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: P1361678

Luminaire Tested: **GSS-SB2D-840-U-5MQ**

Issue Date: 02/18/2026

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:	P1361678
Test Lab:	INNOVATION CENTER(G1)
Issue Date:	02/18/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GSS-SB2D-840-U-5MQ
Description:	GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 2SQUARE 147W 80CRI 4000K FIXTURE w/ TYPE V SQUARE MEDIUM DISTRIBUTION OPTIC
Light Source:	(52) 4000K CCT, 80 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:	18359.3 lumens
Efficiency:	N/A
Efficacy:	124.9 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type V - Short
BUG Rating:	B4 - U0 - G2

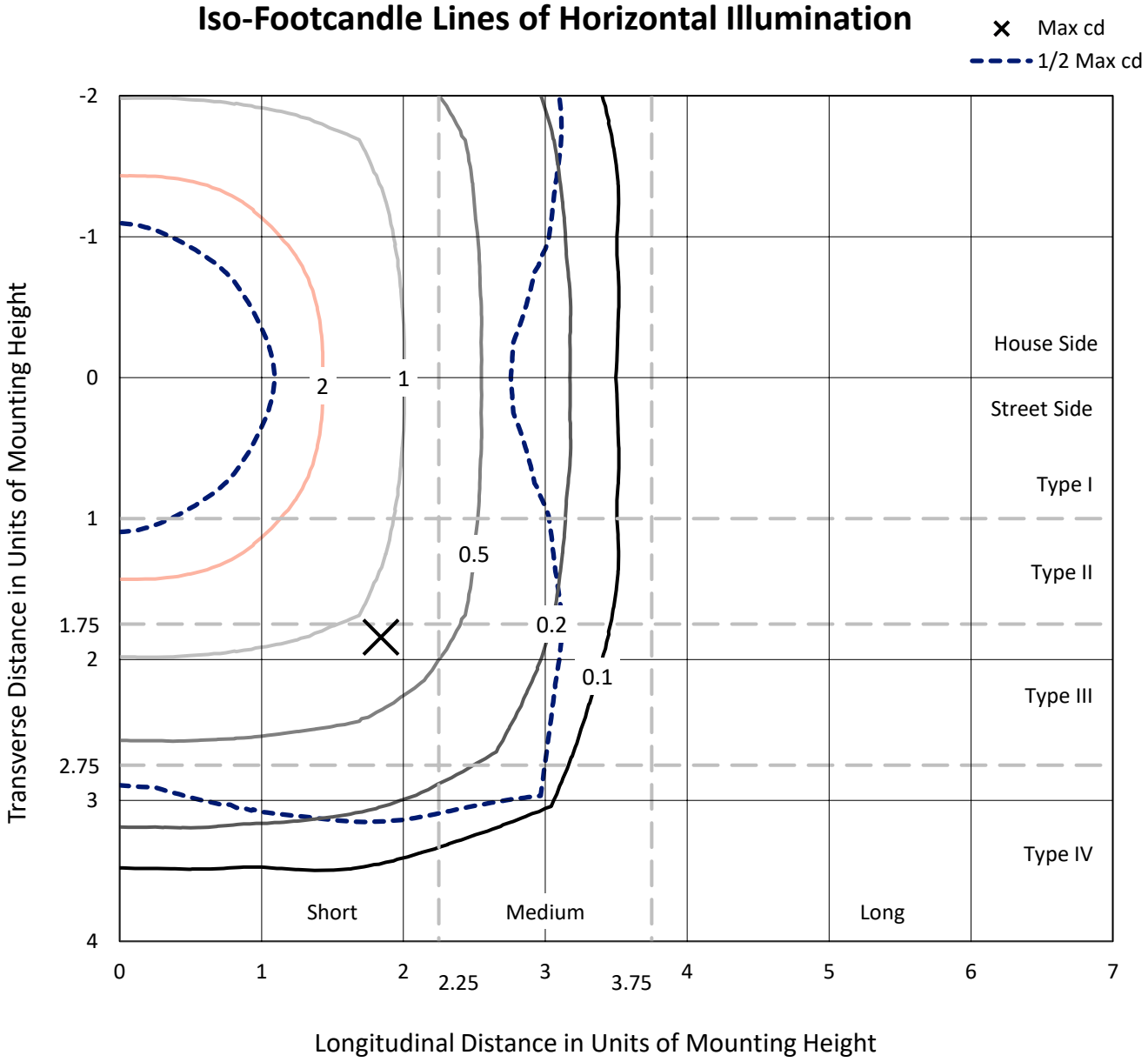
Input Watts (W):	147
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.98
Total Harmonic Distortion (THDi):	3.1%
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P1361678
CATALOG NUMBER: GSS-SB2D-840-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination



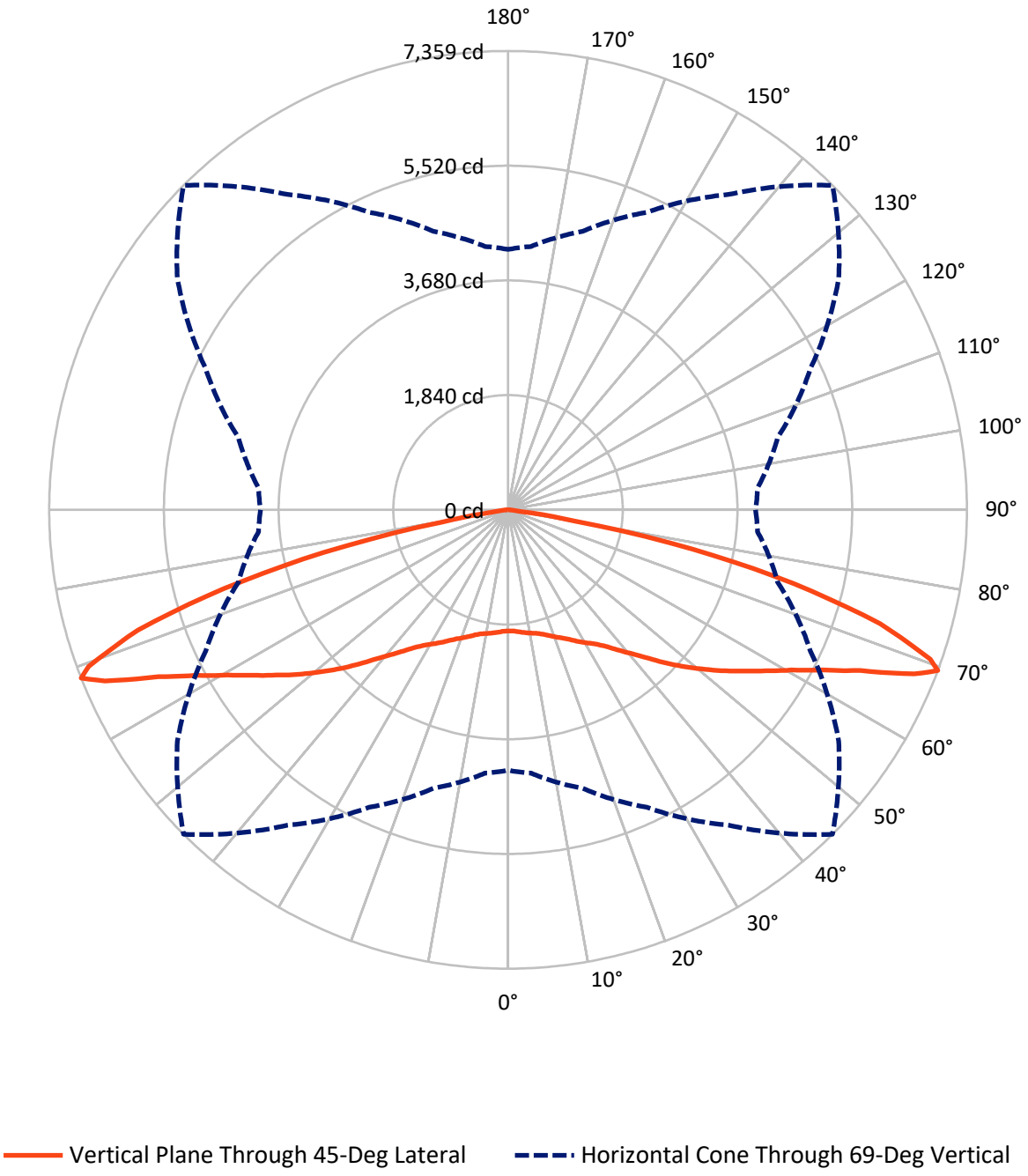
Based on 20 foot mounting height. Maximum calculated value = 4.9 fc
Type V - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P1361678
CATALOG NUMBER: GSS-SB2D-840-U-5MQ

