

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: P1068053

Luminaire Tested: **NAV-SA5A-827-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068053
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA5A-827-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 615mA 5xLight Square PACKAGE
80CRI 2700K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (70) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11258.9 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G2

Input Watts (W): 137.4
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



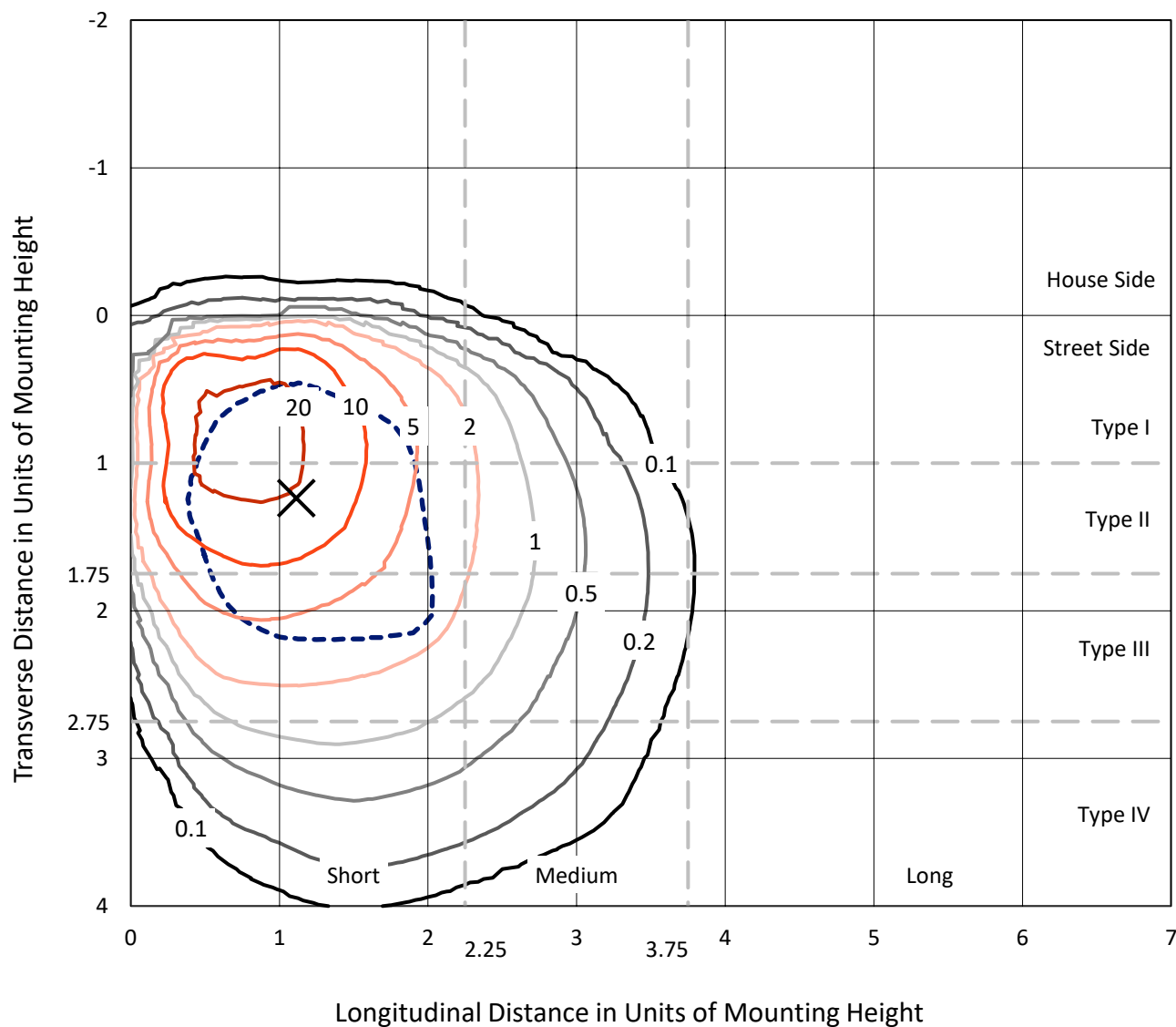
REPORT NUMBER: P1068053

CATALOG NUMBER: NAV-SA5A-827-U-LBC

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

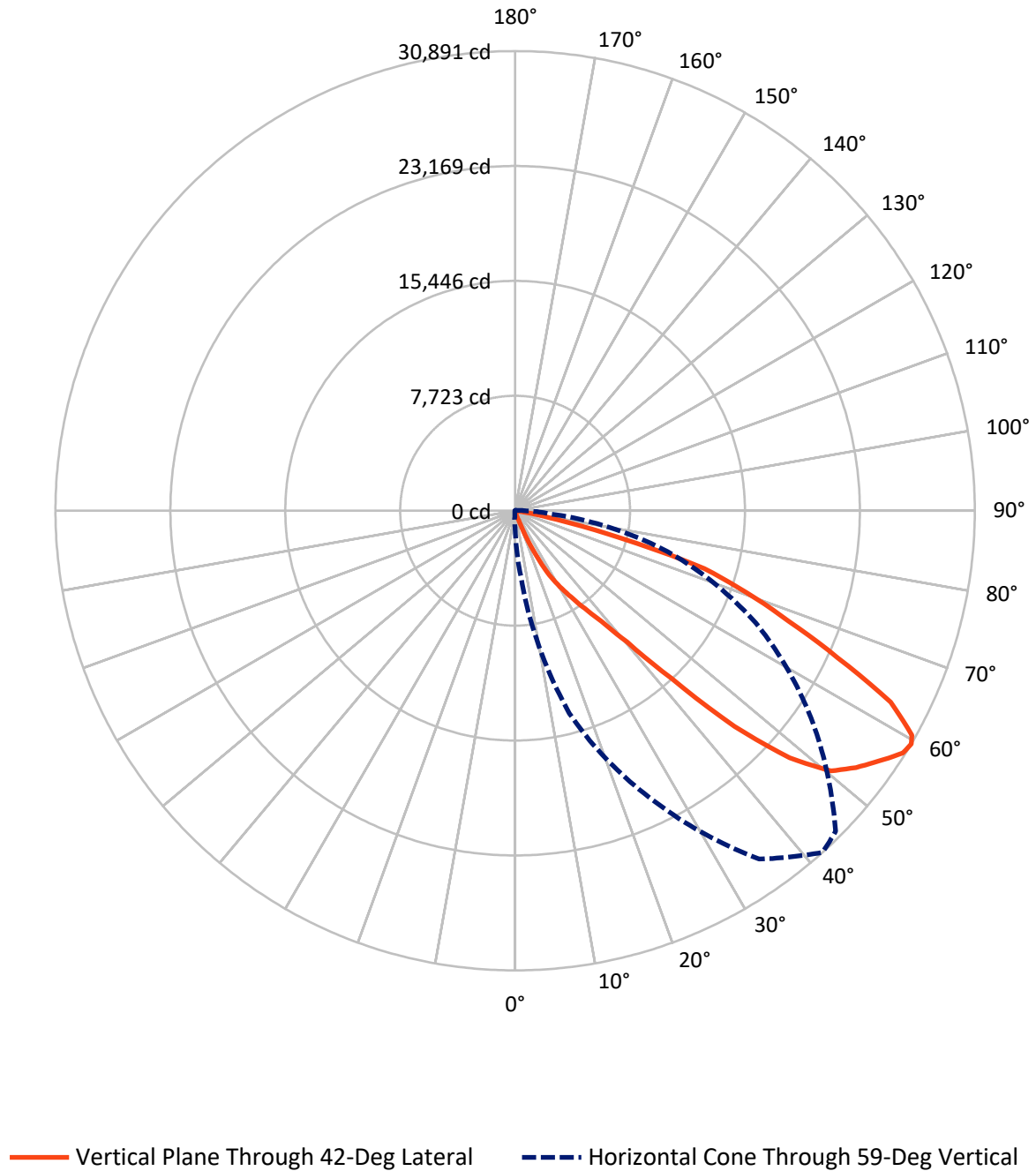


Based on 15 foot mounting height. Maximum calculated value = 33.4 fc
 Type III - Short - N/A

