67	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)