Luminous Intensity Polar Plot



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

Scaled Data Report

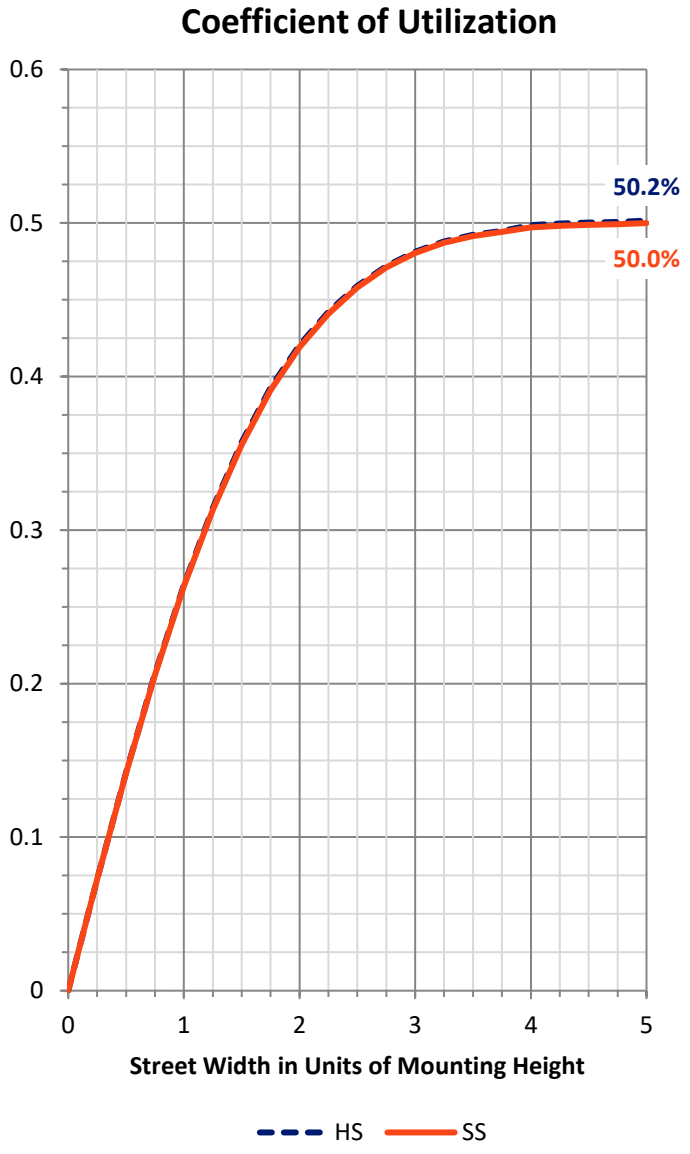
REPORT NUMBER: P1361678
CATALOG NUMBER: GSS-SB2D-840-U-5MQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9179.6	0.0	9179.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9179.6	0.0	9179.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	18359.3	0.0	18359.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.3	1.0
10°-20°	587.7	3.2
20°-30°	1054.4	5.7
30°-40°	1697.3	9.2
40°-50°	2709.1	14.8
50°-60°	4014.4	21.9
60°-70°	5155.1	28.1
70°-80°	2855.5	15.6
80°-90°	96.4	0.5
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°	18359.3	100.0
0°-180°	18359.3	100.0



