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: P438621

Luminaire Tested: **ISW-SA1D-830-U-SL4**

Issue Date: 12/10/2020

Report Generated By 670245982

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:	P438621
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-18)
Test Lab:	INNOVATION CENTER
Issue Date:	12/10/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	ISW-SA1D-830-U-SL4
Description:	IMPACT ELITE LED WEDGE LUMINAIRE
	(1) 80 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4381 lumens
Efficiency:	N/A
Efficacy:	96.9 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G1

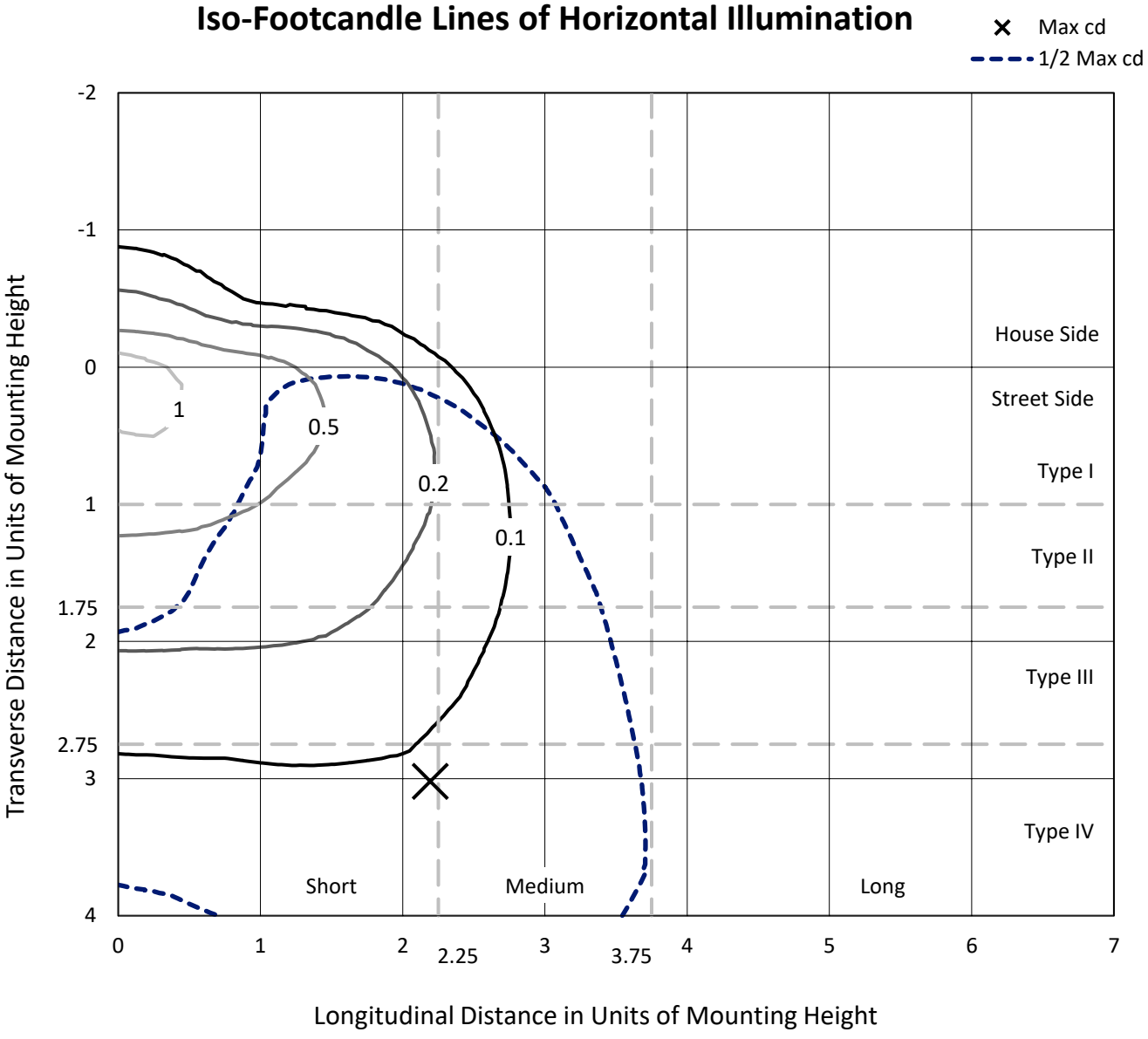
Input Watts (W):	45.2
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P438621
CATALOG NUMBER: ISW-SA1D-830-U-SL4

