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: P387133

Luminaire Tested: **GWC-SA2D-760-U-T4W**

Issue Date: 3/3/2020

Report Generated By 670347003

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:	P387133
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GWC-SA2D-760-U-T4W
Description:	GALLEON WALL LUMINAIRE
	(2) 70 CRI, 5700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	16079 lumens
Efficiency:	N/A
Efficacy:	124.6 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B3 - U0 - G3

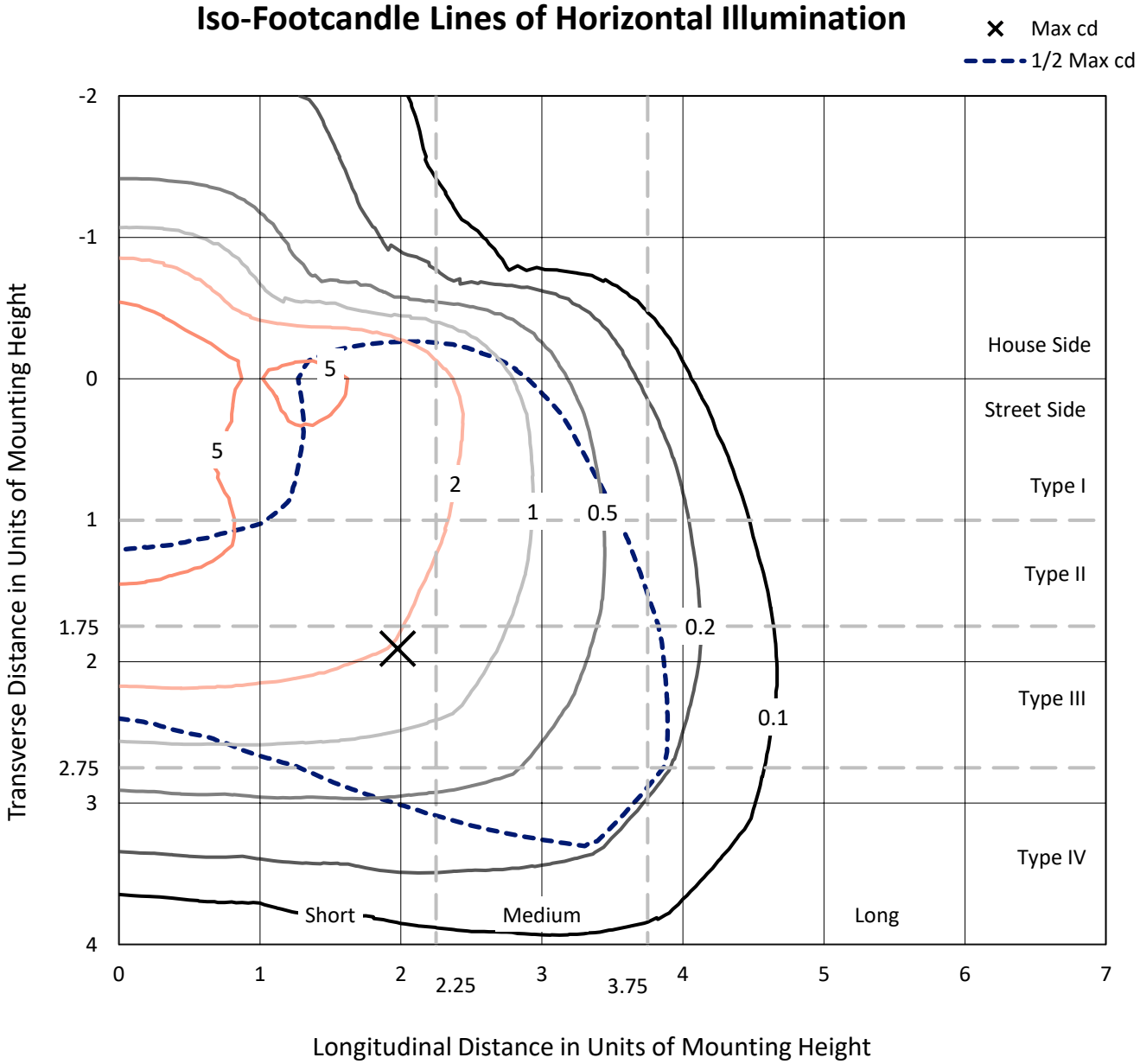
Input Watts (W):	129
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P387133
CATALOG NUMBER: GWC-SA2D-760-U-T4W

Iso-Footcandle Lines of Horizontal Illumination



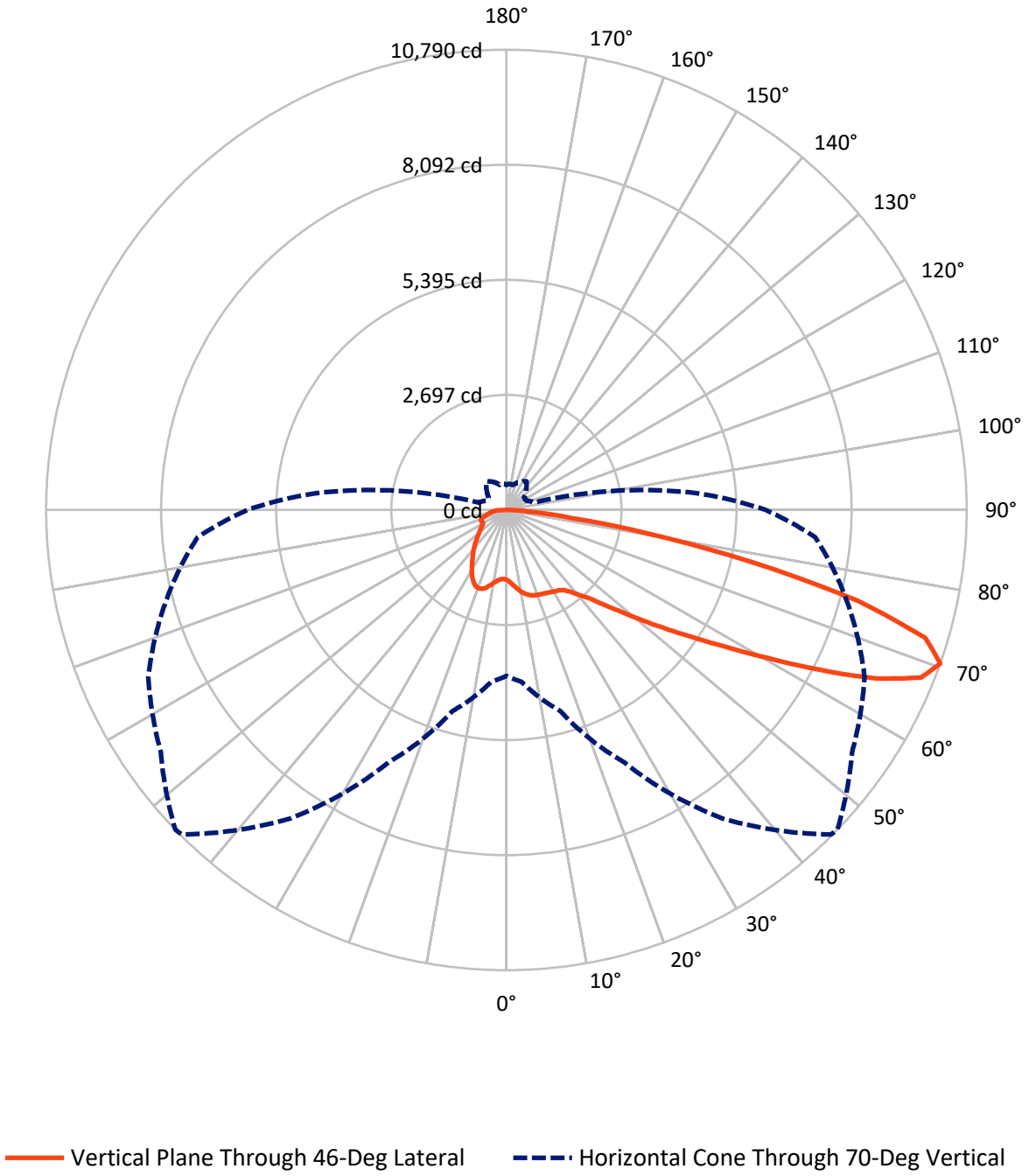
Based on 15 foot mounting height. Maximum calculated value = 9.1 fc
Type IV - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P387133
CATALOG NUMBER: GWC-SA2D-760-U-T4W