REPORT NUMBER: P1068053

CATALOG NUMBER: NAV-SA5A-827-U-LBC

Luminous Intensity Polar Plot



REPORT NUMBER: P1068053

CATALOG NUMBER: NAV-SA5A-827-U-LBC

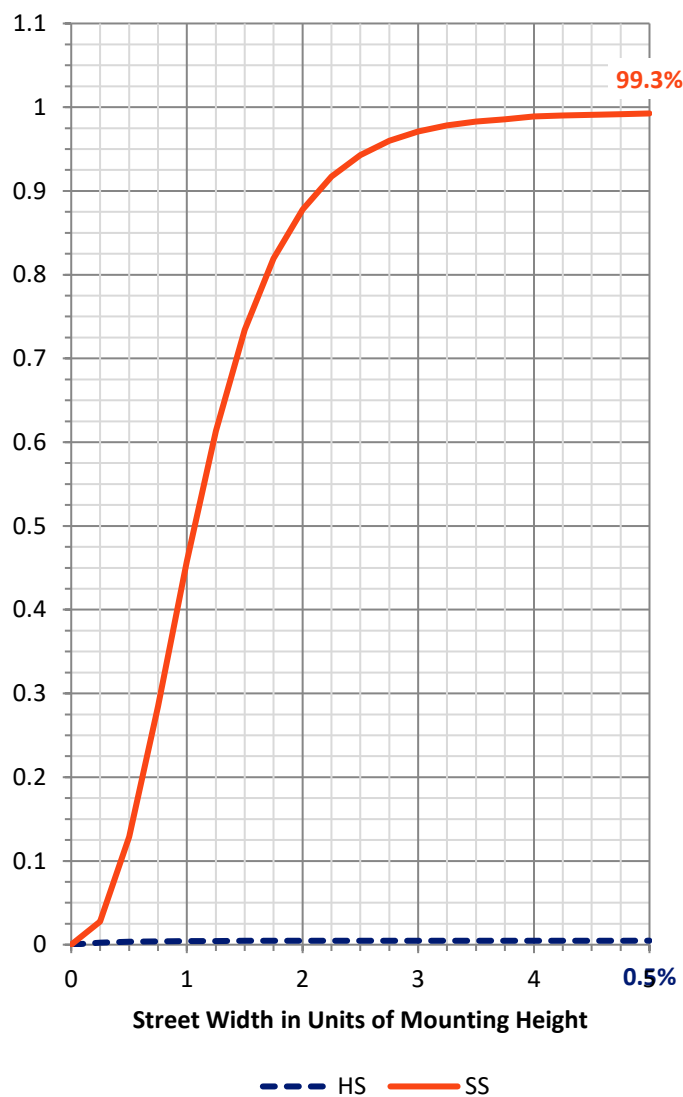
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	54.3	0.0	54.3
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	11204.6	0.0	11204.6
	% Fixture	99.5	0.0	99.5
Total	Lumens	11258.9	0.0	11258.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.3	0.0
10°-20°	16.4	0.1
20°-30°	210.0	1.9
30°-40°	708.0	6.3
40°-50°	2138.6	19.0
50°-60°	3775.1	33.5
60°-70°	3324.1	29.5
70°-80°	1058.1	9.4
80°-90°	25.3	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°	11258.9	100.0
0°-180°	11258.9	100.0