Iso-Footcandle Lines of Horizontal Illumination



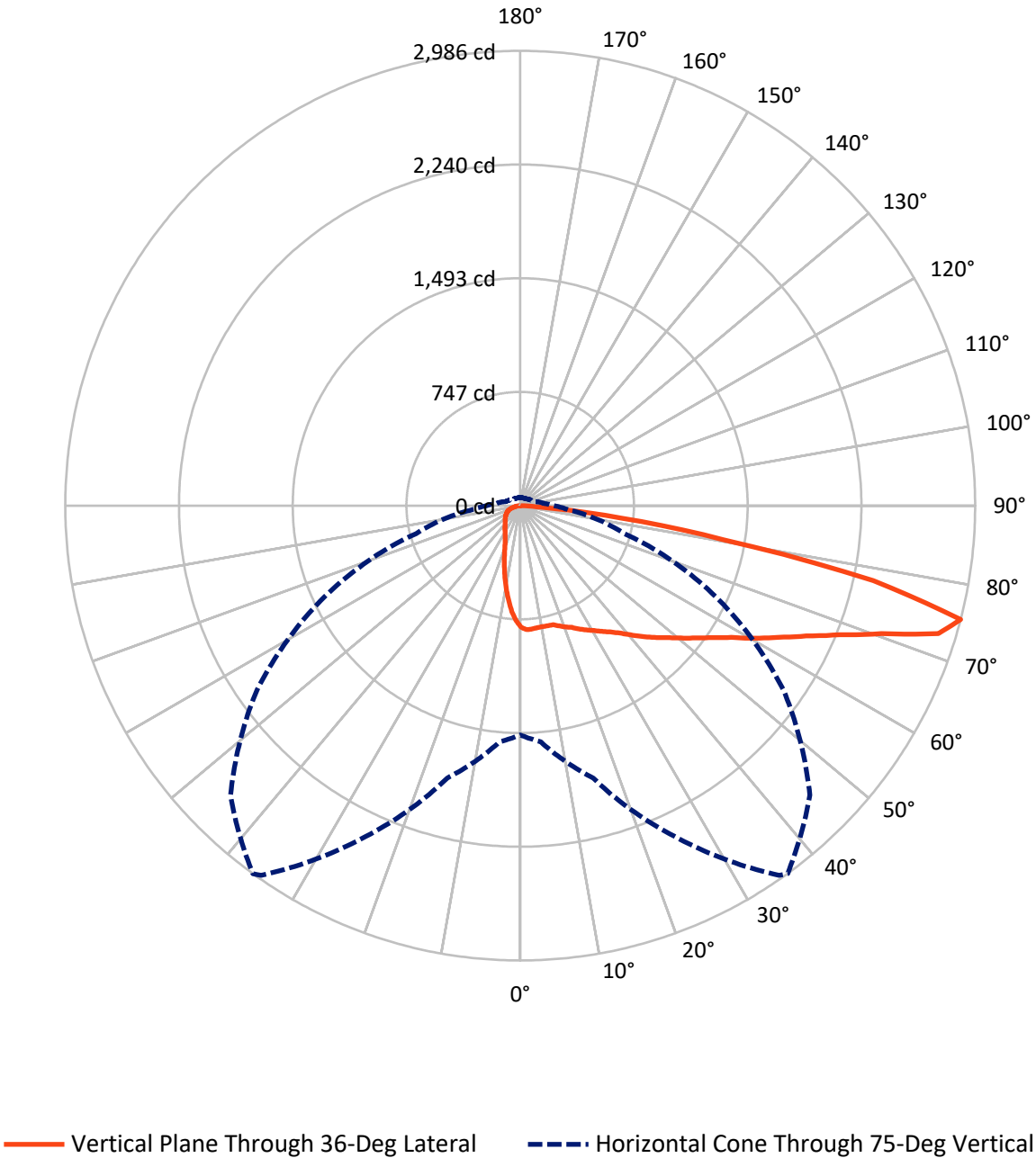
Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
Type IV - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P438621
CATALOG NUMBER: ISW-SA1D-830-U-SL4

Luminous Intensity Polar Plot



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

Scaled Data Report

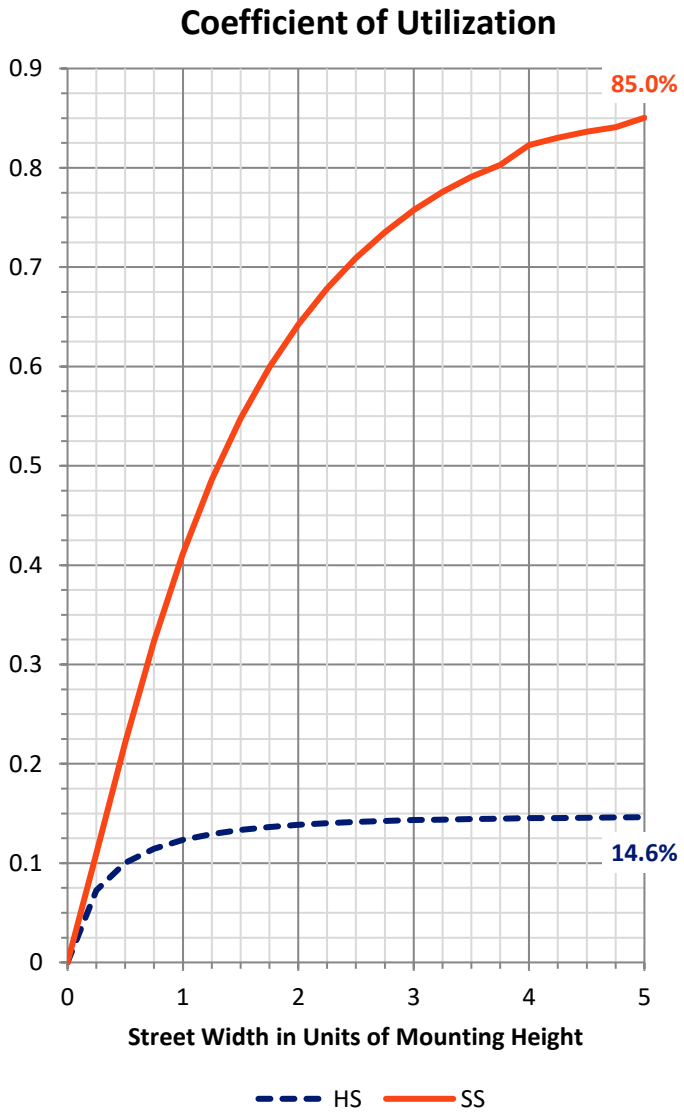
REPORT NUMBER: P438621
CATALOG NUMBER: ISW-SA1D-830-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	646.5	0.0	646.5
	% Fixture	14.8	0.0	14.8
Street Side	Lumens	3734.5	0.0	3734.5
	% Fixture	85.2	0.0	85.2
Total	Lumens	4381.0	0.0	4381.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.5	1.6
10°-20°	182.3	4.2
20°-30°	281.9	6.4
30°-40°	408.3	9.3
40°-50°	590.5	13.5
50°-60°	819.1	18.7
60°-70°	1034.2	23.6
70°-80°	888.4	20.3
80°-90°	105.8	2.4
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°	4381.0	100.0
0°-180°	4381.0	100.0



