

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: P1068042

Luminaire Tested: **NAV-SA2B-827-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068042
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA2B-827-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 800mA 2xLight Square PACKAGE
80CRI 2700K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (28) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5723.1 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G2

Input Watts (W): 72.8
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

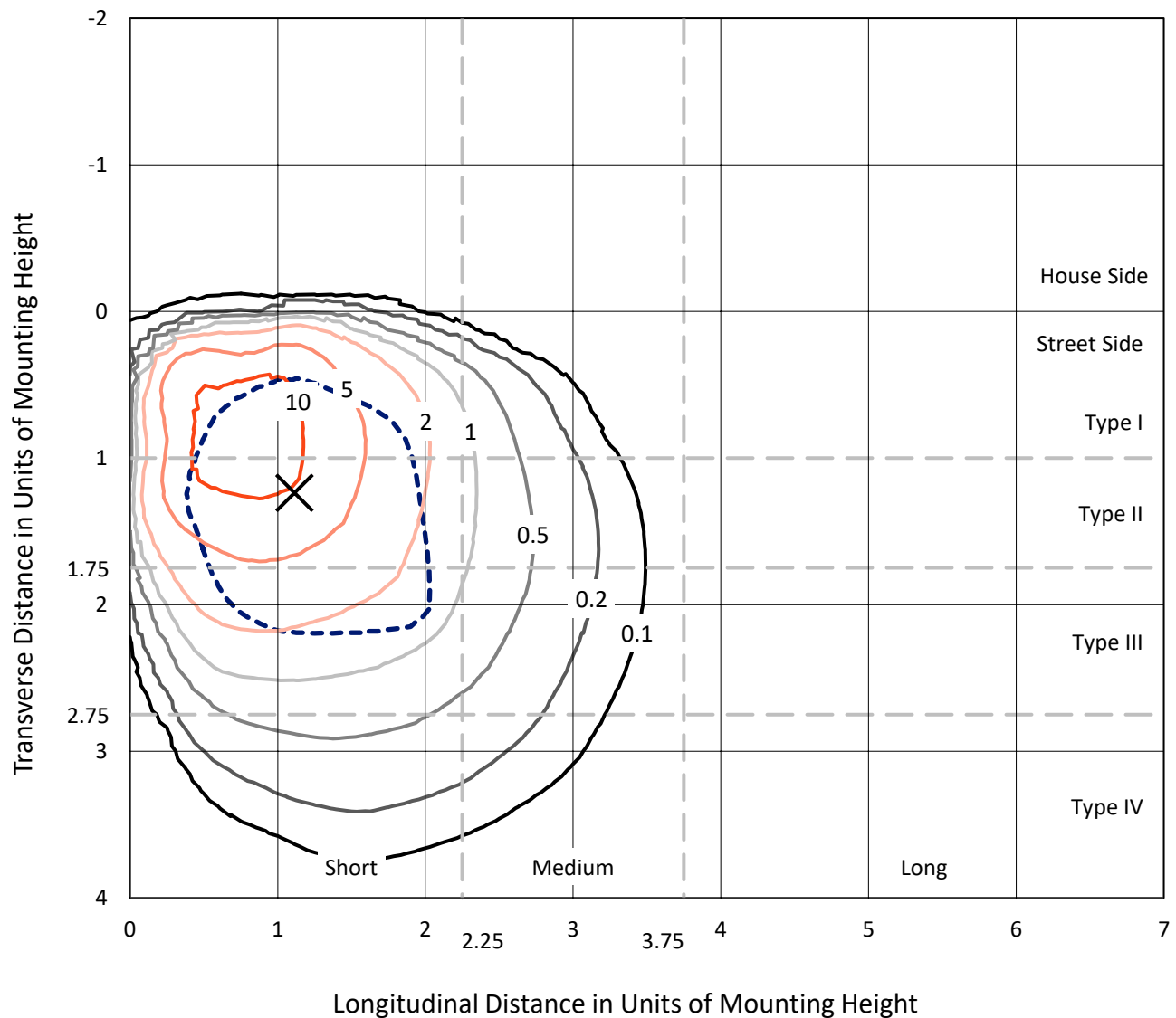


REPORT NUMBER: P1068042

CATALOG NUMBER: NAV-SA2B-827-U-LBC

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

