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: McGRAW-EDISON

Report Number: P1438099

Luminaire Tested: **GALN-SB7C-727-U-T4LG-HSS**

Issue Date: 03/27/202

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Report Generated By 670245763

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P1438099
Test Lab:	INNOVATION CENTER(G1)
Issue Date:	03/27/202
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GALN-SB7C-727-U-T4LG-HSS
Description:	GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 615mA 7xLight Square PACKAGE 70CRI 2700K FIXTURE w/ TYPE IV LOW GLARE WITH HOUSE SIDE SHIELD
Light Source:	(182) 2700K CCT, 70 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Luminaire Equipment:

Sample No.	Condition	Description
a	good	reflector
b	good	lens
c	good	housing
d	good	cord

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	35833.7 lumens
Efficiency:	N/A
Efficacy:	102.2 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U0 - G4

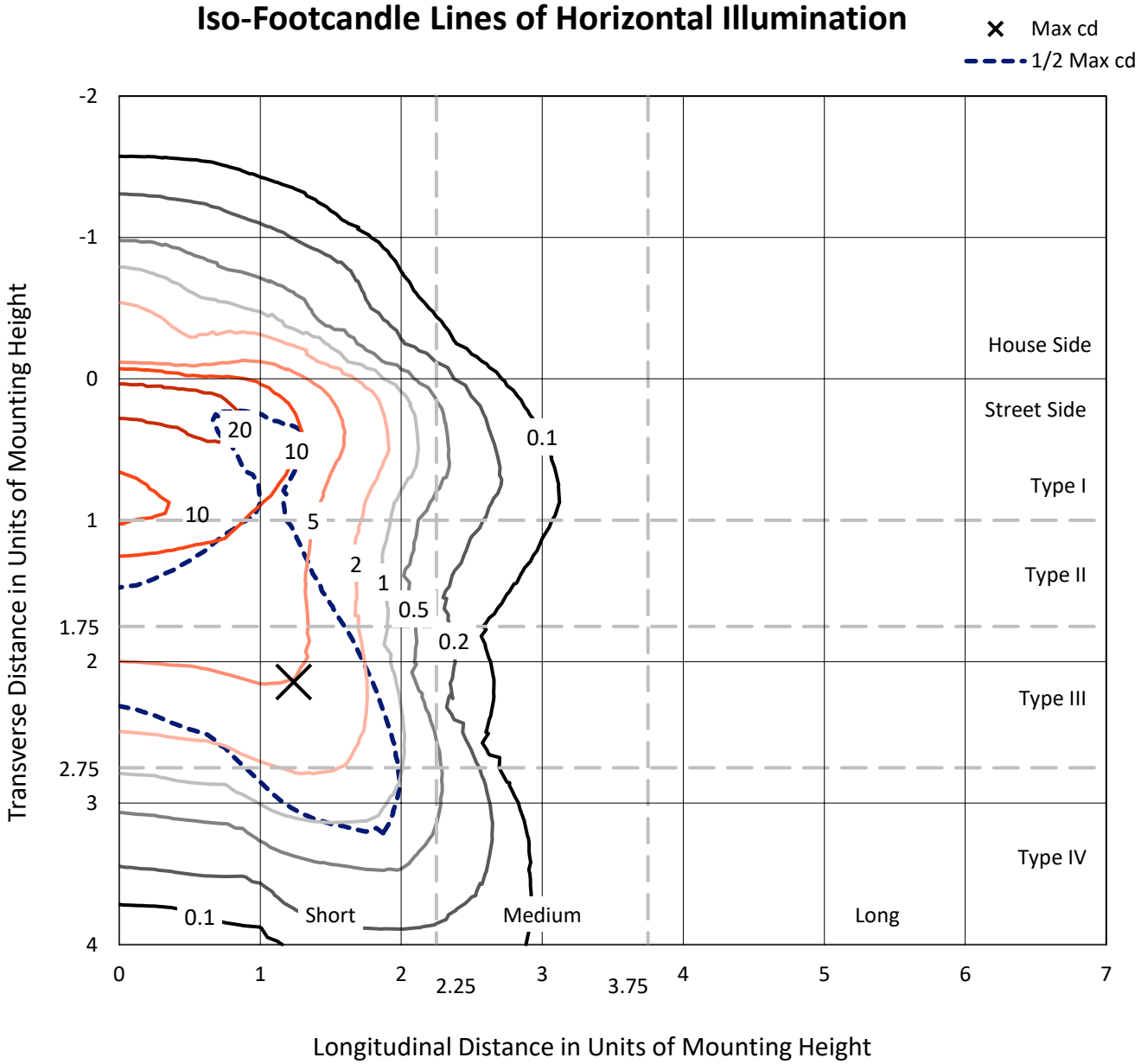
Input Watts (W):	350.5
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.97
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1438099
CATALOG NUMBER: GALN-SB7C-727-U-T4LG-HSS

Iso-Footcandle Lines of Horizontal Illumination



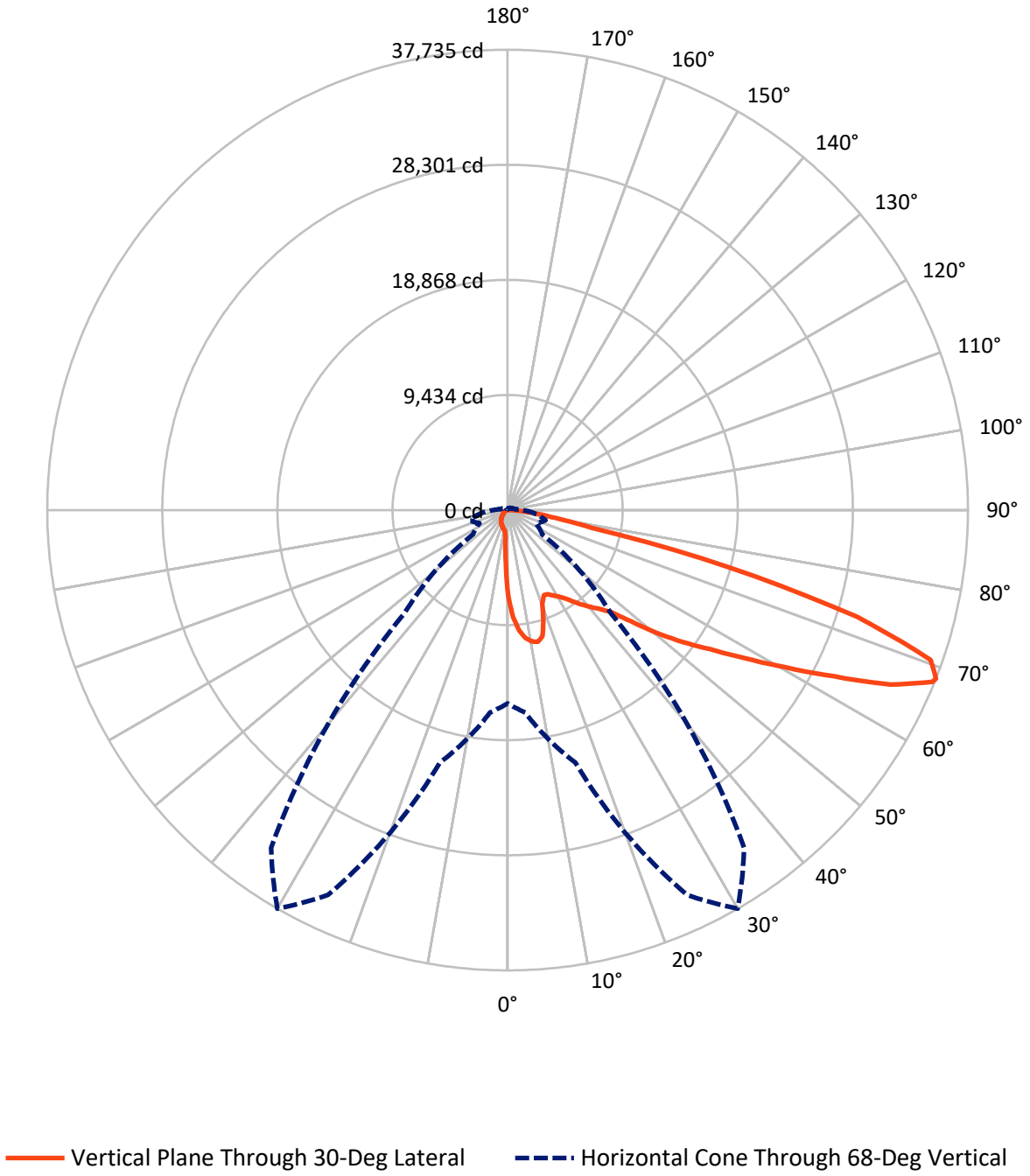
Based on 20 foot mounting height. Maximum calculated value = 27 fc
Type IV - Short - N/A

