

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: P1067956

Luminaire Tested: **NAV-SA4D-730-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1067956
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA4D-730-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 1200mA 4xLight Square PACKAGE
70CRI 3000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (56) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19084 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G3

Input Watts (W): 218.9
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

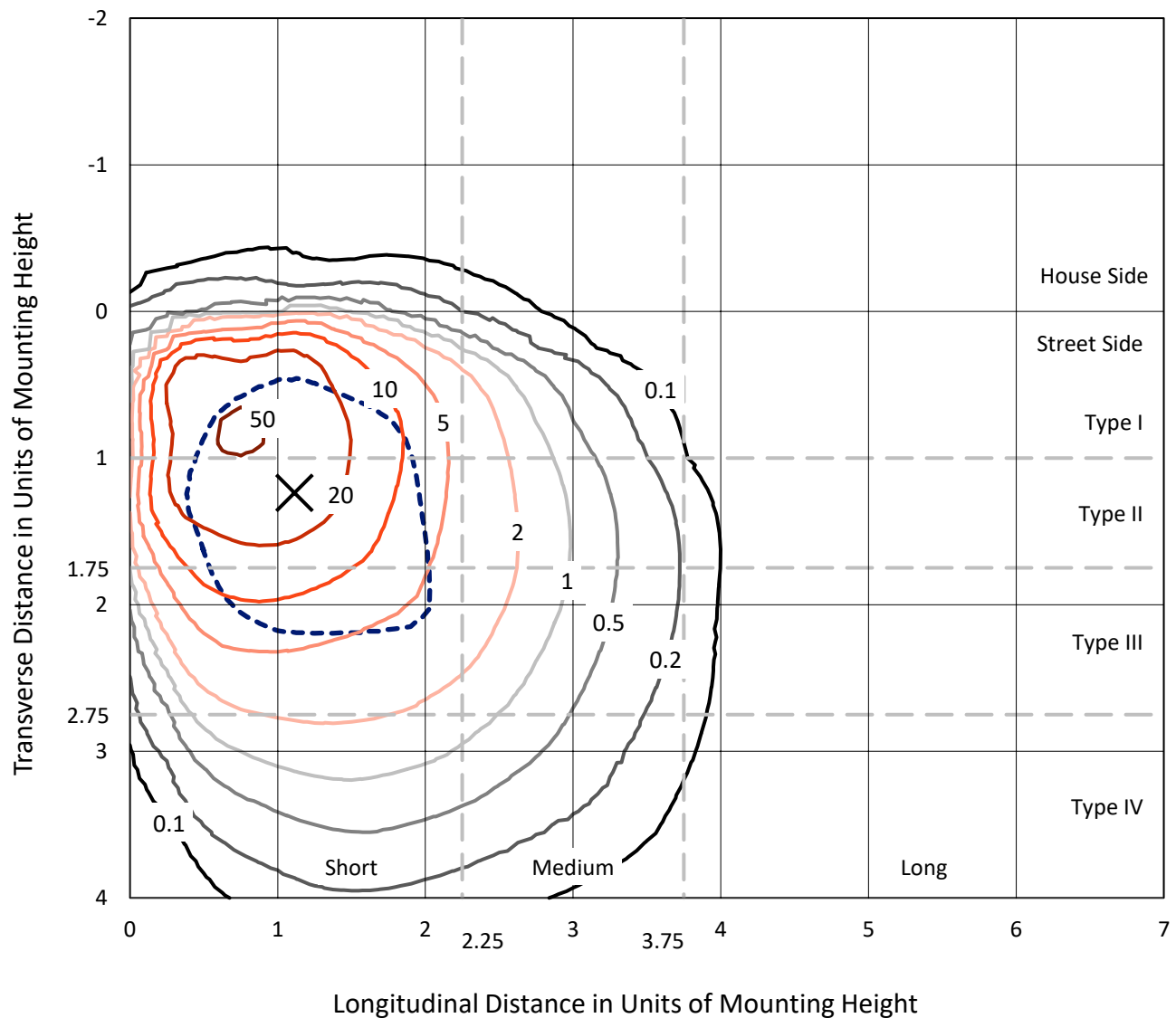


REPORT NUMBER: P1067956

CATALOG NUMBER: NAV-SA4D-730-U-LBC

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

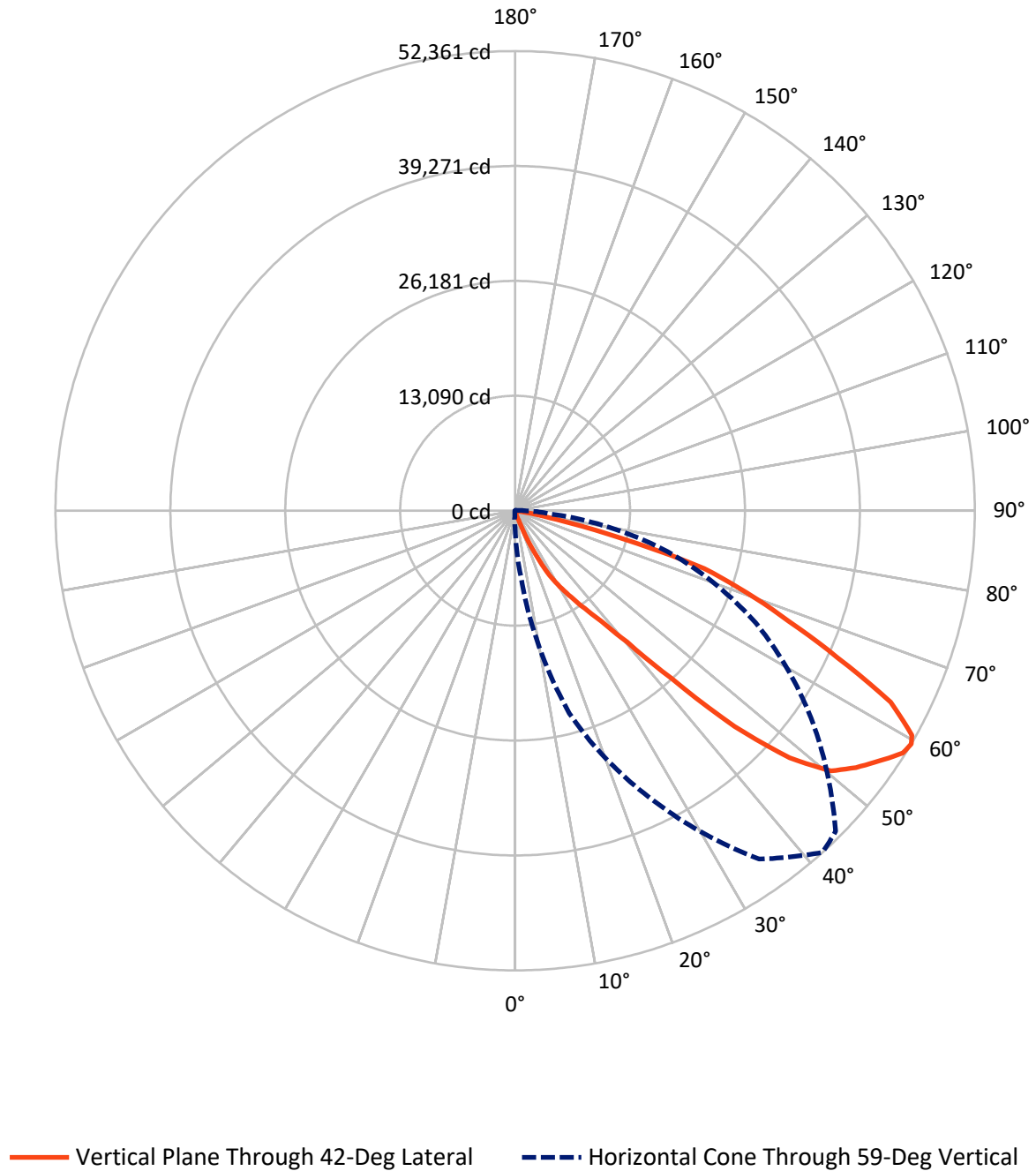


Based on 15 foot mounting height. Maximum calculated value = 56.7 fc
 Type III - Short - N/A

