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

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

Scaled data based on original data using

LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: STREETWORKS

Report Number: P1456114

Luminaire Tested: GLAN-SB9D-835-U-T2LG

Issue Date: 05/20/2026

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

Scaled Data Report

Test Information

Test Method:	LM-79-2024
Report Number:	P1456114
Test Lab:	INNOVATION CENTER(G1)
Issue Date:	5/22/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	STREETWORKS
Catalog Number:	GLAN-SB9D-835-U-T2LG
Description:	GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 900mA 9xLight Square PACKAGE 80CRI 3500K FIXTURE w/ TYPE II LOW GLARE
Light Source:	(234) 3500K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	83197.4 lumens
Efficiency:	N/A
Efficacy:	126.4 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B5 - U0 - G5

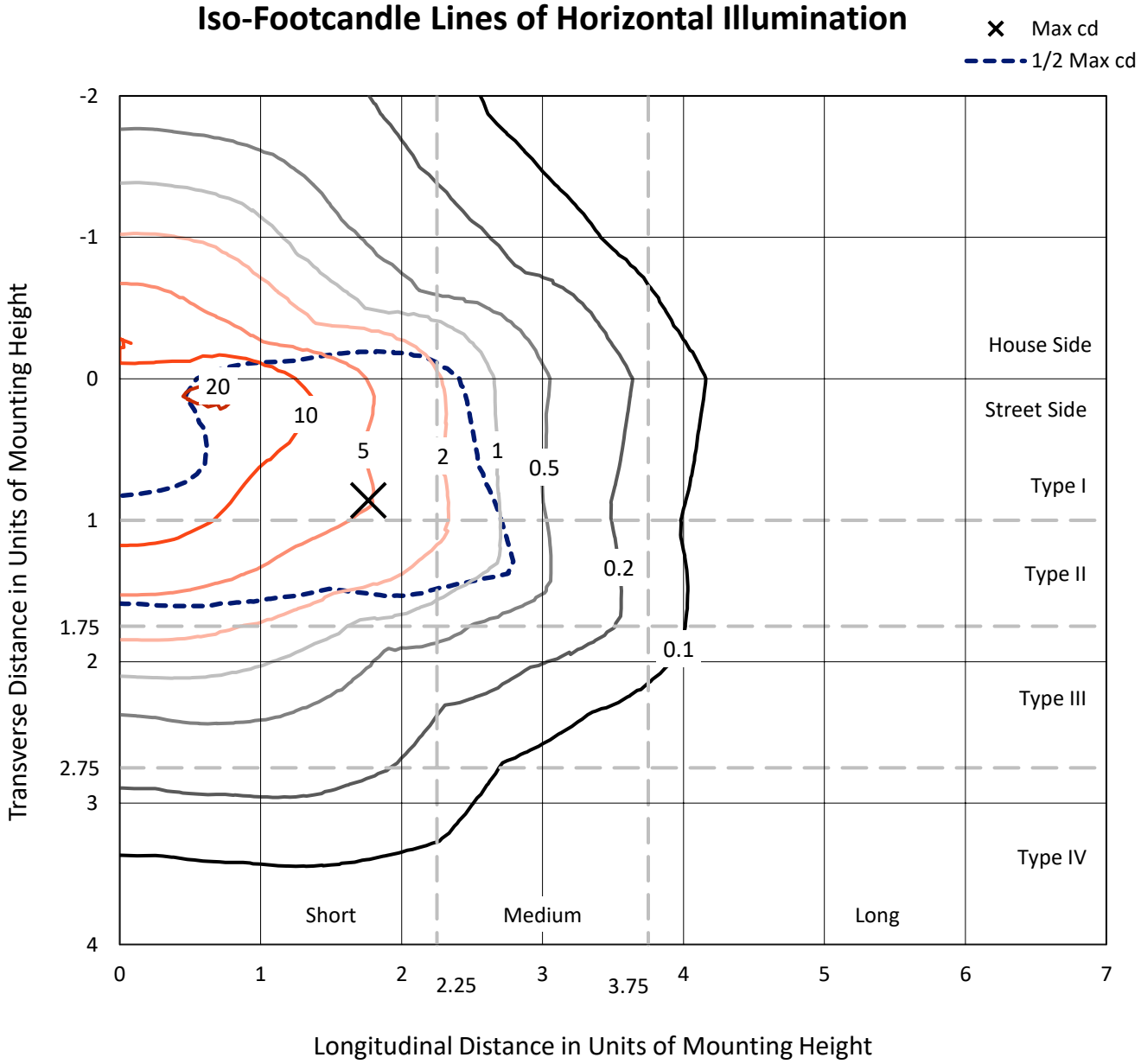
Input Watts (W):	658
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.97
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P1456114
CATALOG NUMBER: GLAN-SB9D-835-U-T2LG

Iso-Footcandle Lines of Horizontal Illumination



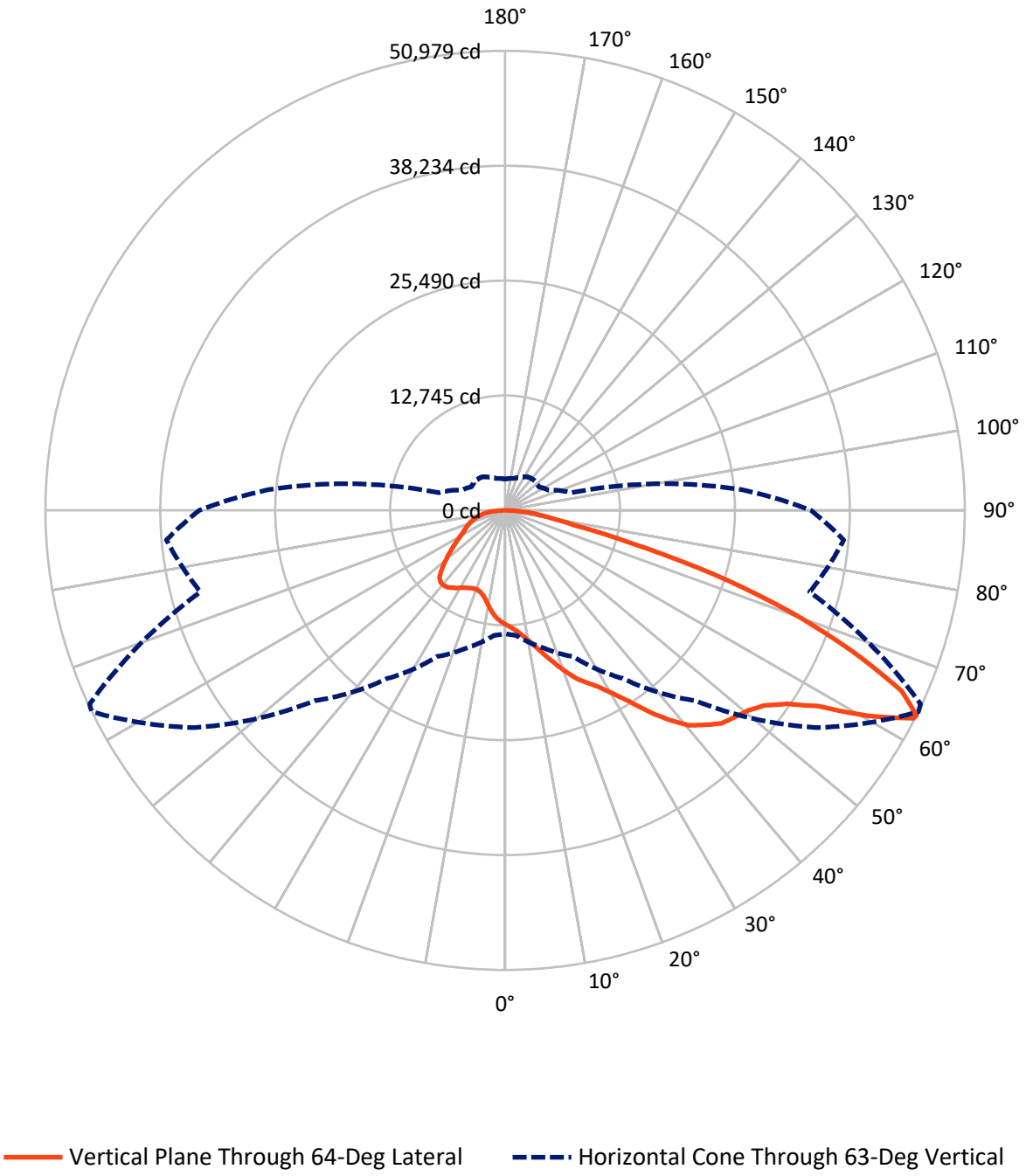
Based on 30 foot mounting height. Maximum calculated value = 21.7 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P1456114
CATALOG NUMBER: GLAN-SB9D-835-U-T2LG