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

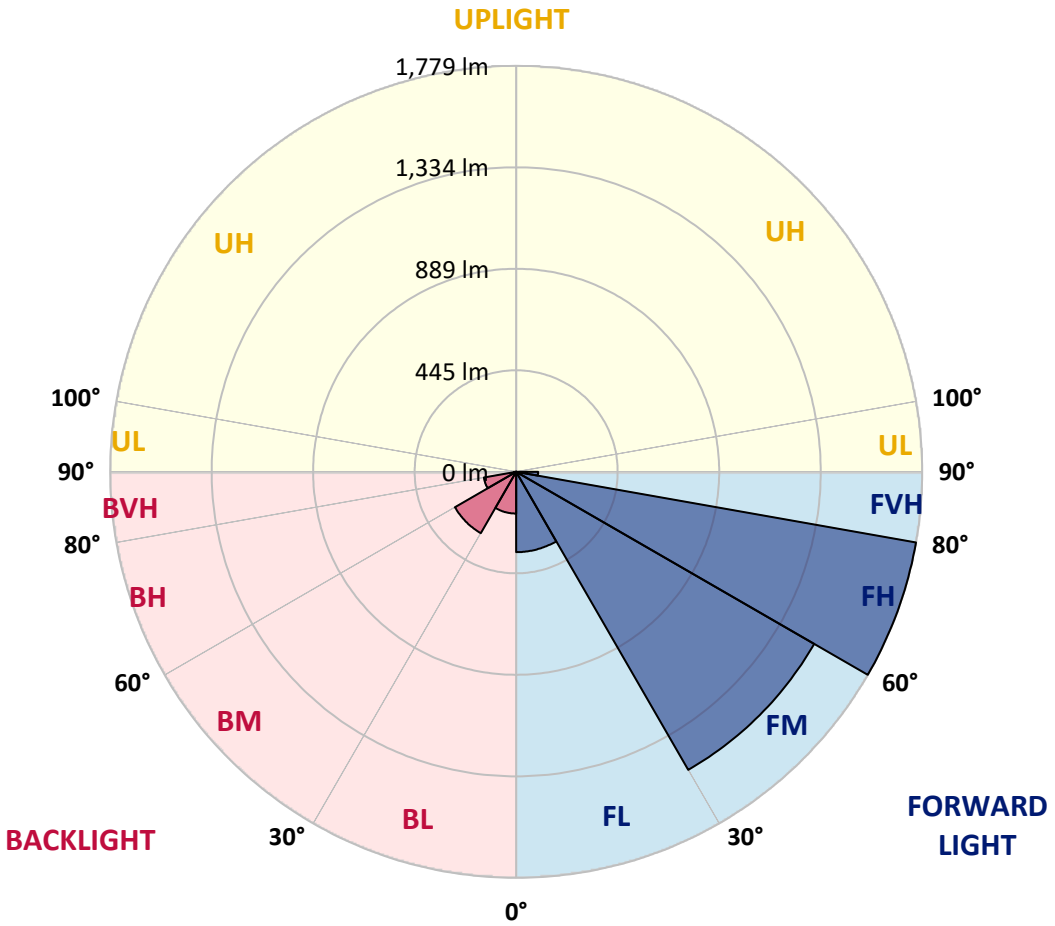
Scaled Data Report

REPORT NUMBER: P438621
CATALOG NUMBER: ISW-SA1D-830-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	351.8	8.0			
FM	(30°-60°)	1507.9	34.4			
FH	(60°-80°)	1778.7	40.6			G1/1800
FVH	(80°-90°)	96.1	2.2			G1/100
BL	(0°-30°)	182.8	4.2	B1/500		
BM	(30°-60°)	310.0	7.1	B1/1000		
BH	(60°-80°)	143.9	3.3	B1/500		G1/500
BVH	(80°-90°)	9.8	0.2			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
Type IV Short