REPORT NUMBER: P1067956

CATALOG NUMBER: NAV-SA4D-730-U-LBC

Luminous Intensity Polar Plot



REPORT NUMBER: P1067956

CATALOG NUMBER: NAV-SA4D-730-U-LBC

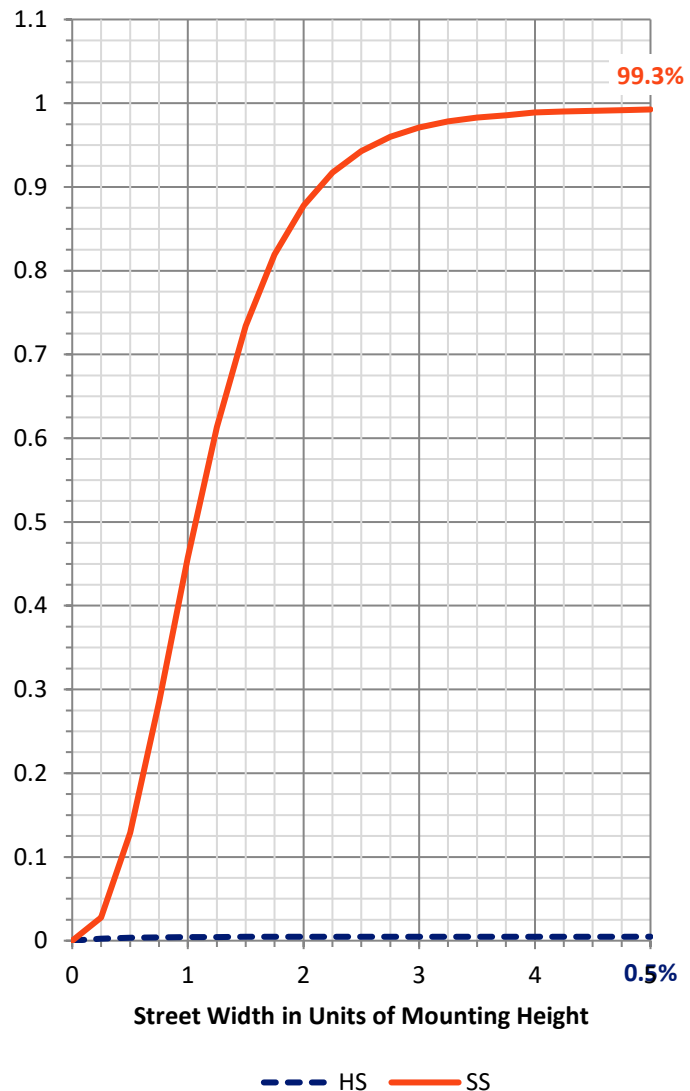
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	92.0	0.0	92.0
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	18992.1	0.0	18992.1
	% Fixture	99.5	0.0	99.5
Total	Lumens	19084.0	0.0	19084.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.6	0.0
10°-20°	27.8	0.1
20°-30°	356.0	1.9
30°-40°	1200.1	6.3
40°-50°	3624.9	19.0
50°-60°	6398.9	33.5
60°-70°	5634.3	29.5
70°-80°	1793.4	9.4
80°-90°	42.9	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°	19084.0	100.0
0°-180°	19084.0	100.0



REPORT NUMBER: P1067956

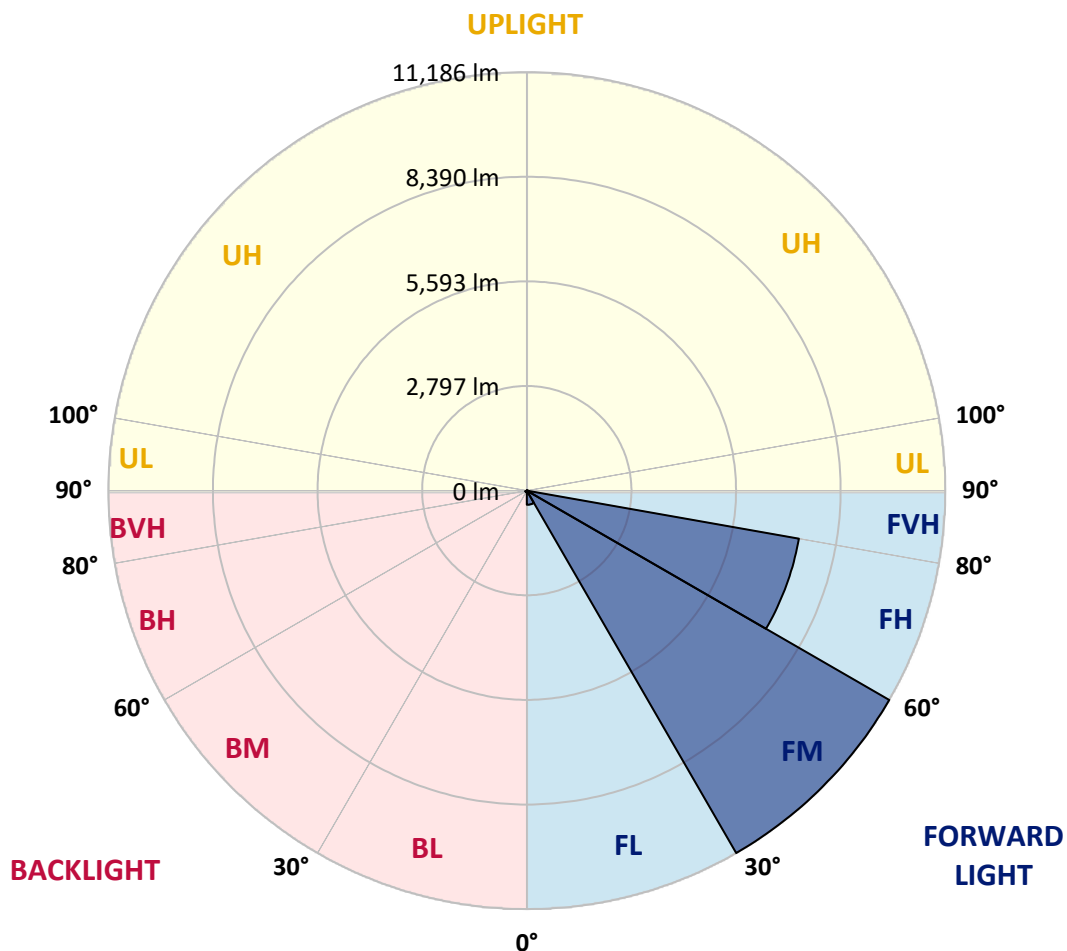
CATALOG NUMBER: NAV-SA4D-730-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	379.1	2.0			
FM	(30°-60°)	11186.4	58.6			
FH	(60°-80°)	7385.7	38.7			G3/7500
FVH	(80°-90°)	40.8	0.2			G1/100
BL	(0°-30°)	10.3	0.1	B0/110		
BM	(30°-60°)	37.6	0.2	B0/220		
BH	(60°-80°)	42.1	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: P1067956