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1438099
CATALOG NUMBER: GALN-SB7C-727-U-T4LG-HSS

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

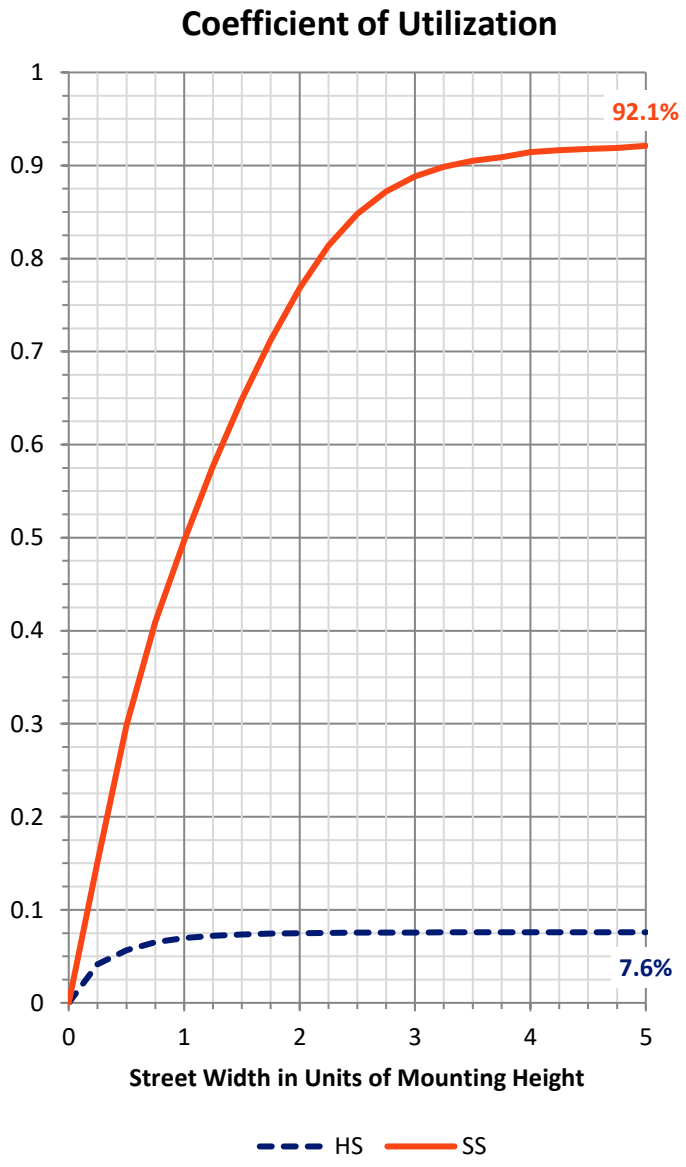
REPORT NUMBER: P1438099
CATALOG NUMBER: GALN-SB7C-727-U-T4LG-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2735.0	0.0	2735.0
	% Fixture	7.6	0.0	7.6
Street Side	Lumens	33098.6	0.0	33098.6
	% Fixture	92.4	0.0	92.4
Total	Lumens	35833.7	0.0	35833.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	609.7	1.7
10°-20°	1740.7	4.9
20°-30°	2735.4	7.6
30°-40°	4290.3	12.0
40°-50°	6412.7	17.9
50°-60°	8531.0	23.8
60°-70°	8246.9	23.0
70°-80°	2964.4	8.3
80°-90°	302.5	0.8
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°	35833.7	100.0
0°-180°	35833.7	100.0



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

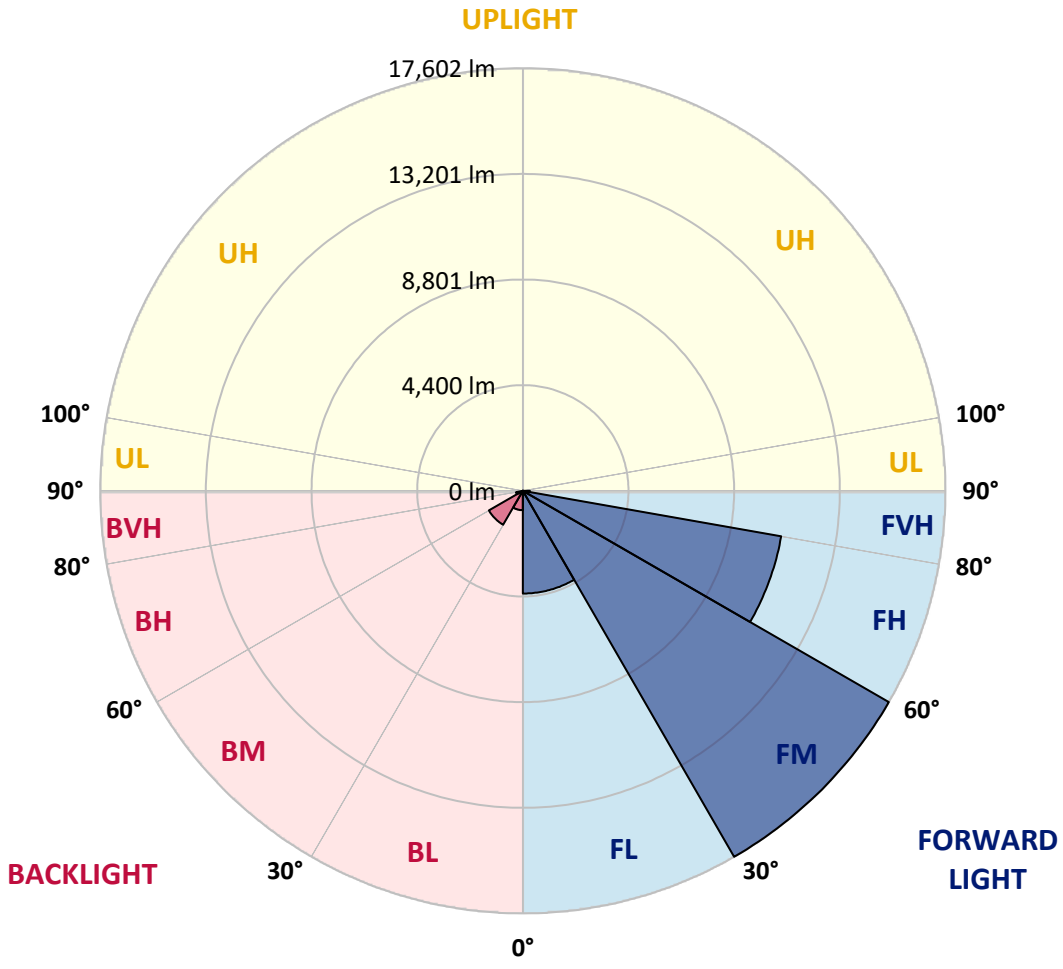
Scaled Data Report

REPORT NUMBER: P1438099
CATALOG NUMBER: GALN-SB7C-727-U-T4LG-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	4278.5	11.9			
FM	(30°-60°)	17601.5	49.1			
FH	(60°-80°)	10926.8	30.5			G4/12000
FVH	(80°-90°)	291.8	0.8			G3/500
BL	(0°-30°)	807.3	2.3	B2/1000		
BM	(30°-60°)	1632.6	4.6	B2/2500		
BH	(60°-80°)	284.5	0.8	B1/500		G1/500
BVH	(80°-90°)	10.7	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
Type IV Short