Luminous Intensity Polar Plot



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

Scaled Data Report

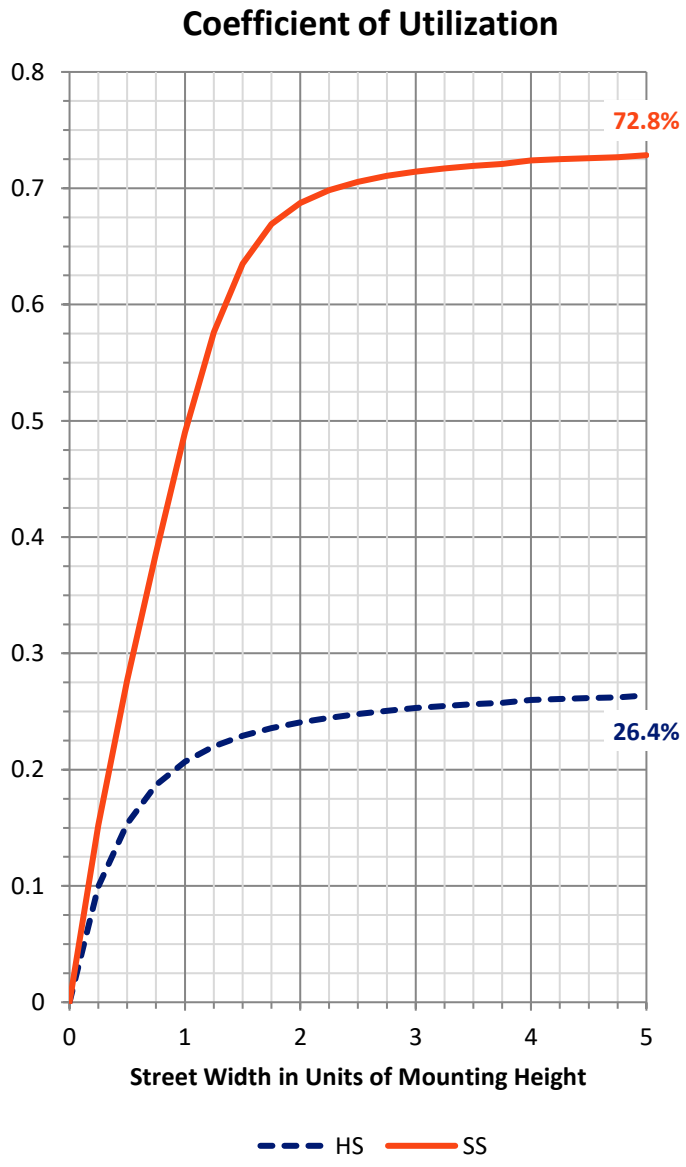
REPORT NUMBER: P1456114
CATALOG NUMBER: GLAN-SB9D-835-U-T2LG

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	22352.8	0.0	22352.8
	% Fixture	26.9	0.0	26.9
Street Side	Lumens	60844.6	0.0	60844.6
	% Fixture	73.1	0.0	73.1
Total	Lumens	83197.4	0.0	83197.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1163.3	1.4
10°-20°	3581.2	4.3
20°-30°	6548.8	7.9
30°-40°	11265.0	13.5
40°-50°	16612.8	20.0
50°-60°	19911.5	23.9
60°-70°	15980.9	19.2
70°-80°	6421.6	7.7
80°-90°	1712.3	2.1
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°	83197.4	100.0
0°-180°	83197.4	100.0