CATALOG NUMBER: NAV-SA4D-730-U-LBC

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
2.5°	83.8	83.8	77.8	71.8	65.8	59.8	59.8	59.8	53.9	53.9	47.9
5°	95.7	95.7	89.8	83.8	83.8	77.8	77.8	71.8	65.8	65.8	59.8
7.5°	101.7	101.7	101.7	101.7	95.7	95.7	95.7	89.8	83.8	77.8	71.8
10°	107.7	113.7	119.7	119.7	119.7	119.7	119.7	113.7	101.7	95.7	83.8
12.5°	119.7	125.7	137.6	149.6	149.6	155.6	149.6	143.6	131.6	113.7	95.7
15°	131.6	143.6	161.6	185.5	209.4	215.4	215.4	197.5	173.5	137.6	113.7
17.5°	149.6	167.5	215.4	293.2	377.0	442.8	442.8	394.9	275.2	179.5	131.6
20°	161.6	197.5	347.0	706.0	1077.0	1352.3	1298.4	1148.8	616.3	281.2	143.6
22.5°	179.5	251.3	736.0	1854.9	2872.1	3374.7	3255.0	2471.2	1382.2	502.6	173.5
25°	203.4	365.0	1460.0	3476.4	5337.3	5881.8	5804.0	4613.3	2519.0	843.7	221.4
27.5°	251.3	538.5	2339.5	5271.4	7874.2	8341.0	8311.0	6755.3	4026.9	1358.2	287.2
30°	317.1	783.8	3470.4	7162.2	9555.6	10028.3	9878.7	8323.0	5433.0	2076.3	371.0
32.5°	394.9	1095.0	4493.6	8556.4	11105.3	11727.6	11548.1	9687.2	6563.9	2686.6	550.5
35°	514.6	1400.1	5504.8	9789.0	12894.4	13684.2	13385.0	11093.4	7539.2	3374.7	664.2
37.5°	574.4	1579.6	6432.2	11129.3	14904.8	15981.8	15754.5	12870.4	8532.4	4254.2	813.8
40°	580.4	1795.0	7395.6	12876.4	17747.0	19667.7	19260.8	15922.0	10381.3	5385.1	1047.1
42.5°	598.3	2118.1	8646.1	15856.2	23329.5	26087.9	25627.2	21534.5	14575.7	7652.9	1483.9
45°	682.1	2728.5	11195.1	21426.8	30994.4	35039.2	34506.7	29354.9	20433.6	11919.1	2531.0
47.5°	975.3	4104.7	15664.7	27440.2	38832.7	42057.8	41926.2	35517.9	25740.9	16293.0	4290.1
50°	1567.7	6300.6	20750.7	32496.2	43822.9	46593.3	46264.2	38090.8	28768.5	19278.7	5498.8
52.5°	2094.2	8400.8	23945.8	34357.1	45312.8	48615.7	48214.8	39030.2	29564.3	20158.3	5833.9
55°	2225.9	9160.7	24897.2	34931.5	46300.1	50327.0	49746.6	39658.4	29666.0	19530.0	5277.4
57.5°	2160.0	8442.7	24280.9	35493.9	47676.3	52086.1	51314.2	40885.1	30007.1	18465.0	4391.9
59°	2046.3	7557.1	23898.0	35942.7	48436.2	52361.3	51637.3	41154.3	30234.5	17980.3	3853.4
60°	1914.7	6958.8	23598.8	36235.9	48388.3	51930.5	51182.6	41028.7	30324.2	17561.5	3596.1
62.5°	1477.9	5552.7	23168.0	36026.5	45366.7	47999.4	47574.6	37953.2	29007.9	16221.2	2836.2
65°	1148.8	4248.3	21588.4	32131.2	38605.3	40376.5	40244.8	32137.2	24412.6	13983.4	2046.3
67.5°	909.5	3099.4	18255.6	26022.1	31060.2	33579.2	33483.5	26087.9	18530.8	10686.5	1471.9
70°	742.0	2207.9	12517.4	19619.8	24843.4	28014.6	27877.0	20996.0	13732.1	6779.3	1071.0
72.5°	628.3	1412.1	7593.0	14791.1	20732.7	22545.7	22144.8	16939.2	9986.4	3691.8	849.7
75°	532.5	867.6	3763.6	9220.5	12349.9	12337.9	11937.0	8969.2	5361.2	1807.0	676.1
77.5°	430.8	610.3	1477.9	2531.0	3895.2	4822.7	4744.9	3177.2	1603.6	526.5	418.8
80°	281.2	287.2	394.9	694.1	1071.0	1184.7	1346.3	969.3	466.7	251.3	173.5
82.5°	125.7	137.6	179.5	227.4	227.4	209.4	185.5	137.6	101.7	83.8	41.9
85°	29.9	41.9	29.9	35.9	29.9	23.9	23.9	12.0	0.0	0.0	0.0
87.5°	6.0	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: P1067956