REPORT NUMBER: P1068053

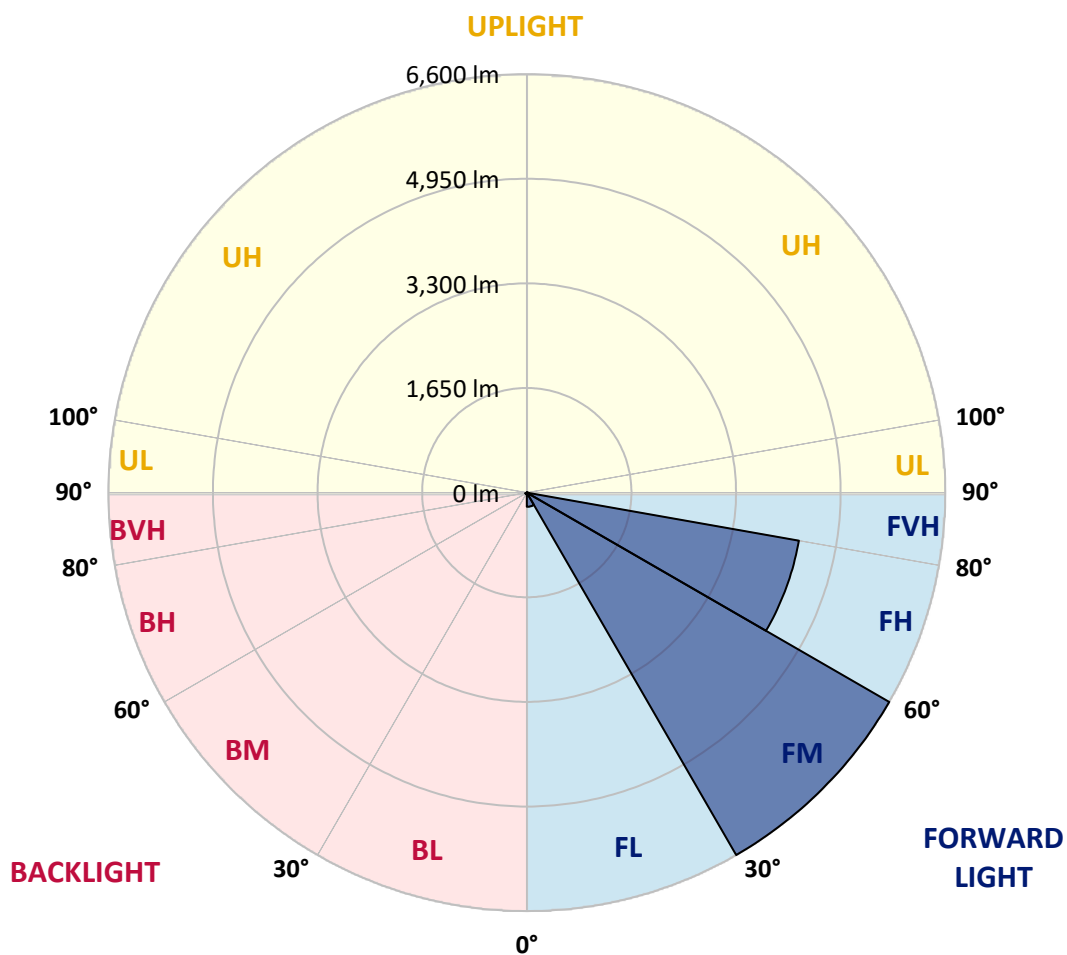
CATALOG NUMBER: NAV-SA5A-827-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	223.7	2.0			
FM	(30°-60°)	6599.6	58.6			
FH	(60°-80°)	4357.3	38.7			G2/5000
FVH	(80°-90°)	24.1	0.2			G1/100
BL	(0°-30°)	6.1	0.1	B0/110		
BM	(30°-60°)	22.2	0.2	B0/220		
BH	(60°-80°)	24.8	0.2	B0/110		G0/110
BVH	(80°-90°)	1.2	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: P1068053