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1438099
CATALOG NUMBER: GALN-SB7C-727-U-T4LG-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	30°	35°	45°	55°	65°	75°	85°
0°	7066.0	7066.0	7066.0	7066.0	*7066.0*	7066.0	7066.0	7066.0	7066.0	7066.0	7066.0
2.5°	9031.1	9031.1	8966.7	8880.8	*8784.1*	8751.9	8569.4	8311.7	8043.2	7731.8	7280.7
5°	10190.9	10180.2	10051.3	10051.3	*9922.4*	9804.3	9621.8	9245.9	8816.4	8258.0	7474.0
7.5°	10706.4	10727.8	10674.1	10674.1	*10599.0*	10513.1	10405.7	10040.6	9535.8	8784.1	7667.3
10°	10888.9	10899.6	10899.6	10974.8	*10953.3*	10942.6	10931.9	10727.8	10201.6	9321.1	7871.4
12.5°	10448.6	10502.3	10652.7	10985.6	*11092.9*	11211.1	11372.1	11307.7	10942.6	9997.6	8182.8
15°	9031.1	9041.9	9460.7	10287.5	*10727.8*	11178.8	11801.7	11930.5	11694.3	10727.8	8504.9
17.5°	7452.6	7484.8	7817.7	8741.2	*9449.9*	10491.6	12048.7	12574.9	12489.0	11447.3	8805.6
20°	6797.5	6840.5	7001.5	7581.4	*8118.4*	9084.8	11801.7	13187.0	13219.2	12166.8	9084.8
22.5°	6647.2	6679.4	6808.3	7259.3	*7592.2*	8236.5	10964.1	13670.2	14046.0	12993.7	9417.7
25°	6604.2	6636.4	6829.7	7323.7	*7635.1*	8172.0	10201.6	13927.9	15023.3	13852.8	9739.9
27.5°	6572.0	6615.0	6926.4	7560.0	*7925.1*	8440.5	10062.0	13981.6	15957.5	14765.5	10266.1
30°	6615.0	6679.4	7087.5	7806.9	*8225.7*	8805.6	10394.9	14035.3	16988.4	15807.2	10931.9
32.5°	6786.8	6840.5	7334.4	8139.8	*8623.1*	9278.1	10964.1	14357.5	17965.6	16870.3	11565.4
35°	6980.1	7055.2	7645.9	8612.3	*9192.2*	9933.2	11737.3	14991.0	18899.9	17879.7	12220.5
37.5°	7216.3	7302.2	8011.0	9149.3	*9815.1*	10652.7	12574.9	15871.6	19726.7	18706.6	12875.5
40°	7538.5	7635.1	8429.8	9718.4	*10437.9*	11275.5	13401.7	16741.4	20360.3	19200.6	13305.1
42.5°	8805.6	8934.5	9267.4	10276.8	*11082.2*	11941.3	14217.9	17568.3	20596.6	19361.6	13391.0
45°	11168.1	11297.0	11211.1	11404.4	*11941.3*	12746.7	15109.2	18363.0	20628.8	19318.7	13348.0
47.5°	13541.3	13691.7	13616.5	13509.1	*13627.2*	14013.8	16107.9	18867.7	20457.0	19297.2	13348.0
50°	15807.2	15721.3	15732.0	15699.8	*15807.2*	16011.2	17074.3	18964.3	20414.0	19501.2	13466.2
52.5°	17020.6	17063.6	17332.0	17729.4	*17965.6*	18169.7	18180.4	19114.6	20102.6	19157.6	13326.6
55°	18212.6	18298.5	18921.4	19597.9	*20124.1*	20510.7	19286.5	19018.0	18244.8	18008.6	12596.3
57.5°	19554.9	19673.1	20553.6	21949.6	*22873.1*	23077.2	20381.8	17213.9	15442.1	16365.6	11178.8
60°	21402.0	21541.6	22712.1	24806.1	*26180.6*	25761.8	20467.7	14346.7	12263.4	13584.3	9224.4
62.5°	22851.7	23130.9	25246.4	28510.9	*30025.0*	28693.5	18867.7	10996.3	8569.4	9546.6	6733.1
65°	21305.3	21842.2	25289.3	32752.6	*34503.0*	32140.5	16354.8	7506.3	4832.4	6174.7	4306.2
67.5°	17224.7	17976.4	22454.3	34814.4	*37574.2*	33955.3	12875.5	3984.0	2770.6	3586.7	2265.8
68°	*15850.1*	*16666.3*	*21412.7*	*34814.4*	*37735.3*	*33794.3*	*11952.0*	*3447.1*	*2555.8*	*3221.6*	*1965.2*
70°	10953.3	11533.2	16462.2	32860.0	*36790.3*	30808.9	7871.4	1975.9	1922.2	2212.1	1299.4
72.5°	5369.3	5992.1	8805.6	26041.0	*29971.3*	23678.5	3586.7	1310.1	1460.4	1621.5	1020.2
75°	2137.0	2265.8	3468.6	12843.3	*18728.1*	15109.2	1879.2	987.9	1256.4	1267.2	805.4
77.5°	1224.2	1299.4	1922.2	4725.0	*7023.0*	6754.6	1213.5	708.7	998.7	912.8	526.2
80°	687.3	698.0	1084.6	2491.3	*4016.2*	3597.4	826.9	515.5	762.4	644.3	354.4
82.5°	343.6	386.6	687.3	1374.5	*2233.6*	2287.3	440.3	365.1	612.1	461.8	289.9
85°	247.0	268.5	494.0	762.4	*1030.9*	1546.4	268.5	182.6	461.8	311.4	204.0
87.5°	128.9	161.1	311.4	375.8	*418.8*	526.2	128.9	85.9	257.7	182.6	107.4
90°	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1438099
CATALOG NUMBER: GALN-SB7C-727-U-T4LG-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7066.0	7066.0	7066.0	7066.0	7066.0	7066.0	7066.0	7066.0	7066.0	7066.0	7066.0
2.5°	7066.0	6819.0	6314.3	5723.7	5261.9	4789.4	4402.8	4037.7	3865.9	3844.4	3887.4
5°	7033.8	6496.8	5347.8	4220.3	3296.7	2652.4	2298.1	2115.5	2018.9	1975.9	1986.6
7.5°	6969.3	6153.2	4316.9	2856.5	2137.0	1857.8	1771.9	1739.6	1728.9	1728.9	1728.9
10°	6904.9	5691.4	3307.5	2094.0	1750.4	1675.2	1653.7	1653.7	1643.0	1643.0	1653.7
12.5°	6872.7	5261.9	2566.5	1750.4	1632.3	1600.0	1578.6	1567.8	1567.8	1567.8	1578.6
15°	6797.5	4789.4	2072.5	1621.5	1557.1	1514.1	1503.4	1492.7	1492.7	1492.7	1492.7
17.5°	6733.1	4327.6	1804.1	1535.6	1481.9	1439.0	1428.2	1417.5	1417.5	1428.2	1428.2
20°	6636.4	3887.4	1621.5	1449.7	1406.8	1363.8	1353.1	1342.3	1353.1	1353.1	1353.1
22.5°	6518.3	3522.3	1514.1	1385.3	1331.6	1288.6	1288.6	1288.6	1288.6	1288.6	1299.4
25°	6443.1	3264.5	1439.0	1310.1	1256.4	1224.2	1213.5	1213.5	1234.9	1234.9	1245.7
27.5°	6561.3	3200.1	1449.7	1288.6	1192.0	1159.8	1149.0	1149.0	1170.5	1181.2	1192.0
30°	6915.6	3318.2	1578.6	1353.1	1149.0	1095.3	1084.6	1084.6	1116.8	1127.5	1138.3
32.5°	7323.7	3565.2	1771.9	1439.0	1116.8	1030.9	1009.4	1009.4	1041.6	1052.4	1063.1
35°	7882.1	3951.8	2029.6	1514.1	1138.3	966.5	923.5	923.5	945.0	966.5	977.2
37.5°	8601.6	4585.4	2330.3	1567.8	1138.3	891.3	837.6	826.9	848.3	848.3	859.1
40°	9353.3	5412.2	2641.7	1567.8	1084.6	816.1	762.4	730.2	741.0	730.2	741.0
42.5°	9772.1	6078.0	2910.2	1471.2	1020.2	741.0	687.3	644.3	633.6	612.1	622.8
45°	10008.3	6378.7	2835.0	1363.8	955.7	687.3	622.8	569.1	547.7	515.5	515.5
47.5°	10008.3	6410.9	2426.9	1277.9	891.3	644.3	558.4	504.7	472.5	440.3	451.0
50°	9890.2	6121.0	1922.2	1192.0	816.1	601.4	504.7	461.8	418.8	397.3	397.3
52.5°	9396.2	5176.0	1471.2	1084.6	730.2	547.7	451.0	408.1	365.1	354.4	354.4
55°	8547.9	3801.5	1192.0	977.2	655.1	504.7	408.1	375.8	332.9	311.4	311.4
57.5°	6947.9	2598.7	987.9	880.6	579.9	451.0	365.1	332.9	279.2	257.7	257.7
60°	5154.5	1696.7	837.6	773.2	494.0	408.1	322.2	279.2	236.2	214.8	204.0
62.5°	3479.3	1149.0	698.0	612.1	418.8	354.4	279.2	236.2	182.6	139.6	139.6
65°	2169.2	891.3	579.9	483.2	365.1	311.4	236.2	182.6	128.9	96.6	85.9
67.5°	1245.7	719.5	472.5	375.8	311.4	247.0	182.6	150.3	107.4	75.2	64.4
68°	*1149.0*	*687.3*	*440.3*	*354.4*	*289.9*	*236.2*	*171.8*	*139.6*	*96.6*	*64.4*	*64.4*
70°	934.3	612.1	375.8	289.9	247.0	193.3	150.3	118.1	75.2	43.0	43.0
72.5°	826.9	515.5	322.2	225.5	171.8	161.1	118.1	85.9	53.7	32.2	21.5
75°	676.5	408.1	257.7	171.8	118.1	118.1	85.9	53.7	21.5	0.0	0.0
77.5°	440.3	300.7	204.0	107.4	64.4	75.2	53.7	21.5	0.0	0.0	0.0
80°	289.9	225.5	139.6	53.7	32.2	32.2	10.7	0.0	0.0	0.0	0.0
82.5°	204.0	150.3	85.9	21.5	10.7	10.7	0.0	0.0	0.0	0.0	0.0
85°	128.9	64.4	32.2	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	53.7	21.5	10.7	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

