

Signify Classified - Internal
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: INVUE

Report Number: P472163

Luminaire Tested: **CCP-VA-5-740-U-T4W**

Issue Date: 01/27/2021



Test Information

Test Method: LM-79-08
Report Number: P472163
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCP-VA-5-740-U-T4W
Description: INVUE CLEARCURVE POLE MOUNT Wave Stream LUMINAIRE WITH T4W
DISTRIBUTION LENS
Light Source: 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7960.7 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 74.3
Input Voltage (V): 120
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: 25 FT

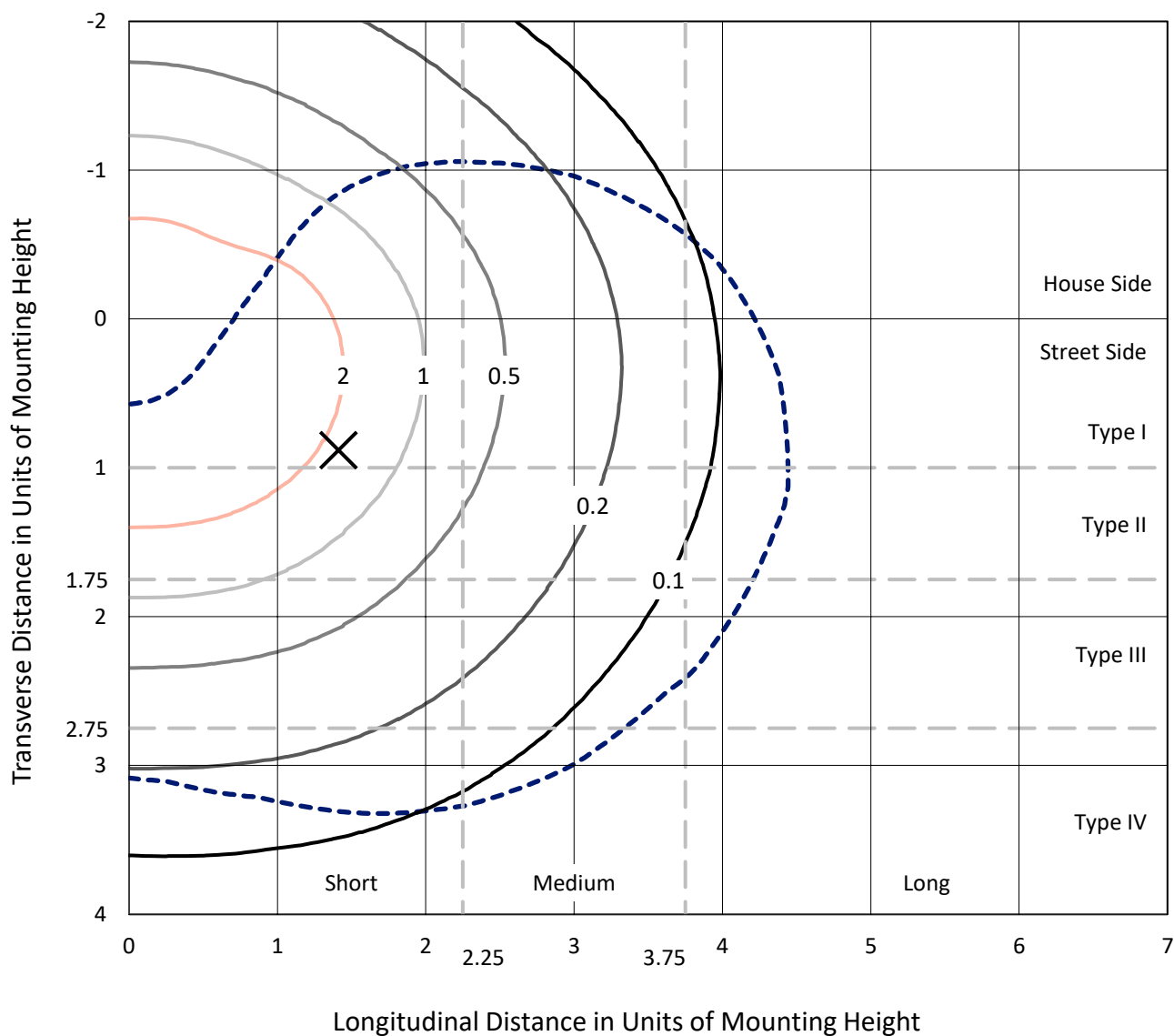
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CATALOG NUMBER: CCP-VA-5-740-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