Luminous Intensity Polar Plot



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

Scaled Data Report

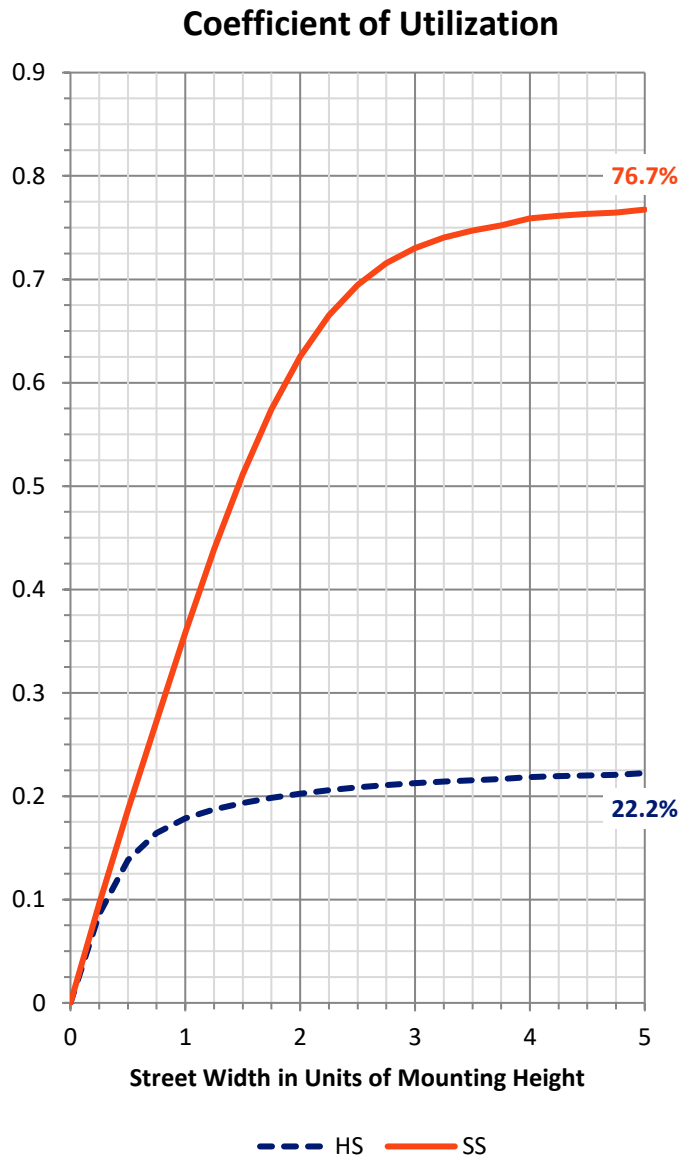
REPORT NUMBER: P387133
CATALOG NUMBER: GWC-SA2D-760-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3685.3	0.0	3685.3
	% Fixture	22.9	0.0	22.9
Street Side	Lumens	12393.7	0.0	12393.7
	% Fixture	77.1	0.0	77.1
Total	Lumens	16079.0	0.0	16079.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.0	1.0
10°-20°	556.4	3.5
20°-30°	927.7	5.8
30°-40°	1316.5	8.2
40°-50°	1936.4	12.0
50°-60°	3279.4	20.4
60°-70°	4655.0	29.0
70°-80°	2828.0	17.6
80°-90°	412.7	2.6
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°	16079.0	100.0
0°-180°	16079.0	100.0



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

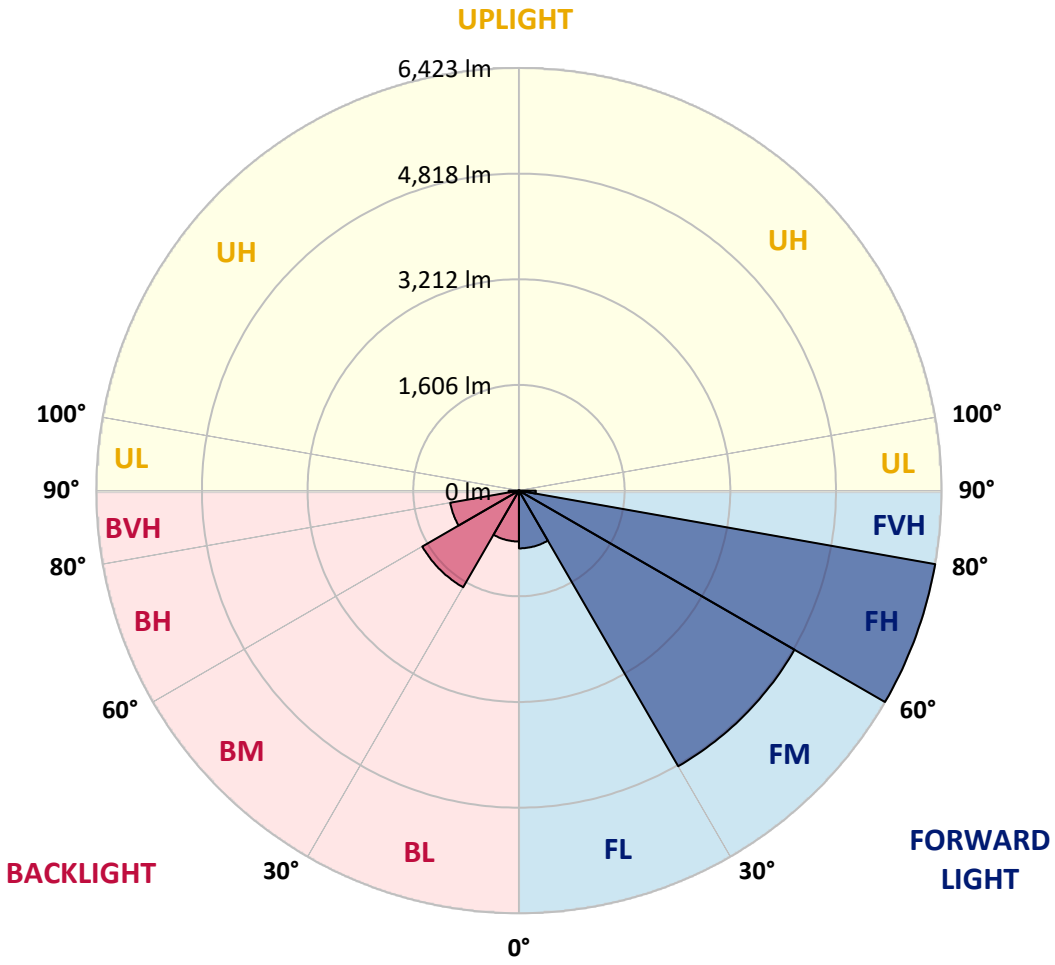
Scaled Data Report

REPORT NUMBER: P387133
CATALOG NUMBER: GWC-SA2D-760-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	877.3	5.5			
FM	(30°-60°)	4835.8	30.1			
FH	(60°-80°)	6423.5	39.9			G3/7500
FVH	(80°-90°)	257.1	1.6			G3/500
BL	(0°-30°)	773.7	4.8	B2/1000		
BM	(30°-60°)	1696.4	10.6	B2/2500		
BH	(60°-80°)	1059.5	6.6	B3/2500		G3/2500
BVH	(80°-90°)	155.6	1.0			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type IV Short