CATALOG NUMBER: NAV-SA4D-730-U-LBC

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
2.5°	47.9	47.9	47.9	41.9	41.9	41.9	35.9	35.9	35.9	29.9	29.9
5°	59.8	53.9	47.9	47.9	41.9	41.9	35.9	29.9	29.9	29.9	23.9
7.5°	65.8	59.8	53.9	47.9	41.9	35.9	35.9	29.9	23.9	23.9	23.9
10°	77.8	71.8	59.8	47.9	41.9	35.9	29.9	29.9	23.9	18.0	18.0
12.5°	89.8	77.8	65.8	53.9	41.9	35.9	29.9	29.9	23.9	18.0	12.0
15°	101.7	89.8	71.8	53.9	41.9	35.9	29.9	29.9	18.0	12.0	6.0
17.5°	113.7	95.7	71.8	59.8	41.9	35.9	29.9	23.9	12.0	6.0	0.0
20°	119.7	101.7	77.8	59.8	41.9	35.9	29.9	18.0	6.0	0.0	0.0
22.5°	131.6	113.7	83.8	59.8	41.9	29.9	18.0	6.0	0.0	0.0	0.0
25°	155.6	119.7	83.8	59.8	41.9	29.9	12.0	0.0	0.0	0.0	0.0
27.5°	173.5	131.6	83.8	59.8	41.9	23.9	6.0	0.0	0.0	0.0	0.0
30°	203.4	143.6	89.8	59.8	41.9	18.0	6.0	0.0	0.0	0.0	0.0
32.5°	251.3	155.6	89.8	59.8	35.9	18.0	0.0	0.0	0.0	0.0	0.0
35°	305.2	179.5	89.8	59.8	35.9	18.0	0.0	0.0	0.0	0.0	0.0
37.5°	311.1	191.5	89.8	59.8	35.9	12.0	0.0	0.0	0.0	0.0	0.0
40°	323.1	179.5	95.7	59.8	35.9	12.0	0.0	0.0	0.0	0.0	0.0
42.5°	371.0	167.5	101.7	59.8	35.9	12.0	0.0	0.0	0.0	0.0	0.0
45°	550.5	173.5	101.7	65.8	35.9	18.0	0.0	0.0	0.0	0.0	0.0
47.5°	957.4	179.5	95.7	65.8	35.9	18.0	0.0	0.0	0.0	0.0	0.0
50°	1226.6	209.4	95.7	71.8	41.9	12.0	0.0	0.0	0.0	0.0	0.0
52.5°	1304.4	245.3	95.7	77.8	53.9	6.0	0.0	0.0	0.0	0.0	0.0
55°	1268.5	287.2	101.7	83.8	65.8	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	1172.8	311.1	107.7	89.8	71.8	0.0	0.0	0.0	0.0	0.0	0.0
59°	1071.0	329.1	125.7	95.7	71.8	0.0	0.0	0.0	0.0	0.0	0.0
60°	987.3	347.0	131.6	101.7	71.8	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	795.8	371.0	143.6	119.7	59.8	0.0	0.0	0.0	0.0	0.0	0.0
65°	694.1	388.9	149.6	131.6	53.9	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	634.2	400.9	161.6	137.6	47.9	0.0	0.0	0.0	0.0	0.0	0.0
70°	586.4	394.9	173.5	131.6	41.9	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	532.5	377.0	209.4	119.7	35.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	478.7	341.1	227.4	107.7	23.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	347.0	287.2	209.4	95.7	12.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	149.6	155.6	149.6	71.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	29.9	35.9	29.9	18.0	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: P1067956

CATALOG NUMBER: NAV-SA4D-730-U-LBC

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
2.5°	29.9	29.9	29.9	29.9	35.9	35.9	47.9	59.8	71.8	77.8	77.8
5°	23.9	23.9	23.9	23.9	23.9	29.9	35.9	47.9	65.8	71.8	71.8
7.5°	18.0	18.0	18.0	18.0	18.0	18.0	29.9	41.9	59.8	65.8	71.8
10°	18.0	12.0	12.0	6.0	6.0	12.0	18.0	35.9	53.9	59.8	65.8
12.5°	12.0	6.0	6.0	0.0	0.0	6.0	12.0	29.9	47.9	53.9	59.8
15°	6.0	0.0	0.0	0.0	0.0	0.0	6.0	23.9	41.9	47.9	59.8
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	35.9	47.9	53.9
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	29.9	41.9	47.9
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	23.9	35.9	41.9
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	23.9	29.9
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	18.0	23.9
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	18.0	23.9
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0	18.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0	18.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0	12.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0
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: P1067956

CATALOG NUMBER: NAV-SA4D-730-U-LBC

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	318°	325°	335°	345°	355°	360°
0°	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
2.5°	83.8	83.8	77.8	71.8	71.8	71.8	77.8	83.8	83.8	83.8
5°	77.8	77.8	71.8	71.8	71.8	71.8	77.8	89.8	95.7	95.7
7.5°	77.8	77.8	71.8	71.8	71.8	71.8	77.8	89.8	95.7	101.7
10°	71.8	71.8	71.8	71.8	65.8	71.8	77.8	89.8	107.7	107.7
12.5°	71.8	71.8	71.8	71.8	65.8	71.8	83.8	95.7	113.7	119.7
15°	71.8	71.8	71.8	65.8	65.8	71.8	83.8	101.7	119.7	131.6
17.5°	65.8	71.8	71.8	65.8	65.8	71.8	83.8	101.7	131.6	149.6
20°	59.8	65.8	71.8	65.8	65.8	65.8	83.8	101.7	137.6	161.6
22.5°	53.9	59.8	65.8	65.8	59.8	65.8	83.8	107.7	149.6	179.5
25°	47.9	53.9	53.9	59.8	59.8	65.8	83.8	107.7	155.6	203.4
27.5°	35.9	41.9	47.9	53.9	53.9	65.8	83.8	113.7	167.5	251.3
30°	29.9	35.9	41.9	47.9	53.9	65.8	83.8	113.7	179.5	317.1
32.5°	29.9	35.9	41.9	47.9	53.9	59.8	83.8	119.7	197.5	394.9
35°	23.9	29.9	35.9	47.9	47.9	59.8	83.8	119.7	215.4	514.6
37.5°	23.9	29.9	35.9	47.9	47.9	59.8	83.8	119.7	263.3	574.4
40°	18.0	23.9	29.9	47.9	47.9	59.8	89.8	125.7	269.3	580.4
42.5°	18.0	23.9	29.9	41.9	47.9	59.8	89.8	125.7	251.3	598.3
45°	18.0	23.9	29.9	47.9	53.9	65.8	89.8	131.6	245.3	682.1
47.5°	18.0	23.9	29.9	47.9	59.8	65.8	89.8	131.6	251.3	975.3
50°	18.0	23.9	29.9	47.9	65.8	65.8	89.8	131.6	275.2	1567.7
52.5°	12.0	18.0	23.9	41.9	53.9	71.8	95.7	125.7	293.2	2094.2
55°	12.0	12.0	18.0	35.9	47.9	77.8	101.7	125.7	341.1	2225.9
57.5°	12.0	12.0	18.0	29.9	41.9	83.8	107.7	125.7	394.9	2160.0
59°	12.0	12.0	12.0	29.9	35.9	83.8	107.7	131.6	400.9	2046.3
60°	12.0	12.0	12.0	23.9	35.9	83.8	113.7	137.6	406.9	1914.7
62.5°	6.0	6.0	6.0	23.9	29.9	83.8	125.7	167.5	418.8	1477.9
65°	12.0	12.0	6.0	18.0	29.9	71.8	143.6	179.5	424.8	1148.8
67.5°	12.0	12.0	12.0	23.9	29.9	71.8	149.6	185.5	424.8	909.5
70°	12.0	12.0	12.0	23.9	35.9	71.8	149.6	191.5	418.8	742.0
72.5°	12.0	12.0	12.0	23.9	35.9	65.8	137.6	197.5	400.9	628.3
75°	12.0	12.0	12.0	18.0	29.9	59.8	131.6	215.4	365.0	532.5
77.5°	12.0	12.0	12.0	12.0	23.9	47.9	119.7	239.3	323.1	430.8
80°	18.0	12.0	12.0	12.0	18.0	41.9	113.7	233.4	269.3	281.2
82.5°	18.0	12.0	12.0	6.0	12.0	29.9	89.8	179.5	137.6	125.7
85°	12.0	12.0	12.0	6.0	6.0	18.0	41.9	53.9	41.9	29.9
87.5°	12.0	12.0	12.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-4