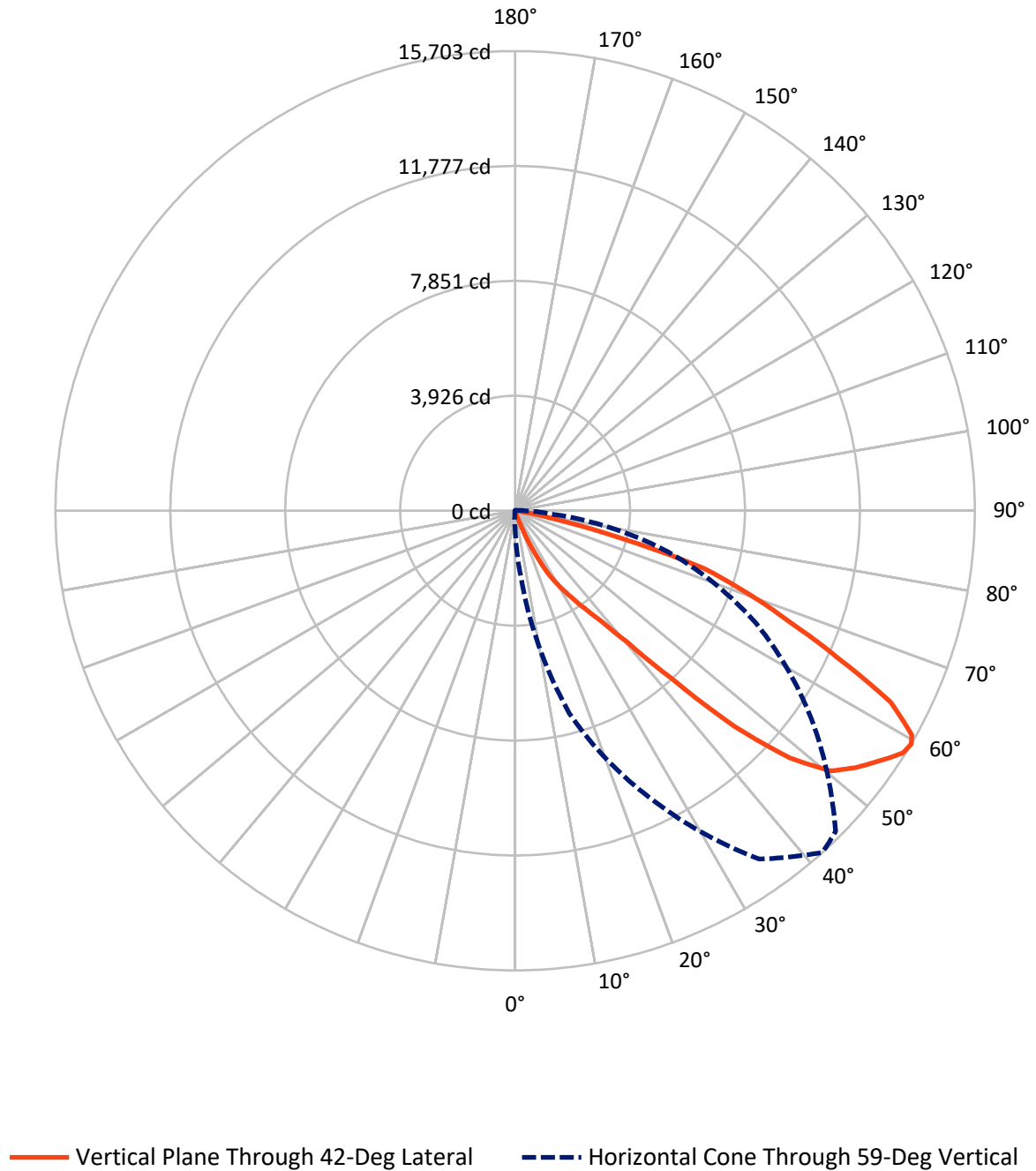


Based on 15 foot mounting height. Maximum calculated value = 17 fc
 Type III - Short - N/A

REPORT NUMBER: P1068042

CATALOG NUMBER: NAV-SA2B-827-U-LBC

Luminous Intensity Polar Plot



REPORT NUMBER: P1068042

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	27.6	0.0	27.6
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	5695.5	0.0	5695.5
	% Fixture	99.5	0.0	99.5
Total	Lumens	5723.1	0.0	5723.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.0
10°-20°	8.3	0.1
20°-30°	106.8	1.9
30°-40°	359.9	6.3
40°-50°	1087.1	19.0
50°-60°	1919.0	33.5
60°-70°	1689.7	29.5
70°-80°	537.8	9.4
80°-90°	12.9	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°	5723.1	100.0
0°-180°	5723.1	100.0