CATALOG NUMBER: NAV-SA5A-827-U-LBC

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
2.5°	49.4	49.4	45.9	42.4	38.8	35.3	35.3	35.3	31.8	31.8	28.2
5°	56.5	56.5	53.0	49.4	49.4	45.9	45.9	42.4	38.8	38.8	35.3
7.5°	60.0	60.0	60.0	60.0	56.5	56.5	56.5	53.0	49.4	45.9	42.4
10°	63.5	67.1	70.6	70.6	70.6	70.6	70.6	67.1	60.0	56.5	49.4
12.5°	70.6	74.1	81.2	88.3	88.3	91.8	88.3	84.7	77.7	67.1	56.5
15°	77.7	84.7	95.3	109.4	123.6	127.1	127.1	116.5	102.4	81.2	67.1
17.5°	88.3	98.8	127.1	173.0	222.4	261.2	261.2	233.0	162.4	105.9	77.7
20°	95.3	116.5	204.7	416.5	635.4	797.8	766.0	677.8	363.6	165.9	84.7
22.5°	105.9	148.3	434.2	1094.3	1694.4	1990.9	1920.3	1457.9	815.4	296.5	102.4
25°	120.0	215.3	861.3	2051.0	3148.8	3470.0	3424.1	2721.7	1486.1	497.7	130.6
27.5°	148.3	317.7	1380.2	3110.0	4645.5	4920.9	4903.2	3985.4	2375.7	801.3	169.4
30°	187.1	462.4	2047.4	4225.5	5637.5	5916.3	5828.1	4910.3	3205.3	1224.9	218.9
32.5°	233.0	646.0	2651.1	5048.0	6551.7	6918.9	6813.0	5715.1	3872.5	1585.0	324.8
35°	303.6	826.0	3247.6	5775.1	7607.2	8073.2	7896.7	6544.7	4447.8	1990.9	391.8
37.5°	338.9	931.9	3794.8	6565.9	8793.3	9428.7	9294.6	7593.1	5033.8	2509.9	480.1
40°	342.4	1059.0	4363.1	7596.6	10470.1	11603.2	11363.2	9393.4	6124.6	3177.0	617.8
42.5°	353.0	1249.6	5100.9	9354.6	13763.6	15391.0	15119.2	12704.6	8599.2	4514.9	875.4
45°	402.4	1609.7	6604.7	12641.1	18285.6	20671.9	20357.7	17318.4	12055.1	7031.8	1493.2
47.5°	575.4	2421.6	9241.6	16188.8	22909.9	24812.6	24735.0	20954.3	15186.2	9612.3	2531.0
50°	924.9	3717.1	12242.2	19171.6	25854.0	27488.4	27294.2	22472.2	16972.4	11373.8	3244.1
52.5°	1235.5	4956.2	14127.2	20269.5	26733.0	28681.6	28445.0	23026.4	17441.9	11892.7	3441.8
55°	1313.2	5404.5	14688.5	20608.4	27315.4	29691.1	29348.7	23397.1	17501.9	11522.0	3113.5
57.5°	1274.3	4980.9	14324.9	20940.2	28127.3	30729.0	30273.6	24120.7	17703.1	10893.7	2591.0
59°	1207.3	4458.4	14099.0	21204.9	28575.7	30891.4	30464.2	24279.6	17837.3	10607.8	2273.3
60°	1129.6	4105.4	13922.5	21377.9	28547.4	30637.2	30195.9	24205.5	17890.2	10360.7	2121.6
62.5°	871.9	3275.9	13668.3	21254.4	26764.7	28318.0	28067.3	22391.0	17113.6	9569.9	1673.2
65°	677.8	2506.3	12736.4	18956.3	22775.8	23820.7	23743.0	18959.8	14402.6	8249.7	1207.3
67.5°	536.6	1828.6	10770.1	15352.1	18324.4	19810.6	19754.1	15391.0	10932.5	6304.6	868.4
70°	437.7	1302.6	7384.8	11575.0	14656.7	16527.6	16446.4	12386.9	8101.4	3999.5	631.9
72.5°	370.7	833.1	4479.6	8726.3	12231.6	13301.2	13064.7	9993.5	5891.6	2178.0	501.3
75°	314.2	511.9	2220.4	5439.8	7286.0	7278.9	7042.4	5291.5	3162.9	1066.1	398.9
77.5°	254.2	360.1	871.9	1493.2	2298.1	2845.2	2799.3	1874.4	946.1	310.6	247.1
80°	165.9	169.4	233.0	409.5	631.9	698.9	794.3	571.9	275.3	148.3	102.4
82.5°	74.1	81.2	105.9	134.1	134.1	123.6	109.4	81.2	60.0	49.4	24.7
85°	17.7	24.7	17.7	21.2	17.7	14.1	14.1	7.1	0.0	0.0	0.0
87.5°	3.5	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