Test Date: 10/10/2024

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

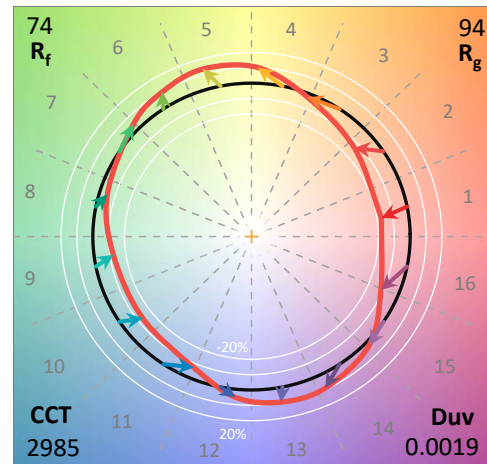
Data in this report applies to families of products including GSS-SB1A-730-U-5WQ

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	CRI (Ra):	70.8		
CIE u':	0.2504	R1:	66.3	R9:	-43.2
CIE v':	0.5243	R2:	80.6	R10:	57.6
Duv:	0.0019	R3:	94.5	R11:	64.8
CIE x:	0.4408	R4:	68.2	R12:	53.5
CIE y:	0.4101	R5:	66.5	R13:	68.7
CIE z:	0.1491	R6:	74.7	R14:	97.0
Peak Wavelength (nm):	595	R7:	76.2	R15:	56.4
Dominant Wavelength (nm):	582	R8:	39.6		
Purity:	55.41818				
Rf:	73.8				
Rg:	94.4				



Test Conditions

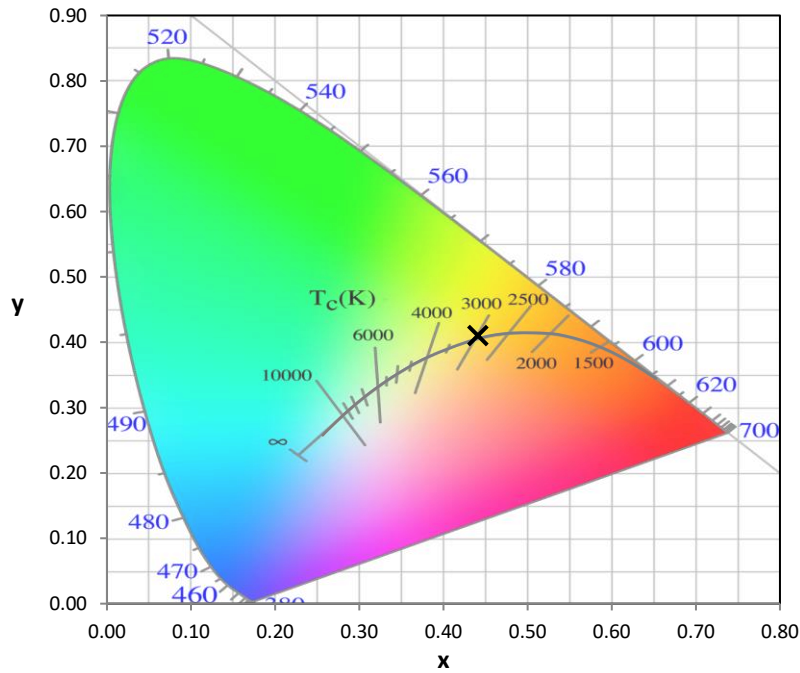
Stabilization Time: 36M
 Operation Time: 1H 36M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-4

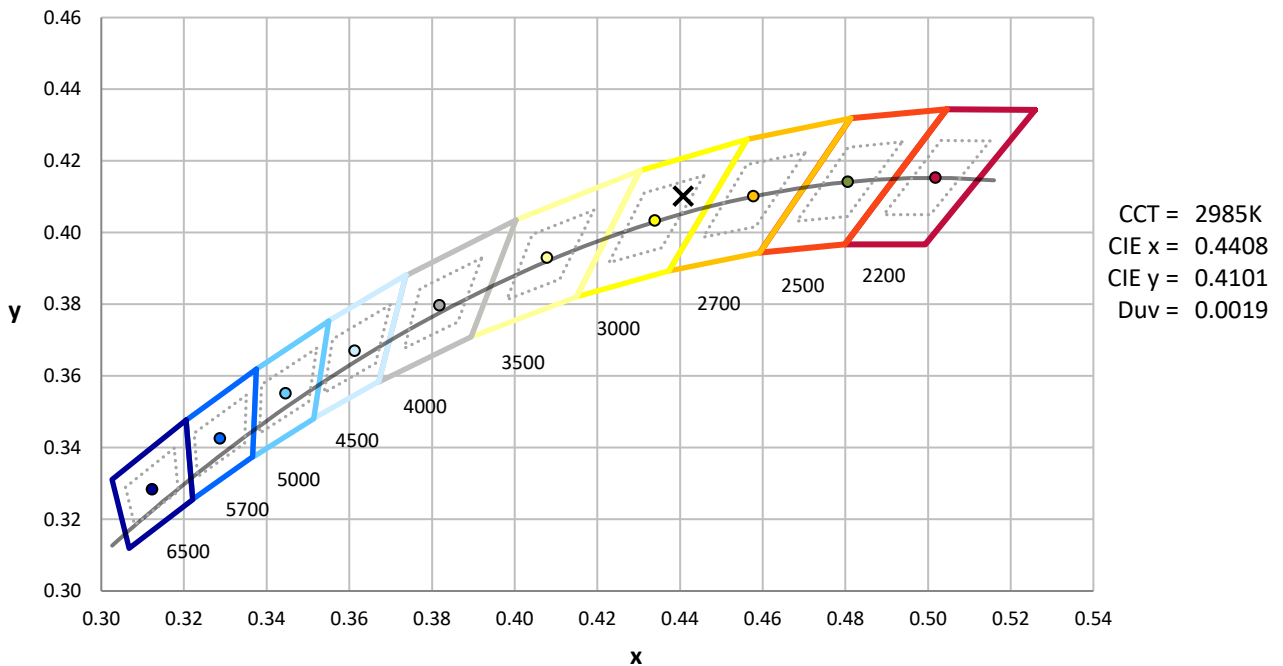
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-4

CIE 1931 Chromaticity Diagram



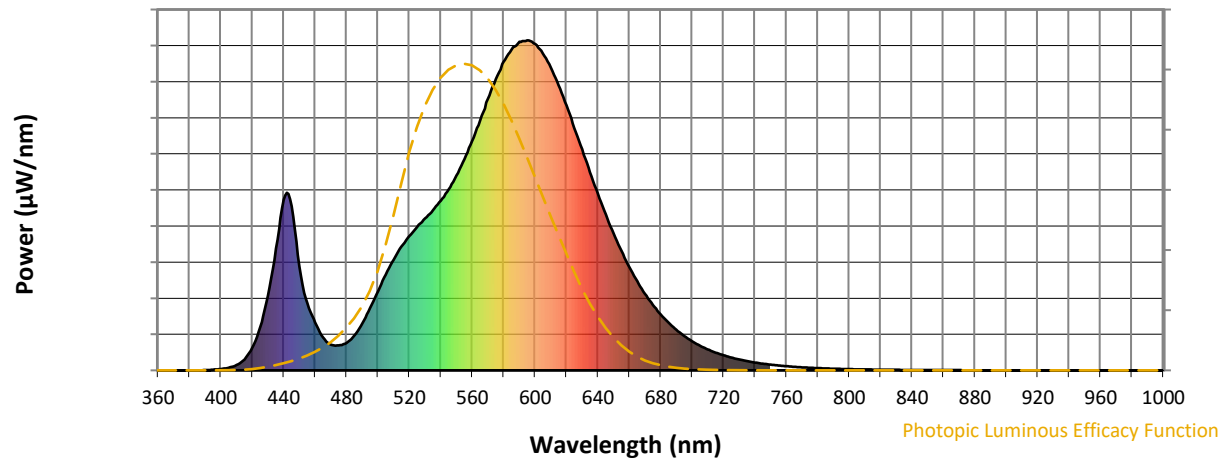
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-4