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

Scaled Data Report

REPORT NUMBER: P387133
CATALOG NUMBER: GWC-SA2D-760-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	*1638.1*	1638.1	1638.1	1638.1	1638.1
2.5°	1720.1	1721.2	1723.4	1717.9	1702.5	1698.1	*1696.5*	1680.5	1670.1	1654.6	1641.4
5°	1857.7	1858.8	1855.5	1840.1	1806.0	1780.7	*1778.5*	1742.1	1709.1	1673.9	1647.5
7.5°	2001.3	2003.0	1992.5	1963.3	1915.5	1871.4	*1868.7*	1819.2	1769.1	1715.7	1676.1
10°	2128.4	2121.8	2104.8	2064.0	2007.4	1953.4	*1951.2*	1899.5	1841.7	1777.4	1724.5
12.5°	2213.2	2207.7	2185.6	2136.1	2073.9	2024.4	*2020.0*	1972.1	1916.0	1845.6	1782.3
15°	2259.9	2263.8	2234.1	2177.9	2117.4	2075.6	*2071.7*	2037.6	1987.6	1916.6	1843.9
17.5°	2266.0	2269.3	2240.7	2185.1	2135.6	2107.0	*2105.3*	2082.7	2046.4	1978.2	1902.3
20°	2230.8	2233.0	2209.3	2163.6	2131.2	2122.4	*2121.8*	2111.9	2084.9	2024.4	1950.7
22.5°	2179.6	2181.2	2164.2	2131.2	2120.2	2133.9	*2137.8*	2133.9	2114.7	2058.0	1988.7
25°	2166.9	2165.8	2148.2	2114.7	2124.0	2153.2	*2158.1*	2159.8	2146.6	2097.1	2037.1
27.5°	2228.0	2224.2	2190.6	2136.7	2142.7	2177.9	*2184.5*	2200.5	2192.3	2148.8	2092.1
30°	2404.7	2398.0	2329.3	2220.3	2190.6	2208.8	*2217.0*	2242.3	2244.0	2207.7	2165.3
32.5°	2702.9	2694.6	2571.4	2376.6	2271.5	2240.1	*2247.8*	2285.8	2306.2	2278.1	2232.4
35°	3079.8	3070.5	2908.7	2642.4	2406.9	2300.1	*2305.6*	2335.9	2376.6	2337.0	2276.4
37.5°	3472.7	3450.2	3294.4	2954.9	2622.0	2428.3	*2428.3*	2432.2	2451.4	2368.9	2328.2
40°	3863.4	3840.8	3700.0	3322.5	2900.4	2630.3	*2617.6*	2532.3	2516.9	2445.9	2432.2
42.5°	4226.6	4220.0	4136.9	3737.9	3227.3	2828.9	*2811.3*	2666.6	2669.9	2625.9	2626.4
45°	4612.9	4612.9	4545.2	4157.2	3608.1	3148.1	*3130.5*	2917.5	2950.5	2930.2	2979.1
47.5°	4928.2	4938.1	4928.7	4594.2	4051.0	3553.6	*3521.7*	3265.3	3357.7	3427.6	3570.1
50°	5250.1	5265.5	5267.1	5073.4	4586.4	4035.6	*3999.3*	3726.9	3933.3	4133.6	4413.7
52.5°	5717.2	5751.9	5613.8	5551.6	5242.4	4607.9	*4572.1*	4320.7	4665.1	4946.3	5428.9
55°	6150.3	6120.0	6021.5	6060.1	5944.5	5259.4	*5232.5*	5011.8	5480.6	5846.0	6472.8
57.5°	6384.7	6382.5	6481.6	6646.6	6701.7	6062.8	*6040.2*	5825.6	6400.1	6674.7	7452.8
60°	6659.8	6663.7	6909.1	7283.8	7510.6	7063.2	*7053.3*	6890.4	7293.2	7448.4	8221.5
62.5°	6698.4	6767.7	7190.3	7835.2	8267.7	8231.9	*8254.0*	7849.5	8092.2	8065.8	8795.4
65°	6255.4	6346.7	7111.6	8001.9	9020.5	9510.2	*9530.6*	8814.1	8722.2	8593.5	9000.7
67.5°	5347.5	5482.8	6313.7	7639.3	9268.6	10455.0	*10483.6*	9561.9	9245.0	8772.3	8506.5
70°	*3891.5*	*4041.7*	*4878.1*	*6524.5*	*8826.2*	*10757.1*	*10789.6*	*9892.6*	*9264.8*	*8263.3*	*7261.8*
72.5°	2350.7	2468.5	3158.0	4803.3	7449.5	10206.8	*10264.6*	9473.3	8458.7	6999.4	5362.3
75°	1032.3	1109.3	1527.0	2767.8	5333.2	8444.9	*8517.0*	8108.7	6872.8	5086.6	3169.5
77.5°	439.7	461.7	626.2	1202.3	3014.9	5770.6	*5869.7*	5924.7	4662.9	2767.8	1339.3
80°	274.0	282.8	354.4	544.2	1410.9	3241.1	*3347.8*	3485.9	2315.5	1017.4	467.7
82.5°	166.7	176.6	235.5	329.1	734.6	1469.2	*1520.4*	1617.8	898.6	439.7	242.1
85°	100.1	107.3	144.2	208.0	418.2	577.8	*577.2*	638.3	423.2	282.8	127.7
87.5°	47.9	53.4	77.0	107.9	210.8	216.8	*203.0*	230.0	257.0	185.4	64.4
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: P387133
CATALOG NUMBER: GWC-SA2D-760-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1637.0	1634.8	1627.7	1622.2	1621.1	1617.8	1615.0	1616.7	1618.9	1619.4	1619.4
5°	1636.5	1630.4	1621.1	1617.2	1622.2	1628.8	1637.0	1648.0	1654.6	1659.6	1662.9
7.5°	1662.9	1651.3	1640.9	1638.7	1648.6	1666.2	1684.9	1708.0	1724.0	1735.0	1737.2
10°	1706.9	1692.6	1682.2	1684.4	1702.0	1727.3	1753.7	1783.4	1807.6	1822.5	1823.6
12.5°	1757.5	1743.8	1733.9	1743.2	1772.4	1803.2	1830.7	1856.6	1878.6	1893.5	1893.5
15°	1815.9	1806.0	1794.4	1815.9	1855.5	1883.0	1894.6	1907.2	1919.3	1930.3	1928.1
17.5°	1872.0	1862.6	1856.6	1881.9	1923.2	1935.8	1928.1	1918.8	1918.8	1924.8	1925.9
20°	1920.4	1912.2	1916.0	1940.8	1962.2	1949.0	1920.4	1890.7	1878.6	1881.9	1885.2
22.5°	1962.8	1958.9	1970.5	1982.1	1966.6	1920.4	1867.6	1827.4	1812.6	1811.5	1812.6
25°	2012.3	2011.8	2026.1	2005.2	1936.9	1851.6	1780.7	1741.6	1733.3	1739.9	1750.9
27.5°	2073.9	2080.0	2087.2	2010.7	1876.4	1747.6	1675.6	1648.6	1656.8	1672.8	1683.3
30°	2152.6	2169.1	2153.7	1996.9	1789.5	1628.8	1560.0	1552.3	1574.9	1597.4	1608.4
32.5°	2229.1	2255.0	2217.6	1961.1	1677.2	1502.8	1449.4	1447.2	1474.7	1496.7	1512.1
35°	2290.7	2341.9	2265.4	1890.2	1547.3	1386.7	1347.6	1332.7	1342.6	1368.5	1386.1
37.5°	2371.1	2456.4	2298.5	1781.8	1406.5	1290.9	1245.2	1211.1	1202.3	1212.8	1221.6
40°	2518.0	2630.8	2313.9	1630.4	1268.9	1195.2	1149.0	1098.9	1064.2	1038.9	1039.4
42.5°	2757.9	2858.1	2304.0	1446.6	1141.8	1101.6	1049.4	991.6	935.4	878.2	873.8
45°	3147.5	3195.9	2274.2	1251.9	1030.1	1003.7	954.7	896.9	822.1	757.2	751.1
47.5°	3771.0	3663.7	2228.0	1081.8	931.6	920.6	875.5	808.9	729.6	677.4	673.0
50°	4621.1	4338.8	2205.5	946.5	844.7	848.0	811.1	740.7	665.8	627.3	622.9
52.5°	5638.0	5125.2	2248.9	841.9	774.8	786.3	758.8	692.8	630.1	599.8	595.4
55°	6692.9	5939.5	2295.7	766.0	708.7	731.3	721.9	667.5	610.8	582.7	578.9
57.5°	7595.8	6547.6	2202.2	704.3	649.9	685.1	693.3	651.5	600.9	575.6	571.2
60°	8164.3	6792.5	1956.7	646.6	603.1	648.2	676.8	647.1	604.7	602.5	599.2
62.5°	8433.9	6771.0	1588.6	600.9	573.9	632.3	688.9	671.9	648.8	668.6	670.2
65°	8312.8	6447.4	1183.1	570.6	553.0	638.3	725.2	718.6	661.4	681.2	684.0
67.5°	7516.1	5675.4	876.0	544.2	529.9	655.4	791.3	734.1	636.7	651.0	642.2
70°	*6074.9*	*4499.5*	*675.7*	*514.5*	*506.2*	*653.2*	*821.0*	*724.7*	*609.7*	*613.0*	*589.3*
72.5°	4189.2	3068.3	549.7	487.0	472.1	595.4	800.1	701.6	587.1	561.8	530.5
75°	2278.1	1646.9	467.2	458.4	412.1	522.8	761.6	685.1	566.8	533.2	515.6
77.5°	896.4	683.4	405.5	419.3	360.4	461.7	718.6	653.7	538.7	494.7	485.9
80°	365.9	348.9	336.2	362.6	309.8	403.9	666.9	616.8	505.1	458.9	441.3
82.5°	207.4	216.8	261.4	286.1	251.5	372.0	642.2	587.1	465.0	411.0	390.1
85°	106.2	127.1	182.1	205.2	184.9	316.4	591.5	513.9	373.1	314.8	316.4
87.5°	51.2	71.0	115.0	128.8	120.0	228.9	441.9	372.5	290.5	230.0	222.9
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

Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

INVUE

Report Number: SP1-2012-088-5-R3

Luminaire Tested: CCW-SA1A-760-U-SL2-HSS

Test Date: 01/19/2021

Report Generated By controller / USPTCWHP6086842

Test Information

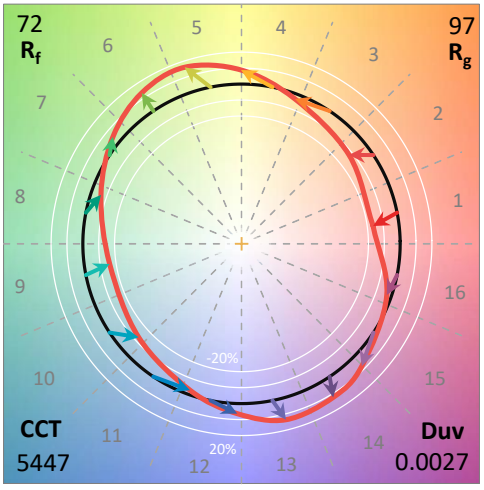
Test Method:	LM-79-08
Report Number:	SP1-2012-088-5-R3
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1
Measurement Geometry:	4π
Issue Date:	01/19/2021
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	INVUE
Catalog Number:	**CCW-SA1A-760-U-SL2-HSS**
Description:	INVUE WALL PACK

THIS IS A REVISION OF SP1-2012-088-5-R2. TO UPDATE THE CATALOG INFORMATION.TESTED IN SITU. INVUE WALL PACK LIGHT SQUARE T2 OPTICS 1-SQUARE WITH HOUSE SIDE SHIELD

Spectral Parameters

CCT (K):	5447	CRI (Ra):	71.9		
CIE u':	0.2053	R1:	70.7	R9:	-27.5
CIE v':	0.4809	R2:	74.8	R10:	41.5
Duv:	0.0027	R3:	78.7	R11:	74.9
CIE x:	0.3337	R4:	74.0	R12:	49.9
CIE y:	0.3473	R5:	72.5	R13:	70.2
CIE z:	0.3190	R6:	67.7	R14:	88.1
Peak Wavelength (nm):	443	R7:	77.7		
Dominant Wavelength (nm):	556	R8:	58.8		
Purity:	4.5				

Rf:	72.3
Rg:	97.2



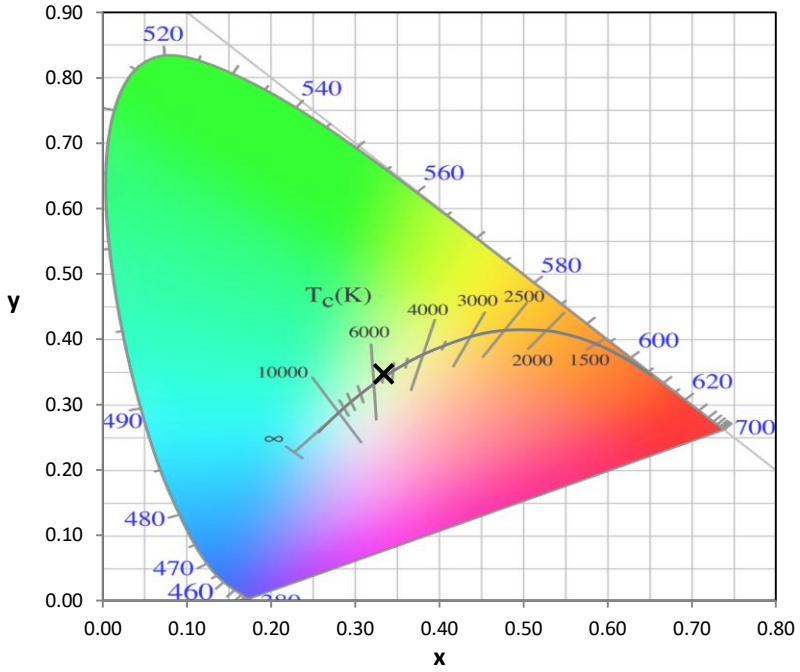
Test Conditions

Stabilization Time:	75M
Operation Time:	12H
Room Temperature (°C) / RH%:	25.4/18%
Sphere Temperature (°C):	25.3

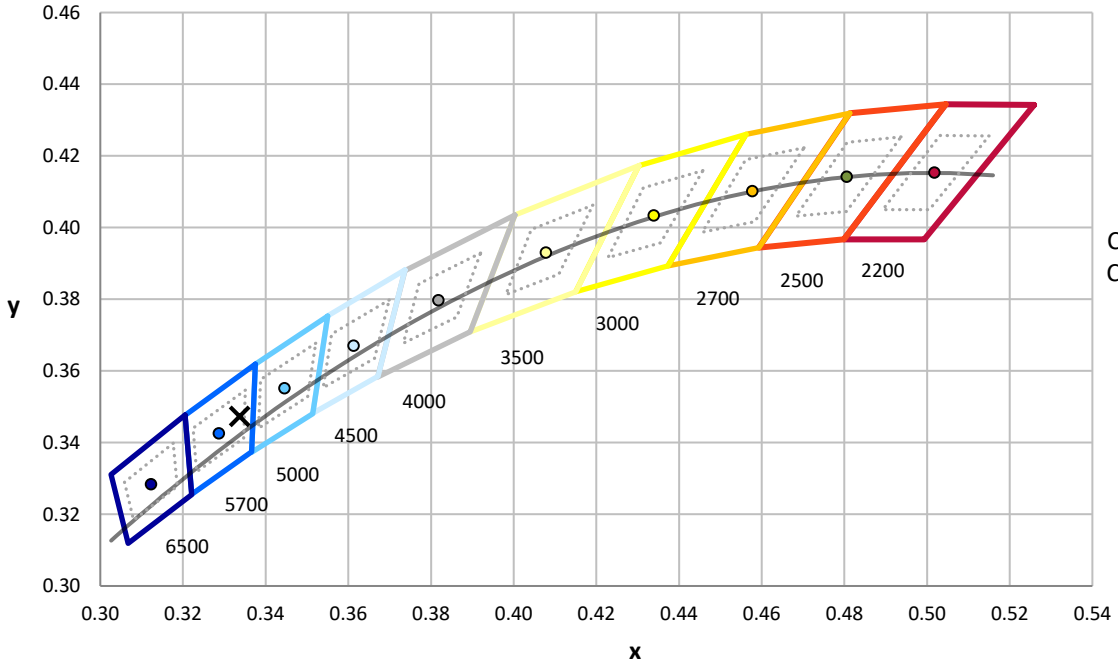
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	7/29/2020	1/29/2021
Power Meter	IN0071	12/1/2020	12/1/2021
AC Power Source	IN0063	12/1/2020	12/1/2021
DC Power Source	IN0208	12/1/2020	12/1/2021
Sphere Thermometer	IN0085	12/1/2020	12/1/2021
Room Thermometer	IN0046	12/1/2020	12/1/2021