REPORT NUMBER: P1068042

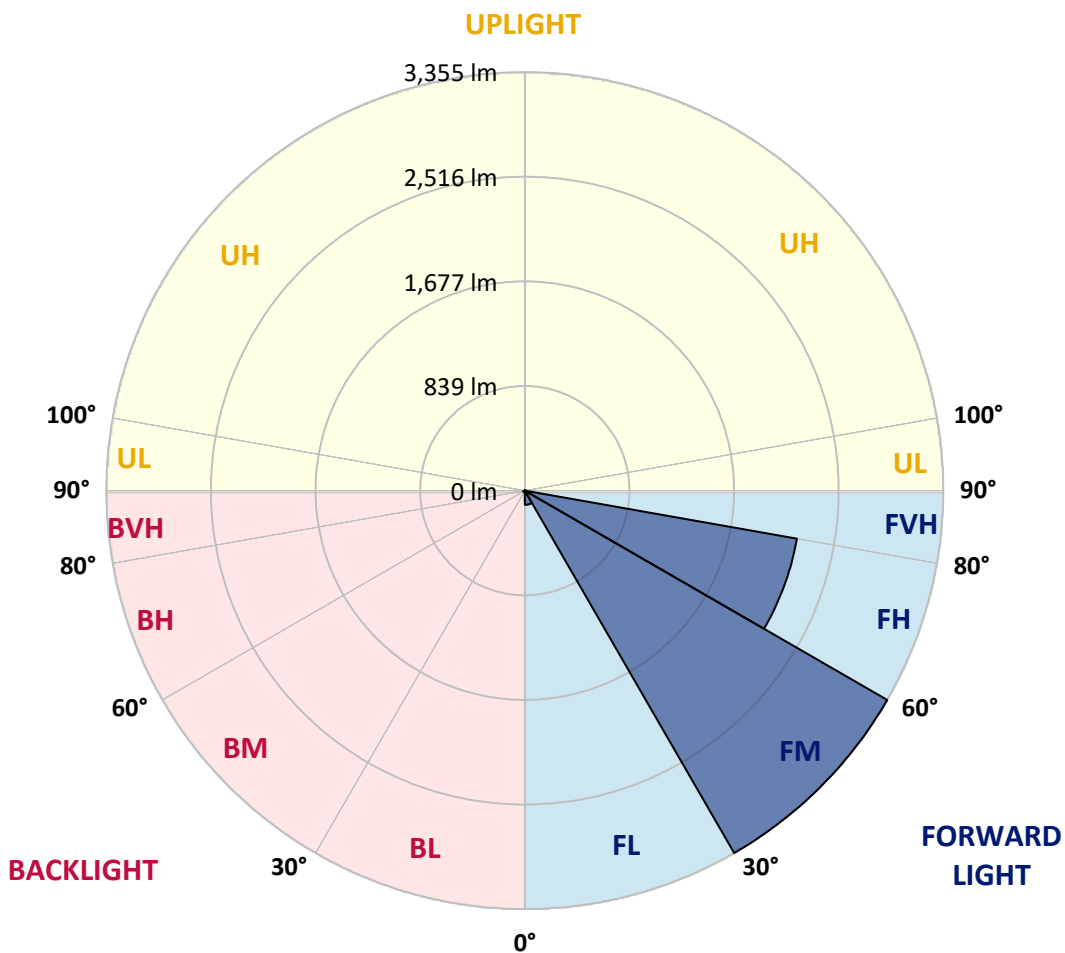
CATALOG NUMBER: NAV-SA2B-827-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	113.7	2.0			
FM	(30°-60°)	3354.7	58.6			
FH	(60°-80°)	2214.9	38.7			G2/5000
FVH	(80°-90°)	12.2	0.2			G1/100
BL	(0°-30°)	3.1	0.1	B0/110		
BM	(30°-60°)	11.3	0.2	B0/220		
BH	(60°-80°)	12.6	0.2	B0/110		G0/110
BVH	(80°-90°)	0.6	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-G2