Photopic Flux vs. Wavelength

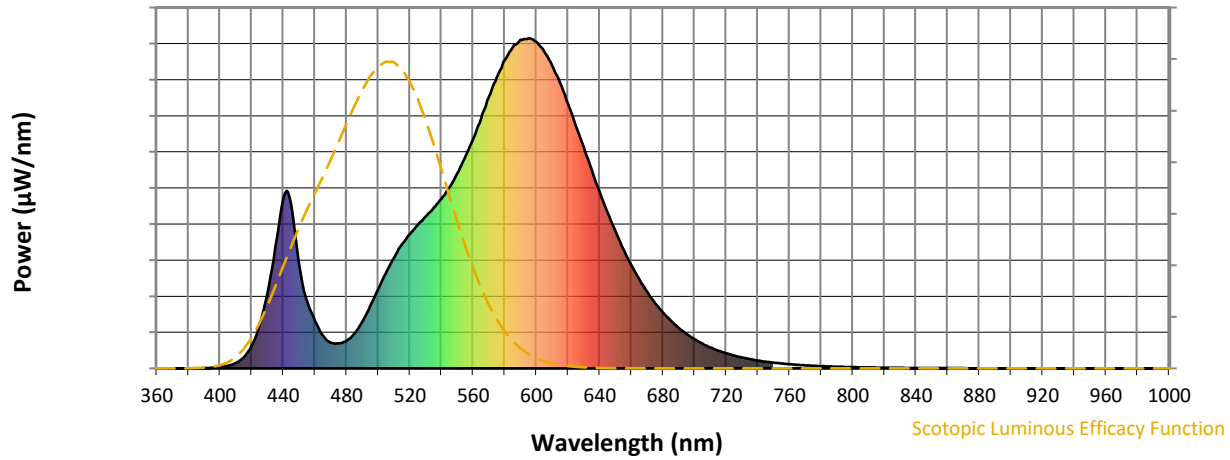


Photopic Lumens: NR

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



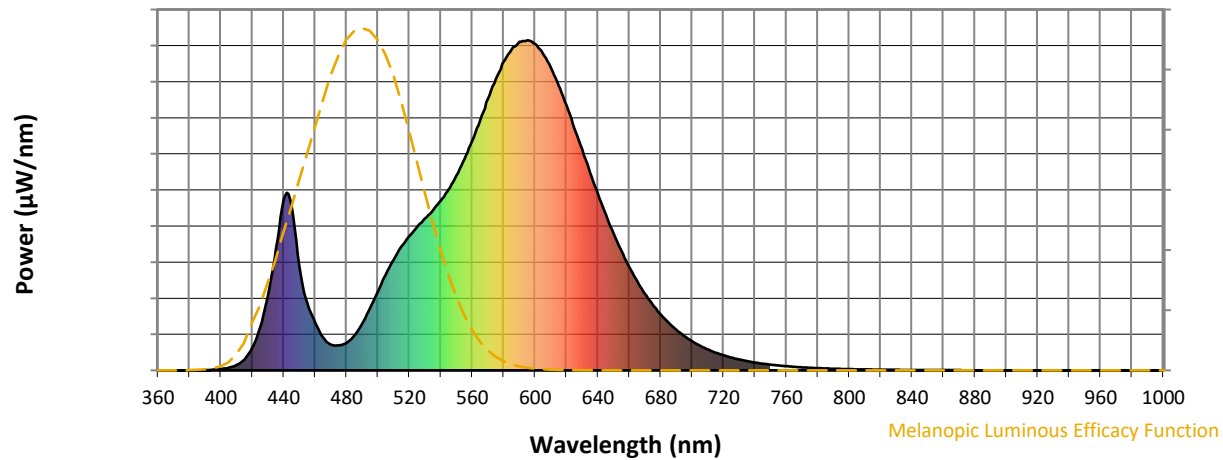
Scotopic Lumens: NR

S/P: 1.19

λ (nm)	Power 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

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.13

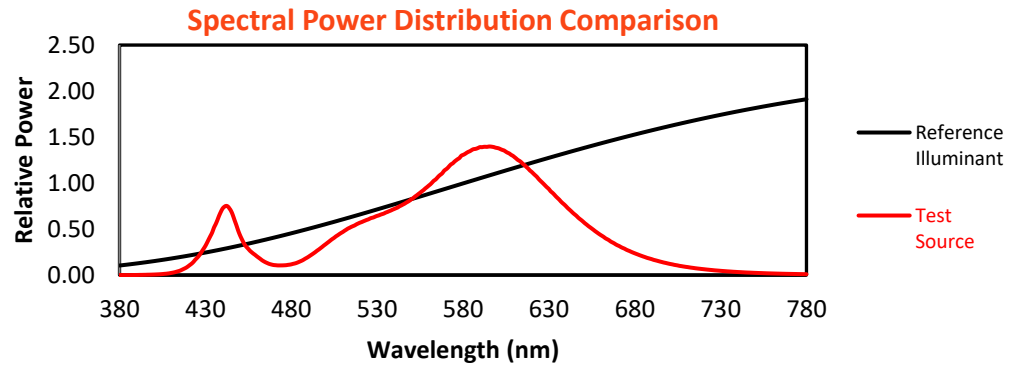
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	142	NR	620	803	NR	750	17	NR	880	0	NR
365	0	NR	495	189	NR	625	734	NR	755	15	NR	885	0	NR
370	0	NR	500	240	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