REPORT NUMBER: SP1-2012-088-5-R3

CIE 1931 Chromaticity Diagram



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

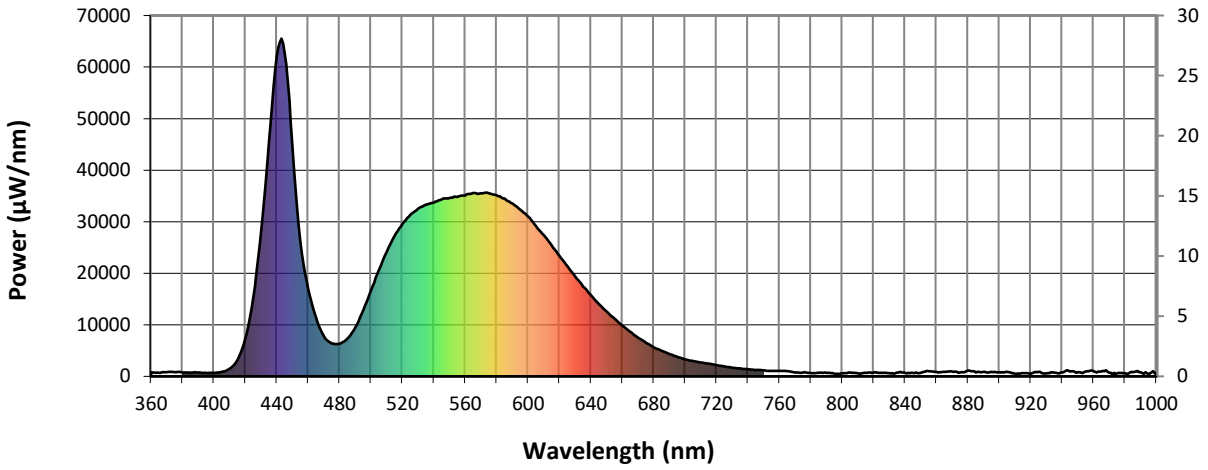


CCT = 5447K
CIE x = 0.3337
CIE y = 0.3473
Duv = 0.0027

Point lies inside the ANSI 5700K 4-step quadrangle

REPORT NUMBER: SP1-2012-088-5-R3

Photopic Flux vs. Wavelength

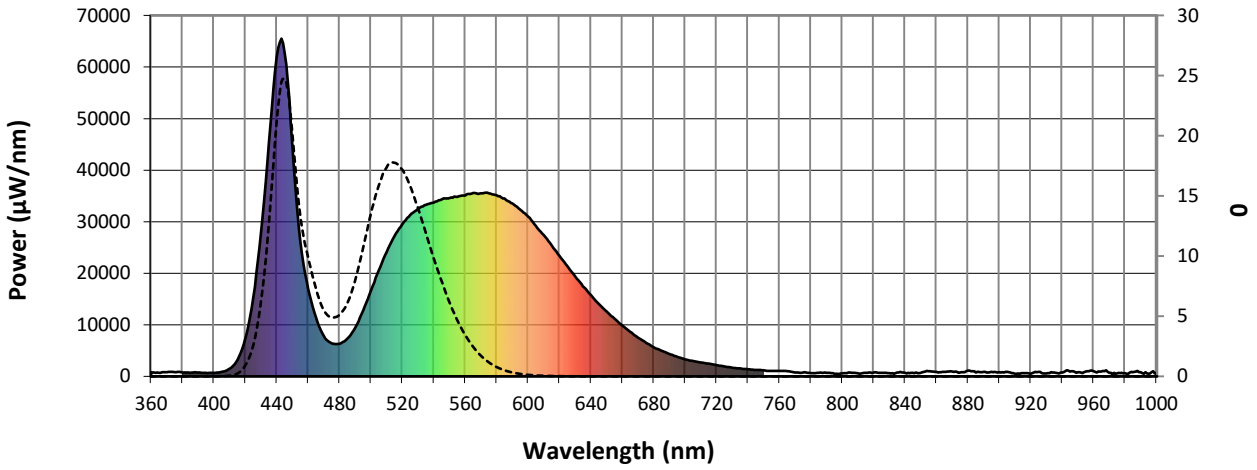


######

λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)
360	828	0.0	490	9471	1.3	620	23317	6.1	750	1157	0.0	880	1136	0.0
365	696	0.0	495	12752	2.3	625	21413	4.7	755	1067	0.0	885	773	0.0
370	807	0.0	500	16685	3.7	630	19344	3.5	760	1059	0.0	890	872	0.0
375	837	0.0	505	20565	5.8	635	17464	2.6	765	1009	0.0	895	891	0.0
380	757	0.0	510	24119	8.3	640	15745	1.9	770	774	0.0	900	807	0.0
385	706	0.0	515	27181	11.3	645	14060	1.4	775	761	0.0	905	899	0.0
390	746	0.0	520	29555	14.3	650	12579	0.9	780	653	0.0	910	506	0.0
395	660	0.0	525	31307	16.8	655	11181	0.6	785	704	0.0	915	598	0.0
400	671	0.0	530	32558	19.2	660	9847	0.4	790	663	0.0	920	510	0.0
405	848	0.0	535	33301	20.7	665	8641	0.3	795	493	0.0	925	874	0.0
410	1490	0.0	540	33727	22.0	670	7535	0.2	800	584	0.0	930	549	0.0
415	3203	0.0	545	34356	22.9	675	6542	0.1	805	739	0.0	935	720	0.0
420	7298	0.0	550	34589	23.5	680	5664	0.1	810	601	0.0	940	754	0.0
425	15315	0.1	555	34855	23.8	685	4962	0.0	815	677	0.0	945	931	0.0
430	27886	0.2	560	35083	23.8	690	4369	0.0	820	726	0.0	950	811	0.0
435	45485	0.5	565	35553	23.6	695	3785	0.0	825	693	0.0	955	955	0.0
440	61965	1.0	570	35511	23.1	700	3318	0.0	830	619	0.0	960	1025	0.0
445	62721	1.3	575	35515	22.1	705	2962	0.0	835	738	0.0	965	916	0.0
450	44754	1.2	580	35114	20.9	710	2689	0.0	840	681	0.0	970	695	0.0
455	26152	0.9	585	34546	19.2	715	2476	0.0	845	691	0.0	975	568	0.0
460	17101	0.7	590	33522	17.3	720	2192	0.0	850	710	0.0	980	643	0.0
465	11400	0.6	595	32326	15.3	725	1939	0.0	855	1025	0.0	985	804	0.0
470	7763	0.5	600	30973	13.3	730	1698	0.0	860	889	0.0	990	812	0.0
475	6419	0.5	605	29160	11.3	735	1533	0.0	865	885	0.0	995	496	0.0
480	6330	0.6	610	27373	9.4	740	1375	0.0	870	905	0.0	1000	659	0.0
485	7299	0.9	615	25423	7.7	745	1254	0.0	875	739	0.0			