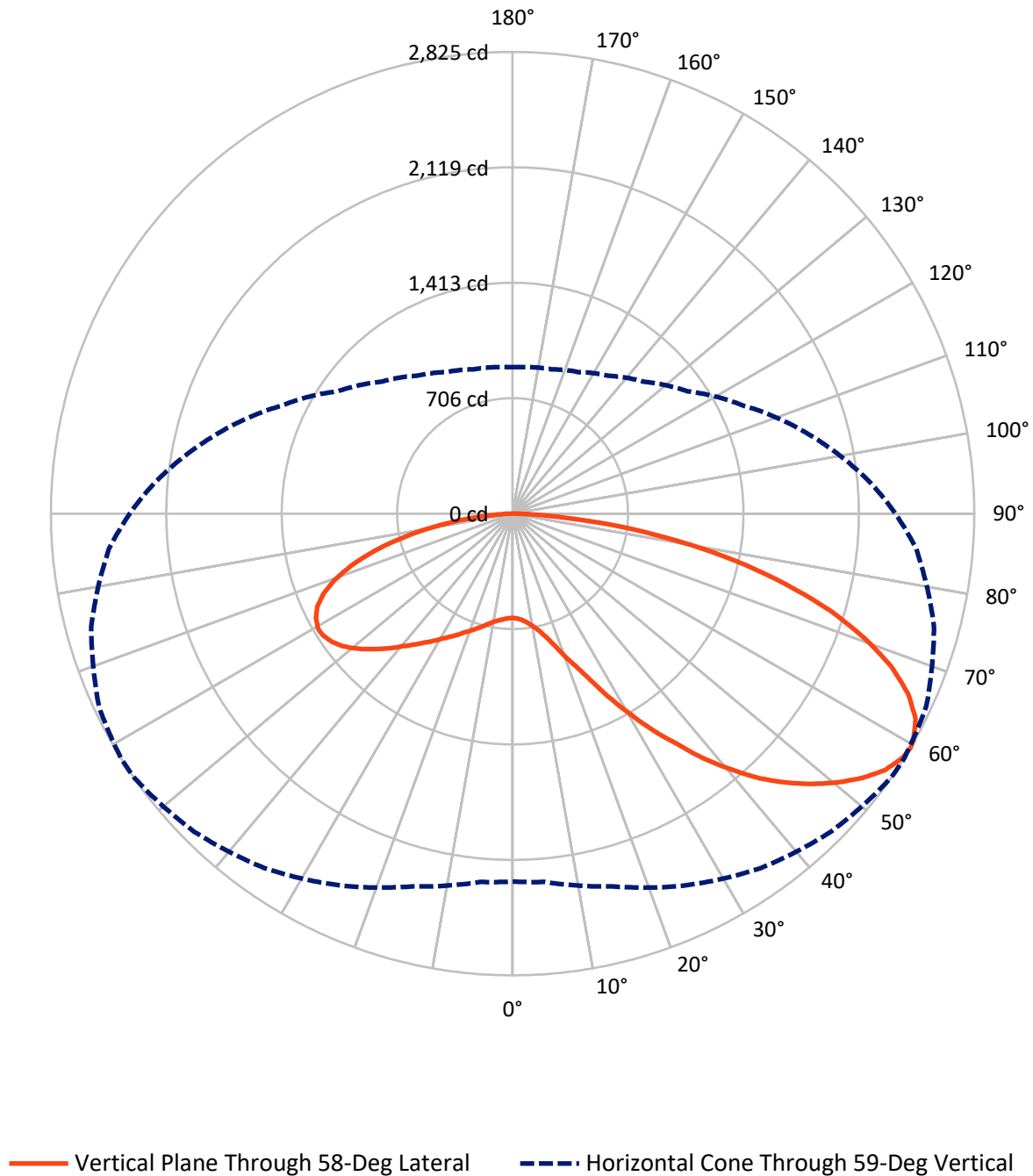


Based on 15 foot mounting height. Maximum calculated value = 4.3 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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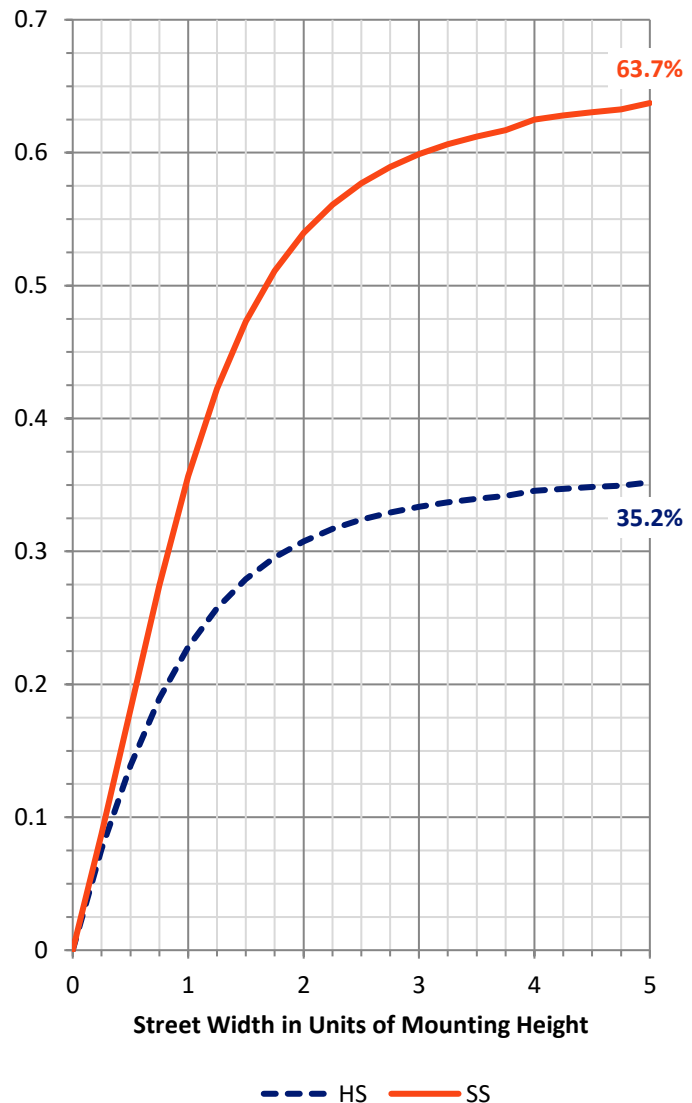
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2839.1	0.0	2839.1
	% Fixture	35.7	0.0	35.7
Street Side	Lumens	5121.6	0.0	5121.6
	% Fixture	64.3	0.0	64.3
Total	Lumens	7960.7	0.0	7960.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	0.8
10°-20°	215.9	2.7
20°-30°	455.8	5.7
30°-40°	838.8	10.5
40°-50°	1307.4	16.4
50°-60°	1717.9	21.6
60°-70°	1800.1	22.6
70°-80°	1248.1	15.7
80°-90°	313.4	3.9
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°	7960.7	100.0
0°-180°	7960.7	100.0

Coefficient of Utilization



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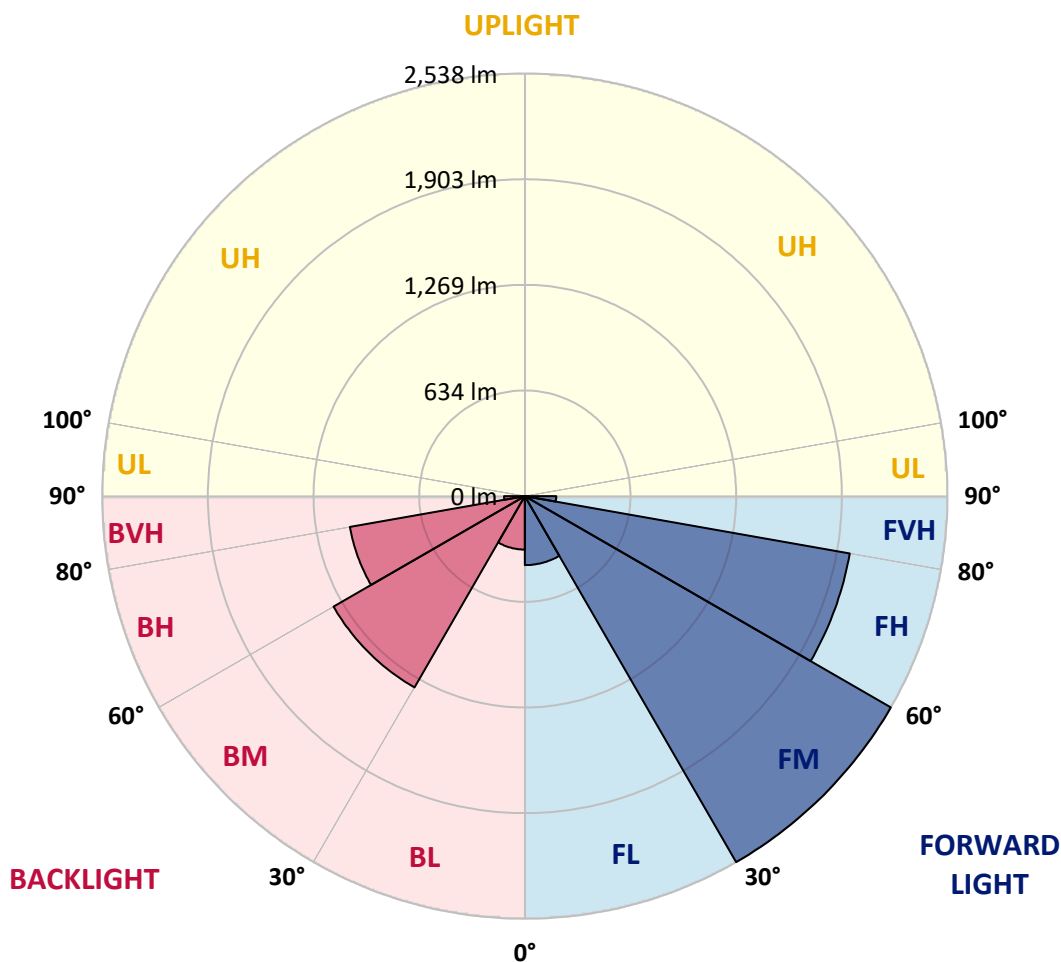
CATALOG NUMBER: CCP-VA-5-740-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	414.1	5.2			
FM	(30°-60°)	2537.7	31.9			
FH	(60°-80°)	1981.4	24.9			G2/5000
FVH	(80°-90°)	188.3	2.4			G2/225
BL	(0°-30°)	320.9	4.0	B1/500		
BM	(30°-60°)	1326.4	16.7	B2/2500		
BH	(60°-80°)	1066.7	13.4	B3/2500		G3/2500
BVH	(80°-90°)	125.1	1.6			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