Type III Short



REPORT NUMBER: P1068042

CATALOG NUMBER: NAV-SA2B-827-U-LBC

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
2.5°	25.1	25.1	23.3	21.5	19.7	17.9	17.9	17.9	16.1	16.1	14.4
5°	28.7	28.7	26.9	25.1	25.1	23.3	23.3	21.5	19.7	19.7	17.9
7.5°	30.5	30.5	30.5	30.5	28.7	28.7	28.7	26.9	25.1	23.3	21.5
10°	32.3	34.1	35.9	35.9	35.9	35.9	35.9	34.1	30.5	28.7	25.1
12.5°	35.9	37.7	41.3	44.9	44.9	46.7	44.9	43.1	39.5	34.1	28.7
15°	39.5	43.1	48.4	55.6	62.8	64.6	64.6	59.2	52.0	41.3	34.1
17.5°	44.9	50.2	64.6	87.9	113.0	132.8	132.8	118.4	82.5	53.8	39.5
20°	48.4	59.2	104.1	211.7	323.0	405.5	389.4	344.5	184.8	84.3	43.1
22.5°	53.8	75.4	220.7	556.3	861.3	1012.0	976.1	741.1	414.5	150.7	52.0
25°	61.0	109.5	437.8	1042.5	1600.6	1763.9	1740.5	1383.5	755.4	253.0	66.4
27.5°	75.4	161.5	701.6	1580.8	2361.4	2501.4	2492.4	2025.8	1207.6	407.3	86.1
30°	95.1	235.1	1040.7	2147.9	2865.6	3007.4	2962.5	2496.0	1629.3	622.6	111.3
32.5°	118.4	328.4	1347.6	2566.0	3330.4	3517.0	3463.1	2905.1	1968.4	805.7	165.1
35°	154.3	419.9	1650.8	2935.6	3866.9	4103.7	4014.0	3326.8	2260.9	1012.0	199.2
37.5°	172.3	473.7	1929.0	3337.5	4469.8	4792.8	4724.6	3859.7	2558.8	1275.8	244.0
40°	174.1	538.3	2217.8	3861.5	5322.1	5898.1	5776.1	4774.8	3113.2	1614.9	314.0
42.5°	179.4	635.2	2592.9	4755.1	6996.3	7823.5	7685.3	6457.9	4371.1	2295.0	445.0
45°	204.6	818.2	3357.3	6425.6	9294.8	10507.8	10348.1	8803.2	6127.8	3574.4	759.0
47.5°	292.5	1230.9	4697.7	8229.0	11645.5	12612.6	12573.2	10651.4	7719.4	4886.1	1286.6
50°	470.1	1889.5	6222.9	9745.2	13142.0	13972.8	13874.1	11423.0	8627.3	5781.5	1649.0
52.5°	628.0	2519.3	7181.1	10303.3	13588.8	14579.3	14459.1	11704.7	8866.0	6045.2	1749.5
55°	667.5	2747.2	7466.4	10475.5	13884.9	15092.5	14918.4	11893.1	8896.5	5856.8	1582.6
57.5°	647.8	2531.9	7281.6	10644.2	14297.6	15620.0	15388.5	12260.9	8998.8	5537.4	1317.1
59°	613.7	2266.3	7166.7	10778.8	14525.4	15702.6	15485.4	12341.7	9067.0	5392.1	1155.6
60°	574.2	2086.9	7077.0	10866.7	14511.1	15573.4	15349.1	12304.0	9093.9	5266.5	1078.4
62.5°	443.2	1665.2	6947.8	10803.9	13604.9	14394.5	14267.1	11381.7	8699.1	4864.5	850.5
65°	344.5	1274.0	6474.1	9635.8	11577.3	12108.4	12068.9	9637.6	7321.0	4193.4	613.7
67.5°	272.7	929.5	5474.6	7803.7	9314.6	10070.0	10041.3	7823.5	5557.2	3204.7	441.4
70°	222.5	662.1	3753.8	5883.7	7450.2	8401.3	8360.0	6296.5	4118.1	2033.0	321.2
72.5°	188.4	423.5	2277.1	4435.7	6217.5	6761.2	6641.0	5079.9	2994.8	1107.1	254.8
75°	159.7	260.2	1128.7	2765.1	3703.6	3700.0	3579.8	2689.8	1607.8	541.9	202.8
77.5°	129.2	183.0	443.2	759.0	1168.1	1446.3	1422.9	952.8	480.9	157.9	125.6
80°	84.3	86.1	118.4	208.1	321.2	355.3	403.7	290.7	140.0	75.4	52.0
82.5°	37.7	41.3	53.8	68.2	68.2	62.8	55.6	41.3	30.5	25.1	12.6
85°	9.0	12.6	9.0	10.8	9.0	7.2	7.2	3.6	0.0	0.0	0.0
87.5°	1.8	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: P1068042