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

Scaled Data Report

REPORT NUMBER: P438621
CATALOG NUMBER: ISW-SA1D-830-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	799.3	799.3	799.3	799.3	799.3	*799.3*	799.3	799.3	799.3	799.3	799.3
2.5°	822.2	822.2	822.2	820.5	817.3	*815.6*	812.4	809.1	807.5	800.9	799.3
5°	822.2	823.8	822.2	820.5	817.3	*814.0*	810.7	804.2	799.3	791.1	782.9
7.5°	814.0	815.6	815.6	814.0	810.7	*809.1*	805.8	797.7	791.1	779.7	766.6
10°	800.9	804.2	804.2	805.8	807.5	*807.5*	804.2	797.7	787.8	774.8	753.5
12.5°	784.6	792.8	797.7	802.6	809.1	*809.1*	810.7	800.9	792.8	774.8	753.5
15°	779.7	784.6	794.4	809.1	815.6	*810.7*	817.3	812.4	802.6	784.6	758.4
17.5°	778.0	782.9	799.3	817.3	827.1	*830.3*	830.3	823.8	812.4	794.4	761.7
20°	784.6	791.1	812.4	835.3	850.0	*850.0*	848.3	840.2	825.4	804.2	768.2
22.5°	805.8	807.5	832.0	859.8	871.2	*867.9*	871.2	856.5	840.2	818.9	776.4
25°	833.6	836.9	856.5	889.2	895.7	*897.4*	892.5	876.1	858.1	836.9	786.2
27.5°	871.2	876.1	890.8	921.9	926.8	*923.5*	917.0	897.4	879.4	859.8	805.8
30°	915.3	918.6	936.6	949.7	954.6	*951.3*	946.4	925.2	910.4	892.5	835.3
32.5°	957.8	959.5	979.1	992.2	984.0	*984.0*	977.5	956.2	944.8	941.5	872.8
35°	1002.0	1005.2	1023.2	1029.8	1016.7	*1018.3*	1016.7	998.7	1002.0	1008.5	930.1
37.5°	1042.8	1047.7	1069.0	1070.6	1065.7	*1060.8*	1065.7	1055.9	1062.5	1088.6	997.1
40°	1078.8	1085.3	1111.5	1116.4	1114.8	*1114.8*	1118.0	1116.4	1140.9	1183.4	1078.8
42.5°	1108.2	1116.4	1147.4	1160.5	1170.3	*1175.2*	1186.7	1189.9	1225.9	1294.6	1173.6
45°	1137.6	1145.8	1188.3	1209.6	1232.4	*1234.1*	1257.0	1268.4	1335.4	1397.5	1276.6
47.5°	1172.0	1181.8	1221.0	1263.5	1289.7	*1294.6*	1337.1	1359.9	1441.7	1521.8	1373.0
50°	1219.4	1222.6	1253.7	1325.6	1358.3	*1366.5*	1413.9	1461.3	1551.2	1631.3	1458.0
52.5°	1278.2	1274.9	1289.7	1381.2	1431.9	*1443.3*	1520.1	1567.5	1675.4	1749.0	1525.0
55°	1327.2	1324.0	1345.2	1444.9	1525.0	*1528.3*	1619.8	1665.6	1789.8	1835.6	1582.2
57.5°	1384.5	1377.9	1399.2	1521.8	1631.3	*1632.9*	1739.2	1791.5	1892.8	1912.4	1619.8
60°	1431.9	1431.9	1459.6	1596.9	1749.0	*1766.9*	1863.4	1904.2	1992.5	1968.0	1637.8
62.5°	1476.0	1484.2	1523.4	1696.7	1887.9	*1902.6*	2000.7	2017.0	2095.5	2010.5	1618.2
65°	1528.3	1541.4	1616.6	1816.0	2053.0	*2062.8*	2144.5	2167.4	2198.5	2008.9	1533.2
67.5°	1583.9	1605.1	1704.8	1950.0	2234.4	*2260.6*	2348.8	2326.0	2267.1	1945.1	1355.0
70°	1659.1	1685.2	1827.4	2128.2	2482.9	*2515.6*	2631.6	2491.0	2231.2	1717.9	1098.4
72.5°	1716.3	1750.6	1945.1	2358.6	2819.6	*2870.3*	2842.5	2494.3	2000.7	1369.7	735.5
75°	*1505.4*	*1557.7*	*1851.9*	*2396.2*	*2963.4*	*2986.3*	*2688.8*	*2108.6*	*1417.1*	*707.8*	*317.1*
77.5°	1100.0	1096.8	1353.4	1861.7	2428.9	*2368.5*	2039.9	1371.4	673.4	256.6	160.2
80°	552.5	531.2	732.3	992.2	1310.9	*1351.8*	1206.3	712.7	266.4	137.3	96.4
82.5°	204.3	209.2	268.1	405.4	658.7	*668.5*	487.1	302.4	145.5	71.9	50.7
85°	78.5	81.7	88.3	88.3	122.6	*135.7*	125.9	121.0	49.0	24.5	27.8
87.5°	0.0	0.0	0.0	0.0	1.6	*1.6*	1.6	1.6	1.6	1.6	1.6
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: P438621
CATALOG NUMBER: ISW-SA1D-830-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	799.3	799.3	799.3	799.3	799.3	799.3	799.3	799.3	799.3	799.3	799.3
2.5°	794.4	791.1	784.6	773.1	766.6	761.7	755.2	748.6	747.0	745.4	753.5
5°	774.8	769.9	753.5	738.8	722.5	709.4	696.3	684.9	678.3	676.7	680.0
7.5°	755.2	748.6	724.1	694.7	666.9	644.0	621.1	609.7	591.7	591.7	593.3
10°	743.7	732.3	697.9	653.8	617.9	577.0	549.2	521.4	510.0	501.8	498.5
12.5°	737.2	719.2	673.4	624.4	568.8	514.9	477.3	443.0	425.0	411.9	411.9
15°	738.8	719.2	657.1	593.3	521.4	456.0	408.6	371.0	348.2	335.1	331.8
17.5°	737.2	712.7	637.5	554.1	474.0	405.4	348.2	308.9	286.0	277.9	276.2
20°	740.4	707.8	614.6	518.2	428.3	354.7	295.9	259.9	246.8	240.3	238.6
22.5°	742.1	697.9	591.7	478.9	379.2	307.3	258.3	233.7	223.9	219.0	217.4
25°	745.4	696.3	565.6	443.0	338.4	271.3	233.7	212.5	207.6	204.3	204.3
27.5°	758.4	696.3	542.7	397.2	295.9	241.9	212.5	199.4	196.1	194.5	194.5
30°	774.8	699.6	521.4	359.6	263.2	219.0	197.8	188.0	186.3	184.7	184.7
32.5°	802.6	711.0	496.9	323.6	235.4	202.7	186.3	178.2	174.9	174.9	174.9
35°	840.2	730.6	472.4	290.9	212.5	186.3	174.9	166.7	165.1	166.7	166.7
37.5°	894.1	753.5	451.1	261.5	194.5	173.3	163.5	158.6	156.9	156.9	158.6
40°	961.1	794.4	429.9	238.6	181.4	161.8	155.3	150.4	148.7	150.4	150.4
42.5°	1034.7	838.5	411.9	215.8	168.4	153.6	145.5	142.2	140.6	142.2	143.8
45°	1116.4	884.3	397.2	199.4	158.6	145.5	138.9	137.3	135.7	135.7	137.3
47.5°	1185.0	933.3	385.8	188.0	150.4	138.9	134.0	130.8	129.1	127.5	129.1
50°	1248.8	970.9	382.5	181.4	145.5	132.4	127.5	124.2	122.6	121.0	122.6
52.5°	1296.2	990.5	382.5	176.5	140.6	127.5	122.6	119.3	117.7	114.4	116.1
55°	1328.9	1000.3	377.6	173.3	135.7	122.6	116.1	114.4	112.8	109.5	109.5
57.5°	1348.5	998.7	359.6	171.6	134.0	116.1	111.1	109.5	107.9	104.6	104.6
60°	1345.2	967.6	326.9	165.1	130.8	111.1	104.6	104.6	104.6	101.3	101.3
62.5°	1297.8	881.0	273.0	155.3	127.5	106.2	98.1	101.3	103.0	99.7	99.7
65°	1170.3	748.6	225.6	142.2	119.3	101.3	93.2	98.1	101.3	99.7	98.1
67.5°	985.6	593.3	186.3	129.1	111.1	94.8	86.6	93.2	94.8	94.8	94.8
70°	761.7	426.6	153.6	112.8	99.7	85.0	78.5	81.7	83.4	83.4	85.0
72.5°	451.1	255.0	125.9	96.4	85.0	73.6	68.7	70.3	68.7	68.7	68.7
75°	*222.3*	*158.6*	*101.3*	*81.7*	*71.9*	*62.1*	*57.2*	*53.9*	*53.9*	*53.9*	*52.3*
77.5°	135.7	117.7	83.4	65.4	57.2	47.4	44.1	40.9	40.9	40.9	40.9
80°	96.4	91.5	63.7	49.0	39.2	34.3	32.7	31.1	31.1	29.4	29.4
82.5°	60.5	68.7	47.4	32.7	26.2	24.5	22.9	21.2	19.6	18.0	18.0
85°	34.3	44.1	27.8	18.0	14.7	11.4	9.8	9.8	8.2	8.2	6.5
87.5°	1.6	3.3	3.3	3.3	3.3	1.6	1.6	1.6	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: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

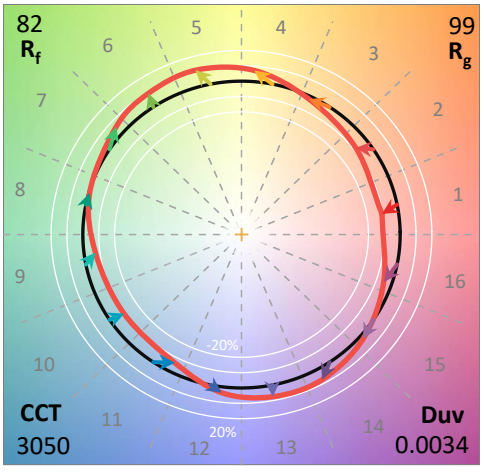
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2408-195-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	08/07/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**GALN-SB1A-830-U-5WQ**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K):	3050	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