REPORT NUMBER: P472163

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	638.2	638.2	638.2	638.2	638.2	638.2	638.2	638.2	638.2	638.2	638.2
2.5°	647.1	647.1	647.1	645.3	645.3	645.3	643.5	643.5	643.5	641.8	640.0
5°	661.5	661.5	659.7	661.5	659.7	657.9	656.1	656.1	656.1	654.3	652.5
7.5°	681.2	683.0	681.2	683.0	681.2	679.4	675.8	675.8	674.0	670.4	666.9
10°	711.7	711.7	711.7	709.9	708.1	706.3	704.5	702.7	700.9	695.5	690.2
12.5°	749.3	749.3	749.3	745.7	745.7	742.1	740.3	738.6	735.0	727.8	720.6
15°	795.9	794.1	799.5	799.5	797.7	797.7	792.3	788.8	785.2	774.4	758.3
17.5°	858.7	856.9	862.2	865.8	865.8	867.6	858.7	855.1	842.5	828.2	806.7
20°	942.9	939.3	944.7	948.3	944.7	948.3	939.3	941.1	923.2	898.1	864.0
22.5°	1034.3	1034.3	1039.7	1039.7	1041.5	1045.1	1034.3	1029.0	1014.6	978.8	935.7
25°	1147.3	1156.2	1156.2	1156.2	1163.4	1165.2	1154.4	1145.5	1125.8	1077.4	1018.2
27.5°	1285.3	1283.5	1281.7	1292.5	1292.5	1296.1	1288.9	1285.3	1262.0	1202.8	1113.2
30°	1432.3	1421.5	1428.7	1432.3	1439.5	1444.8	1437.7	1426.9	1398.2	1333.7	1222.6
32.5°	1566.7	1573.9	1584.7	1588.3	1599.0	1600.8	1582.9	1582.9	1554.2	1471.7	1357.0
35°	1719.1	1719.1	1747.8	1760.3	1760.3	1771.1	1744.2	1729.9	1710.2	1624.1	1478.9
37.5°	1851.8	1855.4	1878.7	1907.3	1910.9	1927.1	1907.3	1902.0	1866.1	1778.3	1616.9
40°	1975.5	1979.0	2007.7	2041.8	2061.5	2086.6	2066.9	2057.9	2020.3	1919.9	1755.0
42.5°	2072.3	2079.4	2115.3	2165.5	2197.7	2228.2	2219.3	2213.9	2161.9	2056.1	1882.2
45°	2145.8	2158.3	2208.5	2267.7	2312.5	2357.3	2359.1	2348.3	2299.9	2181.6	2005.9
47.5°	2204.9	2219.3	2274.8	2350.1	2418.2	2473.8	2484.6	2472.0	2427.2	2303.5	2117.1
50°	2253.3	2260.5	2323.2	2420.0	2504.3	2574.2	2595.7	2584.9	2545.5	2405.7	2213.9
52.5°	2278.4	2289.2	2360.9	2472.0	2574.2	2658.4	2690.7	2685.3	2638.7	2498.9	2299.9
55°	2291.0	2301.7	2386.0	2513.2	2628.0	2726.6	2766.0	2767.8	2723.0	2583.2	2380.6
57.5°	2276.6	2291.0	2382.4	2524.0	2651.3	2757.0	2818.0	2816.2	2780.3	2647.7	2448.7
59°	2251.5	2262.3	2360.9	2509.7	2647.7	2753.5	2823.4	2825.2	2792.9	2669.2	2479.2
60°	2222.8	2235.4	2335.8	2491.7	2633.4	2740.9	2814.4	2818.0	2791.1	2674.6	2491.7
62.5°	2124.2	2140.4	2251.5	2418.2	2572.4	2674.6	2762.4	2767.8	2753.5	2660.2	2500.7
65°	1986.2	2000.6	2120.7	2298.1	2459.5	2565.2	2647.7	2660.2	2658.4	2595.7	2464.8
67.5°	1817.7	1819.5	1932.4	2126.0	2294.5	2398.5	2477.4	2498.9	2515.0	2473.8	2359.1
70°	1615.1	1613.4	1722.7	1914.5	2083.0	2192.4	2271.2	2285.6	2326.8	2294.5	2201.3
72.5°	1364.2	1385.7	1487.9	1649.2	1815.9	1937.8	2007.7	2034.6	2057.9	2065.1	1988.0
75°	1127.6	1150.9	1231.5	1382.1	1525.5	1638.4	1713.7	1726.3	1769.3	1780.1	1708.4
77.5°	901.7	903.5	962.6	1082.7	1213.6	1306.8	1367.8	1400.0	1423.3	1444.8	1369.6
80°	632.8	641.8	683.0	769.0	871.2	969.8	1020.0	1041.5	1057.6	1072.0	1046.9
82.5°	396.2	399.8	426.6	478.6	548.5	604.1	656.1	674.0	677.6	709.9	706.3
85°	188.2	190.0	207.9	233.0	263.5	308.3	328.0	328.0	353.1	376.4	376.4
87.5°	25.1	25.1	30.5	34.1	43.0	55.6	77.1	78.9	93.2	104.0	112.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: CCP-VA-5-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	638.2	638.2	638.2	638.2	638.2	638.2	638.2	638.2	638.2	638.2	638.2
2.5°	640.0	640.0	640.0	640.0	640.0	638.2	640.0	640.0	640.0	640.0	640.0
5°	652.5	650.7	648.9	647.1	647.1	645.3	645.3	645.3	645.3	645.3	645.3
7.5°	665.1	663.3	661.5	657.9	656.1	654.3	654.3	652.5	652.5	652.5	652.5
10°	686.6	684.8	677.6	672.2	668.6	666.9	665.1	663.3	661.5	661.5	661.5
12.5°	715.3	711.7	699.1	691.9	686.6	683.0	679.4	677.6	675.8	674.0	674.0
15°	751.1	742.1	726.0	715.3	708.1	702.7	697.3	693.7	691.9	690.2	690.2
17.5°	794.1	783.4	761.9	742.1	729.6	720.6	713.5	708.1	706.3	706.3	706.3
20°	847.9	830.0	799.5	772.6	752.9	740.3	729.6	724.2	722.4	720.6	718.8
22.5°	910.6	887.3	842.5	801.3	776.2	758.3	745.7	738.6	733.2	731.4	731.4
25°	982.4	948.3	889.1	838.9	804.9	779.8	763.7	754.7	745.7	742.1	742.1
27.5°	1068.4	1023.6	944.7	878.4	831.8	801.3	783.4	770.8	761.9	754.7	751.1
30°	1161.6	1111.4	1005.7	921.4	862.2	828.2	806.7	792.3	779.8	767.2	765.4
32.5°	1279.9	1208.2	1079.2	969.8	898.1	855.1	830.0	812.1	795.9	783.4	779.8
35°	1400.0	1314.0	1156.2	1020.0	932.2	880.2	849.7	830.0	813.8	799.5	797.7
37.5°	1523.7	1432.3	1240.5	1079.2	971.6	908.9	871.2	849.7	830.0	815.6	813.8
40°	1652.8	1545.2	1326.5	1140.1	1012.8	937.5	894.5	867.6	846.1	833.6	831.8
42.5°	1774.7	1658.2	1419.8	1211.8	1061.2	968.0	917.8	889.1	862.2	849.7	847.9
45°	1891.2	1765.7	1513.0	1278.1	1109.6	1000.3	941.1	907.1	878.4	865.8	864.0
47.5°	1997.0	1871.5	1599.0	1349.8	1159.8	1036.1	966.2	925.0	892.7	880.2	880.2
50°	2092.0	1961.1	1683.3	1416.2	1206.4	1072.0	987.7	941.1	908.9	896.3	894.5
52.5°	2181.6	2040.0	1756.8	1473.5	1251.2	1104.3	1009.2	953.7	919.6	905.3	903.5
55°	2253.3	2111.7	1817.7	1520.1	1281.7	1125.8	1023.6	960.8	923.2	910.6	908.9
57.5°	2316.1	2170.9	1860.7	1552.4	1301.4	1138.3	1030.8	960.8	921.4	907.1	905.3
59°	2342.9	2196.0	1875.1	1561.4	1305.0	1140.1	1029.0	955.5	914.2	899.9	896.3
60°	2357.3	2206.7	1880.5	1563.2	1303.2	1136.5	1027.2	950.1	907.1	890.9	890.9
62.5°	2371.6	2215.7	1873.3	1548.8	1283.5	1116.8	1009.2	928.6	880.2	862.2	862.2
65°	2341.2	2183.4	1832.1	1509.4	1244.1	1082.7	975.2	892.7	838.9	821.0	821.0
67.5°	2251.5	2104.5	1756.8	1435.9	1179.5	1023.6	919.6	835.4	785.2	765.4	760.1
70°	2099.2	1975.5	1638.4	1330.1	1091.7	948.3	849.7	769.0	717.0	697.3	690.2
72.5°	1894.8	1772.9	1480.7	1201.1	975.2	849.7	763.7	686.6	629.2	609.5	611.3
75°	1613.4	1527.3	1276.3	1037.9	840.7	724.2	652.5	588.0	539.6	523.4	525.2
77.5°	1308.6	1236.9	1034.3	846.1	686.6	596.9	536.0	484.0	451.7	442.8	437.4
80°	1002.1	932.2	776.2	631.0	521.7	458.9	417.7	381.8	356.7	344.2	347.8
82.5°	672.2	629.2	514.5	417.7	354.9	310.1	295.8	272.5	263.5	256.3	261.7
85°	362.1	324.5	268.9	224.1	195.4	182.8	186.4	184.6	177.5	175.7	181.1
87.5°	118.3	102.2	78.9	66.3	68.1	60.9	60.9	57.4	52.0	50.2	53.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