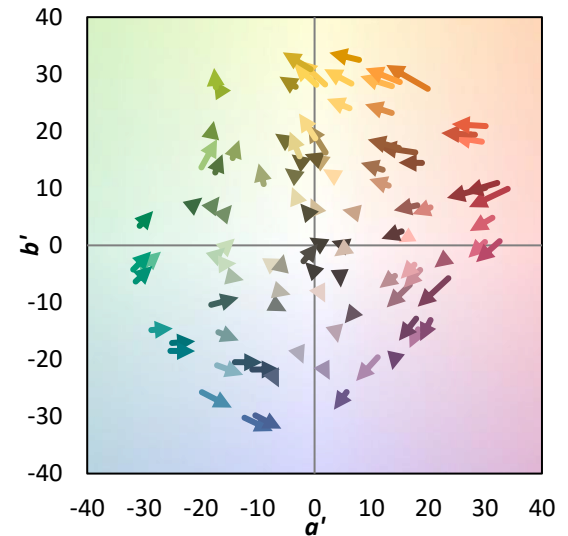
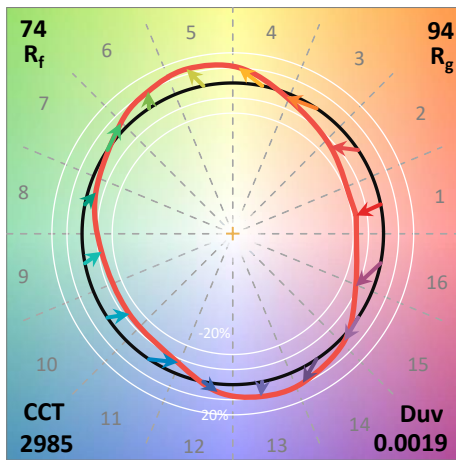
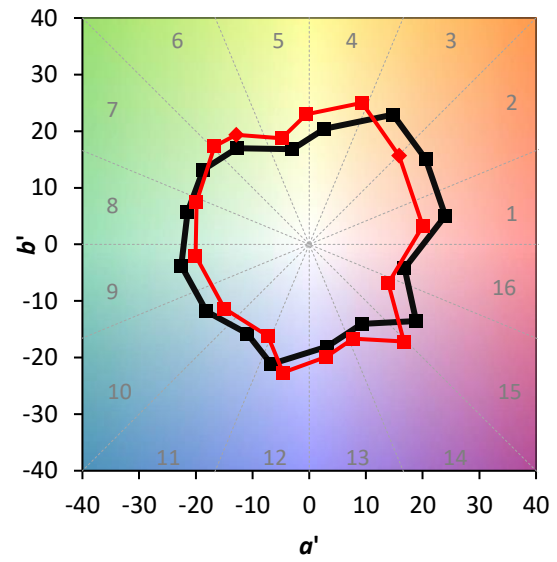
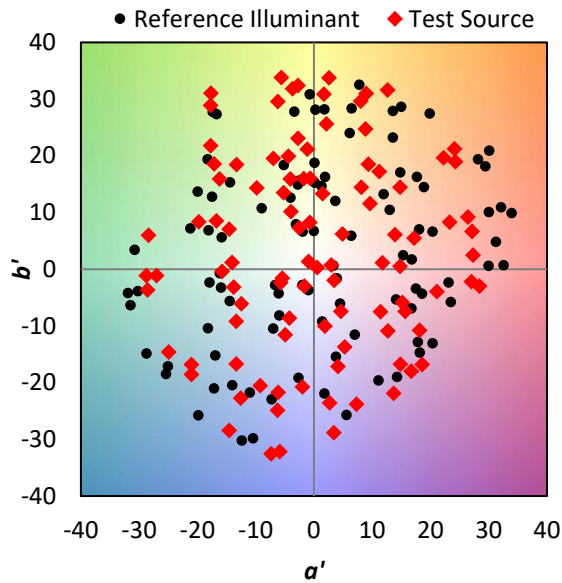
TM-30-18