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-3

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-727-U-5WQ

Data in this report applies to families of products including GSS-SB1A-727-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

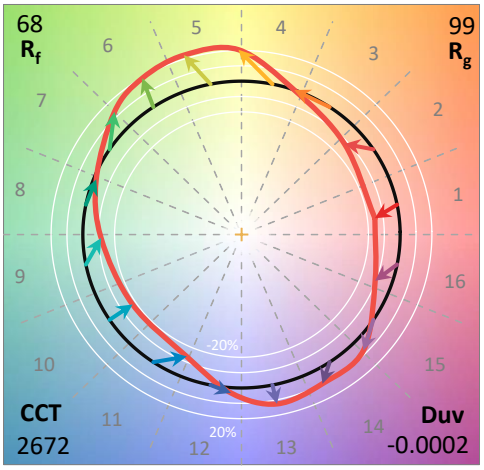
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-184-3
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-727-U-5WQ**
Description:	GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 2700K CCT 26 LEDS

Spectral Parameters

CCT (K):	2672
CIE u':	0.2638
CIE v':	0.5276
Duv:	-0.0002
CIE x:	0.4619
CIE y:	0.4106
CIE z:	0.1275
Peak Wavelength (nm):	601
Dominant Wavelength (nm):	584
Purity:	61.88407
Rf:	67.9
Rg:	98.6

CRI (Ra):	71.1
R1:	68.3
R2:	79.8
R3:	91.2
R4:	69.4
R5:	66.5
R6:	72.6
R7:	77.0
R8:	44.1
R9:	-27.8
R10:	54.4
R11:	65.8
R12:	45.6
R13:	69.8
R14:	94.5
R15:	60.1



Test Conditions

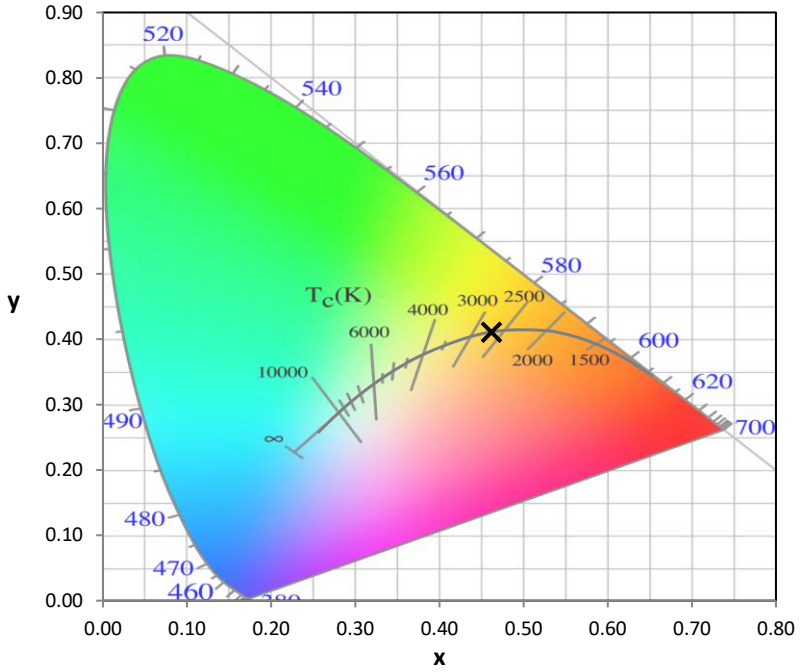
Stabilization Time:	21M
Operation Time:	1H 21M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-184-3

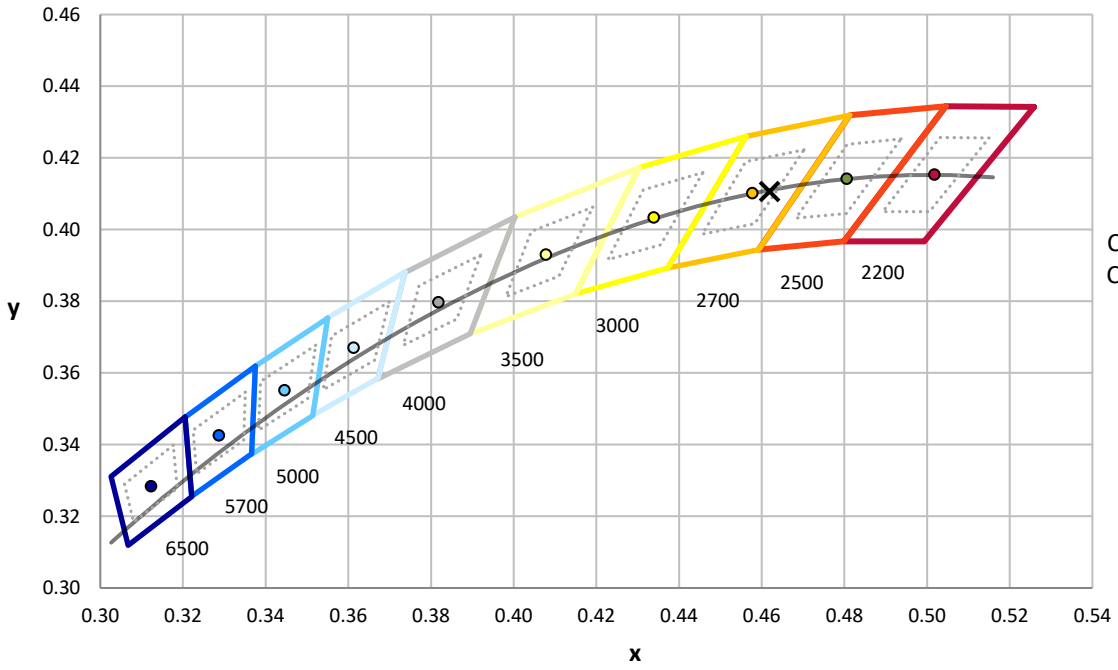
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-3