INVUE

Report Number: SP1-2005-785-13

Luminaire Tested: WIS-VA-3-740-U-T4FT

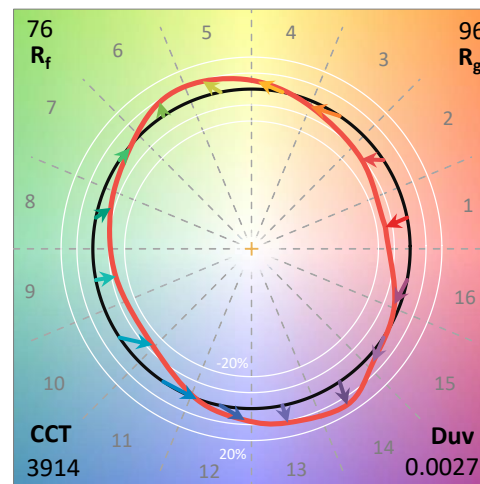
Test Date: 08/04/2020

Test Information

Test Method: LM-79-08
 Report Number: SP1-2005-785-13
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1
 Measurement Geometry: 4π
 Issue Date: 08/04/2020
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: INVUE
 Catalog Number: **WIS-VA-3-740-U-T4FT**
 Description: INVUE WALL PACK VA

Spectral Parameters

CCT (K):	3914	CRI (Ra):	73.8		
CIE u':	0.2252	R1:	71.6	R9:	-14.4
CIE v':	0.5065	R2:	79.1	R10:	49.8
Duv:	0.0027	R3:	84.5	R11:	69.5
CIE x:	0.3862	R4:	73.8	R12:	41.9
CIE y:	0.3861	R5:	70.6	R13:	72.4
CIE z:	0.2276	R6:	70.0	R14:	90.9
Peak Wavelength (nm):	450	R7:	83.1		
Dominant Wavelength (nm):	578	R8:	58.2		
Purity:	31.9				
Rf:	75.9				
Rg:	95.8				



Test Conditions

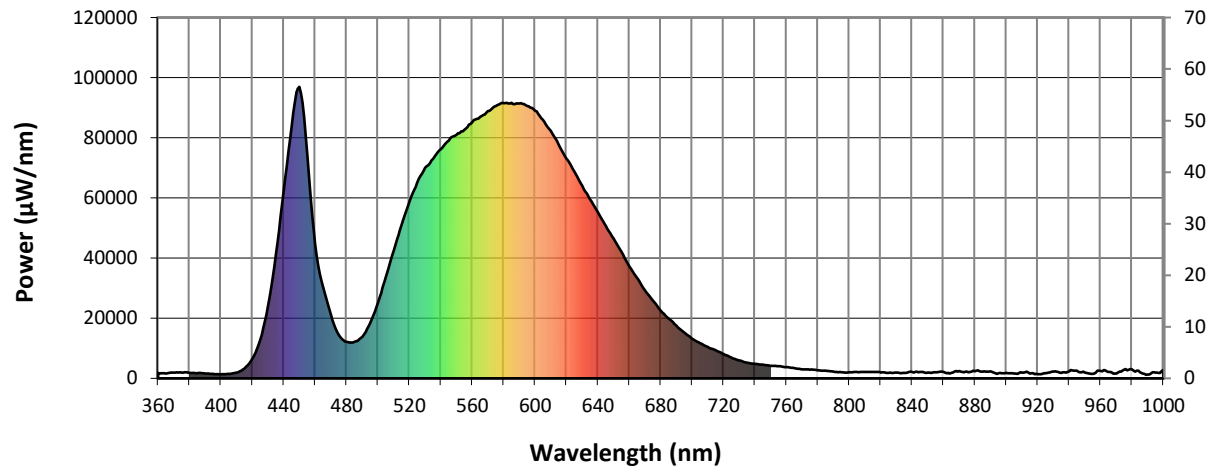
Stabilization Time: 97M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 24.0/45%
 Sphere Temperature (°C): 24.5

REPORT NUMBER: SP1-2005-785-13

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	7/29/2020	1/29/2021
Power Meter	IN0071	12/3/2020	12/3/2020
AC Power Source	IN0063	12/3/2020	12/3/2020
DC Power Source	IN0208	12/3/2020	12/3/2020
Sphere Thermometer	IN0085	12/3/2020	12/3/2020
Room Thermometer	IN0046	12/3/2020	12/3/2020

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Photopic Flux vs. Wavelength