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

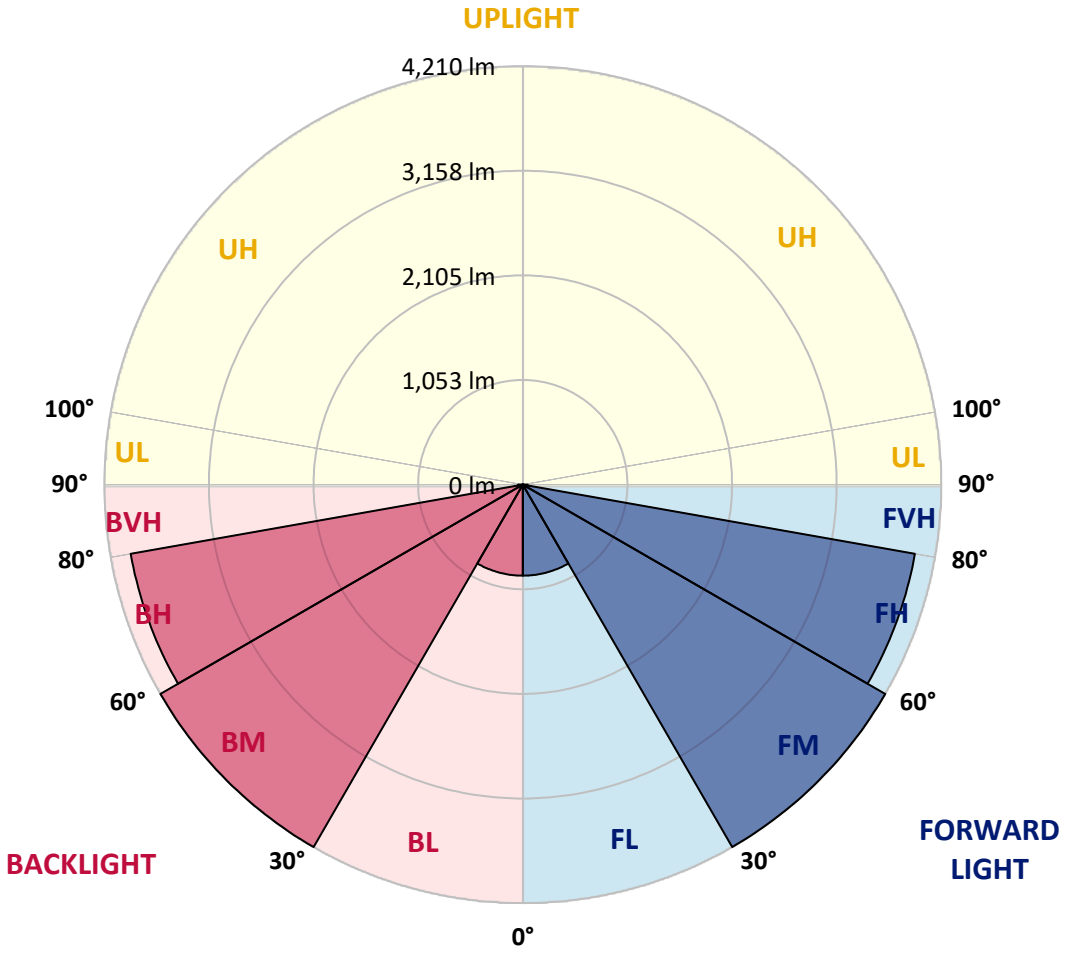
Scaled Data Report

REPORT NUMBER: P1361678
CATALOG NUMBER: GSS-SB2D-840-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	915.7	5.0			
FM	(30°-60°)	4210.4	22.9			
FH	(60°-80°)	4005.3	21.8			G2/5000
FVH	(80°-90°)	48.2	0.3			G1/100
BL	(0°-30°)	915.7	5.0	B2/1000		
BM	(30°-60°)	4210.4	22.9	B3/5000		
BH	(60°-80°)	4005.3	21.8	B4/5000		G2/5000
BVH	(80°-90°)	48.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2
Type V Short



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

Scaled Data Report

REPORT NUMBER: P1361678
CATALOG NUMBER: GSS-SB2D-840-U-5MQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1943.1	1943.1	1943.1	1943.1	1943.1	*1943.1*	1943.1	1943.1	1943.1	1943.1	1943.1
2.5°	1964.2	1955.8	1955.8	1951.6	1947.3	*1947.3*	1951.6	1947.3	1955.8	1951.6	1951.6
5°	1976.8	1968.4	1968.4	1972.6	1964.2	*1968.4*	1972.6	1964.2	1976.8	1968.4	1968.4
7.5°	1993.7	1989.5	1985.3	1993.7	1989.5	*1989.5*	1997.9	1989.5	1997.9	1985.3	1981.1
10°	2019.0	2006.4	2006.4	2010.6	2006.4	*2010.6*	2019.0	2010.6	2010.6	2002.1	2002.1
12.5°	2035.9	2031.6	2027.4	2031.6	2031.6	*2031.6*	2035.9	2027.4	2031.6	2027.4	2023.2
15°	2061.1	2056.9	2056.9	2056.9	2061.1	*2069.6*	2065.4	2052.7	2056.9	2048.5	2048.5
17.5°	2099.1	2090.7	2094.9	2099.1	2107.5	*2120.2*	2107.5	2090.7	2090.7	2082.2	2078.0
20°	2141.2	2137.0	2141.2	2149.7	2158.1	*2175.0*	2158.1	2141.2	2132.8	2124.4	2115.9
22.5°	2187.6	2183.4	2196.0	2204.5	2212.9	*2234.0*	2217.1	2200.2	2179.2	2170.7	2166.5
25°	2238.2	2234.0	2246.6	2271.9	2293.0	*2305.6*	2288.8	2259.3	2242.4	2225.5	2217.1
27.5°	2293.0	2293.0	2314.1	2339.3	2368.8	*2389.9*	2373.1	2335.1	2301.4	2284.5	2280.3
30°	2377.3	2377.3	2398.4	2432.1	2457.4	*2474.2*	2457.4	2427.9	2394.1	2377.3	2373.1
32.5°	2491.1	2491.1	2516.4	2541.7	2554.3	*2562.7*	2558.5	2545.9	2516.4	2491.1	2482.7
35°	2626.0	2630.2	2659.7	2680.8	2693.4	*2685.0*	2693.4	2685.0	2659.7	2638.6	2634.4
37.5°	2798.8	2798.8	2828.3	2849.4	2840.9	*2849.4*	2849.4	2853.6	2840.9	2811.4	2798.8
40°	2988.5	2992.7	3026.4	3039.0	3034.8	*3026.4*	3039.0	3051.7	3034.8	3005.3	2996.9
42.5°	3199.2	3207.6	3232.9	3258.2	3249.8	*3237.1*	3262.4	3270.9	3241.4	3216.1	3216.1
45°	3418.4	3418.4	3456.3	3502.7	3506.9	*3485.8*	3502.7	3506.9	3469.0	3435.2	3422.6
47.5°	3641.8	3650.2	3700.8	3751.4	3768.2	*3747.2*	3759.8	3764.0	3700.8	3667.1	3646.0
50°	3865.2	3877.8	3945.3	4025.4	4042.2	*4008.5*	4033.8	4016.9	3949.5	3877.8	3861.0
52.5°	4046.4	4075.9	4177.1	4286.7	4333.1	*4286.7*	4320.4	4290.9	4177.1	4084.4	4054.9
55°	4248.8	4269.8	4400.5	4543.8	4607.0	*4564.9*	4598.6	4548.0	4387.8	4274.0	4244.5
57.5°	4446.9	4455.3	4602.8	4805.1	4906.3	*4872.6*	4876.8	4779.8	4607.0	4459.5	4417.4
60°	4602.8	4628.1	4817.8	5053.8	5214.0	*5218.2*	5180.3	5032.7	4830.4	4661.8	4628.1
62.5°	4400.5	4455.3	4796.7	5298.3	5559.6	*5656.6*	5542.8	5315.2	4876.8	4573.3	4522.7
65°	4265.6	4299.3	4556.4	5167.6	5972.7	*6213.0*	5985.3	5281.4	4716.6	4476.4	4430.0
67.5°	4354.1	4396.3	4682.9	5155.0	6069.6	*7026.5*	6250.9	5391.0	4813.6	4438.4	4392.1
69°	*4177.1*	*4240.3*	*4623.9*	*5264.6*	*6175.0*	*7359.4*	*6474.3*	*5348.9*	*4476.4*	*4016.9*	*3970.6*
70°	3974.8	4029.6	4442.6	5205.6	6326.8	*7182.4*	6562.8	5091.8	4147.6	3709.2	3667.1
72.5°	3098.0	3157.1	3641.8	4598.6	6002.2	*6242.5*	5728.2	4253.0	3439.5	3047.5	3001.1
75°	1024.3	1129.6	1589.1	2870.4	3861.0	*4733.5*	3700.8	2857.8	1846.2	1395.2	1256.1
77.5°	219.2	236.0	413.1	737.6	1601.7	*3030.6*	1799.8	703.9	379.4	265.5	240.3
80°	118.0	126.5	172.8	215.0	396.2	*1083.3*	345.6	189.7	181.2	130.7	122.2
82.5°	75.9	75.9	96.9	118.0	151.7	*202.3*	134.9	113.8	101.2	71.7	71.7
85°	42.2	42.2	46.4	59.0	59.0	*63.2*	59.0	54.8	46.4	42.2	37.9
87.5°	25.3	29.5	29.5	25.3	25.3	*25.3*	25.3	25.3	25.3	29.5	25.3
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: SP1-2407-184-11

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-840-U-5WQ

Data in this report applies to families of products including GSS-SB1A-840-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