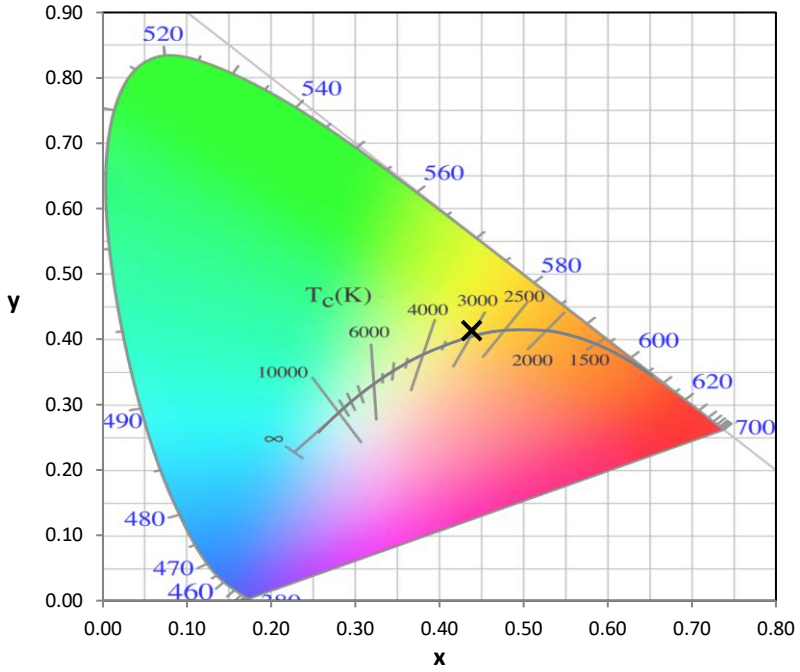
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

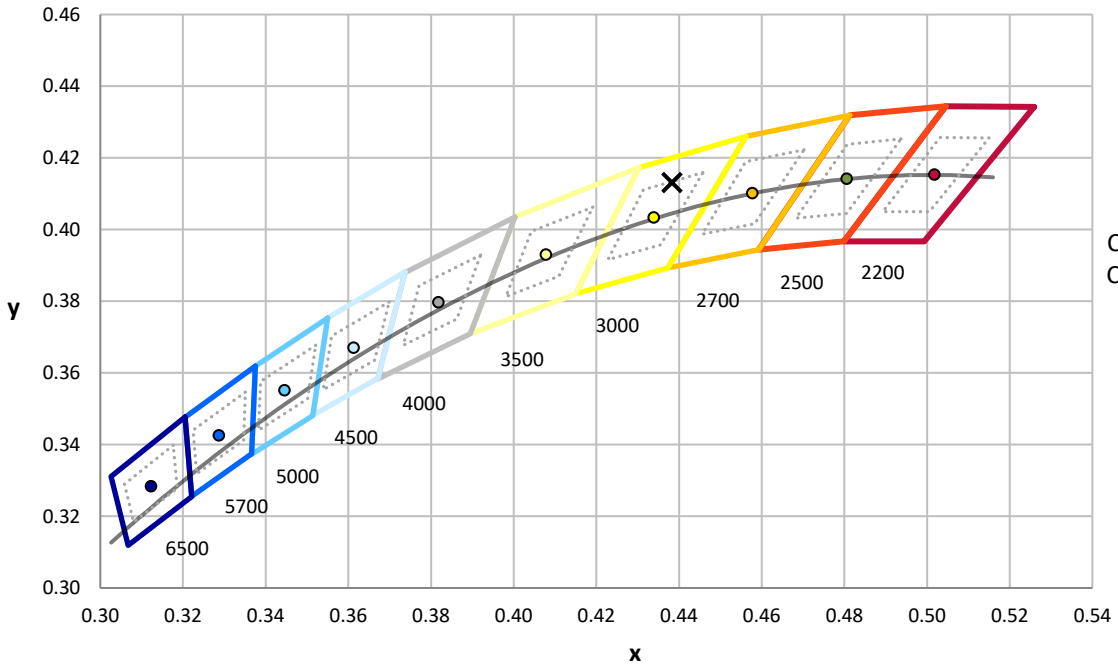
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