CIE 1931 Chromaticity Diagram



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

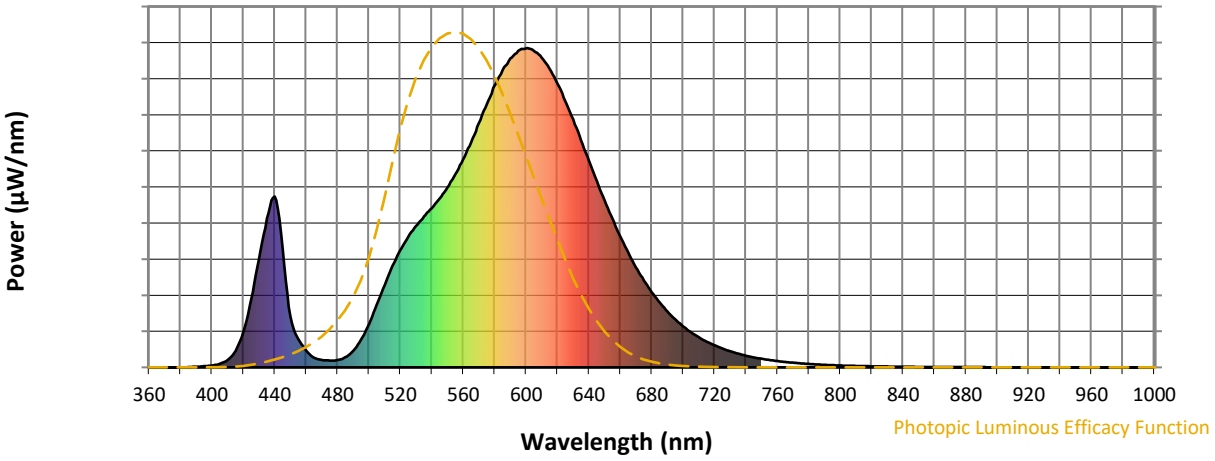


CCT = 2672K
CIE x = 0.4619
CIE y = 0.4106
Duv = -0.0002

Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-3

Photopic Flux vs. Wavelength

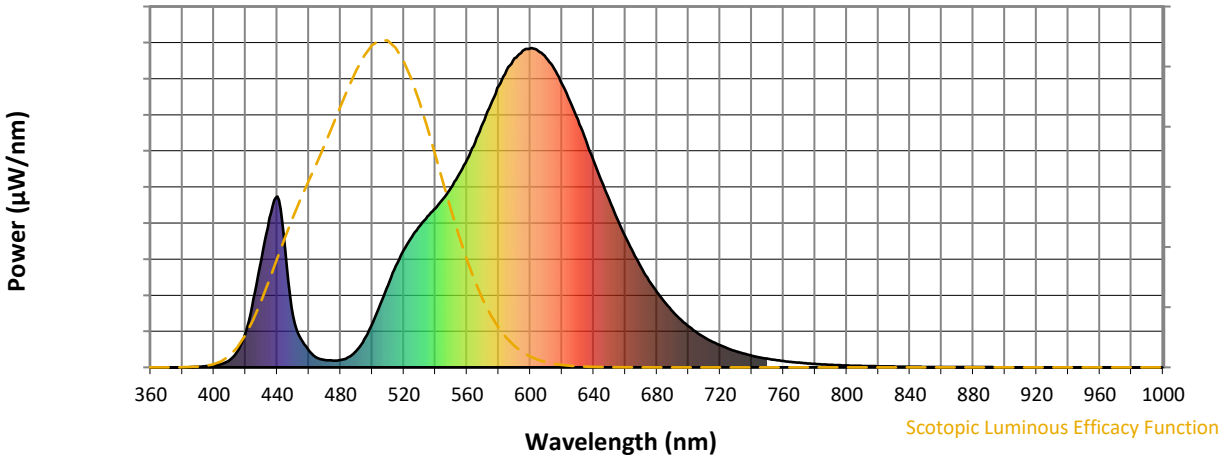


Photopic Lumens: NR

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	52	NR	620	888	NR	750	27	NR	880	1	NR
365	0	NR	495	87	NR	625	834	NR	755	23	NR	885	1	NR
370	0	NR	500	135	NR	630	776	NR	760	20	NR	890	1	NR
375	0	NR	505	196	NR	635	712	NR	765	17	NR	895	0	NR
380	0	NR	510	258	NR	640	648	NR	770	15	NR	900	0	NR
385	1	NR	515	317	NR	645	583	NR	775	12	NR	905	0	NR
390	2	NR	520	368	NR	650	523	NR	780	11	NR	910	0	NR
395	4	NR	525	408	NR	655	465	NR	785	9	NR	915	0	NR
400	6	NR	530	443	NR	660	410	NR	790	8	NR	920	0	NR
405	11	NR	535	473	NR	665	360	NR	795	7	NR	925	0	NR
410	23	NR	540	498	NR	670	313	NR	800	6	NR	930	0	NR
415	51	NR	545	530	NR	675	272	NR	805	5	NR	935	0	NR
420	111	NR	550	563	NR	680	236	NR	810	4	NR	940	0	NR
425	214	NR	555	605	NR	685	203	NR	815	4	NR	945	0	NR
430	339	NR	560	651	NR	690	175	NR	820	3	NR	950	0	NR
435	467	NR	565	705	NR	695	150	NR	825	3	NR	955	0	NR
440	535	NR	570	765	NR	700	128	NR	830	3	NR	960	0	NR
445	372	NR	575	824	NR	705	110	NR	835	2	NR	965	0	NR
450	160	NR	580	882	NR	710	94	NR	840	2	NR	970	0	NR
455	89	NR	585	930	NR	715	80	NR	845	2	NR	975	0	NR
460	53	NR	590	968	NR	720	69	NR	850	1	NR	980	0	NR
465	31	NR	595	991	NR	725	59	NR	855	1	NR	985	0	NR
470	23	NR	600	999	NR	730	50	NR	860	1	NR	990	0	NR
475	21	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	23	NR	610	969	NR	740	36	NR	870	1	NR	1000	0	NR
485	32	NR	615	935	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-3