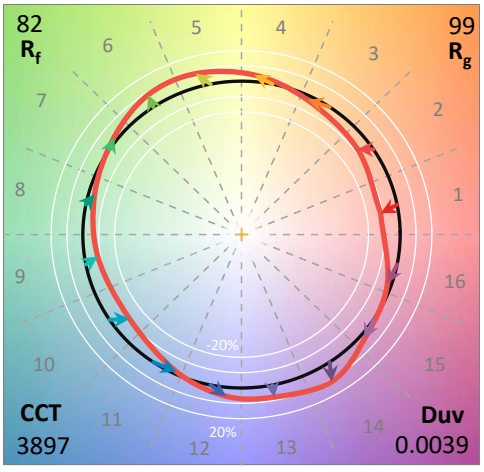
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-184-11
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-840-U-5WQ**
Description:	GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 4000K CCT 26 LEDS

Spectral Parameters

CCT (K):	3897
CIE u':	0.2249
CIE v':	0.5084
Duv:	0.0039
CIE x:	0.3882
CIE y:	0.3900
CIE z:	0.2218
Peak Wavelength (nm):	445
Dominant Wavelength (nm):	577
Purity:	33.54925
Rf:	81.8
Rg:	98.6

CRI (Ra):	80.2
R1:	78.9
R2:	83.5
R3:	88.3
R4:	82.1
R5:	78.8
R6:	78.4
R7:	85.8
R8:	65.8
R9:	6.7
R10:	61.9
R11:	81.9
R12:	58.9
R13:	79.2
R14:	93.2
R15:	71.9



Test Conditions

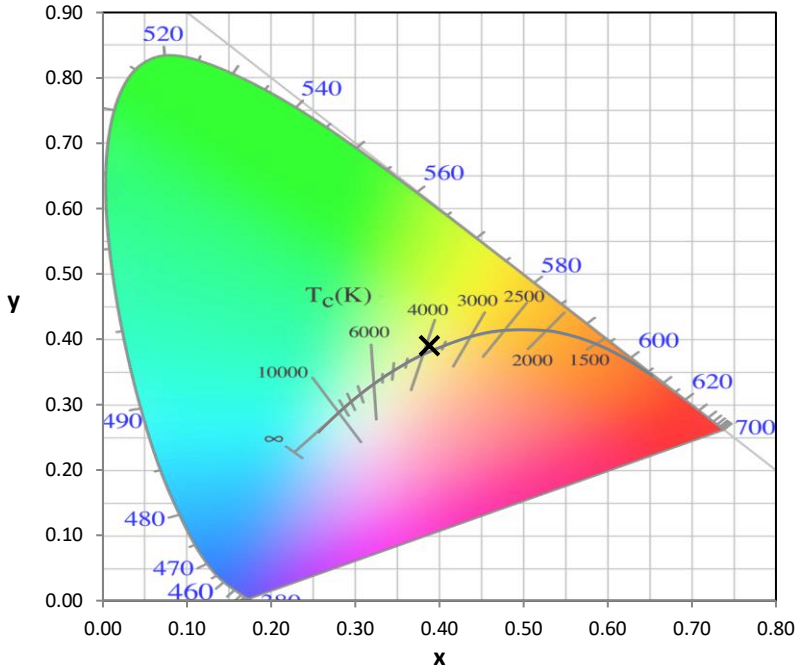
Stabilization Time:	24M
Operation Time:	1H 24M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-184-11

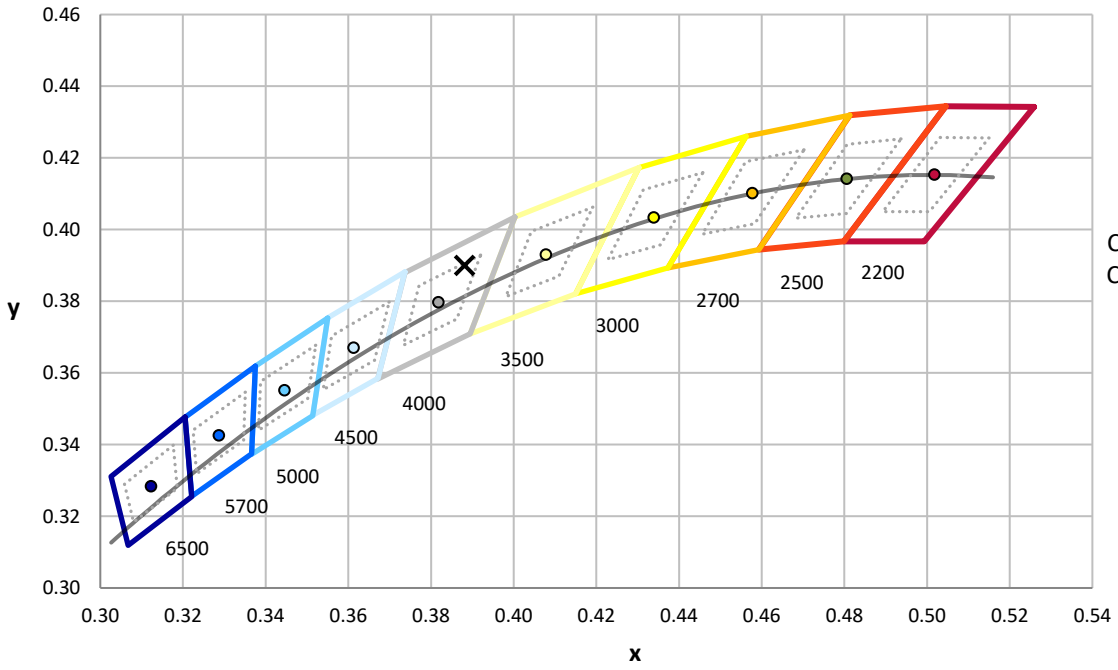
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-11