REPORT NUMBER: SP1-2012-088-5-R3

Scotopic Flux vs. Wavelength

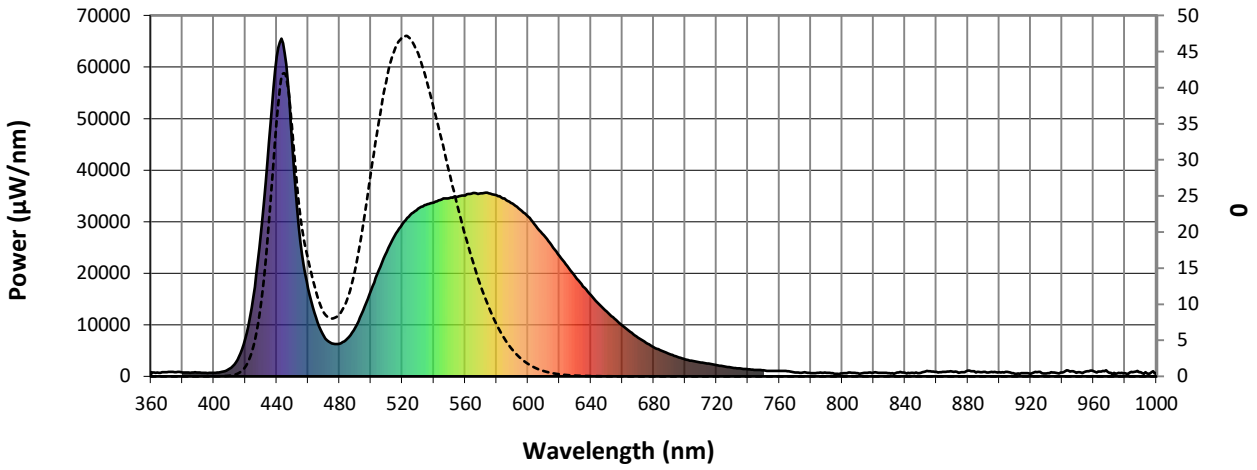


Scotopic Lumens: 1610.2 **S/P: 0.74**

λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)
360	828	0.0	490	9471	14.6	620	23317	0.3	750	1157	0.0	880	1136	0.0
365	696	0.0	495	12752	20.6	625	21413	0.2	755	1067	0.0	885	773	0.0
370	807	0.0	500	16685	27.9	630	19344	0.1	760	1059	0.0	890	872	0.0
375	837	0.0	505	20565	35.0	635	17464	0.1	765	1009	0.0	895	891	0.0
380	757	0.0	510	24119	40.9	640	15745	0.0	770	774	0.0	900	807	0.0
385	706	0.0	515	27181	45.1	645	14060	0.0	775	761	0.0	905	899	0.0
390	746	0.0	520	29555	47.0	650	12579	0.0	780	653	0.0	910	506	0.0
395	660	0.0	525	31307	46.8	655	11181	0.0	785	704	0.0	915	598	0.0
400	671	0.0	530	32558	44.9	660	9847	0.0	790	663	0.0	920	510	0.0
405	848	0.0	535	33301	41.5	665	8641	0.0	795	493	0.0	925	874	0.0
410	1490	0.1	540	33727	37.3	670	7535	0.0	800	584	0.0	930	549	0.0
415	3203	0.3	545	34356	32.9	675	6542	0.0	805	739	0.0	935	720	0.0
420	7298	1.2	550	34589	28.3	680	5664	0.0	810	601	0.0	940	754	0.0
425	15315	3.7	555	34855	23.8	685	4962	0.0	815	677	0.0	945	931	0.0
430	27886	9.5	560	35083	19.6	690	4369	0.0	820	726	0.0	950	811	0.0
435	45485	20.3	565	35553	16.0	695	3785	0.0	825	693	0.0	955	955	0.0
440	61965	34.6	570	35511	12.5	700	3318	0.0	830	619	0.0	960	1025	0.0
445	62721	42.0	575	35515	9.7	705	2962	0.0	835	738	0.0	965	916	0.0
450	44754	34.7	580	35114	7.2	710	2689	0.0	840	681	0.0	970	695	0.0
455	26152	22.9	585	34546	5.3	715	2476	0.0	845	691	0.0	975	568	0.0
460	17101	16.5	590	33522	3.7	720	2192	0.0	850	710	0.0	980	643	0.0
465	11400	12.0	595	32326	2.6	725	1939	0.0	855	1025	0.0	985	804	0.0
470	7763	8.9	600	30973	1.7	730	1698	0.0	860	889	0.0	990	812	0.0
475	6419	8.0	605	29160	1.1	735	1533	0.0	865	885	0.0	995	496	0.0
480	6330	8.5	610	27373	0.7	740	1375	0.0	870	905	0.0	1000	659	0.0
485	7299	10.6	615	25423	0.5	745	1254	0.0	875	739	0.0			

REPORT NUMBER: SP1-2012-088-5-R3

Melanopic Flux vs. Wavelength



Melanopic Lumens: 4010.3 **S/P: 1.85**

λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)	λ (nm)	Power (µW/nm)	Lumens (ϕ/nm)
360	828	0.0	490	9471	7.9	620	23317	0.0	750	1157	0.0	880	1136	0.0
365	696	0.0	495	12752	10.5	625	21413	0.0	755	1067	0.0	885	773	0.0
370	807	0.0	500	16685	13.4	630	19344	0.0	760	1059	0.0	890	872	0.0
375	837	0.0	505	20565	15.8	635	17464	0.0	765	1009	0.0	895	891	0.0
380	757	0.0	510	24119	17.3	640	15745	0.0	770	774	0.0	900	807	0.0
385	706	0.0	515	27181	17.8	645	14060	0.0	775	761	0.0	905	899	0.0
390	746	0.0	520	29555	17.2	650	12579	0.0	780	653	0.0	910	506	0.0
395	660	0.0	525	31307	15.9	655	11181	0.0	785	704	0.0	915	598	0.0
400	671	0.0	530	32558	14.1	660	9847	0.0	790	663	0.0	920	510	0.0
405	848	0.0	535	33301	12.0	665	8641	0.0	795	493	0.0	925	874	0.0
410	1490	0.1	540	33727	9.9	670	7535	0.0	800	584	0.0	930	549	0.0
415	3203	0.2	545	34356	8.0	675	6542	0.0	805	739	0.0	935	720	0.0
420	7298	0.8	550	34589	6.2	680	5664	0.0	810	601	0.0	940	754	0.0
425	15315	2.4	555	34855	4.7	685	4962	0.0	815	677	0.0	945	931	0.0
430	27886	5.9	560	35083	3.5	690	4369	0.0	820	726	0.0	950	811	0.0
435	45485	12.1	565	35553	2.5	695	3785	0.0	825	693	0.0	955	955	0.0
440	61965	20.7	570	35511	1.7	700	3318	0.0	830	619	0.0	960	1025	0.0
445	62721	24.7	575	35515	1.2	705	2962	0.0	835	738	0.0	965	916	0.0
450	44754	20.6	580	35114	0.8	710	2689	0.0	840	681	0.0	970	695	0.0
455	26152	13.7	585	34546	0.5	715	2476	0.0	845	691	0.0	975	568	0.0
460	17101	10.1	590	33522	0.3	720	2192	0.0	850	710	0.0	980	643	0.0
465	11400	7.4	595	32326	0.2	725	1939	0.0	855	1025	0.0	985	804	0.0
470	7763	5.6	600	30973	0.1	730	1698	0.0	860	889	0.0	990	812	0.0
475	6419	4.9	605	29160	0.1	735	1533	0.0	865	885	0.0	995	496	0.0
480	6330	5.1	610	27373	0.0	740	1375	0.0	870	905	0.0	1000	659	0.0
485	7299	6.0	615	25423	0.0	745	1254	0.0	875	739	0.0			