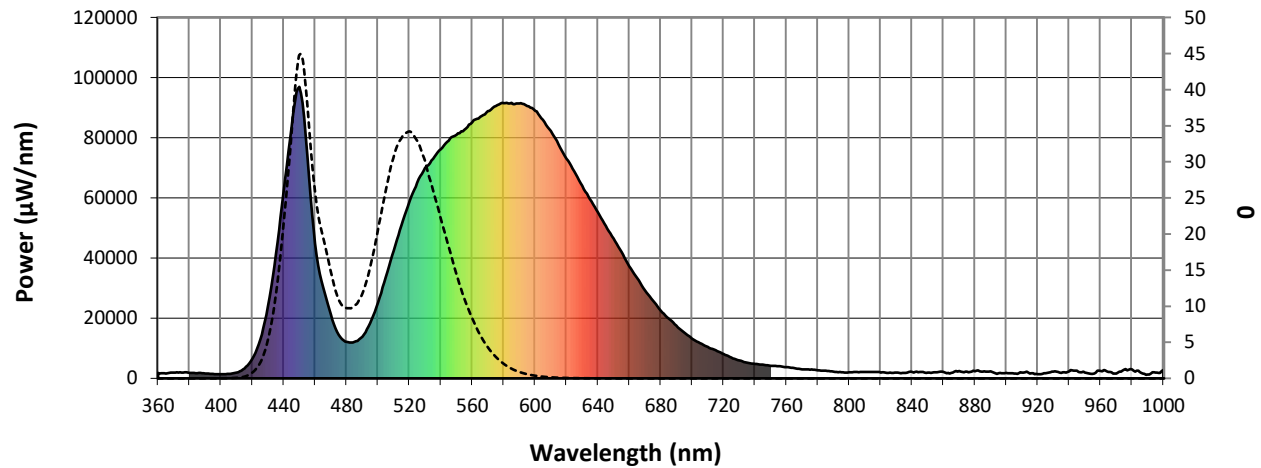


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λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)
360	1777	0.0	490	13889	2.0	620	73034	19.0	750	4168	0.0	880	2380	0.0
365	1645	0.0	495	18334	3.3	625	68899	15.2	755	4006	0.0	885	2220	0.0
370	1873	0.0	500	25225	5.6	630	64021	11.6	760	3706	0.0	890	2311	0.0
375	1965	0.0	505	33622	9.4	635	59595	9.0	765	3453	0.0	895	1655	0.0
380	1854	0.0	510	42469	14.6	640	55182	6.6	770	2984	0.0	900	1845	0.0
385	1682	0.0	515	50827	21.1	645	50671	4.9	775	2915	0.0	905	1614	0.0
390	1620	0.0	520	58760	28.5	650	46455	3.4	780	2713	0.0	910	1919	0.0
395	1465	0.0	525	65016	34.9	655	42012	2.4	785	2521	0.0	915	1651	0.0
400	1369	0.0	530	70032	41.2	660	37258	1.6	790	2187	0.0	920	1386	0.0
405	1472	0.0	535	73041	45.3	665	33282	1.1	795	2010	0.0	925	1654	0.0
410	1921	0.0	540	76154	49.6	670	29305	0.6	800	1980	0.0	930	2256	0.0
415	3297	0.0	545	79118	52.7	675	25857	0.4	805	2112	0.0	935	1853	0.0
420	6480	0.0	550	81000	55.0	680	22592	0.3	810	2148	0.0	940	2392	0.0
425	12903	0.1	555	82646	56.4	685	19937	0.2	815	2119	0.0	945	2525	0.0
430	24020	0.2	560	85163	57.9	690	17536	0.1	820	1966	0.0	950	1880	0.0
435	41399	0.5	565	86959	57.8	695	15253	0.1	825	1813	0.0	955	1472	0.0
440	62213	1.0	570	88812	57.7	700	13252	0.0	830	1933	0.0	960	2448	0.0
445	83734	1.7	575	90518	56.3	705	11730	0.0	835	1863	0.0	965	2185	0.0
450	96938	2.5	580	91567	54.4	710	10390	0.0	840	2087	0.0	970	1600	0.0
455	74147	2.5	585	91648	50.9	715	9321	0.0	845	2119	0.0	975	2867	0.0
460	44763	1.8	590	91405	47.3	720	8040	0.0	850	1872	0.0	980	3029	0.0
465	30427	1.6	595	90610	42.9	725	6876	0.0	855	2001	0.0	985	2108	0.0
470	21030	1.3	600	88999	38.4	730	5969	0.0	860	2128	0.0	990	1266	0.0
475	14459	1.1	605	86003	33.3	735	5202	0.0	865	1779	0.0	995	1939	0.0
480	12138	1.2	610	82309	28.3	740	4843	0.0	870	2479	0.0	1000	2782	0.0
485	12135	1.4	615	77745	23.5	745	4567	0.0	875	2223	0.0			

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Scotopic Flux vs. Wavelength



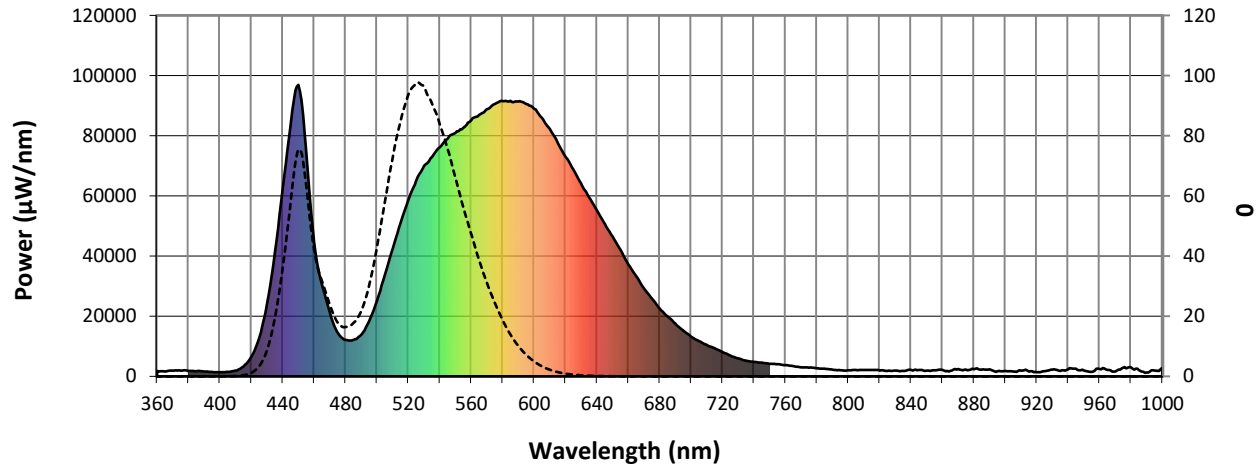
Scotopic Lumens: 3014.1

S/P: 0.57

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	1777	0.0	490	13889	21.4	620	73034	0.9	750	4168	0.0	880	2380	0.0
365	1645	0.0	495	18334	29.6	625	68899	0.6	755	4006	0.0	885	2220	0.0
370	1873	0.0	500	25225	42.2	630	64021	0.4	760	3706	0.0	890	2311	0.0
375	1965	0.0	505	33622	57.2	635	59595	0.2	765	3453	0.0	895	1655	0.0
380	1854	0.0	510	42469	72.0	640	55182	0.1	770	2984	0.0	900	1845	0.0
385	1682	0.0	515	50827	84.2	645	50671	0.1	775	2915	0.0	905	1614	0.0
390	1620	0.0	520	58760	93.4	650	46455	0.1	780	2713	0.0	910	1919	0.0
395	1465	0.0	525	65016	97.3	655	42012	0.0	785	2521	0.0	915	1651	0.0
400	1369	0.0	530	70032	96.6	660	37258	0.0	790	2187	0.0	920	1386	0.0
405	1472	0.0	535	73041	91.0	665	33282	0.0	795	2010	0.0	925	1654	0.0
410	1921	0.1	540	76154	84.2	670	29305	0.0	800	1980	0.0	930	2256	0.0
415	3297	0.3	545	79118	75.9	675	25857	0.0	805	2112	0.0	935	1853	0.0
420	6480	1.1	550	81000	66.2	680	22592	0.0	810	2148	0.0	940	2392	0.0
425	12903	3.2	555	82646	56.5	685	19937	0.0	815	2119	0.0	945	2525	0.0
430	24020	8.2	560	85163	47.6	690	17536	0.0	820	1966	0.0	950	1880	0.0
435	41399	18.5	565	86959	39.0	695	15253	0.0	825	1813	0.0	955	1472	0.0
440	62213	34.8	570	88812	31.3	700	13252	0.0	830	1933	0.0	960	2448	0.0
445	83734	56.1	575	90518	24.7	705	11730	0.0	835	1863	0.0	965	2185	0.0
450	96938	75.1	580	91567	18.9	710	10390	0.0	840	2087	0.0	970	1600	0.0
455	74147	64.8	585	91648	14.0	715	9321	0.0	845	2119	0.0	975	2867	0.0
460	44763	43.2	590	91405	10.2	720	8040	0.0	850	1872	0.0	980	3029	0.0
465	30427	32.1	595	90610	7.2	725	6876	0.0	855	2001	0.0	985	2108	0.0
470	21030	24.2	600	88999	5.0	730	5969	0.0	860	2128	0.0	990	1266	0.0
475	14459	18.1	605	86003	3.4	735	5202	0.0	865	1779	0.0	995	1939	0.0
480	12138	16.4	610	82309	2.2	740	4843	0.0	870	2479	0.0	1000	2782	0.0
485	12135	17.6	615	77745	1.4	745	4567	0.0	875	2223	0.0			