CATALOG NUMBER: NAV-SA2B-827-U-LBC

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
2.5°	14.4	14.4	14.4	12.6	12.6	12.6	10.8	10.8	10.8	9.0	9.0
5°	17.9	16.1	14.4	14.4	12.6	12.6	10.8	9.0	9.0	9.0	7.2
7.5°	19.7	17.9	16.1	14.4	12.6	10.8	10.8	9.0	7.2	7.2	7.2
10°	23.3	21.5	17.9	14.4	12.6	10.8	9.0	9.0	7.2	5.4	5.4
12.5°	26.9	23.3	19.7	16.1	12.6	10.8	9.0	9.0	7.2	5.4	3.6
15°	30.5	26.9	21.5	16.1	12.6	10.8	9.0	9.0	5.4	3.6	1.8
17.5°	34.1	28.7	21.5	17.9	12.6	10.8	9.0	7.2	3.6	1.8	0.0
20°	35.9	30.5	23.3	17.9	12.6	10.8	9.0	5.4	1.8	0.0	0.0
22.5°	39.5	34.1	25.1	17.9	12.6	9.0	5.4	1.8	0.0	0.0	0.0
25°	46.7	35.9	25.1	17.9	12.6	9.0	3.6	0.0	0.0	0.0	0.0
27.5°	52.0	39.5	25.1	17.9	12.6	7.2	1.8	0.0	0.0	0.0	0.0
30°	61.0	43.1	26.9	17.9	12.6	5.4	1.8	0.0	0.0	0.0	0.0
32.5°	75.4	46.7	26.9	17.9	10.8	5.4	0.0	0.0	0.0	0.0	0.0
35°	91.5	53.8	26.9	17.9	10.8	5.4	0.0	0.0	0.0	0.0	0.0
37.5°	93.3	57.4	26.9	17.9	10.8	3.6	0.0	0.0	0.0	0.0	0.0
40°	96.9	53.8	28.7	17.9	10.8	3.6	0.0	0.0	0.0	0.0	0.0
42.5°	111.3	50.2	30.5	17.9	10.8	3.6	0.0	0.0	0.0	0.0	0.0
45°	165.1	52.0	30.5	19.7	10.8	5.4	0.0	0.0	0.0	0.0	0.0
47.5°	287.1	53.8	28.7	19.7	10.8	5.4	0.0	0.0	0.0	0.0	0.0
50°	367.8	62.8	28.7	21.5	12.6	3.6	0.0	0.0	0.0	0.0	0.0
52.5°	391.2	73.6	28.7	23.3	16.1	1.8	0.0	0.0	0.0	0.0	0.0
55°	380.4	86.1	30.5	25.1	19.7	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	351.7	93.3	32.3	26.9	21.5	0.0	0.0	0.0	0.0	0.0	0.0
59°	321.2	98.7	37.7	28.7	21.5	0.0	0.0	0.0	0.0	0.0	0.0
60°	296.1	104.1	39.5	30.5	21.5	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	238.7	111.3	43.1	35.9	17.9	0.0	0.0	0.0	0.0	0.0	0.0
65°	208.1	116.6	44.9	39.5	16.1	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	190.2	120.2	48.4	41.3	14.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	175.8	118.4	52.0	39.5	12.6	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	159.7	113.0	62.8	35.9	10.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	143.5	102.3	68.2	32.3	7.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	104.1	86.1	62.8	28.7	3.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	44.9	46.7	44.9	21.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	9.0	10.8	9.0	5.4	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: P1068042

CATALOG NUMBER: NAV-SA2B-827-U-LBC

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
2.5°	9.0	9.0	9.0	9.0	10.8	10.8	14.4	17.9	21.5	23.3	23.3
5°	7.2	7.2	7.2	7.2	7.2	9.0	10.8	14.4	19.7	21.5	21.5
7.5°	5.4	5.4	5.4	5.4	5.4	5.4	9.0	12.6	17.9	19.7	21.5
10°	5.4	3.6	3.6	1.8	1.8	3.6	5.4	10.8	16.1	17.9	19.7
12.5°	3.6	1.8	1.8	0.0	0.0	1.8	3.6	9.0	14.4	16.1	17.9
15°	1.8	0.0	0.0	0.0	0.0	0.0	1.8	7.2	12.6	14.4	17.9
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	10.8	14.4	16.1
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	9.0	12.6	14.4
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	7.2	10.8	12.6
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	7.2	9.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	5.4	7.2
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	5.4	7.2
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6	5.4
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6	5.4
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6	3.6
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
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: P1068042