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

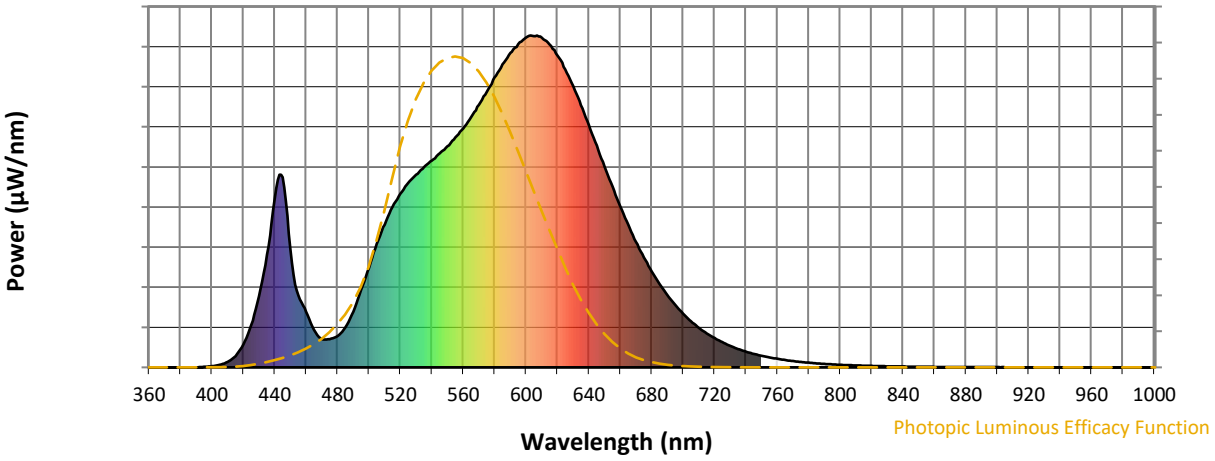


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

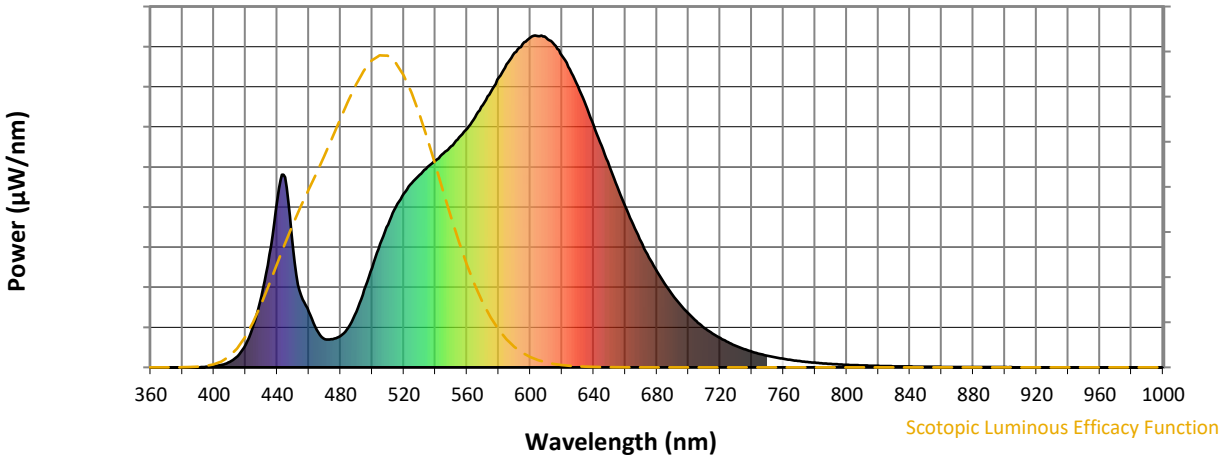


Photopic Lumens: NR

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength

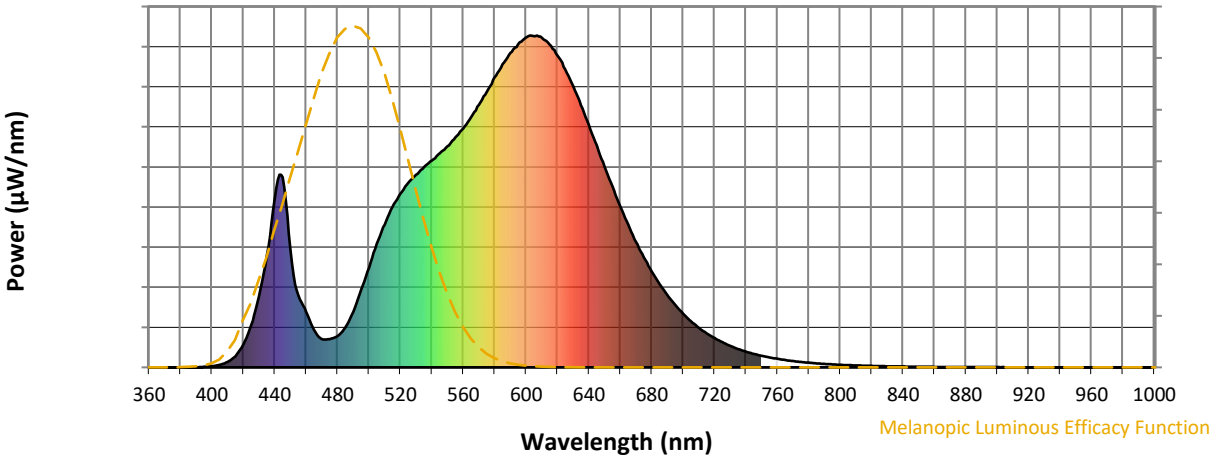


Scotopic Lumens: NR **S/P: 1.27**

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

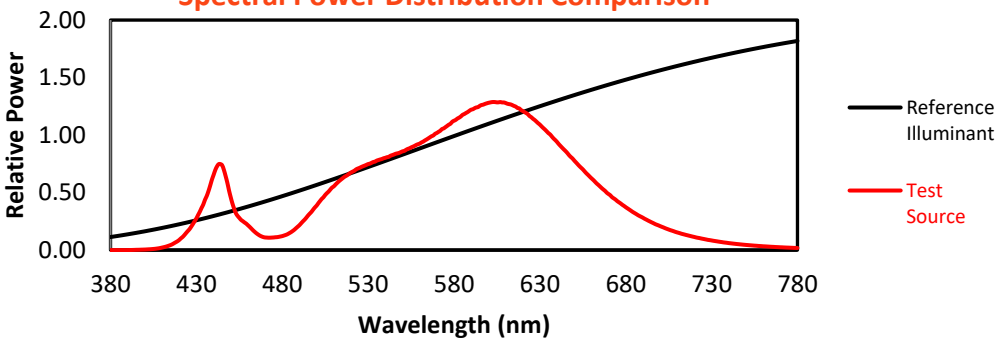
REPORT NUMBER: SP1-2408-195-9

TM-30-18

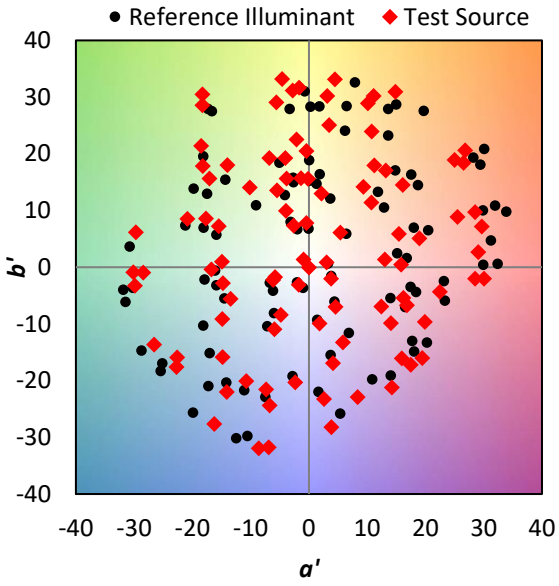
Summary

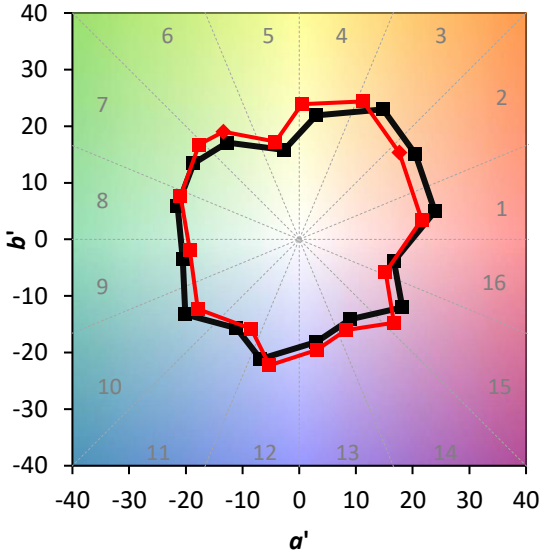
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