Scotopic Flux vs. Wavelength

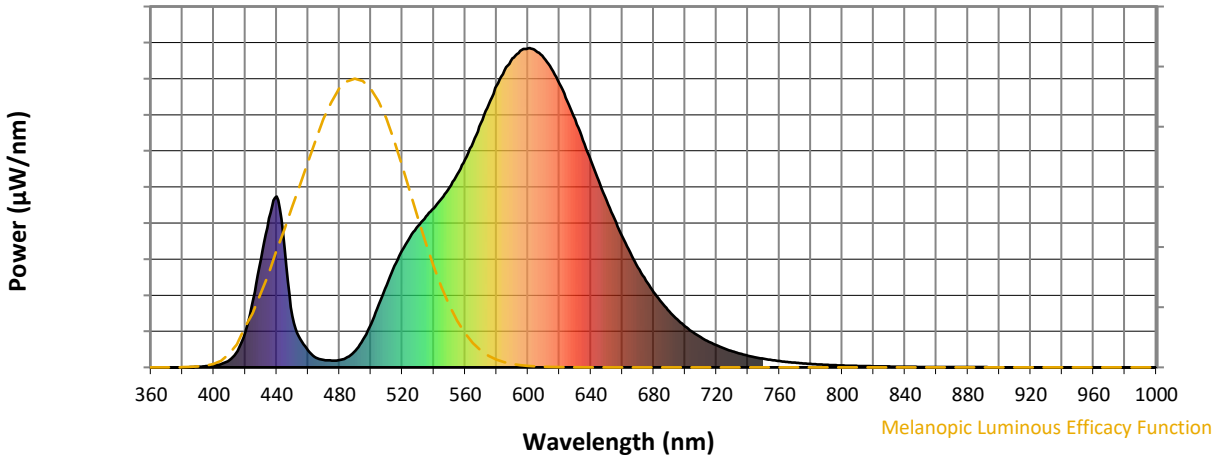


Scotopic Lumens: NR **S/P: 1.02**

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	52	NR	620	888	NR	750	27	NR	880	1	NR
365	0	NR	495	87	NR	625	834	NR	755	23	NR	885	1	NR
370	0	NR	500	135	NR	630	776	NR	760	20	NR	890	1	NR
375	0	NR	505	196	NR	635	712	NR	765	17	NR	895	0	NR
380	0	NR	510	258	NR	640	648	NR	770	15	NR	900	0	NR
385	1	NR	515	317	NR	645	583	NR	775	12	NR	905	0	NR
390	2	NR	520	368	NR	650	523	NR	780	11	NR	910	0	NR
395	4	NR	525	408	NR	655	465	NR	785	9	NR	915	0	NR
400	6	NR	530	443	NR	660	410	NR	790	8	NR	920	0	NR
405	11	NR	535	473	NR	665	360	NR	795	7	NR	925	0	NR
410	23	NR	540	498	NR	670	313	NR	800	6	NR	930	0	NR
415	51	NR	545	530	NR	675	272	NR	805	5	NR	935	0	NR
420	111	NR	550	563	NR	680	236	NR	810	4	NR	940	0	NR
425	214	NR	555	605	NR	685	203	NR	815	4	NR	945	0	NR
430	339	NR	560	651	NR	690	175	NR	820	3	NR	950	0	NR
435	467	NR	565	705	NR	695	150	NR	825	3	NR	955	0	NR
440	535	NR	570	765	NR	700	128	NR	830	3	NR	960	0	NR
445	372	NR	575	824	NR	705	110	NR	835	2	NR	965	0	NR
450	160	NR	580	882	NR	710	94	NR	840	2	NR	970	0	NR
455	89	NR	585	930	NR	715	80	NR	845	2	NR	975	0	NR
460	53	NR	590	968	NR	720	69	NR	850	1	NR	980	0	NR
465	31	NR	595	991	NR	725	59	NR	855	1	NR	985	0	NR
470	23	NR	600	999	NR	730	50	NR	860	1	NR	990	0	NR
475	21	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	23	NR	610	969	NR	740	36	NR	870	1	NR	1000	0	NR
485	32	NR	615	935	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 1.71**

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	52	NR	620	888	NR	750	27	NR	880	1	NR
365	0	NR	495	87	NR	625	834	NR	755	23	NR	885	1	NR
370	0	NR	500	135	NR	630	776	NR	760	20	NR	890	1	NR
375	0	NR	505	196	NR	635	712	NR	765	17	NR	895	0	NR
380	0	NR	510	258	NR	640	648	NR	770	15	NR	900	0	NR
385	1	NR	515	317	NR	645	583	NR	775	12	NR	905	0	NR
390	2	NR	520	368	NR	650	523	NR	780	11	NR	910	0	NR
395	4	NR	525	408	NR	655	465	NR	785	9	NR	915	0	NR
400	6	NR	530	443	NR	660	410	NR	790	8	NR	920	0	NR
405	11	NR	535	473	NR	665	360	NR	795	7	NR	925	0	NR
410	23	NR	540	498	NR	670	313	NR	800	6	NR	930	0	NR
415	51	NR	545	530	NR	675	272	NR	805	5	NR	935	0	NR
420	111	NR	550	563	NR	680	236	NR	810	4	NR	940	0	NR
425	214	NR	555	605	NR	685	203	NR	815	4	NR	945	0	NR
430	339	NR	560	651	NR	690	175	NR	820	3	NR	950	0	NR
435	467	NR	565	705	NR	695	150	NR	825	3	NR	955	0	NR
440	535	NR	570	765	NR	700	128	NR	830	3	NR	960	0	NR
445	372	NR	575	824	NR	705	110	NR	835	2	NR	965	0	NR
450	160	NR	580	882	NR	710	94	NR	840	2	NR	970	0	NR
455	89	NR	585	930	NR	715	80	NR	845	2	NR	975	0	NR
460	53	NR	590	968	NR	720	69	NR	850	1	NR	980	0	NR
465	31	NR	595	991	NR	725	59	NR	855	1	NR	985	0	NR
470	23	NR	600	999	NR	730	50	NR	860	1	NR	990	0	NR
475	21	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	23	NR	610	969	NR	740	36	NR	870	1	NR	1000	0	NR
485	32	NR	615	935	NR	745	31	NR	875	1	NR			

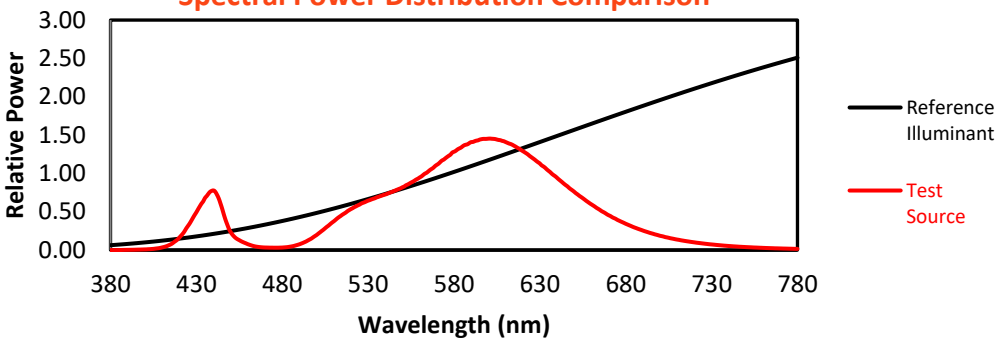
REPORT NUMBER: SP1-2407-184-3

TM-30-18

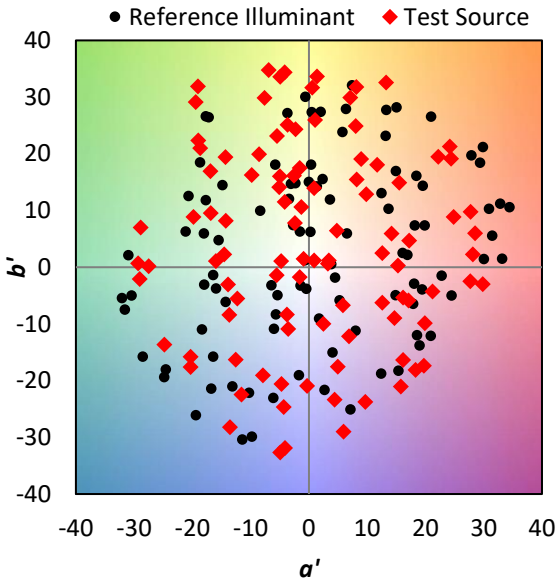
Summary

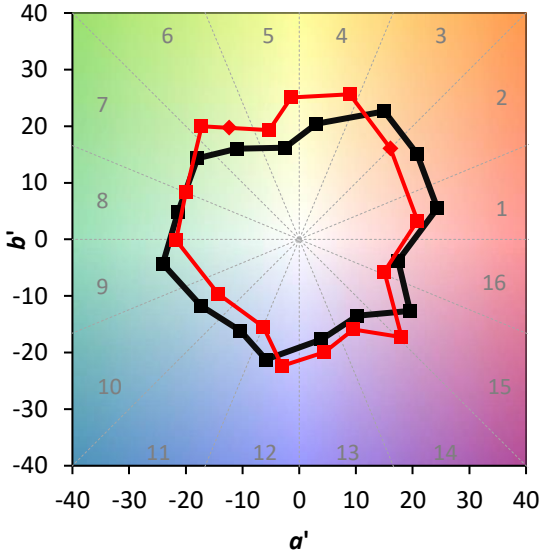
R_f = 67.9
R_g = 98.6
CIE R_a = 71.1
R_9 = -27.8