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

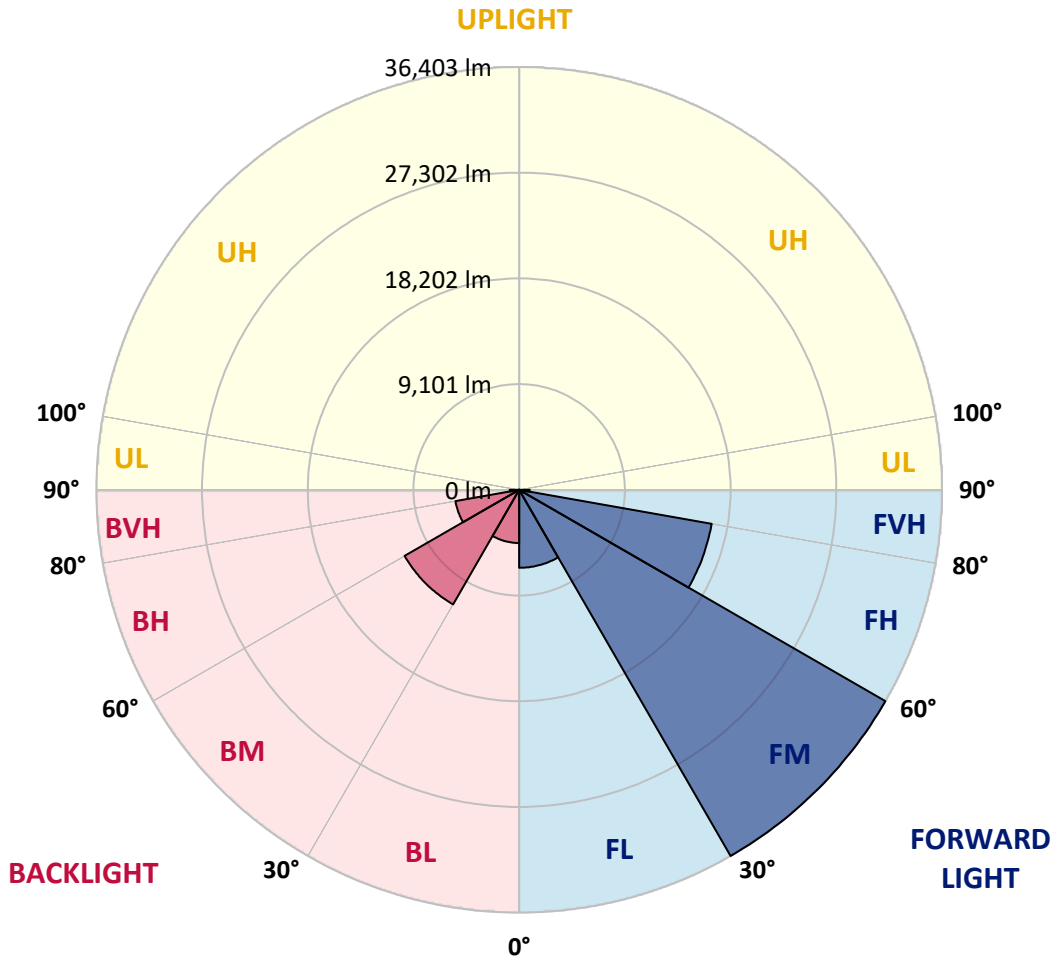
Scaled Data Report

REPORT NUMBER: P1456114
CATALOG NUMBER: GLAN-SB9D-835-U-T2LG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	6712.4	8.1			
FM	(30°-60°)	36403.3	43.8			
FH	(60°-80°)	16829.2	20.2			G5
FVH	(80°-90°)	899.6	1.1			G5
BL	(0°-30°)	4580.9	5.5	B4/5000		
BM	(30°-60°)	11386.0	13.7	B5		
BH	(60°-80°)	5573.2	6.7	B5		G5
BVH	(80°-90°)	812.7	1.0			G5
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
Type II Short