CATALOG NUMBER: NAV-SA2B-827-U-LBC

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	318°	325°	335°	345°	355°	360°
0°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
2.5°	25.1	25.1	23.3	21.5	21.5	21.5	23.3	25.1	25.1	25.1
5°	23.3	23.3	21.5	21.5	21.5	21.5	23.3	26.9	28.7	28.7
7.5°	23.3	23.3	21.5	21.5	21.5	21.5	23.3	26.9	28.7	30.5
10°	21.5	21.5	21.5	21.5	19.7	21.5	23.3	26.9	32.3	32.3
12.5°	21.5	21.5	21.5	21.5	19.7	21.5	25.1	28.7	34.1	35.9
15°	21.5	21.5	21.5	19.7	19.7	21.5	25.1	30.5	35.9	39.5
17.5°	19.7	21.5	21.5	19.7	19.7	21.5	25.1	30.5	39.5	44.9
20°	17.9	19.7	21.5	19.7	19.7	19.7	25.1	30.5	41.3	48.4
22.5°	16.1	17.9	19.7	19.7	17.9	19.7	25.1	32.3	44.9	53.8
25°	14.4	16.1	16.1	17.9	17.9	19.7	25.1	32.3	46.7	61.0
27.5°	10.8	12.6	14.4	16.1	16.1	19.7	25.1	34.1	50.2	75.4
30°	9.0	10.8	12.6	14.4	16.1	19.7	25.1	34.1	53.8	95.1
32.5°	9.0	10.8	12.6	14.4	16.1	17.9	25.1	35.9	59.2	118.4
35°	7.2	9.0	10.8	14.4	14.4	17.9	25.1	35.9	64.6	154.3
37.5°	7.2	9.0	10.8	14.4	14.4	17.9	25.1	35.9	79.0	172.3
40°	5.4	7.2	9.0	14.4	14.4	17.9	26.9	37.7	80.7	174.1
42.5°	5.4	7.2	9.0	12.6	14.4	17.9	26.9	37.7	75.4	179.4
45°	5.4	7.2	9.0	14.4	16.1	19.7	26.9	39.5	73.6	204.6
47.5°	5.4	7.2	9.0	14.4	17.9	19.7	26.9	39.5	75.4	292.5
50°	5.4	7.2	9.0	14.4	19.7	19.7	26.9	39.5	82.5	470.1
52.5°	3.6	5.4	7.2	12.6	16.1	21.5	28.7	37.7	87.9	628.0
55°	3.6	3.6	5.4	10.8	14.4	23.3	30.5	37.7	102.3	667.5
57.5°	3.6	3.6	5.4	9.0	12.6	25.1	32.3	37.7	118.4	647.8
59°	3.6	3.6	3.6	9.0	10.8	25.1	32.3	39.5	120.2	613.7
60°	3.6	3.6	3.6	7.2	10.8	25.1	34.1	41.3	122.0	574.2
62.5°	1.8	1.8	1.8	7.2	9.0	25.1	37.7	50.2	125.6	443.2
65°	3.6	3.6	1.8	5.4	9.0	21.5	43.1	53.8	127.4	344.5
67.5°	3.6	3.6	3.6	7.2	9.0	21.5	44.9	55.6	127.4	272.7
70°	3.6	3.6	3.6	7.2	10.8	21.5	44.9	57.4	125.6	222.5
72.5°	3.6	3.6	3.6	7.2	10.8	19.7	41.3	59.2	120.2	188.4
75°	3.6	3.6	3.6	5.4	9.0	17.9	39.5	64.6	109.5	159.7
77.5°	3.6	3.6	3.6	3.6	7.2	14.4	35.9	71.8	96.9	129.2
80°	5.4	3.6	3.6	3.6	5.4	12.6	34.1	70.0	80.7	84.3
82.5°	5.4	3.6	3.6	1.8	3.6	9.0	26.9	53.8	41.3	37.7
85°	3.6	3.6	3.6	1.8	1.8	5.4	12.6	16.1	12.6	9.0
87.5°	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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: SP1-2407-184-8

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-827-U-5WQ

Data in this report applies to families of products including GSS-SB1A-827-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-8
 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-827-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI
 2700K CCT 26 LEDS

Spectral Parameters

CCT (K): 2756
 CIE u' : 0.2599
 CIE v' : 0.5271
 Duv: 0.0006
 CIE x: 0.4563
 CIE y: 0.4112
 CIE z: 0.1325
 Peak Wavelength (nm): 609
 Dominant Wavelength (nm): 583
 Purity: 60.41121
 R_f: 82.2
 R_g: 99.9

CRI (Ra): 82.9
 R1: 81.6
 R2: 88.8
 R3: 96.0
 R4: 83.4
 R5: 81.4
 R6: 87.0
 R7: 84.0
 R8: 60.8
 R9: 10.8
 R10: 74.8
 R11: 84.3
 R12: 72.1
 R13: 82.9
 R14: 97.3
 R15: 73.7



Test Conditions

Stabilization Time: 29M
 Operation Time: 1H 29M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-8

