

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: P472288

Luminaire Tested: **CCP-VA4-827-U-T4FT**

Issue Date: 01/27/2021



Test Information

Test Method: LM-79-08
Report Number: P472288
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCP-VA4-827-U-T4FT
Description: INVUE CLEARCURVE POLE MOUNT Wave Stream LUMINAIRE WITH T4FT
DISTRIBUTION LENS
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5662.4 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

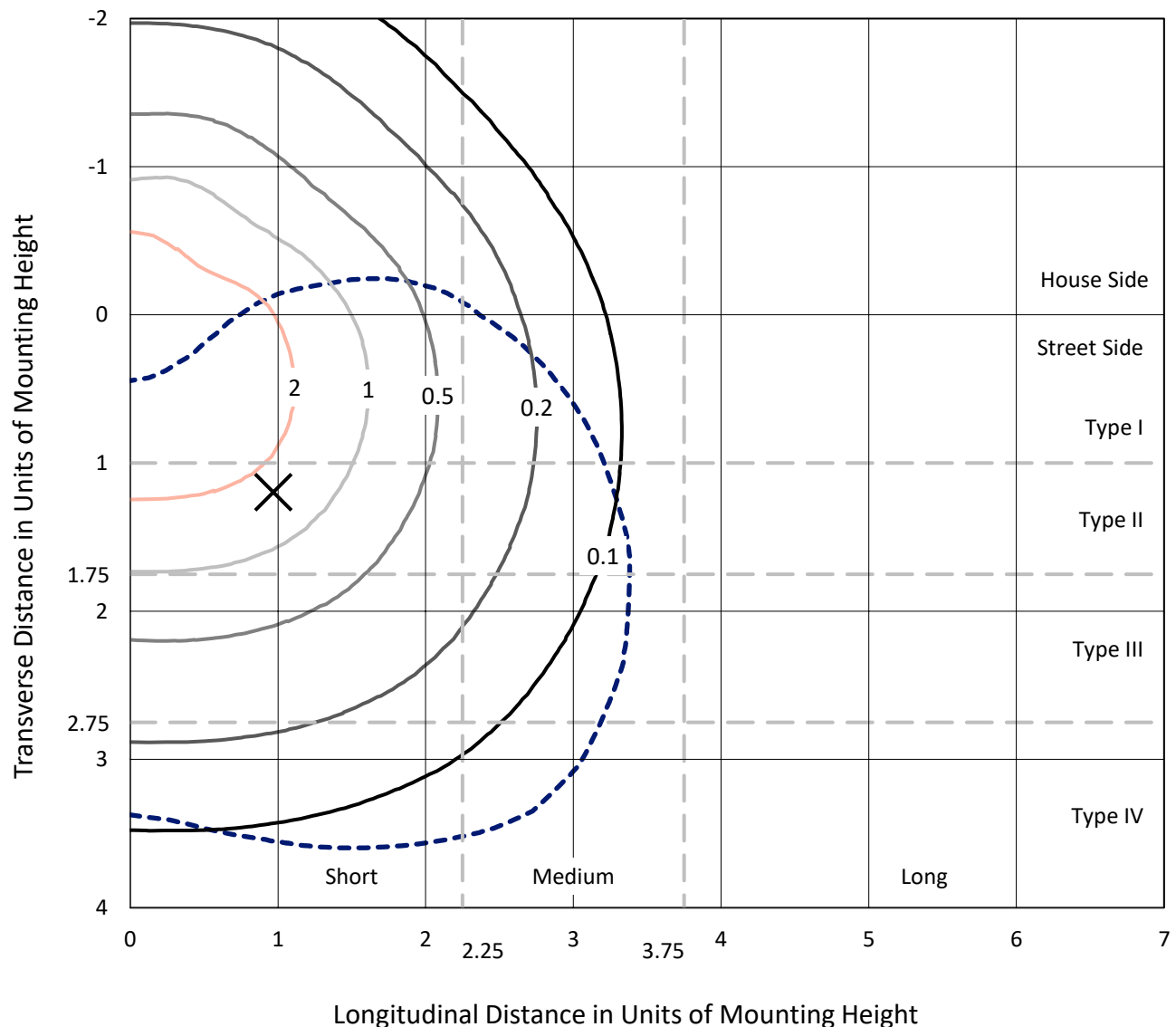
Input Watts (W): 64.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Iso-Footcandle Lines of Horizontal Illumination