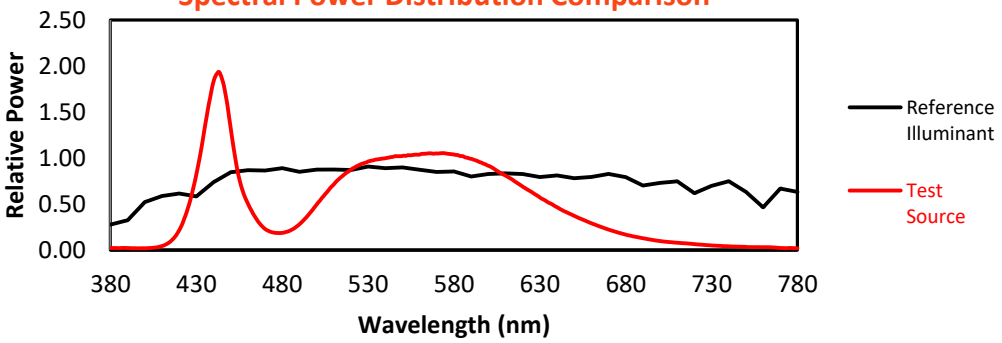
REPORT NUMBER: SP1-2012-088-5-R3

TM-30-18

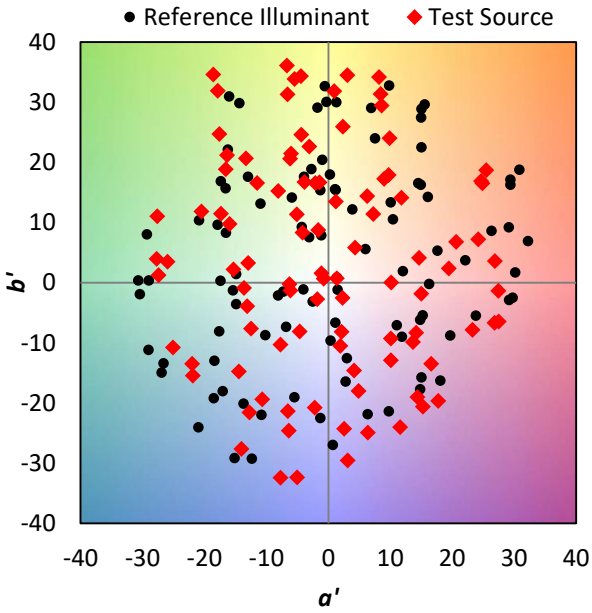
Summary

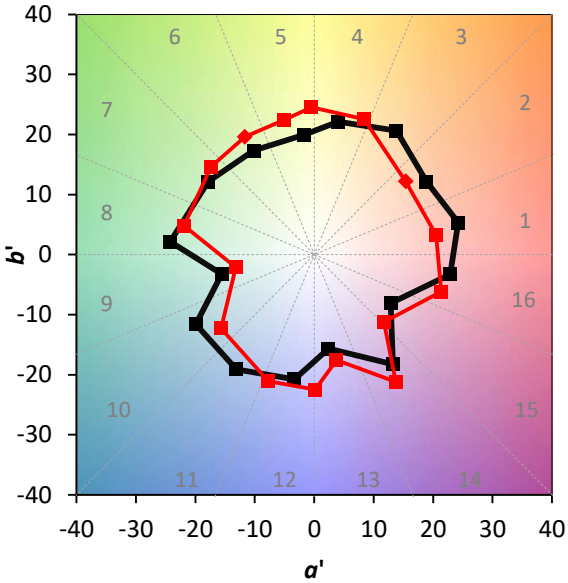
R_f = 72.3
R_g = 97.2
CIE R_a = 71.9
R_9 = -27.5

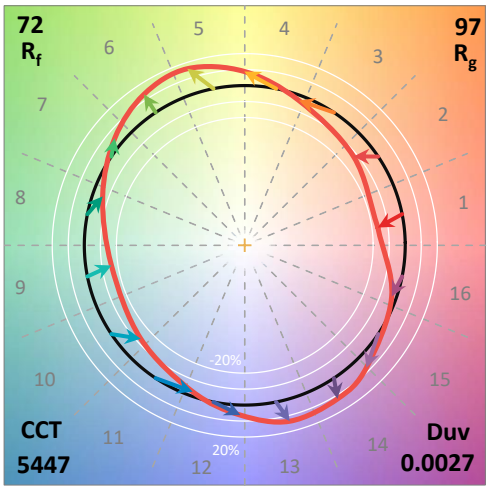
Spectral Power Distribution Comparison

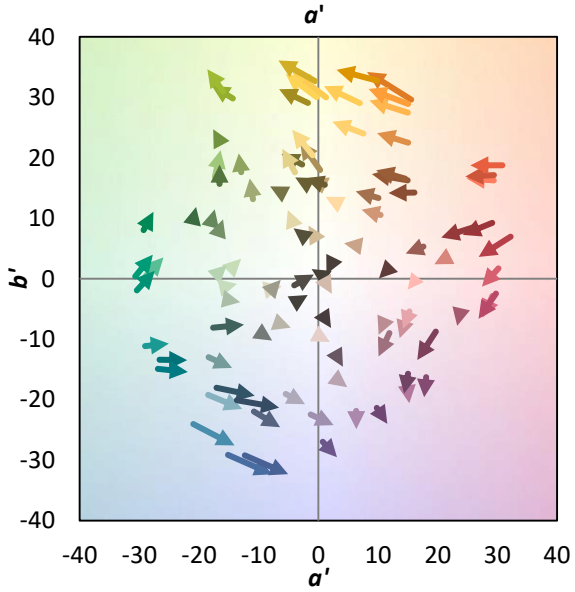


Color Vector Graphics







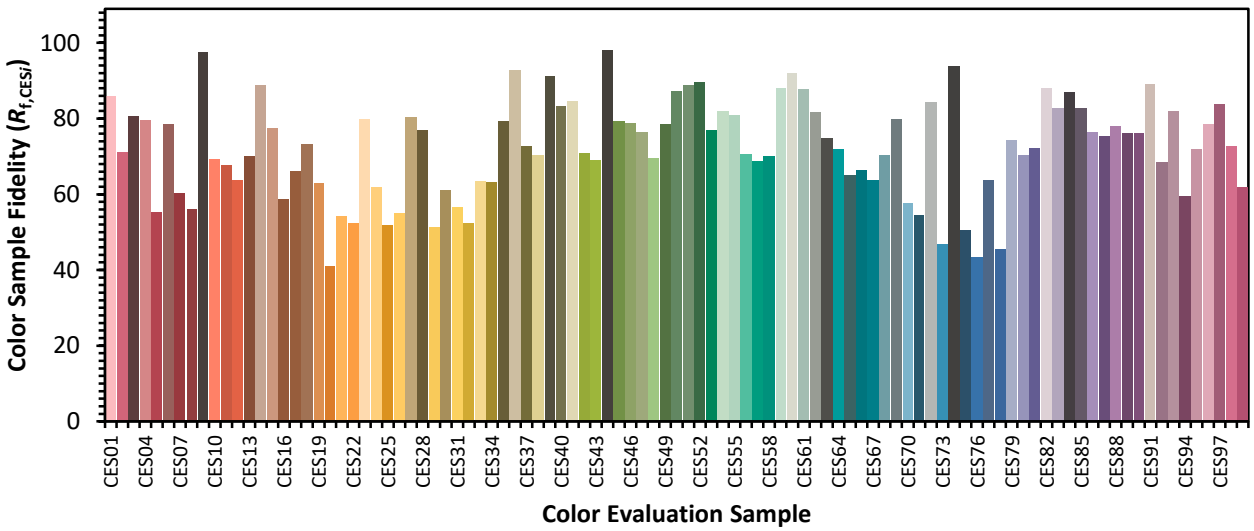


REPORT NUMBER: SP1-2012-088-5-R3

TM-30-18

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

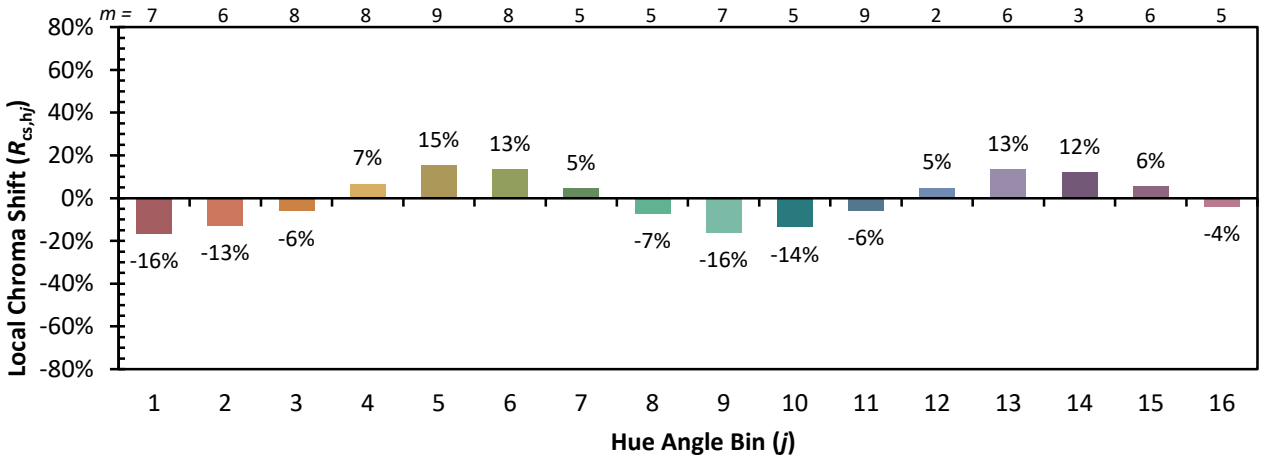
CES01 = 85	CES26 = 55	CES51 = 89	CES76 = 43
CES02 = 59	CES27 = 80	CES52 = 90	CES77 = 64
CES03 = 30	CES28 = 77	CES53 = 77	CES78 = 46
CES04 = 69	CES29 = 51	CES54 = 82	CES79 = 74
CES05 = 46	CES30 = 61	CES55 = 81	CES80 = 70
CES06 = 50	CES31 = 56	CES56 = 71	CES81 = 72
CES07 = 38	CES32 = 52	CES57 = 69	CES82 = 88
CES08 = 38	CES33 = 63	CES58 = 70	CES83 = 83
CES09 = 29	CES34 = 63	CES59 = 88	CES84 = 87
CES10 = 72	CES35 = 79	CES60 = 92	CES85 = 83
CES11 = 55	CES36 = 93	CES61 = 88	CES86 = 76
CES12 = 61	CES37 = 73	CES62 = 82	CES87 = 75
CES13 = 41	CES38 = 70	CES63 = 75	CES88 = 78
CES14 = 74	CES39 = 91	CES64 = 72	CES89 = 76
CES15 = 70	CES40 = 83	CES65 = 65	CES90 = 76
CES16 = 46	CES41 = 85	CES66 = 66	CES91 = 89
CES17 = 48	CES42 = 71	CES67 = 64	CES92 = 69
CES18 = 55	CES43 = 69	CES68 = 70	CES93 = 82
CES19 = 71	CES44 = 98	CES69 = 80	CES94 = 60
CES20 = 64	CES45 = 79	CES70 = 58	CES95 = 72
CES21 = 85	CES46 = 79	CES71 = 54	CES96 = 79
CES22 = 77	CES47 = 76	CES72 = 84	CES97 = 84
CES23 = 91	CES48 = 69	CES73 = 47	CES98 = 73
CES24 = 90	CES49 = 79	CES74 = 94	CES99 = 62
CES25 = 71	CES50 = 87	CES75 = 50	