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

Scaled Data Report

REPORT NUMBER: P1456114
CATALOG NUMBER: GLAN-SB9D-835-U-T2LG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	12670.0	12670.0	12670.0	12670.0	12670.0	12670.0	12670.0	*12670.0*	12670.0	12670.0	12670.0
2.5°	13193.3	13212.0	13155.9	13137.2	13174.6	13099.8	13081.1	*13006.4*	12969.0	12894.3	12800.8
5°	13567.0	13585.7	13548.3	13548.3	13585.7	13529.6	13510.9	*13436.2*	13398.8	13324.1	13137.2
7.5°	13548.3	13567.0	13604.4	13753.9	13940.8	14015.5	14071.6	*14015.5*	13996.8	13884.7	13697.8
10°	13249.3	13268.0	13361.4	13585.7	14052.9	14389.3	14744.3	*14744.3*	14781.7	14688.3	14351.9
12.5°	12838.2	12856.9	13081.1	13436.2	14052.9	14632.2	15361.0	*15660.0*	15641.3	15585.2	15192.8
15°	11847.8	11847.8	12184.1	12856.9	13847.3	14800.4	15884.2	*16687.8*	16706.5	16762.5	16295.4
17.5°	11006.8	11025.5	11305.8	11903.8	13193.3	14706.9	16444.9	*17827.7*	17883.8	18201.5	17528.7
20°	11081.6	11081.6	11175.0	11436.7	12483.1	14333.2	16762.5	*19042.4*	19229.3	19976.8	19135.8
22.5°	11660.9	11660.9	11735.7	11717.0	12352.3	14090.3	16968.1	*20257.1*	20593.5	22144.5	21060.6
25°	12726.1	12707.4	12632.6	12520.5	12894.3	14351.9	17435.3	*21191.4*	21845.5	24536.5	23284.4
27.5°	14034.2	13996.8	13884.7	13697.8	13959.4	15136.7	18238.8	*22181.9*	22892.0	27152.7	25639.0
30°	15660.0	15547.9	15435.7	15192.8	15473.1	16426.2	19434.8	*23583.4*	24256.2	30124.0	28479.5
32.5°	17584.8	17715.6	17341.9	17005.5	17304.5	18182.8	21210.1	*25246.6*	25975.4	33226.1	31432.1
35°	20462.6	20855.1	20742.9	19042.4	19322.7	20294.5	23284.4	*27395.6*	28049.7	36047.9	34459.5
37.5°	23303.1	23209.7	23303.1	21882.9	21434.4	22611.7	25508.2	*29451.2*	30086.6	38346.4	37131.7
40°	25583.0	25863.3	25863.3	24704.7	24125.4	24910.2	27526.5	*31338.7*	31955.4	39617.2	39056.5
42.5°	28068.4	28105.8	28031.0	27021.9	26797.6	27003.2	29301.8	*32534.7*	33039.2	40271.2	40364.7
45°	30871.5	30852.8	30535.1	29694.2	29357.8	29170.9	30404.3	*33693.3*	34197.8	40570.2	41074.8
47.5°	33188.7	33282.2	33300.8	32403.8	31843.2	31039.7	31357.4	*34272.6*	34851.9	40233.8	41224.3
50°	33319.5	33469.0	34179.1	34440.8	34328.6	33039.2	32235.7	*34889.3*	35468.6	40308.6	41766.2
52.5°	32497.3	32646.8	33562.5	34646.3	35954.4	35337.8	33618.5	*35954.4*	36552.4	41037.4	42999.6
55°	30292.2	30535.1	31899.3	33413.0	35748.9	36627.2	36066.6	*37879.2*	38439.9	41616.7	44438.5
57.5°	26367.8	26666.8	28554.3	30964.9	34160.5	36328.2	39617.2	*40962.7*	41429.8	42027.8	44457.2
60°	19715.1	19958.1	22910.7	26162.3	30964.9	34459.5	41728.8	*46251.2*	46512.8	39804.0	41934.4
62.5°	14520.1	14763.0	16743.9	19079.8	24330.9	31021.0	42140.0	*50829.6*	50866.9	35786.3	38458.5
63°	*13679.1*	*13922.1*	*15716.1*	*17902.5*	*22761.2*	*29862.4*	*42009.1*	*50979.1*	*50848.3*	*34964.0*	*37692.4*
65°	10651.8	11081.6	12950.3	14613.5	17061.5	23770.3	40327.3	*48325.5*	48512.3	32534.7	33842.8
67.5°	7250.7	7568.4	9941.7	11866.5	12894.3	15136.7	33076.6	*41355.1*	41654.1	30011.9	27003.2
70°	5606.2	5755.7	7138.6	9399.7	10427.5	9624.0	21565.2	*33300.8*	33300.8	23433.9	19135.8
72.5°	4391.5	4447.6	5382.0	7344.1	8390.6	7400.2	12016.0	*24218.8*	23321.8	13903.4	12763.5
75°	3139.5	3214.2	4055.2	5475.4	6690.1	5830.5	7680.5	*14108.9*	13567.0	7998.2	8521.4
77.5°	2485.4	2522.8	3027.3	4036.5	5419.3	4447.6	5849.1	*7699.2*	7624.4	5624.9	5475.4
80°	1962.2	2036.9	2373.3	2896.5	4186.0	3475.8	4354.2	*5083.0*	4933.5	3868.3	3513.2
82.5°	1401.6	1532.4	1831.4	2205.1	3102.1	2485.4	2859.2	*3588.0*	3588.0	2915.2	2317.2
85°	859.6	971.7	1083.9	1364.2	2205.1	1607.1	1513.7	*2317.2*	2373.3	2186.4	1495.0
87.5°	411.1	448.5	523.2	579.3	803.6	728.8	598.0	*878.3*	897.0	971.7	616.7
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: P1456114
CATALOG NUMBER: GLAN-SB9D-835-U-T2LG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12670.0	12670.0	12670.0	12670.0	12670.0	12670.0	12670.0	12670.0	12670.0	12670.0	12670.0
2.5°	12782.1	12744.8	12557.9	12371.0	12165.5	11978.6	11791.7	11642.2	11474.0	11511.4	11530.1
5°	13025.1	12931.6	12520.5	12034.6	11399.3	10801.3	10222.0	9810.9	9549.2	9474.5	9325.0
7.5°	13548.3	13324.1	12576.6	11548.8	10371.5	9437.1	8895.2	8652.2	8577.5	8596.2	8558.8
10°	14146.3	13809.9	12651.3	10969.5	9474.5	8839.1	8764.4	8913.9	8988.6	9063.4	9082.0
12.5°	14931.2	14389.3	12614.0	10334.1	9044.7	8932.5	9212.9	9493.2	9661.4	9773.5	9754.8
15°	15846.9	15118.1	12501.8	9810.9	8988.6	9287.6	9642.7	9960.4	10165.9	10278.0	10222.0
17.5°	16949.4	15977.7	12371.0	9474.5	9156.8	9511.9	9885.6	10203.3	10427.5	10502.3	10446.2
20°	18313.6	16949.4	12146.8	9325.0	9287.6	9605.3	9941.7	10240.7	10427.5	10502.3	10427.5
22.5°	19920.7	18108.0	11959.9	9325.0	9343.7	9605.3	9848.2	10072.5	10240.7	10296.7	10203.3
25°	21976.3	19453.5	11885.1	9474.5	9362.4	9511.9	9642.7	9773.5	9866.9	9904.3	9866.9
27.5°	24069.3	21004.6	11922.5	9661.4	9343.7	9381.0	9381.0	9399.7	9418.4	9437.1	9418.4
30°	26480.0	22574.3	12072.0	9904.3	9381.0	9194.2	9138.1	9026.0	8932.5	8857.8	8783.1
32.5°	28815.9	24069.3	12333.6	10259.4	9343.7	8988.6	8876.5	8596.2	8334.6	8110.3	8110.3
35°	31338.7	25620.3	12800.8	10521.0	9306.3	8801.7	8484.1	8166.4	7886.1	7568.4	7568.4
37.5°	33506.4	26947.1	13174.6	10820.0	9268.9	8577.5	8072.9	7717.9	7418.9	7101.2	7063.8
40°	35020.1	27713.3	13398.8	10932.1	9138.1	8278.5	7680.5	7232.0	6802.2	6372.4	6353.7
42.5°	35748.9	27676.0	13268.0	10894.7	8895.2	7904.7	7344.1	6746.1	6166.8	5774.4	5737.0
45°	36141.3	27433.0	12763.5	10577.0	8502.7	7512.3	6914.3	6278.9	5699.6	5344.6	5269.8
47.5°	36066.6	26835.0	12072.0	9792.2	7979.5	7082.5	6484.5	5830.5	5363.3	5157.7	5157.7
50°	36272.1	26367.8	11287.2	8895.2	7269.4	6577.9	6092.1	5494.1	5213.8	4952.1	4858.7
52.5°	37187.8	26760.3	10614.4	8054.2	6596.6	6092.1	5755.7	5251.1	4896.1	4727.9	4671.8
55°	38402.5	27601.2	9979.0	7306.8	5942.6	5662.3	5494.1	5026.9	4615.8	4447.6	4354.2
57.5°	38626.7	28180.5	9362.4	6577.9	5400.6	5325.9	5269.8	4634.5	4298.1	4167.3	4092.5
60°	37075.7	27750.7	8558.8	5923.9	4970.8	5008.2	4858.7	4391.5	3999.1	3868.3	3793.5
62.5°	34440.8	26629.5	7755.2	5363.3	4634.5	4709.2	4559.7	4092.5	3700.1	3569.3	3531.9
63°	*33917.5*	*26330.5*	*7568.4*	*5307.2*	*4559.7*	*4653.1*	*4522.3*	*4055.2*	*3662.7*	*3531.9*	*3475.8*
65°	30796.7	24536.5	6914.3	5008.2	4316.8	4316.8	4335.5	3868.3	3531.9	3475.8	3438.5
67.5°	25115.8	20481.3	6204.2	4653.1	4055.2	4111.2	4204.7	3943.0	3812.2	3774.8	3737.5
70°	18986.3	15417.1	5587.5	4316.8	3774.8	3961.7	4597.1	4485.0	3999.1	3662.7	3588.0
72.5°	13454.9	10502.3	5045.6	3980.4	3438.5	3905.7	4765.3	4279.4	3606.7	3214.2	3139.5
75°	9007.3	6764.8	4503.6	3625.3	3064.7	3606.7	4503.6	3905.7	3139.5	3046.0	2933.9
77.5°	5662.3	4821.3	3961.7	3214.2	2653.6	3214.2	4092.5	3475.8	2709.7	2747.0	2578.9
80°	3457.2	3438.5	3326.3	2728.4	2130.4	2560.2	3438.5	2933.9	2167.7	2167.7	1924.8
82.5°	2055.6	2485.4	2821.8	2261.2	1551.0	1831.4	2485.4	2205.1	1812.7	1756.6	1644.5
85°	1382.9	1681.9	2242.5	1737.9	990.4	1121.2	1719.2	1850.0	1663.2	1457.6	1364.2
87.5°	504.6	672.7	1027.8	710.1	429.8	672.7	1289.4	1345.5	1009.1	784.9	710.1
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: SP1-2407-184-10

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-835-U-5WQ

Data in this report applies to families of products including GSS-SB1A-835-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

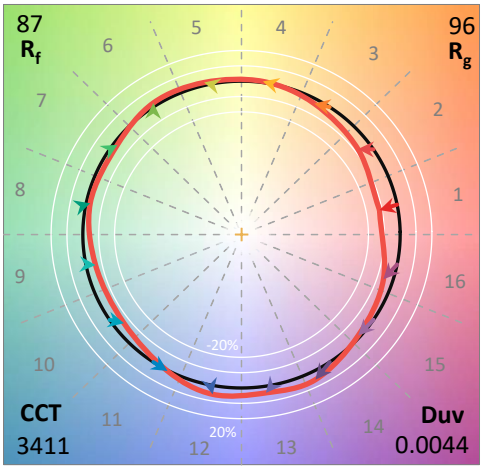
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-184-10
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-835-U-5WQ**
Description:	GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 3500K CCT 26 LEDS

Spectral Parameters

CCT (K):	3411
CIE u':	0.2360
CIE v':	0.5189
Duv:	0.0044
CIE x:	0.4154
CIE y:	0.4059
CIE z:	0.1787
Peak Wavelength (nm):	601
Dominant Wavelength (nm):	579
Purity:	46.51914
Rf:	86.6
Rg:	95.9