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: SP1-2407-184-8

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-8

Photopic Flux vs. Wavelength

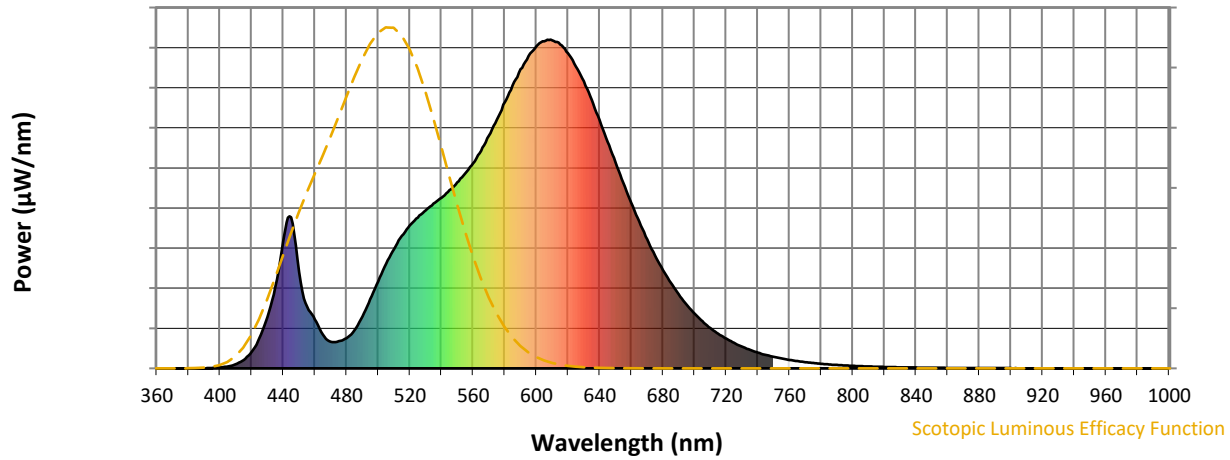


Photopic Lumens: NR

λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-8

Scotopic Flux vs. Wavelength



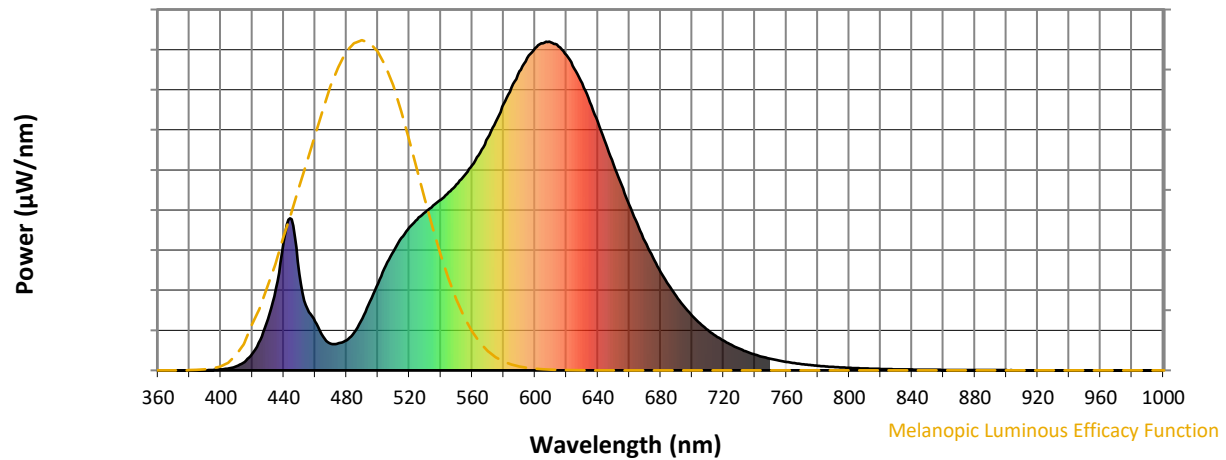
Scotopic Lumens: NR

S/P: 1.2

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	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-8

Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.16

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	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-8