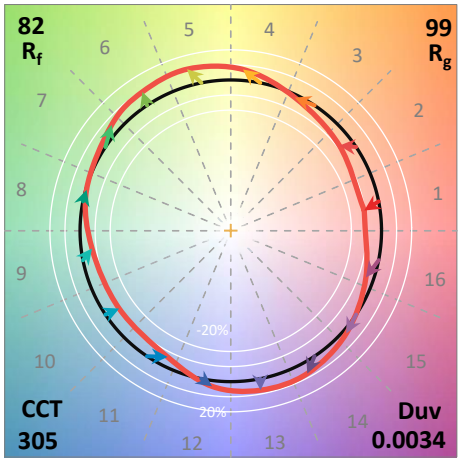
Spectral Power Distribution Comparison

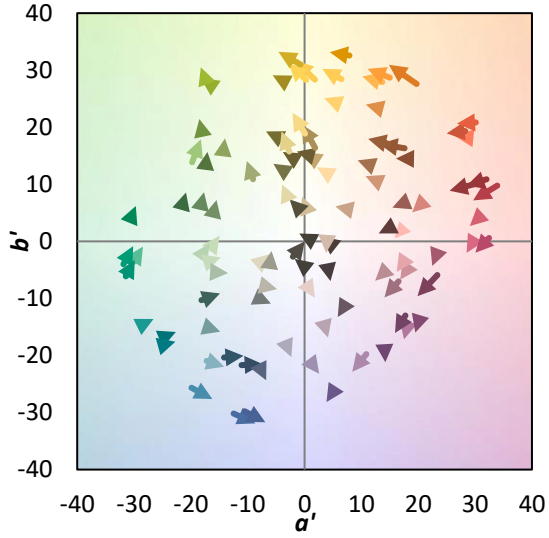


Color Vector Graphics







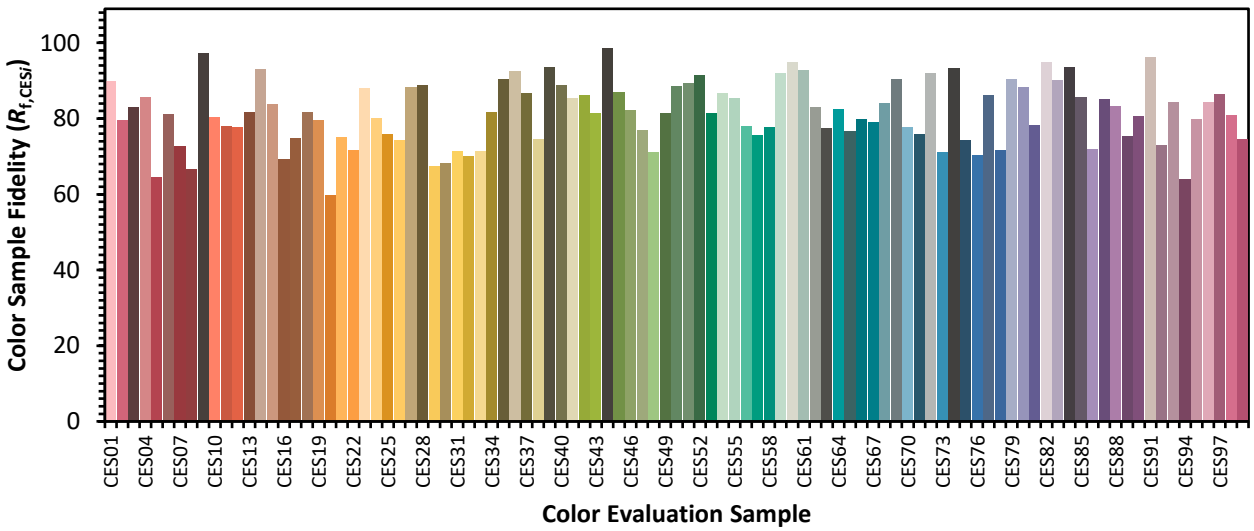


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

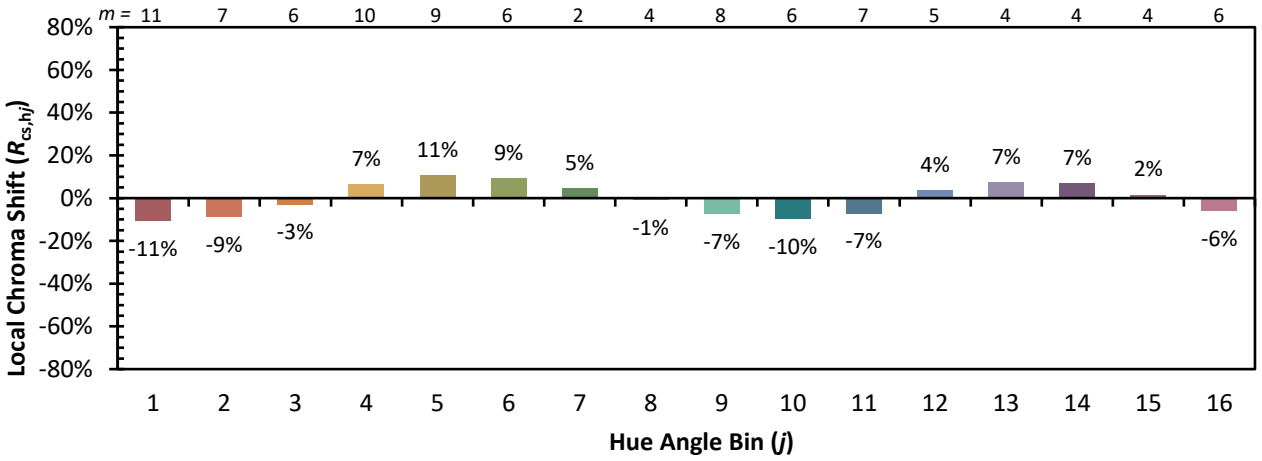
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	