CRI (Ra):	83.5
R1:	81.1
R2:	88.9
R3:	97.2
R4:	83.8
R5:	81.7
R6:	86.9
R7:	86.1
R8:	62.2
R9:	6.3
R10:	75.4
R11:	84.1
R12:	69.7
R13:	82.8
R14:	98.5
R15:	72.6



Test Conditions

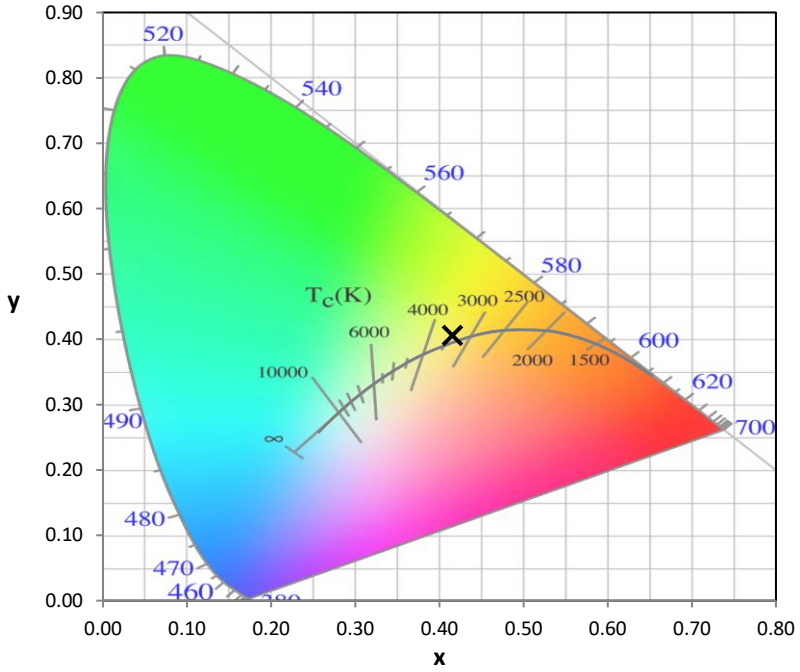
Stabilization Time:	35M
Operation Time:	1H 35M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-184-10

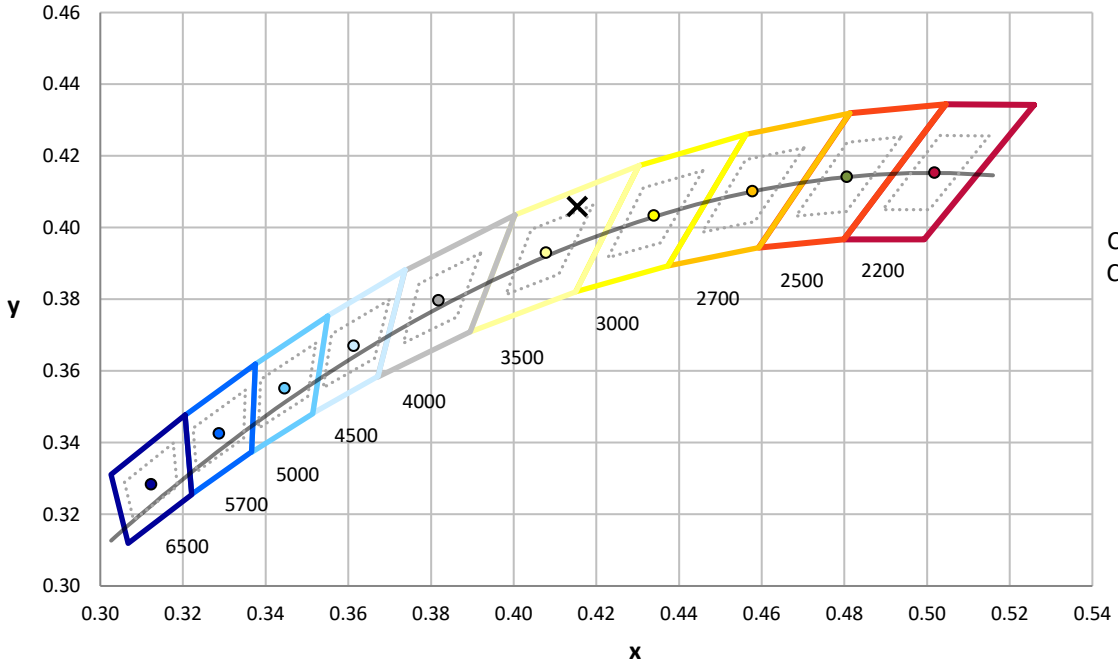
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-10

CIE 1931 Chromaticity Diagram



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

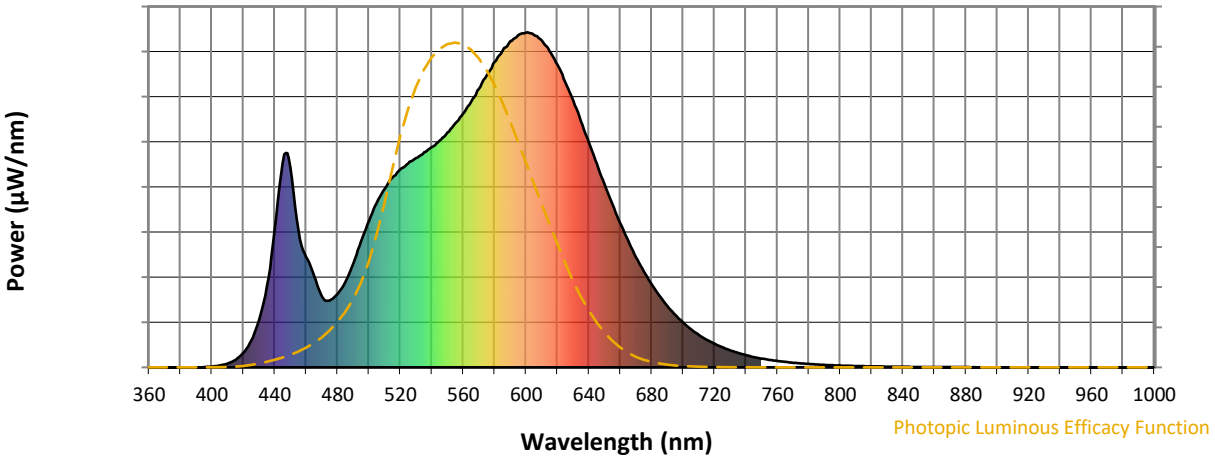


CCT = 3411K
CIE x = 0.4154
CIE y = 0.4059
Duv = 0.0044

Point lies inside the ANSI 3500K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-10