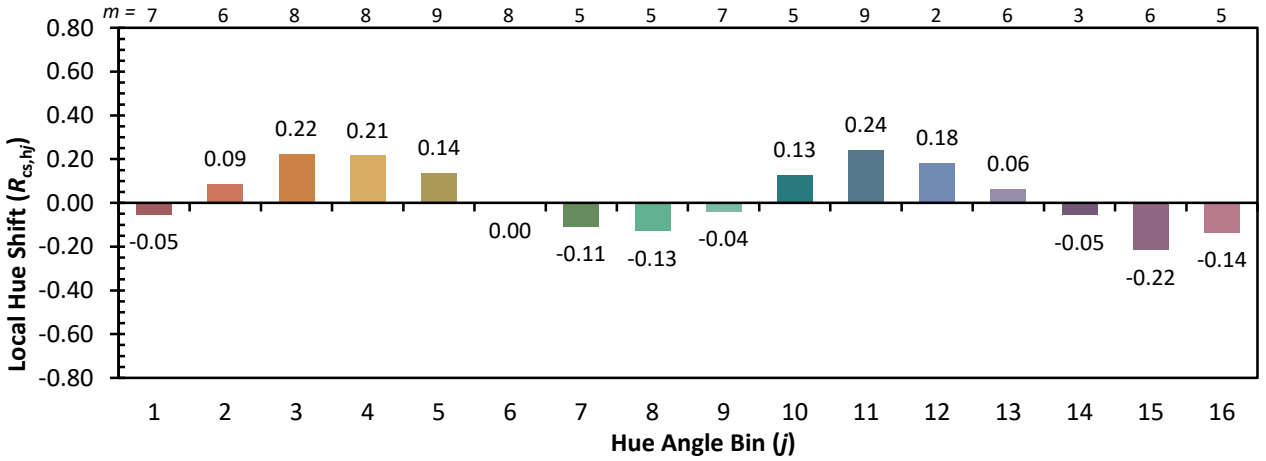


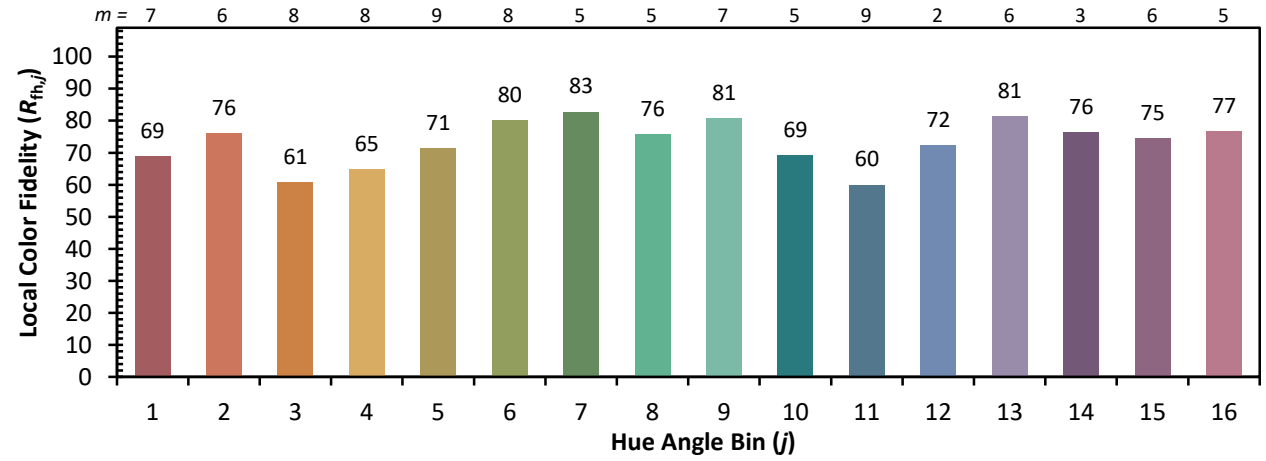
REPORT NUMBER: SP1-2012-088-5-R3

TM-30-18

Color Rendition by Hue-Angle Bin



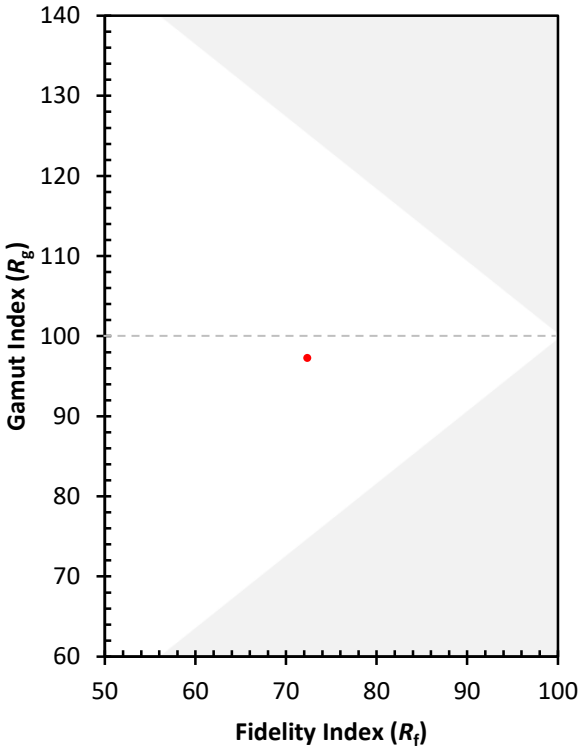


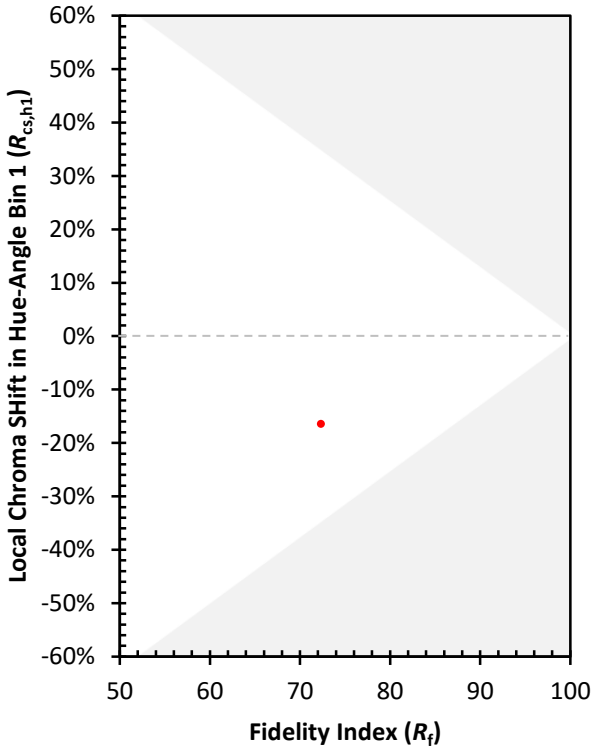


REPORT NUMBER: SP1-2012-088-5-R3

TM-30-18

Measure Comparisons





(END OF REPORT)