CIE 1931 Chromaticity Diagram



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

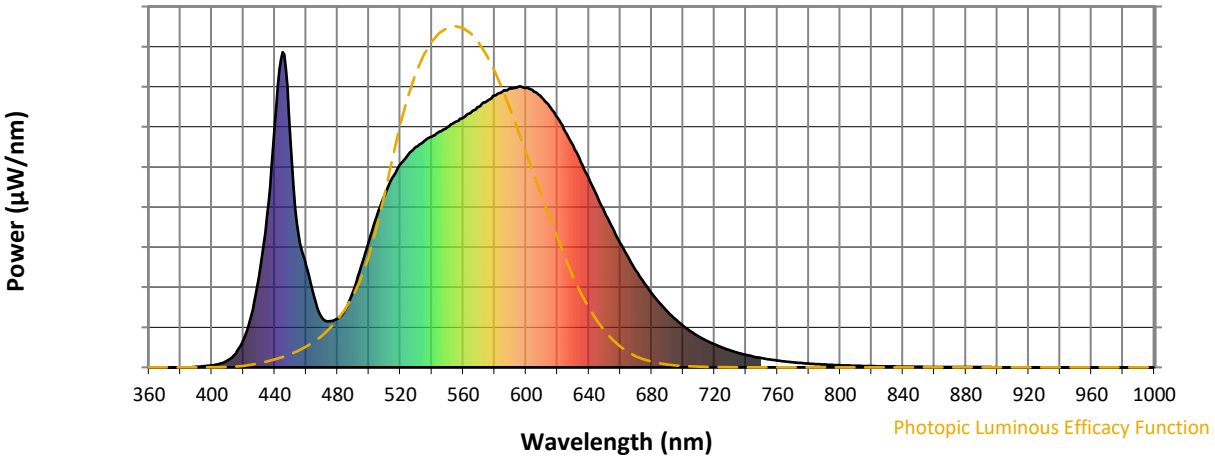


CCT = 3897K
CIE x = 0.3882
CIE y = 0.3900
Duv = 0.0039

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-11

Photopic Flux vs. Wavelength

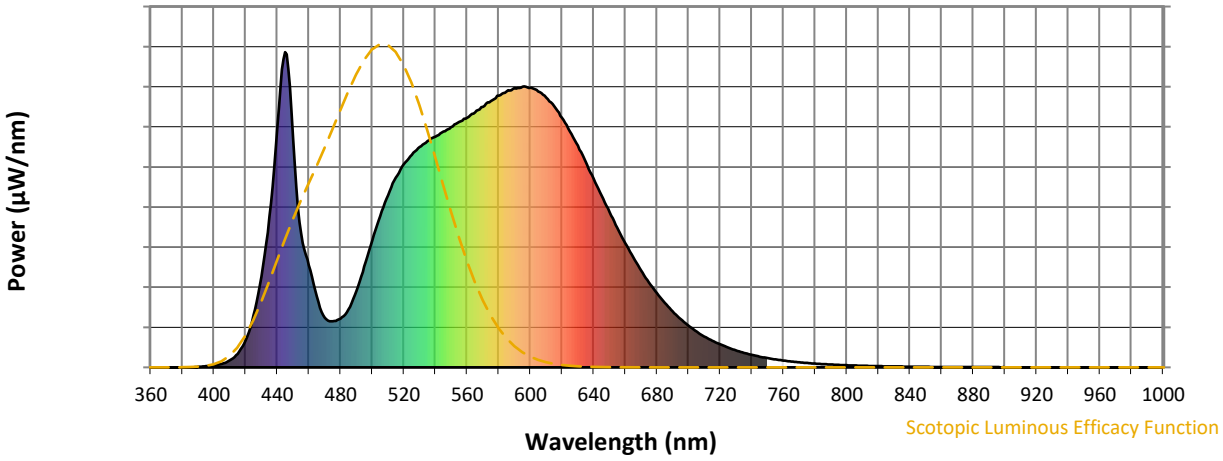


Photopic Lumens: NR

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	242	NR	620	792	NR	750	29	NR	880	1	NR
365	0	NR	495	320	NR	625	748	NR	755	25	NR	885	1	NR
370	0	NR	500	401	NR	630	703	NR	760	22	NR	890	1	NR
375	0	NR	505	479	NR	635	651	NR	765	19	NR	895	1	NR
380	0	NR	510	546	NR	640	599	NR	770	16	NR	900	1	NR
385	0	NR	515	602	NR	645	545	NR	775	14	NR	905	0	NR
390	2	NR	520	645	NR	650	493	NR	780	12	NR	910	0	NR
395	4	NR	525	674	NR	655	443	NR	785	10	NR	915	0	NR
400	6	NR	530	699	NR	660	394	NR	790	9	NR	920	0	NR
405	11	NR	535	718	NR	665	349	NR	795	8	NR	925	0	NR
410	22	NR	540	732	NR	670	307	NR	800	7	NR	930	0	NR
415	43	NR	545	749	NR	675	269	NR	805	6	NR	935	0	NR
420	86	NR	550	762	NR	680	235	NR	810	5	NR	940	0	NR
425	164	NR	555	778	NR	685	204	NR	815	5	NR	945	0	NR
430	288	NR	560	792	NR	690	178	NR	820	4	NR	950	0	NR
435	478	NR	565	809	NR	695	153	NR	825	3	NR	955	0	NR
440	766	NR	570	827	NR	700	132	NR	830	3	NR	960	0	NR
445	1000	NR	575	845	NR	705	114	NR	835	3	NR	965	0	NR
450	726	NR	580	862	NR	710	98	NR	840	2	NR	970	0	NR
455	425	NR	585	875	NR	715	84	NR	845	2	NR	975	0	NR
460	324	NR	590	887	NR	720	73	NR	850	2	NR	980	0	NR
465	225	NR	595	890	NR	725	63	NR	855	1	NR	985	0	NR
470	157	NR	600	887	NR	730	54	NR	860	1	NR	990	0	NR
475	147	NR	605	875	NR	735	46	NR	865	1	NR	995	0	NR
480	154	NR	610	856	NR	740	40	NR	870	1	NR	1000	0	NR
485	184	NR	615	828	NR	745	34	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-11