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Melanopic Flux vs. Wavelength



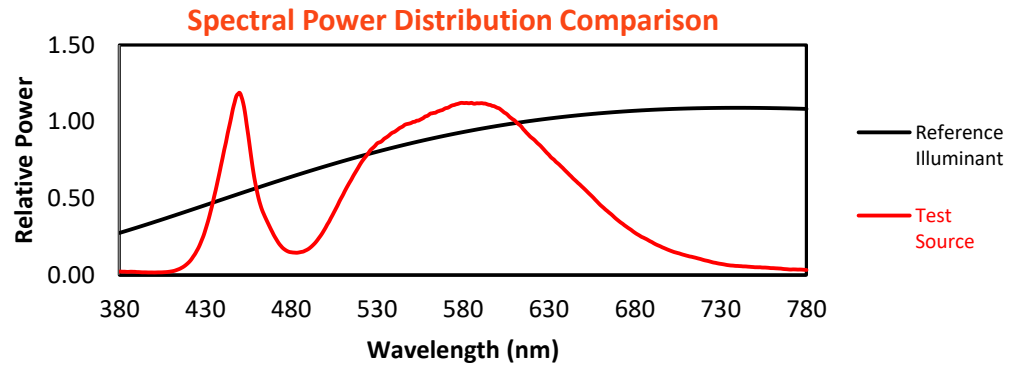
Melanopic Lumens: 7943.1

S/P: 1.5

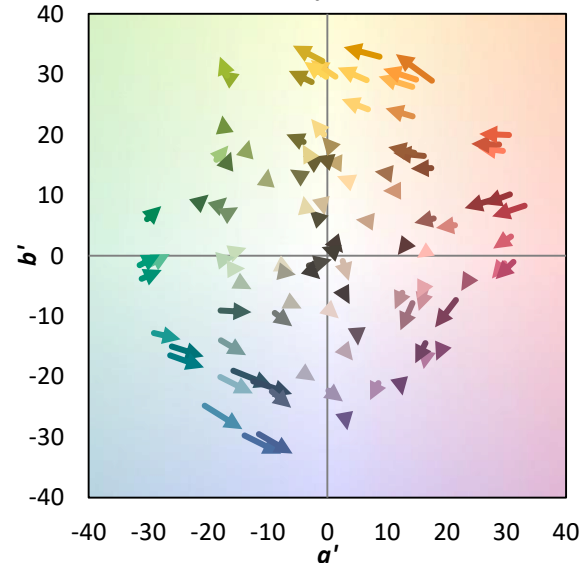
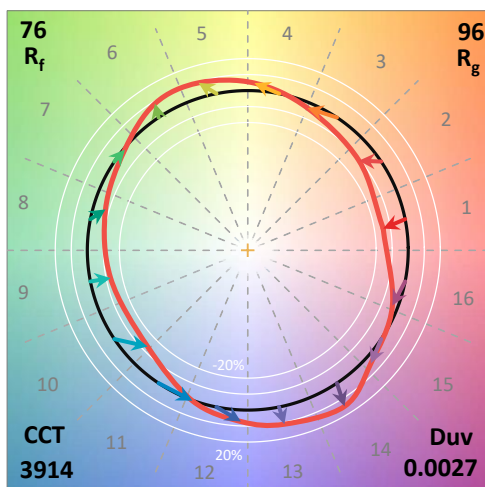
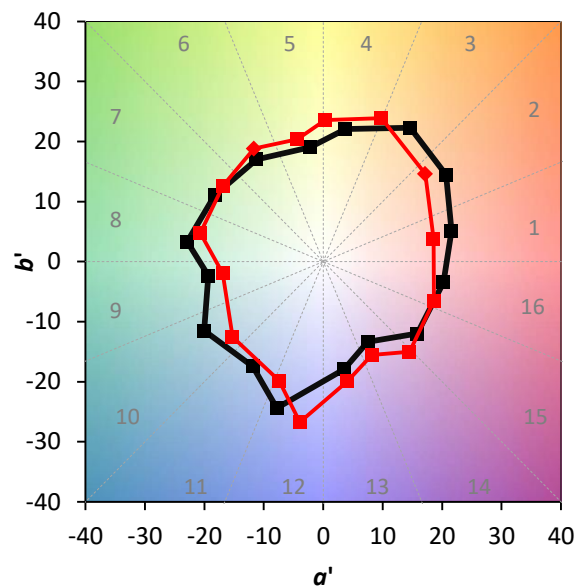
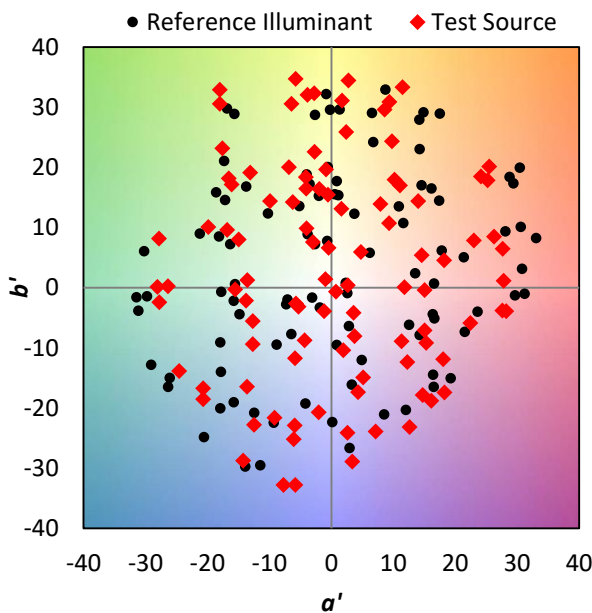
λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)
360	1777	0.0	490	13889	11.6	620	73034	0.1	750	4168	0.0	880	2380	0.0
365	1645	0.0	495	18334	15.1	625	68899	0.0	755	4006	0.0	885	2220	0.0
370	1873	0.0	500	25225	20.3	630	64021	0.0	760	3706	0.0	890	2311	0.0
375	1965	0.0	505	33622	25.8	635	59595	0.0	765	3453	0.0	895	1655	0.0
380	1854	0.0	510	42469	30.5	640	55182	0.0	770	2984	0.0	900	1845	0.0
385	1682	0.0	515	50827	33.2	645	50671	0.0	775	2915	0.0	905	1614	0.0
390	1620	0.0	520	58760	34.2	650	46455	0.0	780	2713	0.0	910	1919	0.0
395	1465	0.0	525	65016	33.0	655	42012	0.0	785	2521	0.0	915	1651	0.0
400	1369	0.0	530	70032	30.3	660	37258	0.0	790	2187	0.0	920	1386	0.0
405	1472	0.0	535	73041	26.3	665	33282	0.0	795	2010	0.0	925	1654	0.0
410	1921	0.1	540	76154	22.3	670	29305	0.0	800	1980	0.0	930	2256	0.0
415	3297	0.2	545	79118	18.4	675	25857	0.0	805	2112	0.0	935	1853	0.0
420	6480	0.7	550	81000	14.5	680	22592	0.0	810	2148	0.0	940	2392	0.0
425	12903	2.0	555	82646	11.1	685	19937	0.0	815	2119	0.0	945	2525	0.0
430	24020	5.1	560	85163	8.4	690	17536	0.0	820	1966	0.0	950	1880	0.0
435	41399	11.0	565	86959	6.1	695	15253	0.0	825	1813	0.0	955	1472	0.0
440	62213	20.8	570	88812	4.3	700	13252	0.0	830	1933	0.0	960	2448	0.0
445	83734	33.0	575	90518	3.0	705	11730	0.0	835	1863	0.0	965	2185	0.0
450	96938	44.7	580	91567	2.0	710	10390	0.0	840	2087	0.0	970	1600	0.0
455	74147	38.8	585	91648	1.4	715	9321	0.0	845	2119	0.0	975	2867	0.0
460	44763	26.4	590	91405	0.9	720	8040	0.0	850	1872	0.0	980	3029	0.0
465	30427	19.9	595	90610	0.6	725	6876	0.0	855	2001	0.0	985	2108	0.0
470	21030	15.1	600	88999	0.4	730	5969	0.0	860	2128	0.0	990	1266	0.0
475	14459	11.0	605	86003	0.2	735	5202	0.0	865	1779	0.0	995	1939	0.0
480	12138	9.8	610	82309	0.1	740	4843	0.0	870	2479	0.0	1000	2782	0.0
485	12135	10.0	615	77745	0.1	745	4567	0.0	875	2223	0.0			