REPORT NUMBER: P1068053

CATALOG NUMBER: NAV-SA5A-827-U-LBC

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
2.5°	28.2	28.2	28.2	24.7	24.7	24.7	21.2	21.2	21.2	17.7	17.7
5°	35.3	31.8	28.2	28.2	24.7	24.7	21.2	17.7	17.7	17.7	14.1
7.5°	38.8	35.3	31.8	28.2	24.7	21.2	21.2	17.7	14.1	14.1	14.1
10°	45.9	42.4	35.3	28.2	24.7	21.2	17.7	17.7	14.1	10.6	10.6
12.5°	53.0	45.9	38.8	31.8	24.7	21.2	17.7	17.7	14.1	10.6	7.1
15°	60.0	53.0	42.4	31.8	24.7	21.2	17.7	17.7	10.6	7.1	3.5
17.5°	67.1	56.5	42.4	35.3	24.7	21.2	17.7	14.1	7.1	3.5	0.0
20°	70.6	60.0	45.9	35.3	24.7	21.2	17.7	10.6	3.5	0.0	0.0
22.5°	77.7	67.1	49.4	35.3	24.7	17.7	10.6	3.5	0.0	0.0	0.0
25°	91.8	70.6	49.4	35.3	24.7	17.7	7.1	0.0	0.0	0.0	0.0
27.5°	102.4	77.7	49.4	35.3	24.7	14.1	3.5	0.0	0.0	0.0	0.0
30°	120.0	84.7	53.0	35.3	24.7	10.6	3.5	0.0	0.0	0.0	0.0
32.5°	148.3	91.8	53.0	35.3	21.2	10.6	0.0	0.0	0.0	0.0	0.0
35°	180.0	105.9	53.0	35.3	21.2	10.6	0.0	0.0	0.0	0.0	0.0
37.5°	183.6	113.0	53.0	35.3	21.2	7.1	0.0	0.0	0.0	0.0	0.0
40°	190.6	105.9	56.5	35.3	21.2	7.1	0.0	0.0	0.0	0.0	0.0
42.5°	218.9	98.8	60.0	35.3	21.2	7.1	0.0	0.0	0.0	0.0	0.0
45°	324.8	102.4	60.0	38.8	21.2	10.6	0.0	0.0	0.0	0.0	0.0
47.5°	564.8	105.9	56.5	38.8	21.2	10.6	0.0	0.0	0.0	0.0	0.0
50°	723.7	123.6	56.5	42.4	24.7	7.1	0.0	0.0	0.0	0.0	0.0
52.5°	769.5	144.7	56.5	45.9	31.8	3.5	0.0	0.0	0.0	0.0	0.0
55°	748.4	169.4	60.0	49.4	38.8	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	691.9	183.6	63.5	53.0	42.4	0.0	0.0	0.0	0.0	0.0	0.0
59°	631.9	194.2	74.1	56.5	42.4	0.0	0.0	0.0	0.0	0.0	0.0
60°	582.5	204.7	77.7	60.0	42.4	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	469.5	218.9	84.7	70.6	35.3	0.0	0.0	0.0	0.0	0.0	0.0
65°	409.5	229.5	88.3	77.7	31.8	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	374.2	236.5	95.3	81.2	28.2	0.0	0.0	0.0	0.0	0.0	0.0
70°	345.9	233.0	102.4	77.7	24.7	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	314.2	222.4	123.6	70.6	21.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	282.4	201.2	134.1	63.5	14.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	204.7	169.4	123.6	56.5	7.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	88.3	91.8	88.3	42.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	17.7	21.2	17.7	10.6	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: P1068053

CATALOG NUMBER: NAV-SA5A-827-U-LBC

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
2.5°	17.7	17.7	17.7	17.7	21.2	21.2	28.2	35.3	42.4	45.9	45.9
5°	14.1	14.1	14.1	14.1	14.1	17.7	21.2	28.2	38.8	42.4	42.4
7.5°	10.6	10.6	10.6	10.6	10.6	10.6	17.7	24.7	35.3	38.8	42.4
10°	10.6	7.1	7.1	3.5	3.5	7.1	10.6	21.2	31.8	35.3	38.8
12.5°	7.1	3.5	3.5	0.0	0.0	3.5	7.1	17.7	28.2	31.8	35.3
15°	3.5	0.0	0.0	0.0	0.0	0.0	3.5	14.1	24.7	28.2	35.3
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	21.2	28.2	31.8
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	17.7	24.7	28.2
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	14.1	21.2	24.7
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	14.1	17.7
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	10.6	14.1
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	10.6	14.1
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.1	10.6
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.1	10.6
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.1	7.1
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.1
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.1
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.1
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.1
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.1
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.1
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5
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: P1068053