Scotopic Flux vs. Wavelength

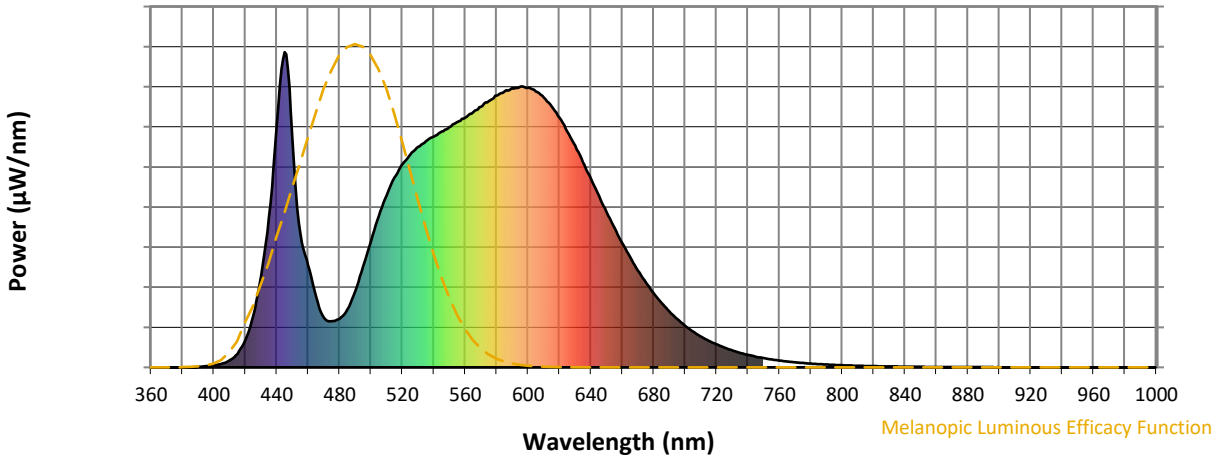


Scotopic Lumens: NR **S/P: 1.57**

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	242	NR	620	792	NR	750	29	NR	880	1	NR
365	0	NR	495	320	NR	625	748	NR	755	25	NR	885	1	NR
370	0	NR	500	401	NR	630	703	NR	760	22	NR	890	1	NR
375	0	NR	505	479	NR	635	651	NR	765	19	NR	895	1	NR
380	0	NR	510	546	NR	640	599	NR	770	16	NR	900	1	NR
385	0	NR	515	602	NR	645	545	NR	775	14	NR	905	0	NR
390	2	NR	520	645	NR	650	493	NR	780	12	NR	910	0	NR
395	4	NR	525	674	NR	655	443	NR	785	10	NR	915	0	NR
400	6	NR	530	699	NR	660	394	NR	790	9	NR	920	0	NR
405	11	NR	535	718	NR	665	349	NR	795	8	NR	925	0	NR
410	22	NR	540	732	NR	670	307	NR	800	7	NR	930	0	NR
415	43	NR	545	749	NR	675	269	NR	805	6	NR	935	0	NR
420	86	NR	550	762	NR	680	235	NR	810	5	NR	940	0	NR
425	164	NR	555	778	NR	685	204	NR	815	5	NR	945	0	NR
430	288	NR	560	792	NR	690	178	NR	820	4	NR	950	0	NR
435	478	NR	565	809	NR	695	153	NR	825	3	NR	955	0	NR
440	766	NR	570	827	NR	700	132	NR	830	3	NR	960	0	NR
445	1000	NR	575	845	NR	705	114	NR	835	3	NR	965	0	NR
450	726	NR	580	862	NR	710	98	NR	840	2	NR	970	0	NR
455	425	NR	585	875	NR	715	84	NR	845	2	NR	975	0	NR
460	324	NR	590	887	NR	720	73	NR	850	2	NR	980	0	NR
465	225	NR	595	890	NR	725	63	NR	855	1	NR	985	0	NR
470	157	NR	600	887	NR	730	54	NR	860	1	NR	990	0	NR
475	147	NR	605	875	NR	735	46	NR	865	1	NR	995	0	NR
480	154	NR	610	856	NR	740	40	NR	870	1	NR	1000	0	NR
485	184	NR	615	828	NR	745	34	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-11

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.06**

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	242	NR	620	792	NR	750	29	NR	880	1	NR
365	0	NR	495	320	NR	625	748	NR	755	25	NR	885	1	NR
370	0	NR	500	401	NR	630	703	NR	760	22	NR	890	1	NR
375	0	NR	505	479	NR	635	651	NR	765	19	NR	895	1	NR
380	0	NR	510	546	NR	640	599	NR	770	16	NR	900	1	NR
385	0	NR	515	602	NR	645	545	NR	775	14	NR	905	0	NR
390	2	NR	520	645	NR	650	493	NR	780	12	NR	910	0	NR
395	4	NR	525	674	NR	655	443	NR	785	10	NR	915	0	NR
400	6	NR	530	699	NR	660	394	NR	790	9	NR	920	0	NR
405	11	NR	535	718	NR	665	349	NR	795	8	NR	925	0	NR
410	22	NR	540	732	NR	670	307	NR	800	7	NR	930	0	NR
415	43	NR	545	749	NR	675	269	NR	805	6	NR	935	0	NR
420	86	NR	550	762	NR	680	235	NR	810	5	NR	940	0	NR
425	164	NR	555	778	NR	685	204	NR	815	5	NR	945	0	NR
430	288	NR	560	792	NR	690	178	NR	820	4	NR	950	0	NR
435	478	NR	565	809	NR	695	153	NR	825	3	NR	955	0	NR
440	766	NR	570	827	NR	700	132	NR	830	3	NR	960	0	NR
445	1000	NR	575	845	NR	705	114	NR	835	3	NR	965	0	NR
450	726	NR	580	862	NR	710	98	NR	840	2	NR	970	0	NR
455	425	NR	585	875	NR	715	84	NR	845	2	NR	975	0	NR
460	324	NR	590	887	NR	720	73	NR	850	2	NR	980	0	NR
465	225	NR	595	890	NR	725	63	NR	855	1	NR	985	0	NR
470	157	NR	600	887	NR	730	54	NR	860	1	NR	990	0	NR
475	147	NR	605	875	NR	735	46	NR	865	1	NR	995	0	NR
480	154	NR	610	856	NR	740	40	NR	870	1	NR	1000	0	NR
485	184	NR	615	828	NR	745	34	NR	875	1	NR			

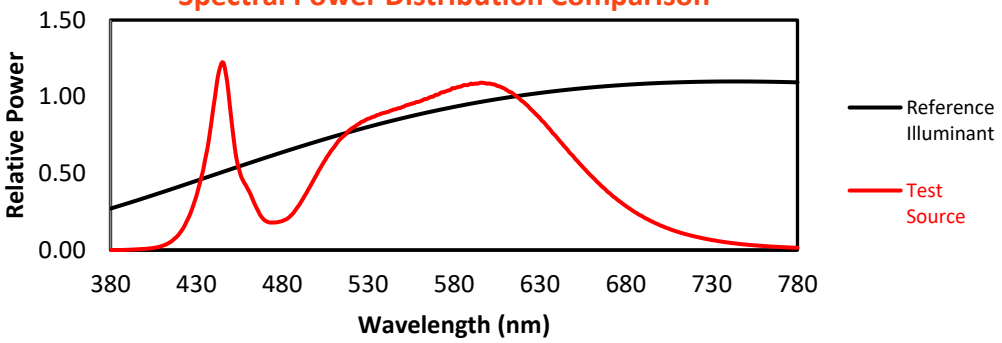
REPORT NUMBER: SP1-2407-184-11

TM-30-18

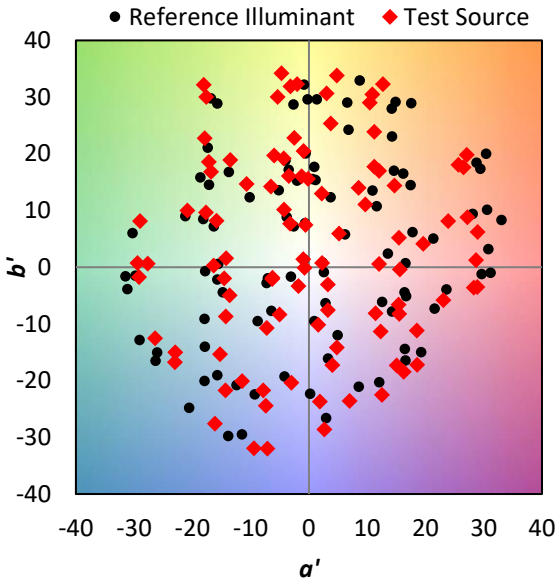
Summary

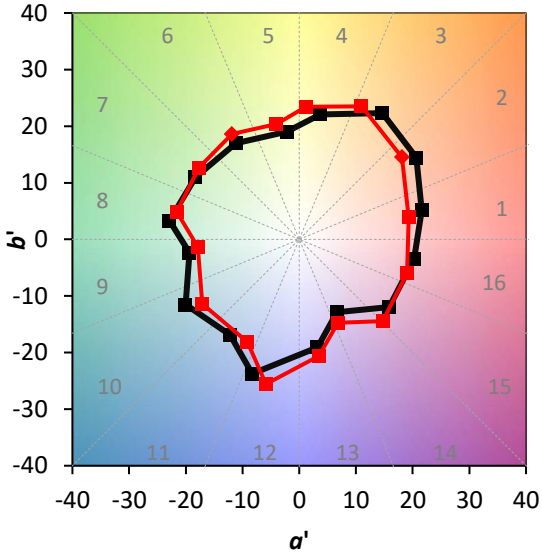
R_f = 81.8
R_g = 98.6
CIE R_a = 80.2
R_9 = 6.7