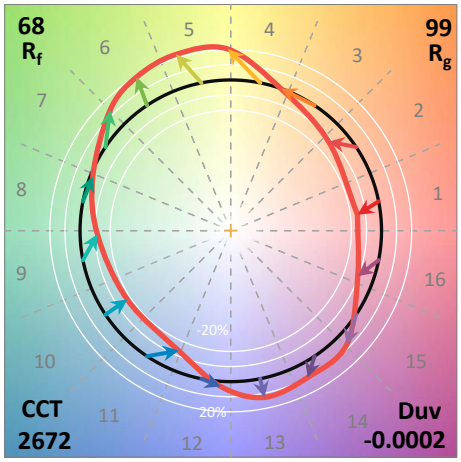
Spectral Power Distribution Comparison

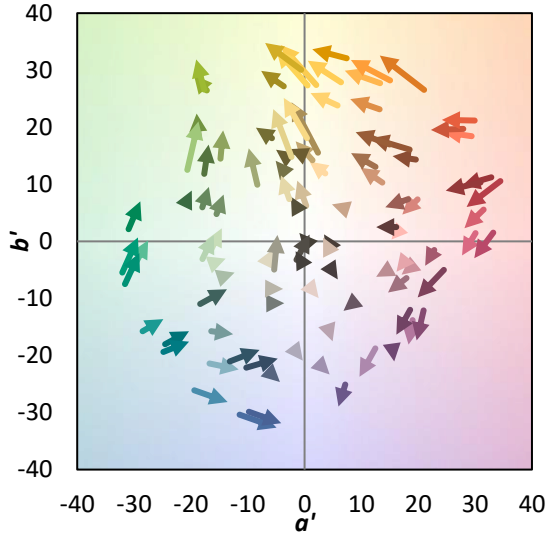


Color Vector Graphics







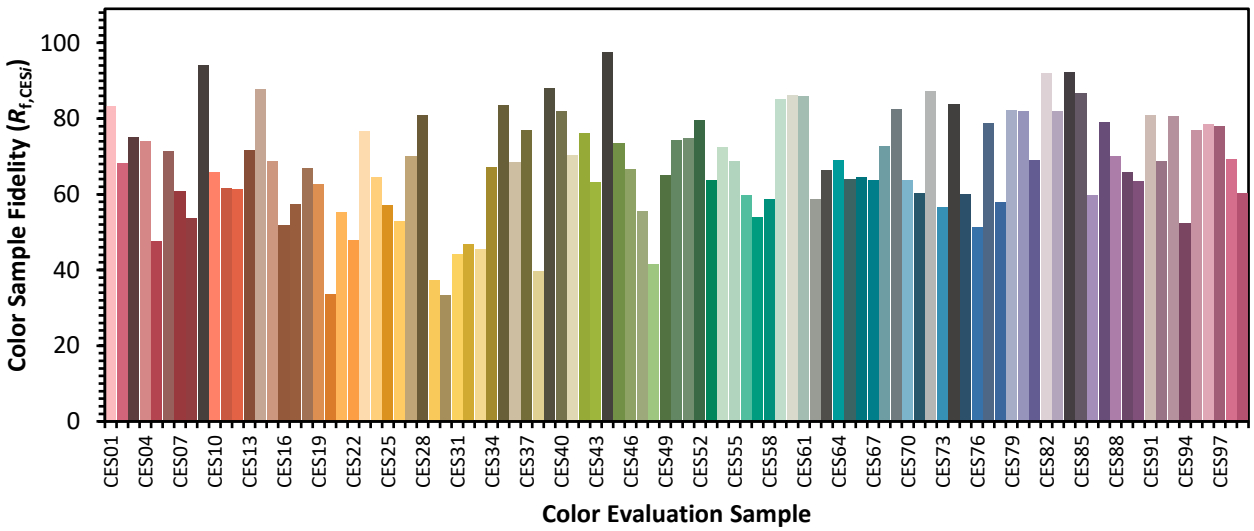


REPORT NUMBER: SP1-2407-184-3

TM-30-18

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

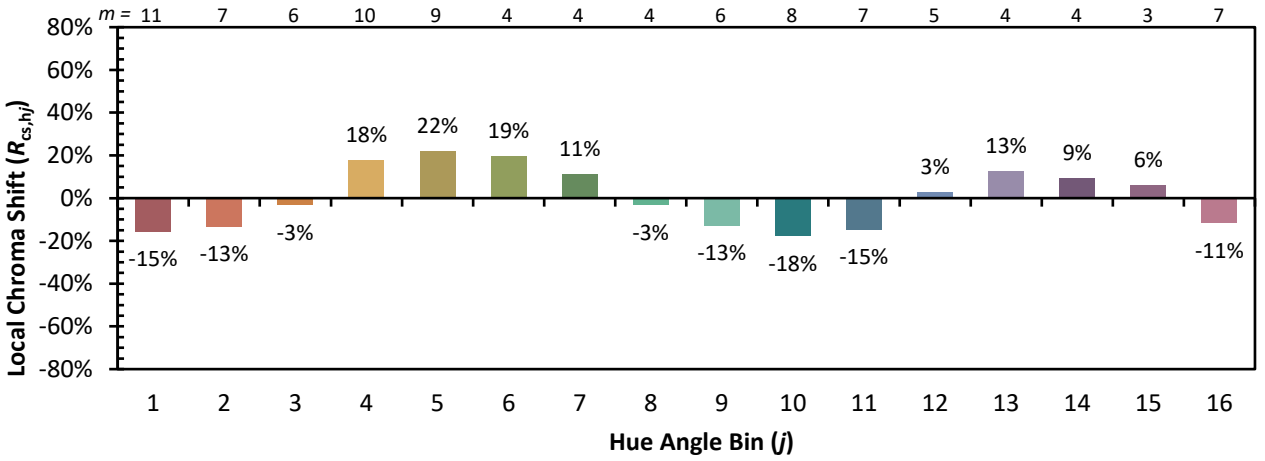
CES01 = 86	CES26 = 53	CES51 = 75	CES76 = 51
CES02 = 63	CES27 = 70	CES52 = 80	CES77 = 79
CES03 = 31	CES28 = 81	CES53 = 64	CES78 = 58
CES04 = 71	CES29 = 37	CES54 = 73	CES79 = 82
CES05 = 50	CES30 = 33	CES55 = 69	CES80 = 82
CES06 = 52	CES31 = 44	CES56 = 60	CES81 = 69
CES07 = 42	CES32 = 47	CES57 = 54	CES82 = 92
CES08 = 41	CES33 = 45	CES58 = 59	CES83 = 82
CES09 = 29	CES34 = 67	CES59 = 85	CES84 = 92
CES10 = 77	CES35 = 84	CES60 = 86	CES85 = 87
CES11 = 60	CES36 = 68	CES61 = 86	CES86 = 60
CES12 = 66	CES37 = 77	CES62 = 59	CES87 = 79
CES13 = 44	CES38 = 40	CES63 = 66	CES88 = 70
CES14 = 74	CES39 = 88	CES64 = 69	CES89 = 66
CES15 = 72	CES40 = 82	CES65 = 64	CES90 = 64
CES16 = 48	CES41 = 70	CES66 = 65	CES91 = 81
CES17 = 51	CES42 = 76	CES67 = 64	CES92 = 69
CES18 = 57	CES43 = 63	CES68 = 73	CES93 = 81
CES19 = 73	CES44 = 97	CES69 = 83	CES94 = 53
CES20 = 67	CES45 = 74	CES70 = 64	CES95 = 77
CES21 = 88	CES46 = 67	CES71 = 60	CES96 = 79
CES22 = 80	CES47 = 55	CES72 = 87	CES97 = 78
CES23 = 92	CES48 = 42	CES73 = 57	CES98 = 69
CES24 = 92	CES49 = 65	CES74 = 84	CES99 = 60
CES25 = 73	CES50 = 74	CES75 = 60	