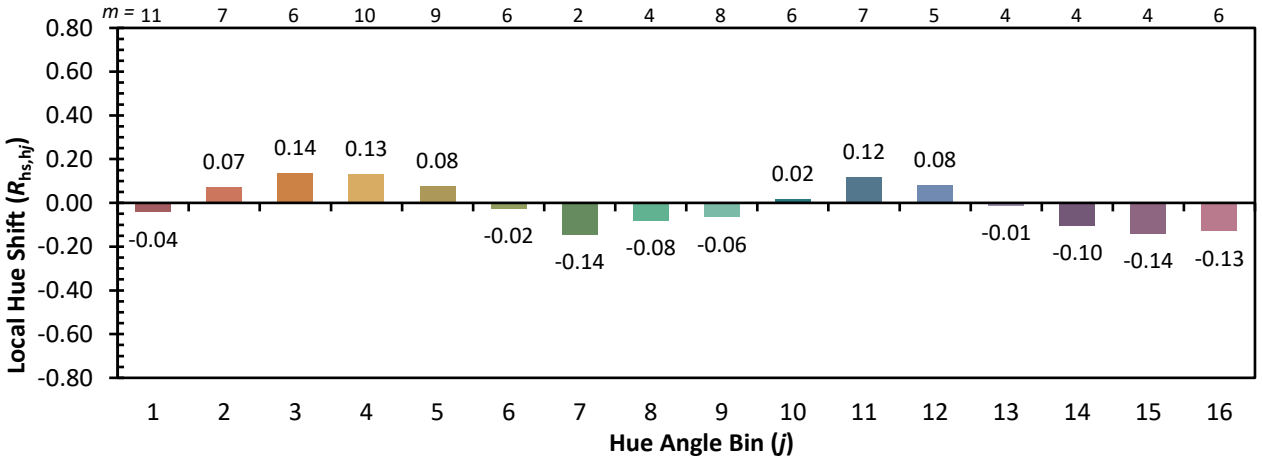


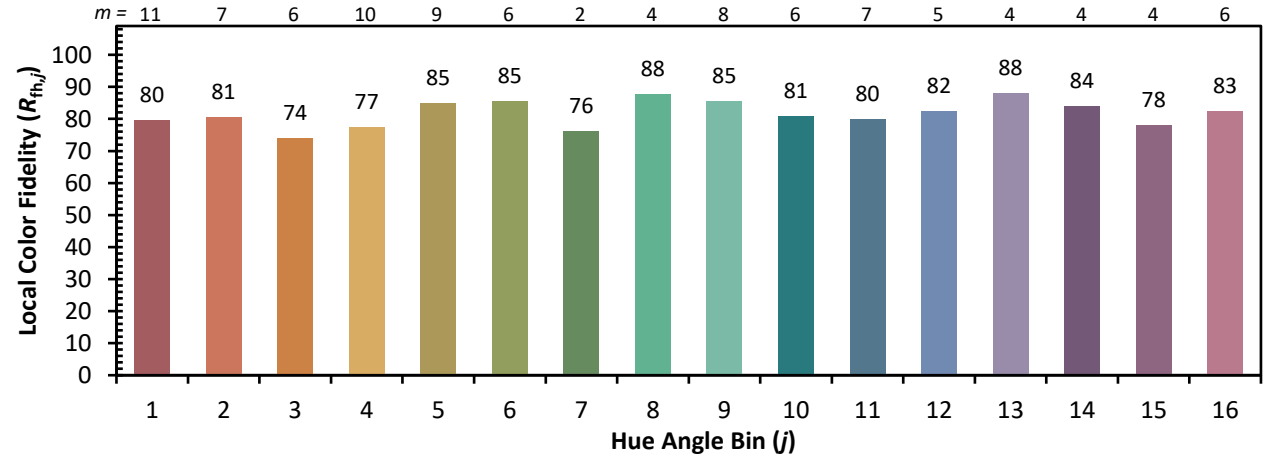
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



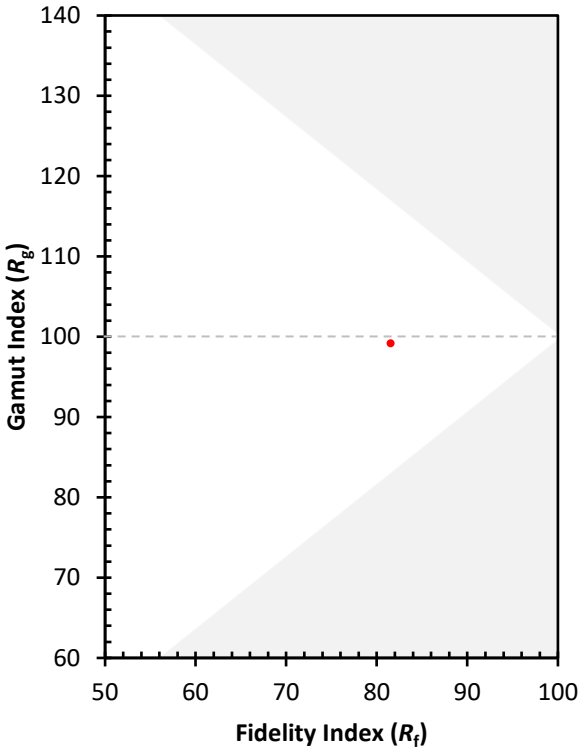


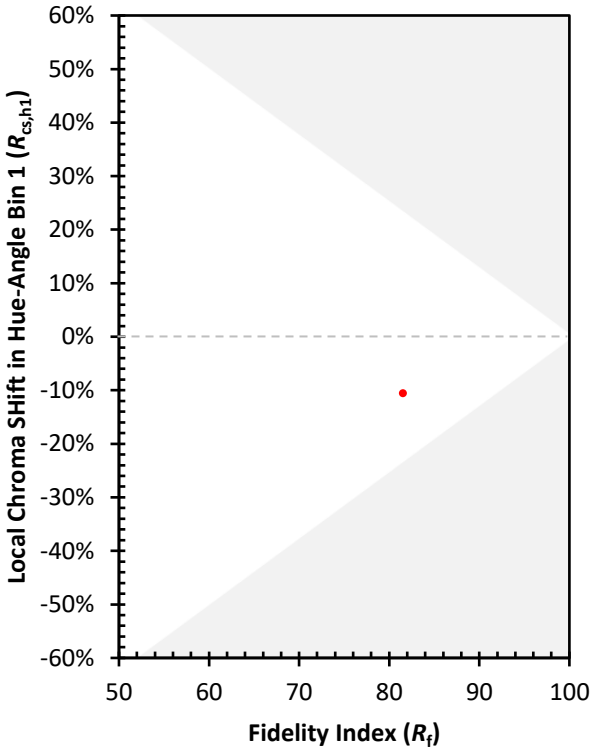


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)