Summary

$R_f = 73.8$
 $R_g = 94.4$
 $CIE R_a = 70.8$
 $R_g = -43.2$

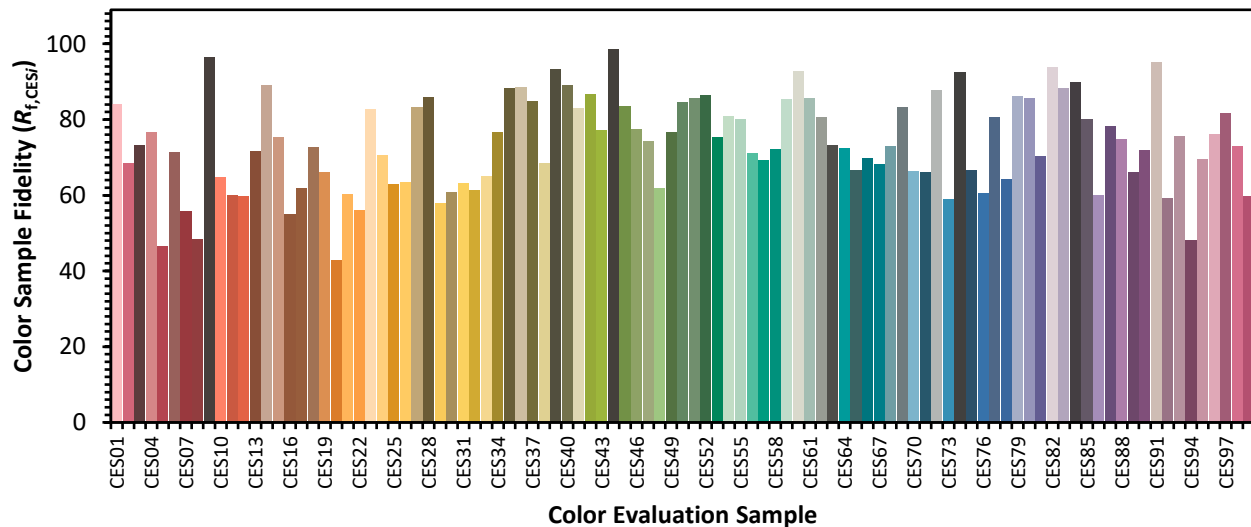


Color Vector Graphics

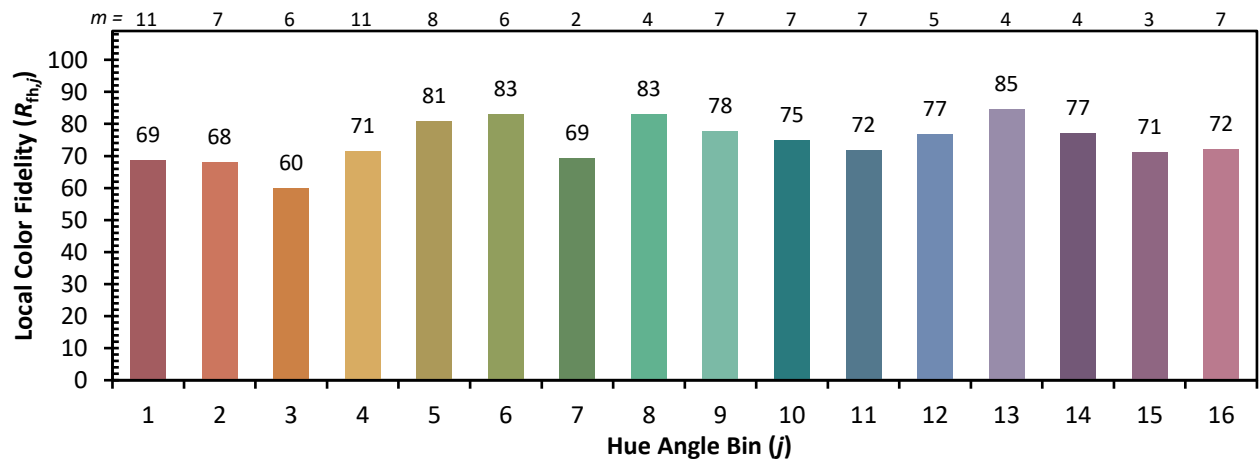
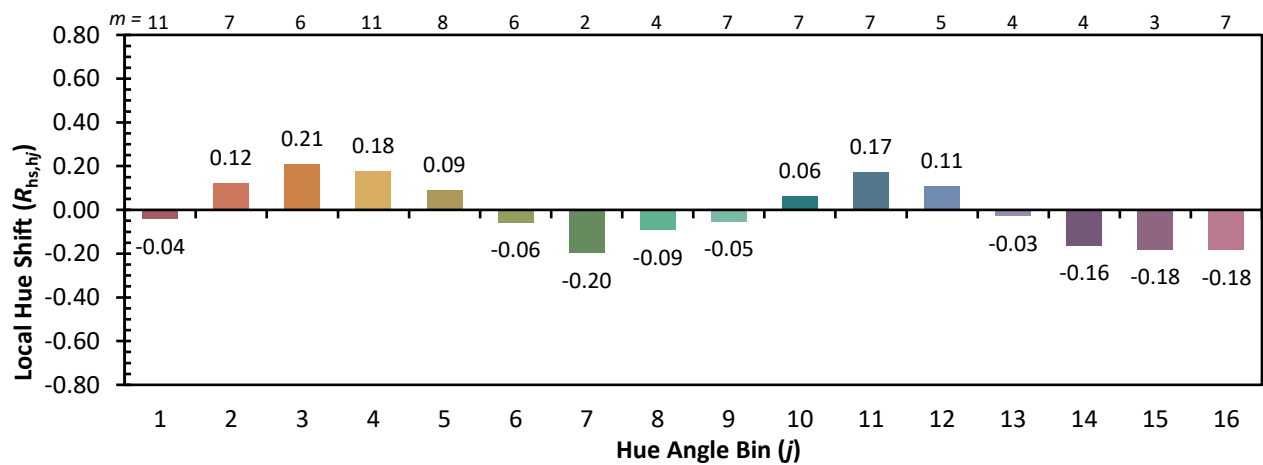
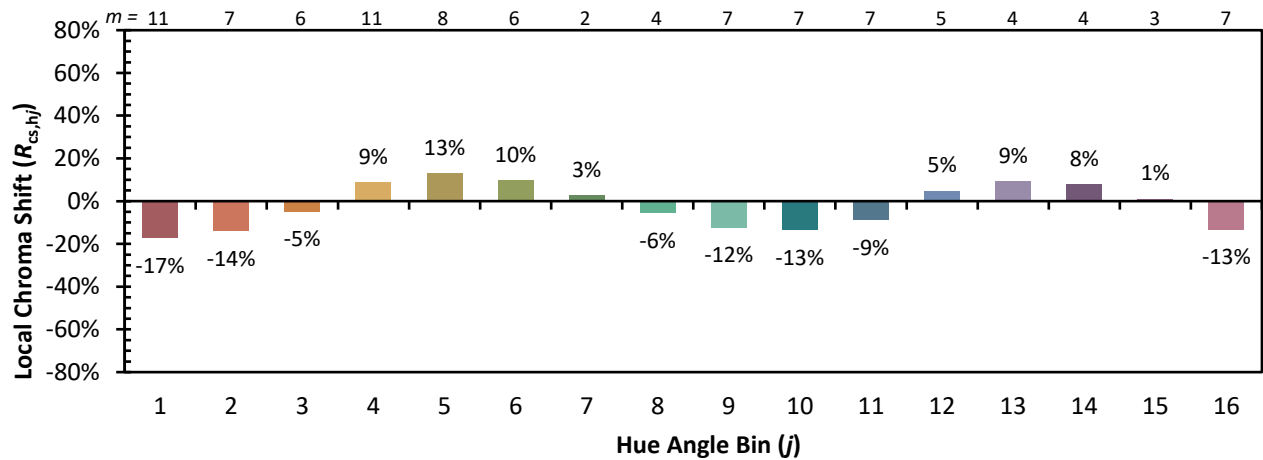


Individual Sample Fidelity Index ($R_{f,i}$)

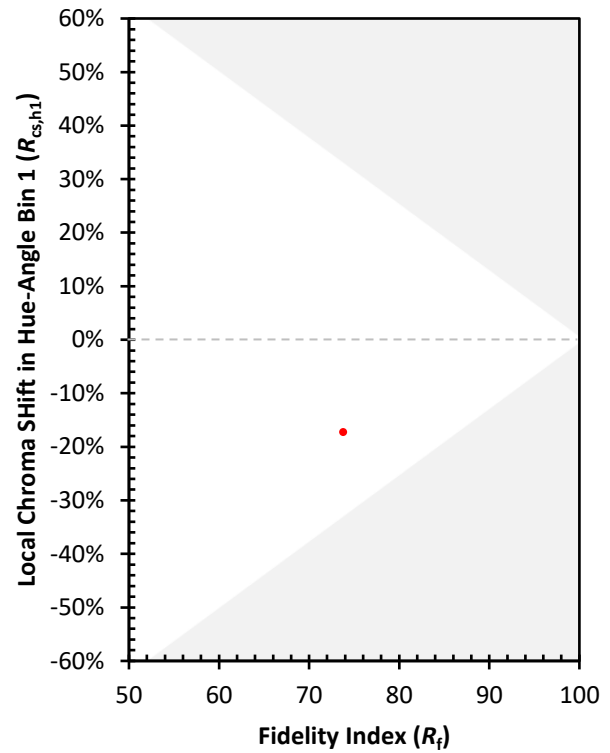
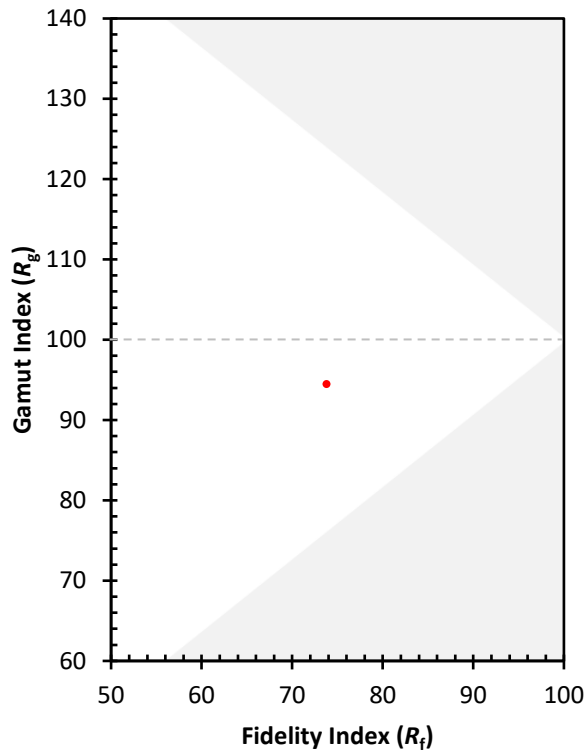
CES01 = 86	CES26 = 63	CES51 = 86	CES76 = 61
CES02 = 62	CES27 = 83	CES52 = 86	CES77 = 81
CES03 = 31	CES28 = 86	CES53 = 75	CES78 = 64
CES04 = 71	CES29 = 58	CES54 = 81	CES79 = 86
CES05 = 49	CES30 = 61	CES55 = 80	CES80 = 86
CES06 = 51	CES31 = 63	CES56 = 71	CES81 = 70
CES07 = 41	CES32 = 61	CES57 = 69	CES82 = 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)