Photopic Flux vs. Wavelength

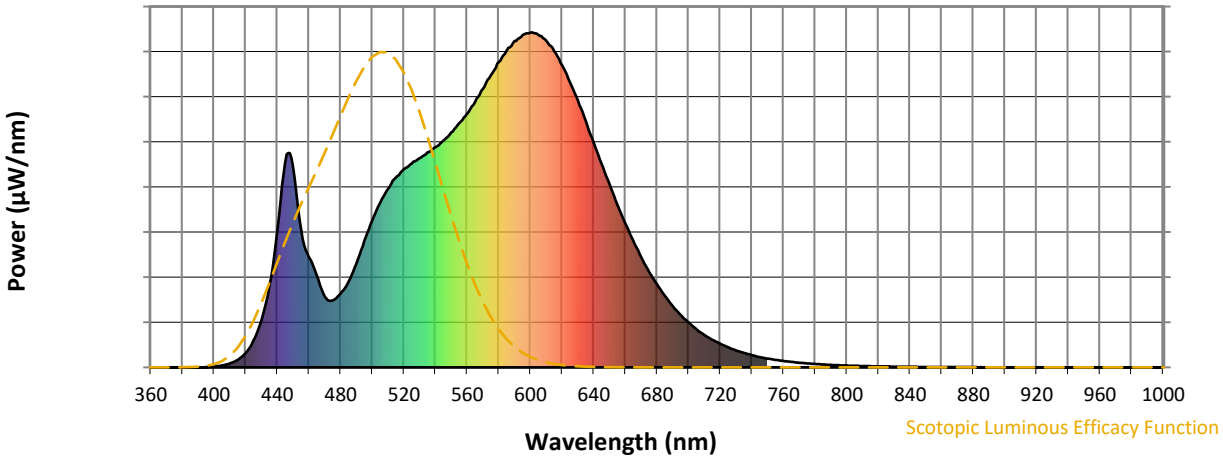


Photopic Lumens: NR

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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-10

Scotopic Flux vs. Wavelength

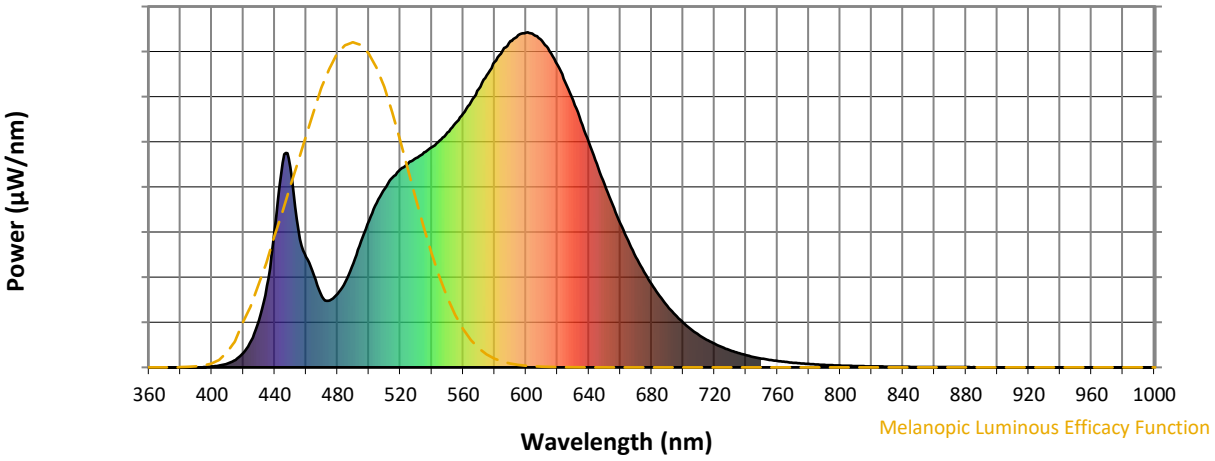


Scotopic Lumens: NR **S/P: 1.48**

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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-10

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.88**

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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

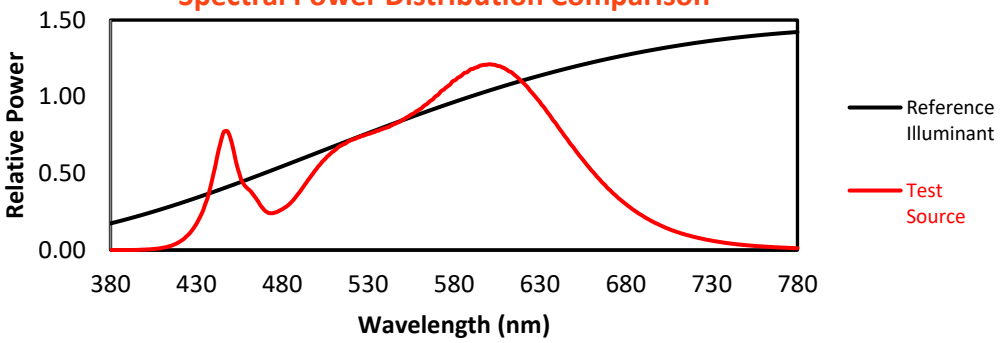
REPORT NUMBER: SP1-2407-184-10

TM-30-18

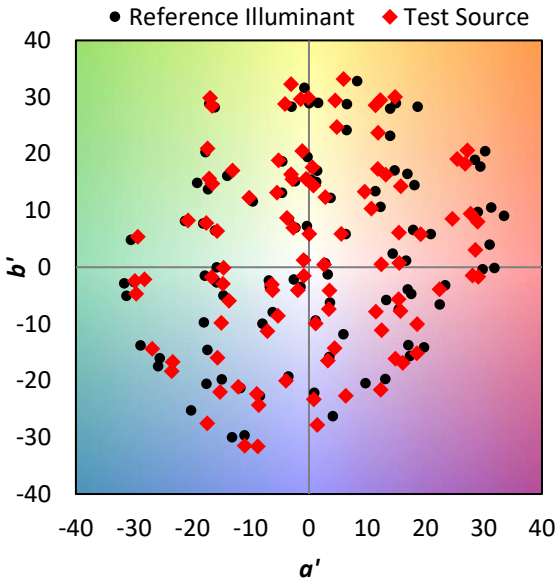
Summary

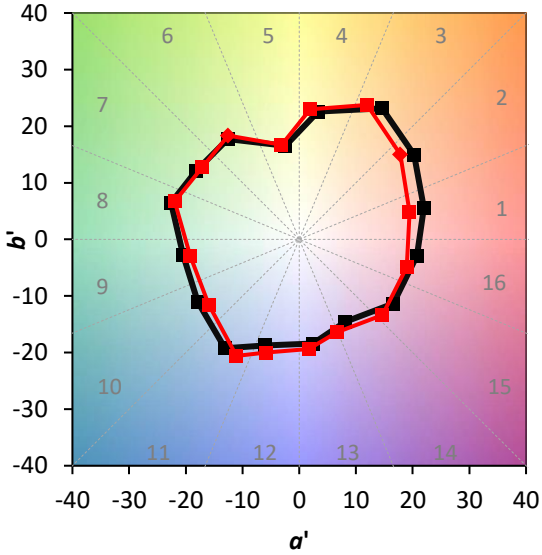
R_f = 86.6
R_g = 95.9
CIE R_a = 83.5
R_9 = 6.3