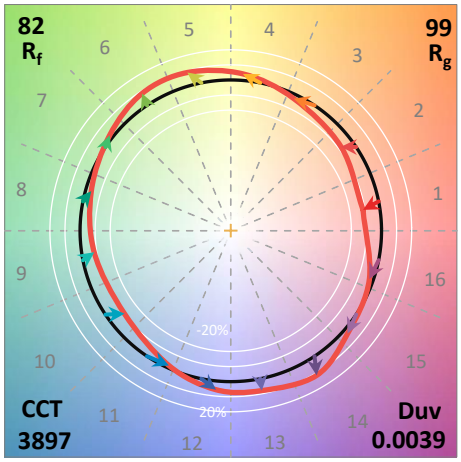
Spectral Power Distribution Comparison

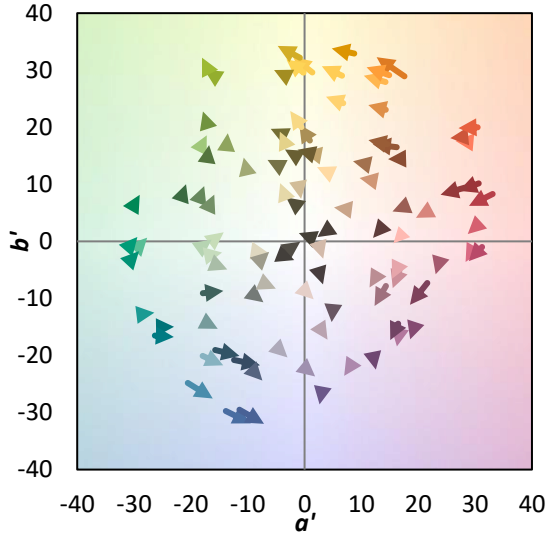


Color Vector Graphics







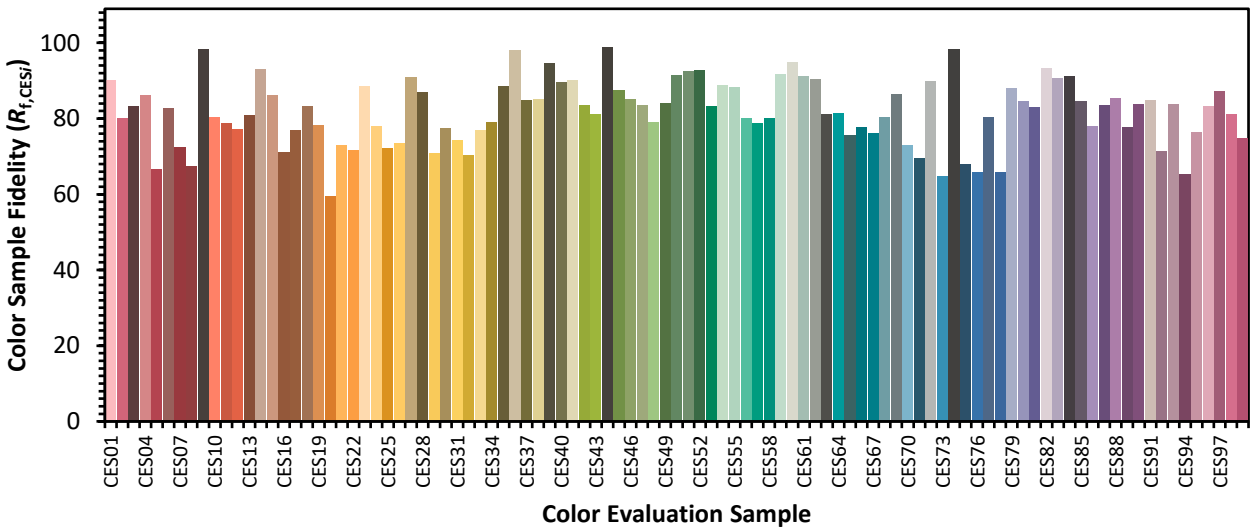


REPORT NUMBER: SP1-2407-184-11

TM-30-18

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

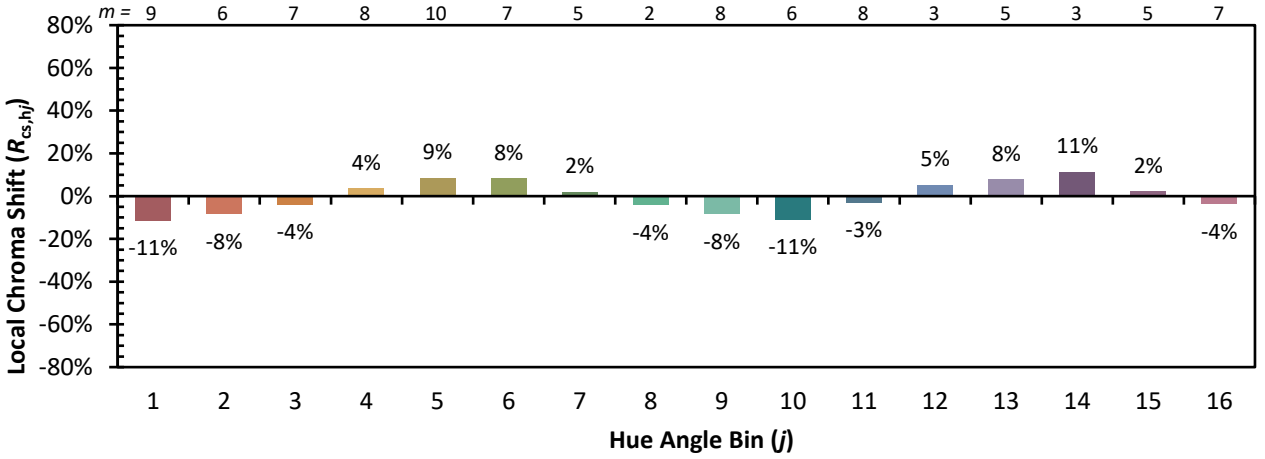
CES01 = 85	CES26 = 73	CES51 = 93	CES76 = 66
CES02 = 61	CES27 = 91	CES52 = 93	CES77 = 80
CES03 = 31	CES28 = 87	CES53 = 83	CES78 = 66
CES04 = 69	CES29 = 71	CES54 = 89	CES79 = 88
CES05 = 48	CES30 = 77	CES55 = 88	CES80 = 85
CES06 = 50	CES31 = 74	CES56 = 80	CES81 = 83
CES07 = 41	CES32 = 70	CES57 = 79	CES82 = 93
CES08 = 40	CES33 = 77	CES58 = 80	CES83 = 91
CES09 = 29	CES34 = 79	CES59 = 92	CES84 = 91
CES10 = 74	CES35 = 88	CES60 = 95	CES85 = 84
CES11 = 57	CES36 = 98	CES61 = 91	CES86 = 78
CES12 = 63	CES37 = 85	CES62 = 90	CES87 = 84
CES13 = 42	CES38 = 85	CES63 = 81	CES88 = 85
CES14 = 74	CES39 = 95	CES64 = 81	CES89 = 78
CES15 = 71	CES40 = 90	CES65 = 76	CES90 = 84
CES16 = 47	CES41 = 90	CES66 = 78	CES91 = 85
CES17 = 49	CES42 = 84	CES67 = 76	CES92 = 71
CES18 = 56	CES43 = 81	CES68 = 80	CES93 = 84
CES19 = 71	CES44 = 99	CES69 = 86	CES94 = 65
CES20 = 65	CES45 = 87	CES70 = 73	CES95 = 77
CES21 = 86	CES46 = 85	CES71 = 70	CES96 = 83
CES22 = 78	CES47 = 84	CES72 = 90	CES97 = 87
CES23 = 91	CES48 = 79	CES73 = 65	CES98 = 81
CES24 = 90	CES49 = 84	CES74 = 98	CES99 = 75
CES25 = 71	CES50 = 91	CES75 = 68	