CATALOG NUMBER: NAV-SA5A-827-U-LBC

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	318°	325°	335°	345°	355°	360°
0°	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
2.5°	49.4	49.4	45.9	42.4	42.4	42.4	45.9	49.4	49.4	49.4
5°	45.9	45.9	42.4	42.4	42.4	42.4	45.9	53.0	56.5	56.5
7.5°	45.9	45.9	42.4	42.4	42.4	42.4	45.9	53.0	56.5	60.0
10°	42.4	42.4	42.4	42.4	38.8	42.4	45.9	53.0	63.5	63.5
12.5°	42.4	42.4	42.4	42.4	38.8	42.4	49.4	56.5	67.1	70.6
15°	42.4	42.4	42.4	38.8	38.8	42.4	49.4	60.0	70.6	77.7
17.5°	38.8	42.4	42.4	38.8	38.8	42.4	49.4	60.0	77.7	88.3
20°	35.3	38.8	42.4	38.8	38.8	38.8	49.4	60.0	81.2	95.3
22.5°	31.8	35.3	38.8	38.8	35.3	38.8	49.4	63.5	88.3	105.9
25°	28.2	31.8	31.8	35.3	35.3	38.8	49.4	63.5	91.8	120.0
27.5°	21.2	24.7	28.2	31.8	31.8	38.8	49.4	67.1	98.8	148.3
30°	17.7	21.2	24.7	28.2	31.8	38.8	49.4	67.1	105.9	187.1
32.5°	17.7	21.2	24.7	28.2	31.8	35.3	49.4	70.6	116.5	233.0
35°	14.1	17.7	21.2	28.2	28.2	35.3	49.4	70.6	127.1	303.6
37.5°	14.1	17.7	21.2	28.2	28.2	35.3	49.4	70.6	155.3	338.9
40°	10.6	14.1	17.7	28.2	28.2	35.3	53.0	74.1	158.9	342.4
42.5°	10.6	14.1	17.7	24.7	28.2	35.3	53.0	74.1	148.3	353.0
45°	10.6	14.1	17.7	28.2	31.8	38.8	53.0	77.7	144.7	402.4
47.5°	10.6	14.1	17.7	28.2	35.3	38.8	53.0	77.7	148.3	575.4
50°	10.6	14.1	17.7	28.2	38.8	38.8	53.0	77.7	162.4	924.9
52.5°	7.1	10.6	14.1	24.7	31.8	42.4	56.5	74.1	173.0	1235.5
55°	7.1	7.1	10.6	21.2	28.2	45.9	60.0	74.1	201.2	1313.2
57.5°	7.1	7.1	10.6	17.7	24.7	49.4	63.5	74.1	233.0	1274.3
59°	7.1	7.1	7.1	17.7	21.2	49.4	63.5	77.7	236.5	1207.3
60°	7.1	7.1	7.1	14.1	21.2	49.4	67.1	81.2	240.0	1129.6
62.5°	3.5	3.5	3.5	14.1	17.7	49.4	74.1	98.8	247.1	871.9
65°	7.1	7.1	3.5	10.6	17.7	42.4	84.7	105.9	250.6	677.8
67.5°	7.1	7.1	7.1	14.1	17.7	42.4	88.3	109.4	250.6	536.6
70°	7.1	7.1	7.1	14.1	21.2	42.4	88.3	113.0	247.1	437.7
72.5°	7.1	7.1	7.1	14.1	21.2	38.8	81.2	116.5	236.5	370.7
75°	7.1	7.1	7.1	10.6	17.7	35.3	77.7	127.1	215.3	314.2
77.5°	7.1	7.1	7.1	7.1	14.1	28.2	70.6	141.2	190.6	254.2
80°	10.6	7.1	7.1	7.1	10.6	24.7	67.1	137.7	158.9	165.9
82.5°	10.6	7.1	7.1	3.5	7.1	17.7	53.0	105.9	81.2	74.1
85°	7.1	7.1	7.1	3.5	3.5	10.6	24.7	31.8	24.7	17.7
87.5°	7.1	7.1	7.1	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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: SP1-2407-184-8