Summary

$R_f = 75.9$
 $R_g = 95.8$
 CIE $R_a = 73.8$
 $R_g = -14.4$

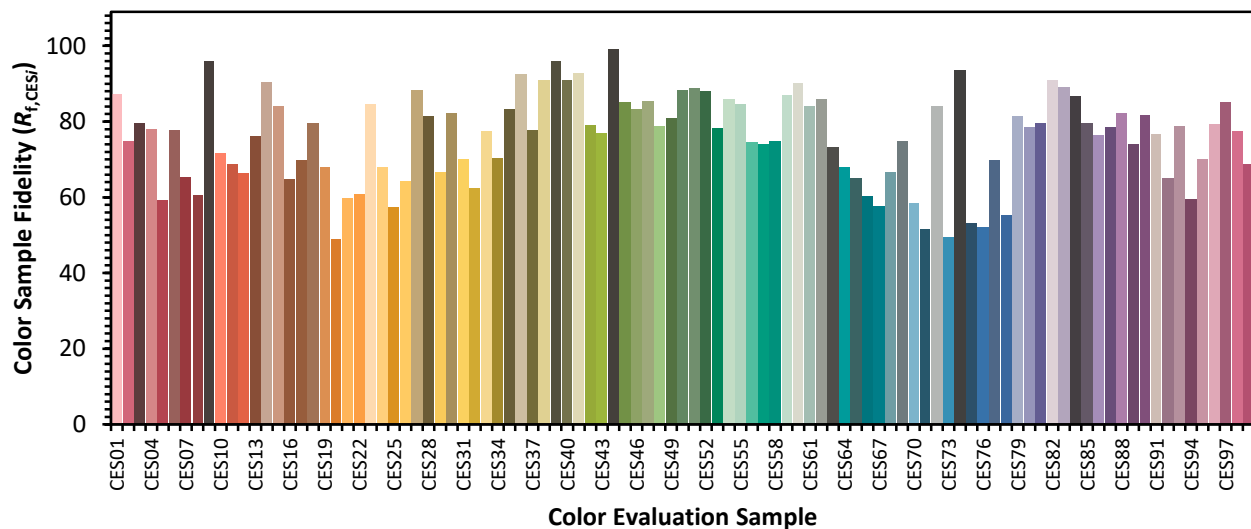


Color Vector Graphics

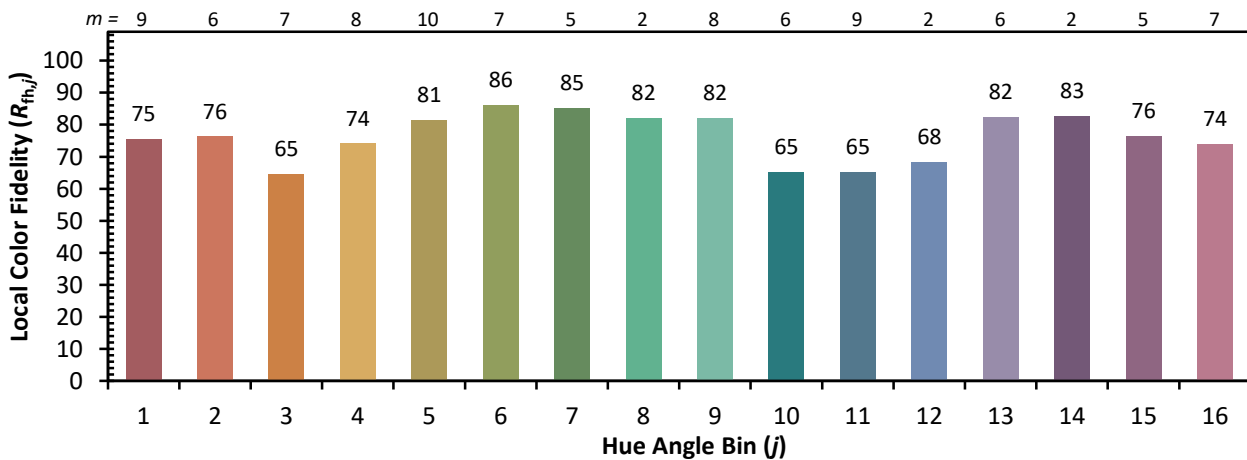
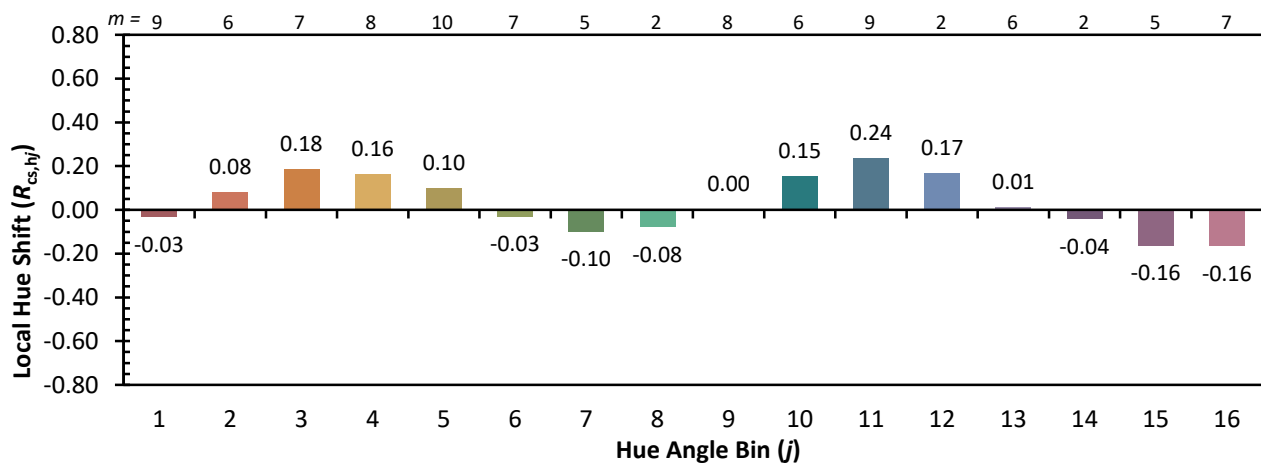
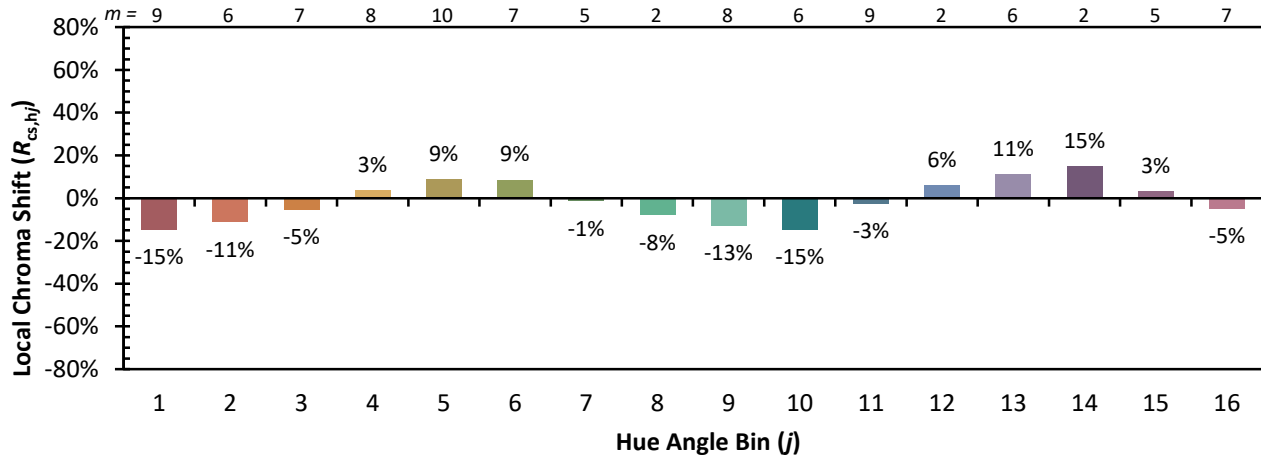