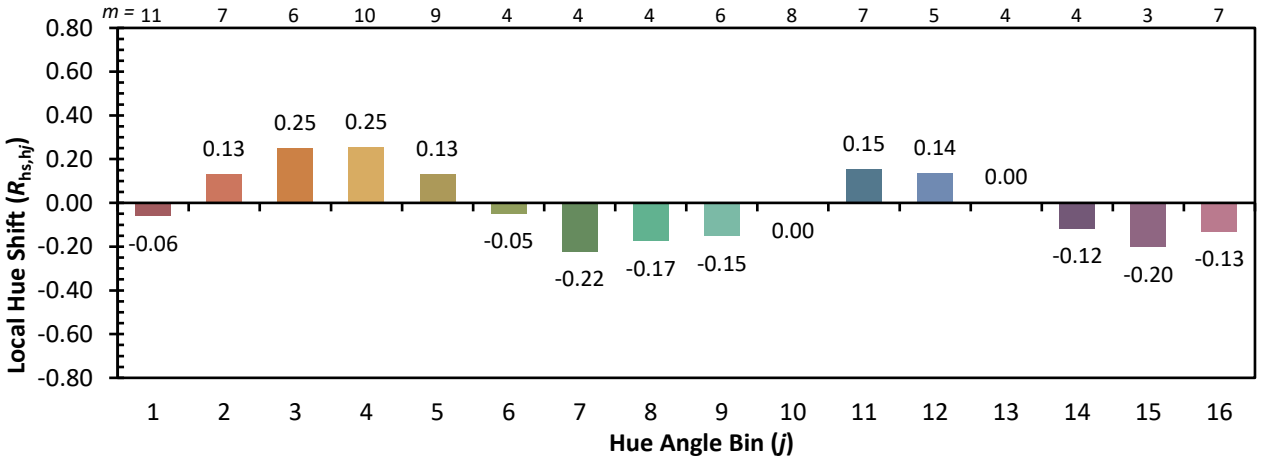


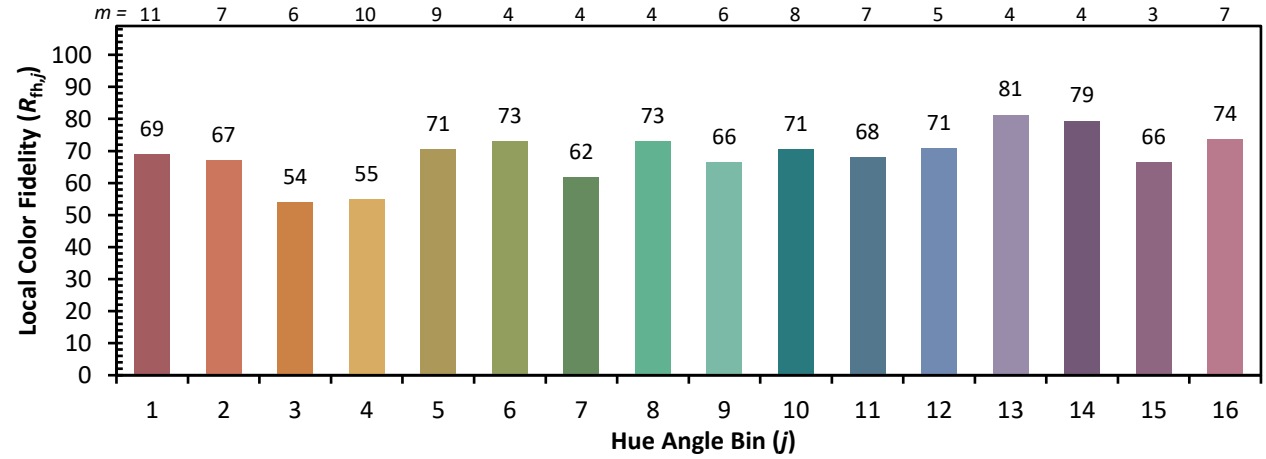
REPORT NUMBER: SP1-2407-184-3

TM-30-18

Color Rendition by Hue-Angle Bin



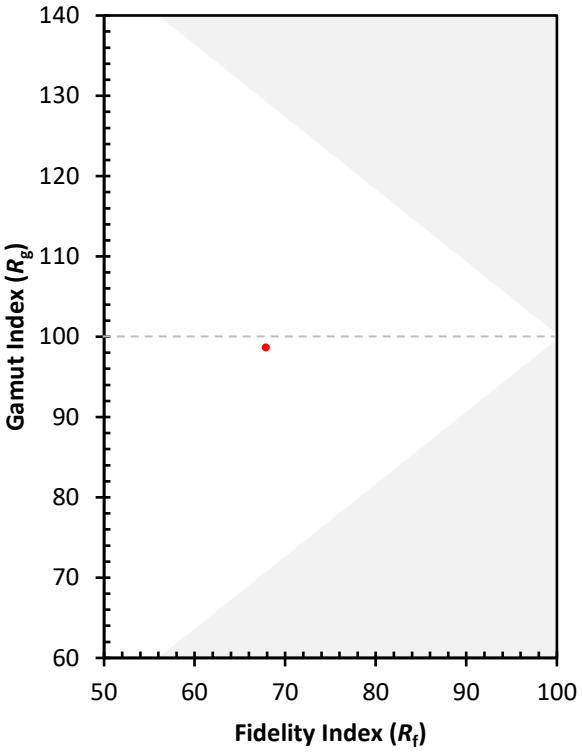


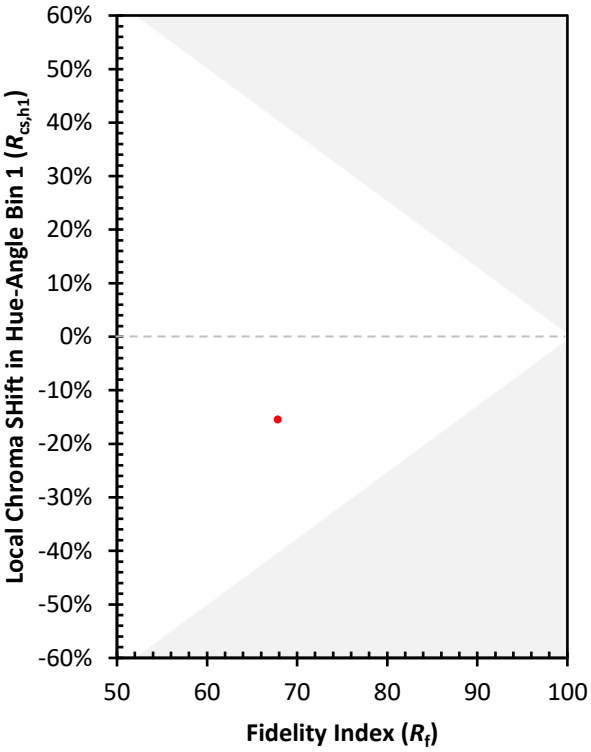


REPORT NUMBER: SP1-2407-184-3

TM-30-18

Measure Comparisons





(END OF REPORT)