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

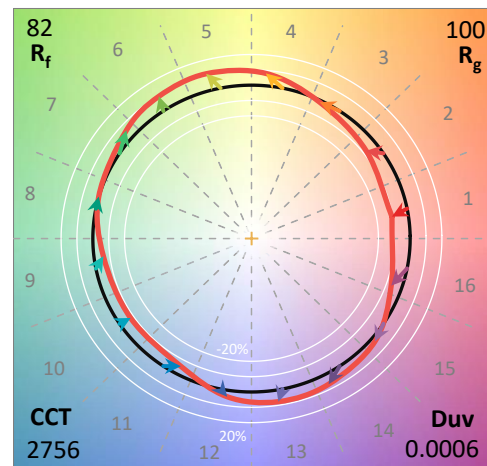
Test Information

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

Photopic Flux vs. Wavelength

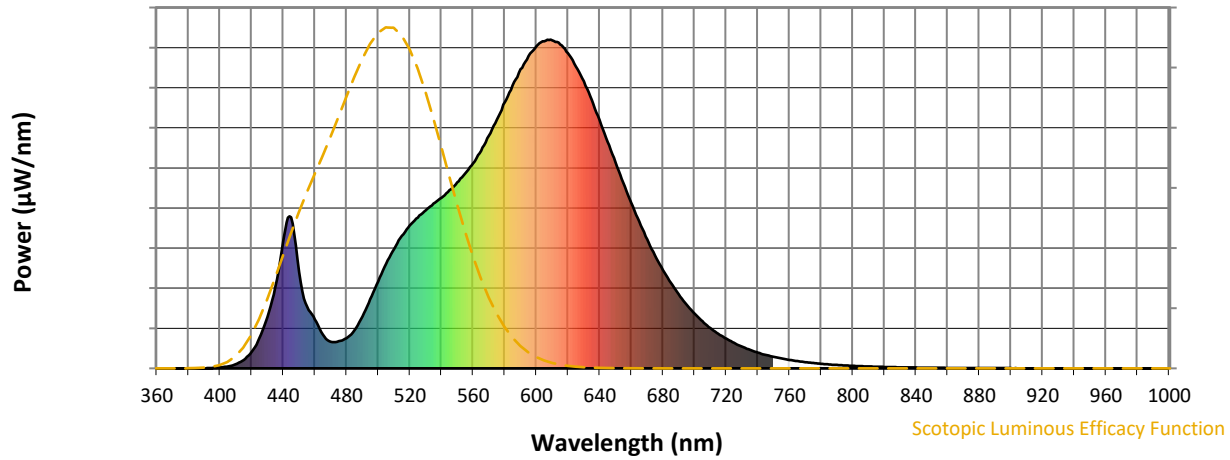


Photopic Lumens: NR

λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /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

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

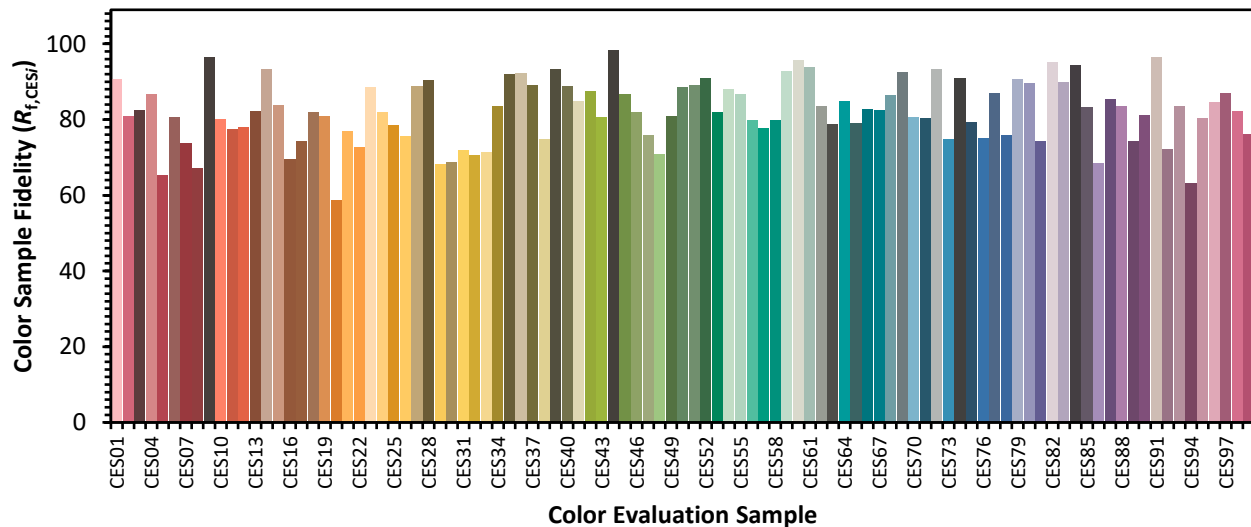


Color Vector Graphics



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)