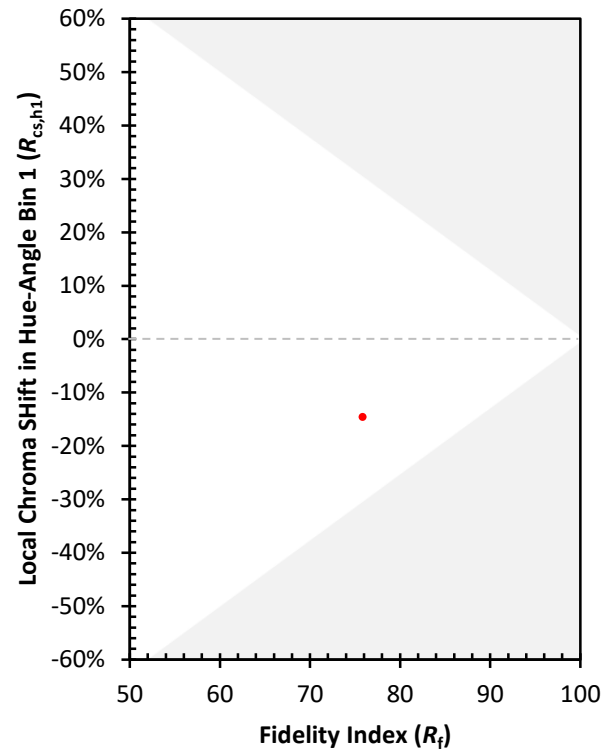
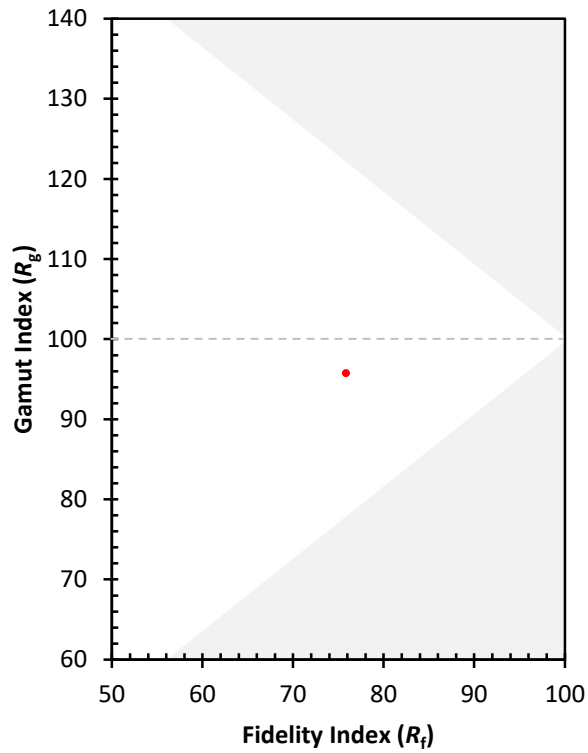
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 64	CES51 = 89	CES76 = 52
CES02 = 61	CES27 = 88	CES52 = 88	CES77 = 70
CES03 = 30	CES28 = 81	CES53 = 78	CES78 = 55
CES04 = 70	CES29 = 67	CES54 = 86	CES79 = 81
CES05 = 48	CES30 = 82	CES55 = 85	CES80 = 78
CES06 = 50	CES31 = 70	CES56 = 75	CES81 = 80
CES07 = 40	CES32 = 62	CES57 = 74	CES82 = 91
CES08 = 39	CES33 = 78	CES58 = 75	CES83 = 89
CES09 = 29	CES34 = 70	CES59 = 87	CES84 = 87
CES10 = 74	CES35 = 83	CES60 = 90	CES85 = 80
CES11 = 57	CES36 = 92	CES61 = 84	CES86 = 76
CES12 = 63	CES37 = 78	CES62 = 86	CES87 = 78
CES13 = 42	CES38 = 91	CES63 = 73	CES88 = 82
CES14 = 74	CES39 = 96	CES64 = 68	CES89 = 74
CES15 = 71	CES40 = 91	CES65 = 65	CES90 = 82
CES16 = 47	CES41 = 93	CES66 = 60	CES91 = 77
CES17 = 49	CES42 = 79	CES67 = 58	CES92 = 65
CES18 = 56	CES43 = 77	CES68 = 67	CES93 = 79
CES19 = 71	CES44 = 99	CES69 = 75	CES94 = 60
CES20 = 65	CES45 = 85	CES70 = 59	CES95 = 70
CES21 = 86	CES46 = 83	CES71 = 52	CES96 = 79
CES22 = 78	CES47 = 85	CES72 = 84	CES97 = 85
CES23 = 92	CES48 = 79	CES73 = 49	CES98 = 78
CES24 = 91	CES49 = 81	CES74 = 94	CES99 = 69
CES25 = 72	CES50 = 88	CES75 = 53	



Color Rendition by Hue-Angle Bin



Measure Comparisons


(END OF REPORT)