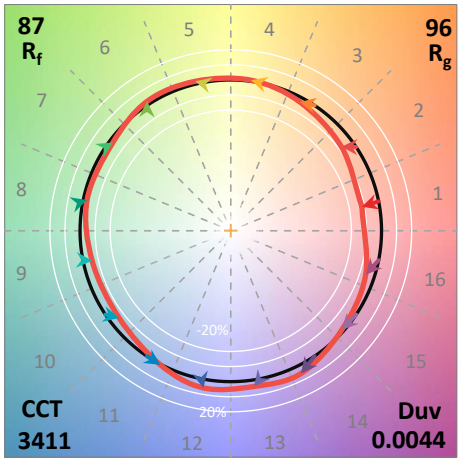
Spectral Power Distribution Comparison

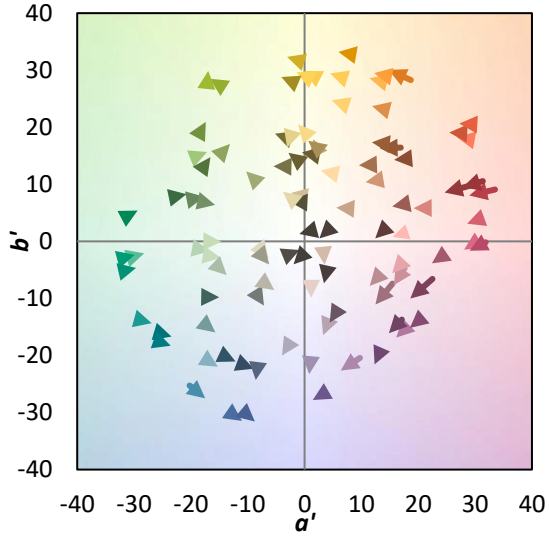


Color Vector Graphics







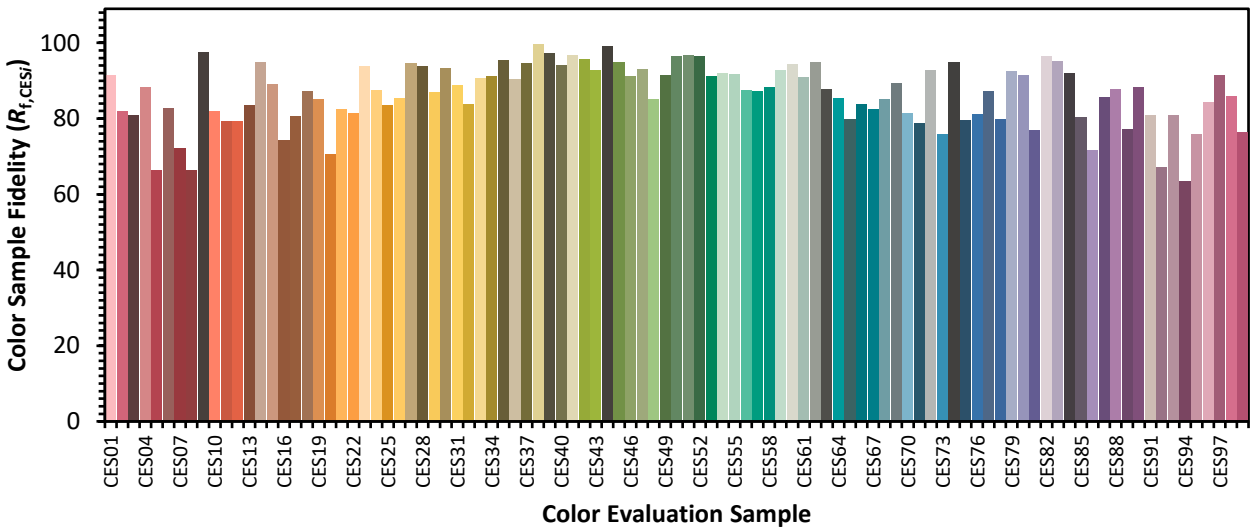


REPORT NUMBER: SP1-2407-184-10

TM-30-18

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

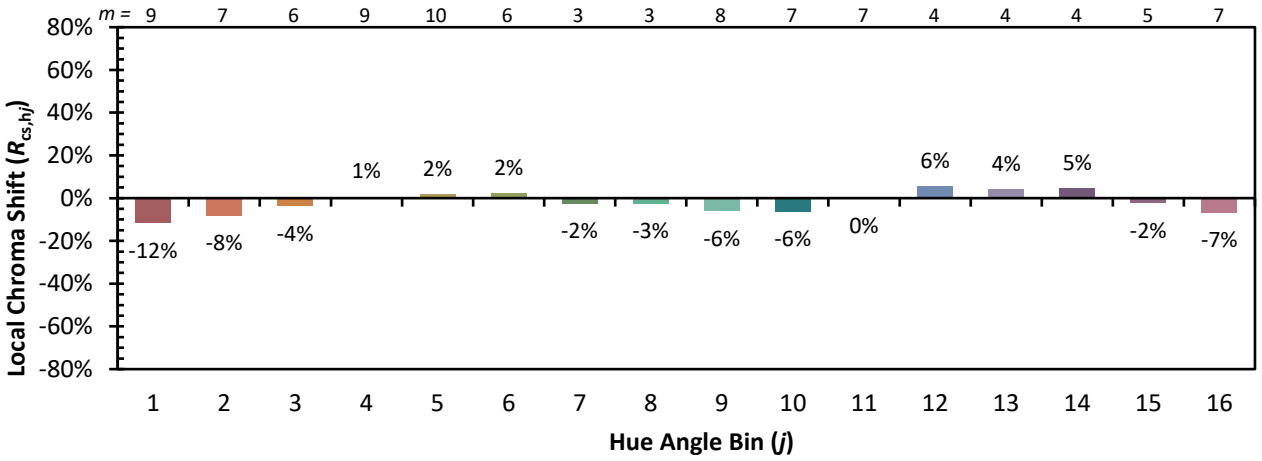
CES01 = 86	CES26 = 85	CES51 = 97	CES76 = 81
CES02 = 62	CES27 = 95	CES52 = 96	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 91	CES78 = 80
CES04 = 70	CES29 = 87	CES54 = 92	CES79 = 93
CES05 = 49	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 89	CES56 = 88	CES81 = 77
CES07 = 41	CES32 = 84	CES57 = 87	CES82 = 96
CES08 = 40	CES33 = 91	CES58 = 88	CES83 = 95
CES09 = 29	CES34 = 91	CES59 = 93	CES84 = 92
CES10 = 75	CES35 = 95	CES60 = 94	CES85 = 80
CES11 = 58	CES36 = 90	CES61 = 91	CES86 = 72
CES12 = 64	CES37 = 95	CES62 = 95	CES87 = 86
CES13 = 43	CES38 = 100	CES63 = 88	CES88 = 88
CES14 = 74	CES39 = 97	CES64 = 85	CES89 = 77
CES15 = 71	CES40 = 94	CES65 = 80	CES90 = 88
CES16 = 47	CES41 = 97	CES66 = 84	CES91 = 81
CES17 = 49	CES42 = 96	CES67 = 82	CES92 = 67
CES18 = 56	CES43 = 93	CES68 = 85	CES93 = 81
CES19 = 72	CES44 = 99	CES69 = 89	CES94 = 63
CES20 = 66	CES45 = 95	CES70 = 81	CES95 = 76
CES21 = 86	CES46 = 91	CES71 = 79	CES96 = 84
CES22 = 78	CES47 = 93	CES72 = 93	CES97 = 92
CES23 = 91	CES48 = 85	CES73 = 76	CES98 = 86
CES24 = 90	CES49 = 92	CES74 = 95	CES99 = 77
CES25 = 72	CES50 = 96	CES75 = 80	