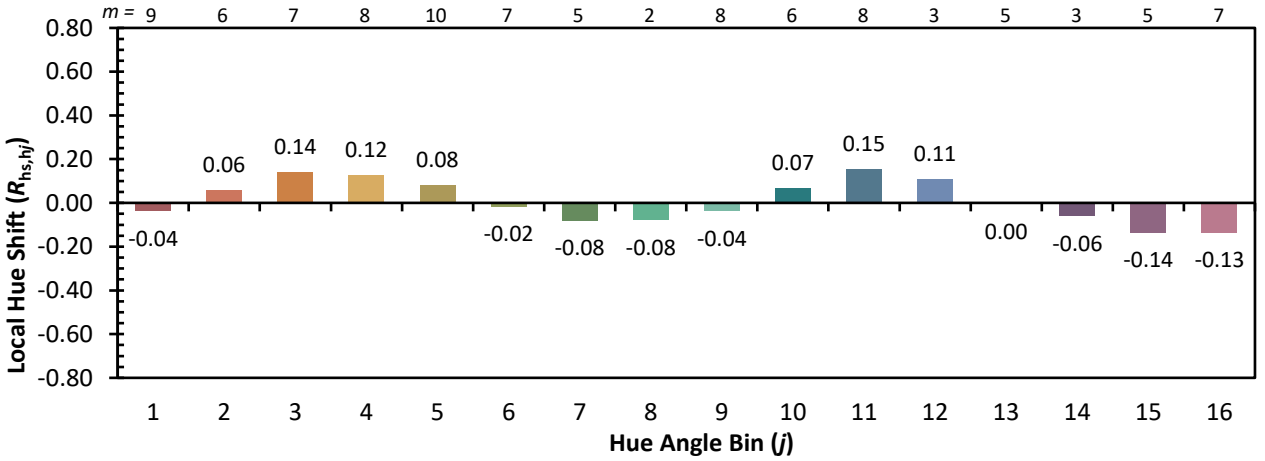


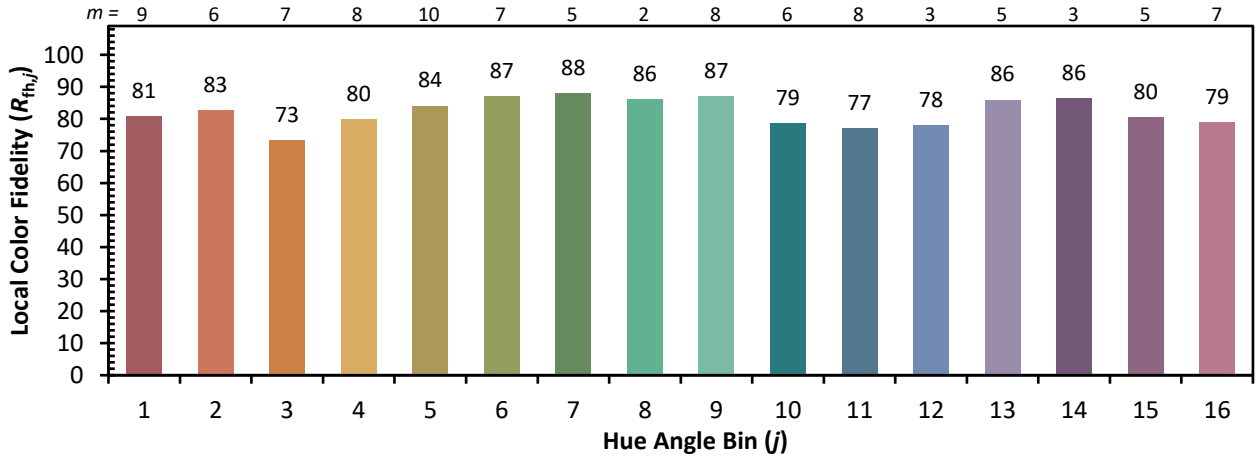
REPORT NUMBER: SP1-2407-184-11

TM-30-18

Color Rendition by Hue-Angle Bin



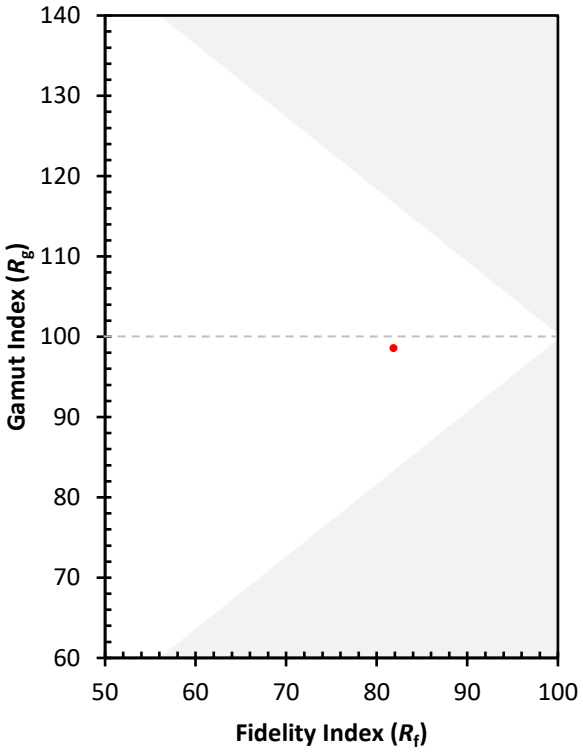


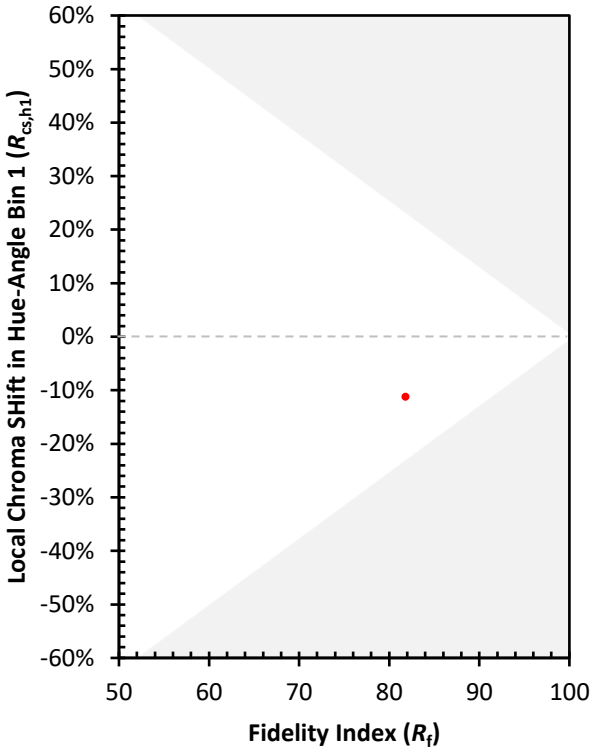


REPORT NUMBER: SP1-2407-184-11

TM-30-18

Measure Comparisons





(END OF REPORT)