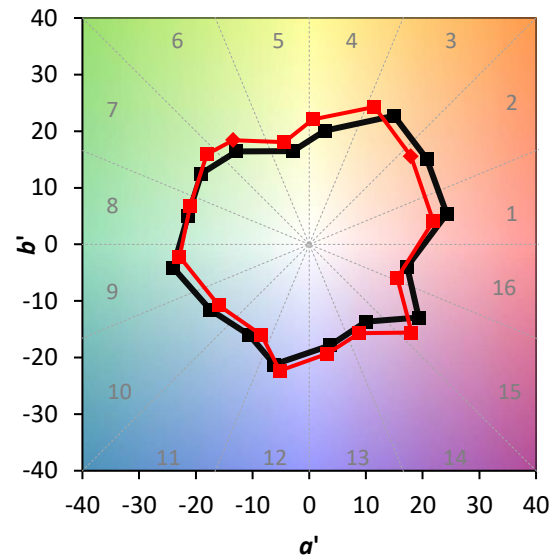
TM-30-18

Summary

$R_f = 82.2$
 $R_g = 99.9$
 $CIE R_a = 82.9$
 $R_9 = 10.8$

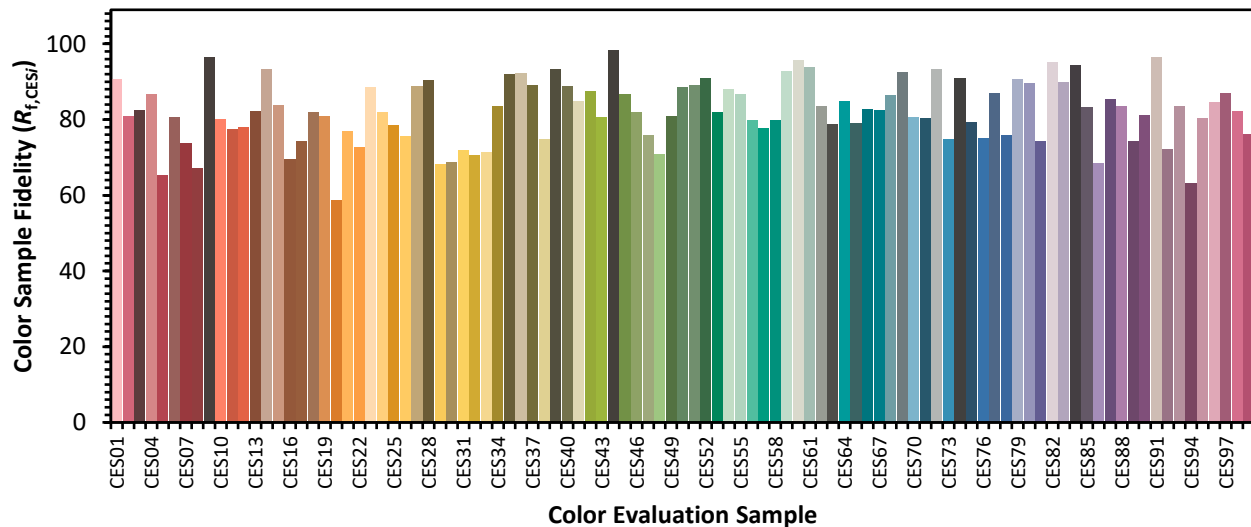


Color Vector Graphics

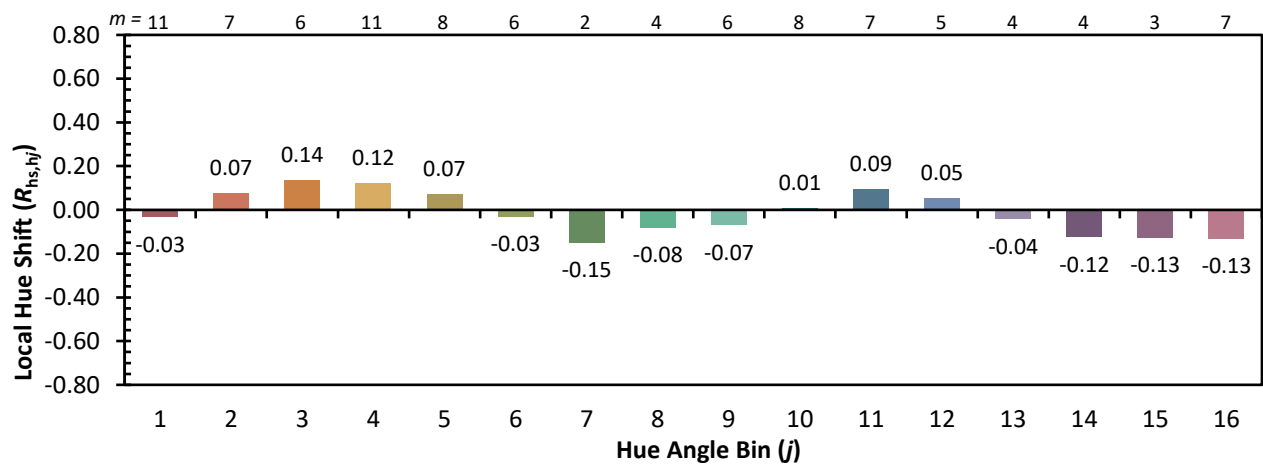


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 76	CES51 = 89	CES76 = 75
CES02 = 63	CES27 = 89	CES52 = 91	CES77 = 87
CES03 = 31	CES28 = 90	CES53 = 82	CES78 = 76
CES04 = 71	CES29 = 68	CES54 = 88	CES79 = 91
CES05 = 50	CES30 = 69	CES55 = 87	CES80 = 90
CES06 = 52	CES31 = 72	CES56 = 80	CES81 = 74
CES07 = 43	CES32 = 71	CES57 = 78	CES82 = 95
CES08 = 42	CES33 = 71	CES58 = 80	CES83 = 90
CES09 = 29	CES34 = 84	CES59 = 93	CES84 = 94
CES10 = 77	CES35 = 92	CES60 = 96	CES85 = 83
CES11 = 59	CES36 = 92	CES61 = 94	CES86 = 69
CES12 = 66	CES37 = 89	CES62 = 84	CES87 = 85
CES13 = 44	CES38 = 75	CES63 = 79	CES88 = 84
CES14 = 74	CES39 = 93	CES64 = 85	CES89 = 74
CES15 = 72	CES40 = 89	CES65 = 79	CES90 = 81
CES16 = 48	CES41 = 85	CES66 = 83	CES91 = 96
CES17 = 50	CES42 = 88	CES67 = 82	CES92 = 72
CES18 = 57	CES43 = 81	CES68 = 86	CES93 = 84
CES19 = 73	CES44 = 98	CES69 = 92	CES94 = 63
CES20 = 67	CES45 = 87	CES70 = 81	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 81	CES96 = 85
CES22 = 79	CES47 = 76	CES72 = 93	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 75	CES98 = 82
CES24 = 91	CES49 = 81	CES74 = 91	CES99 = 76
CES25 = 72	CES50 = 88	CES75 = 79	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)