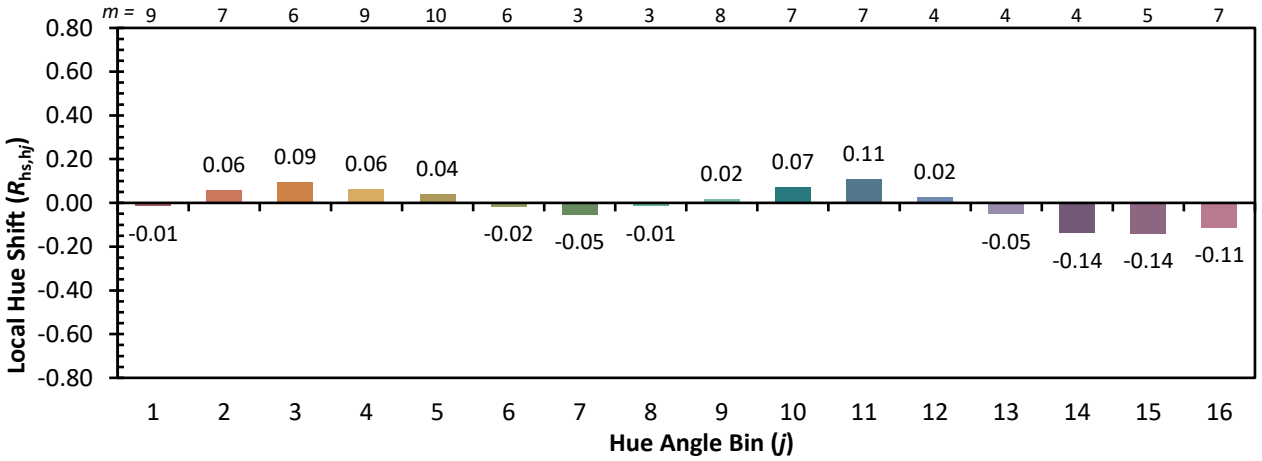


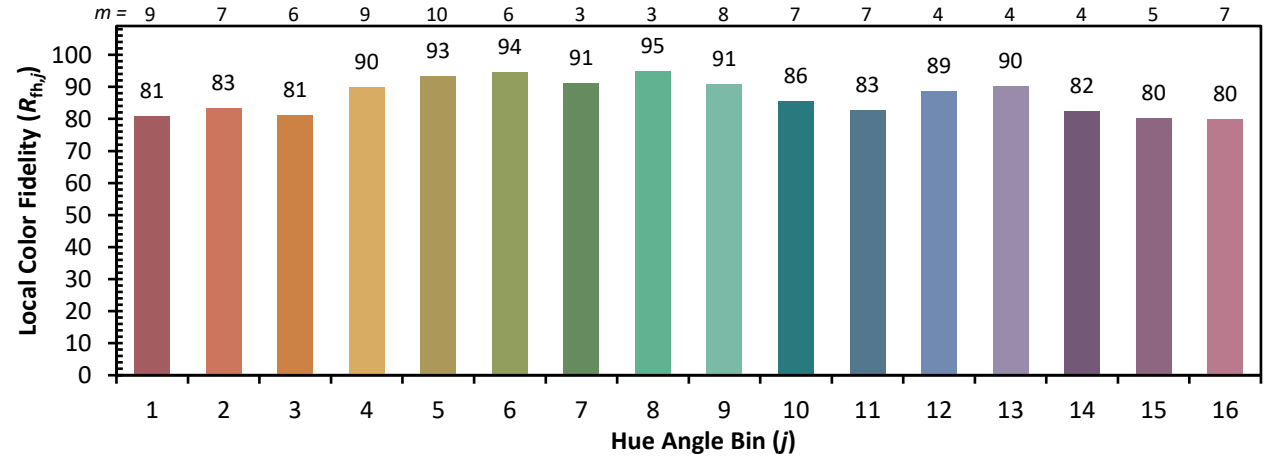
REPORT NUMBER: SP1-2407-184-10

TM-30-18

Color Rendition by Hue-Angle Bin



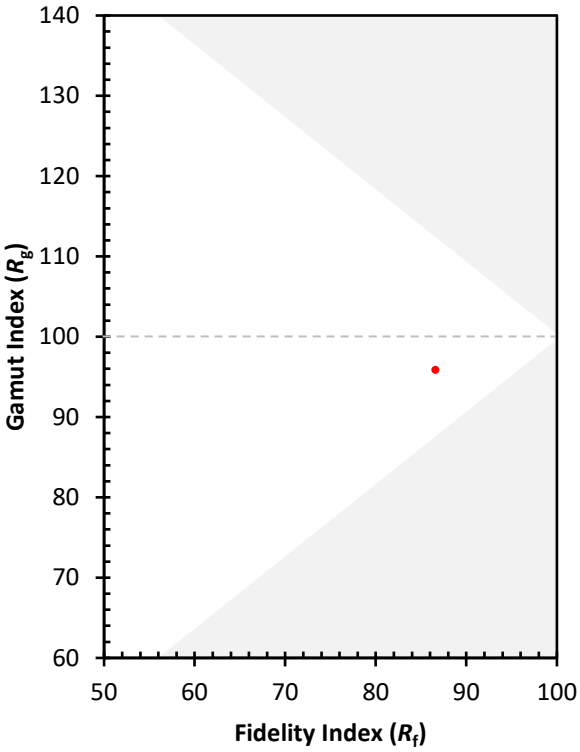


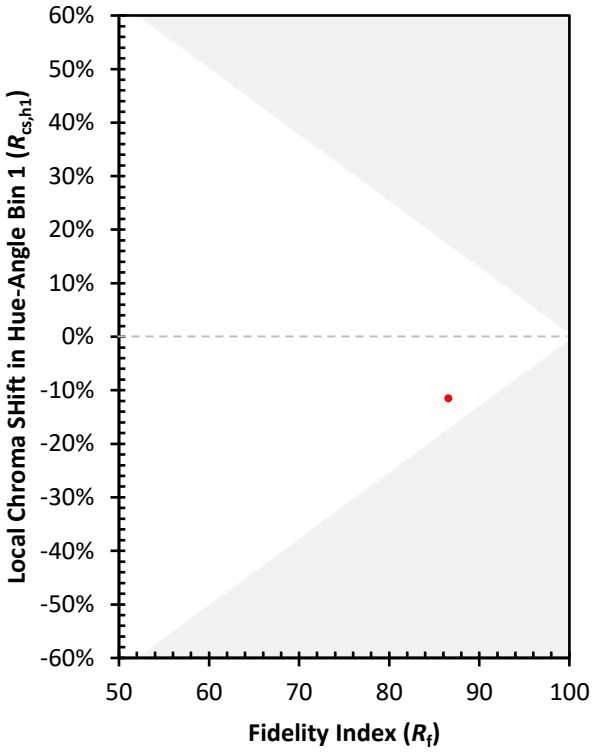


REPORT NUMBER: SP1-2407-184-10

TM-30-18

Measure Comparisons





(END OF REPORT)