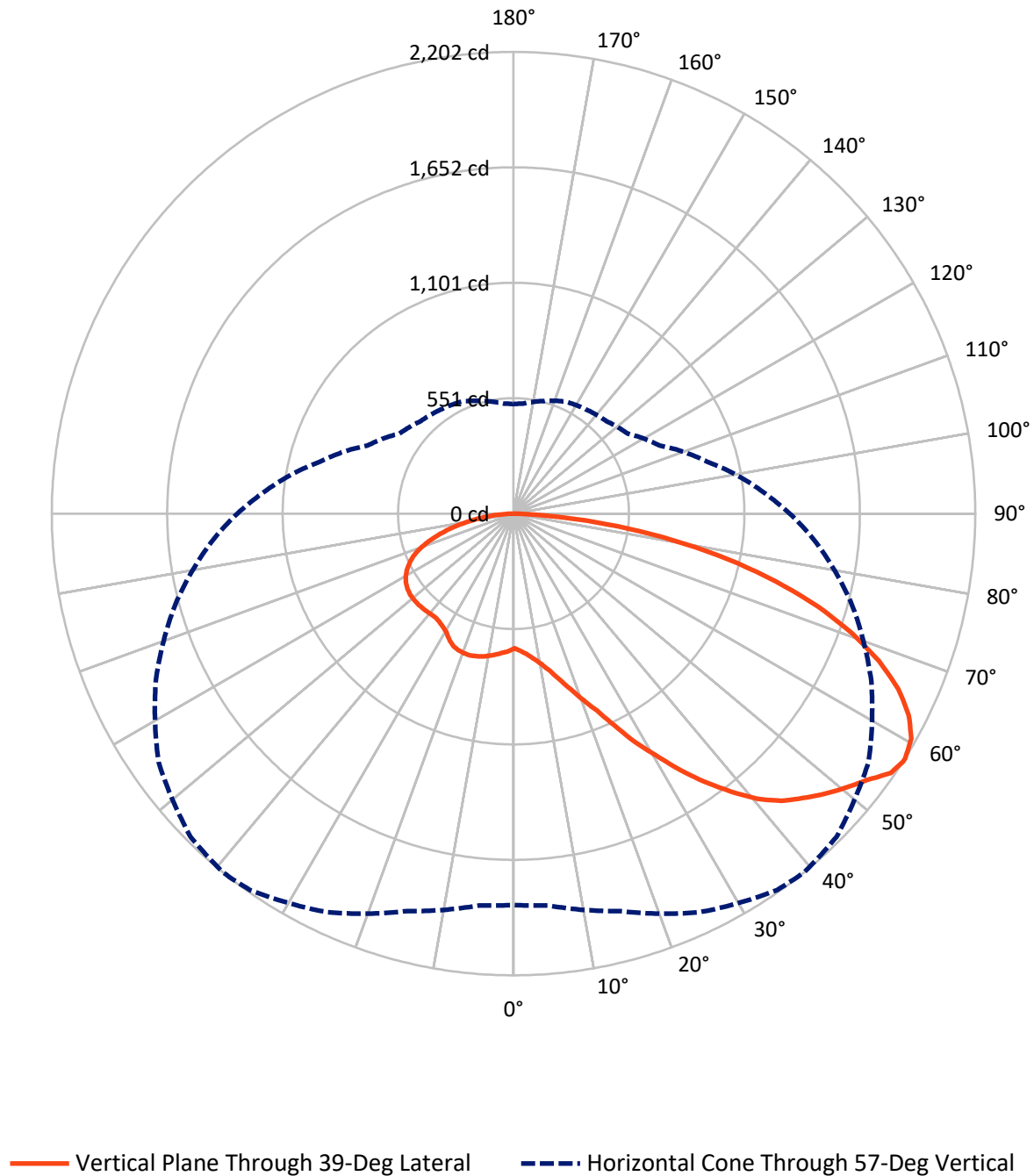
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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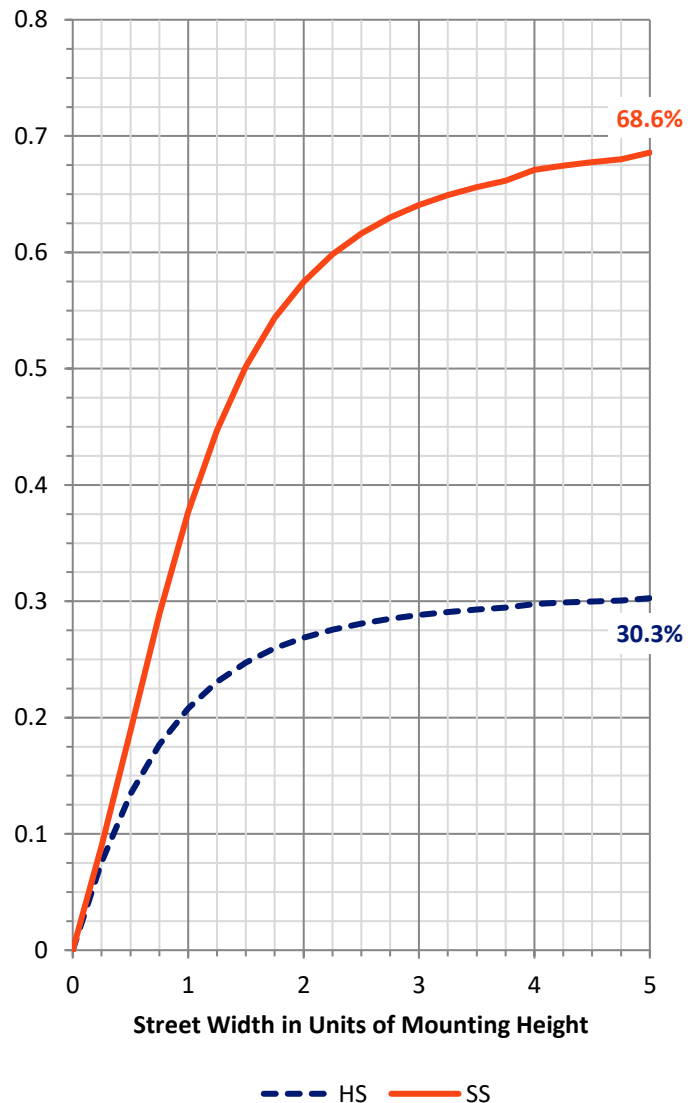
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1737.4	0.0	1737.4
	% Fixture	30.7	0.0	30.7
Street Side	Lumens	3925.0	0.0	3925.0
	% Fixture	69.3	0.0	69.3
Total	Lumens	5662.4	0.0	5662.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.1
10°-20°	216.8	3.8
20°-30°	418.8	7.4
30°-40°	677.5	12.0
40°-50°	951.8	16.8
50°-60°	1175.8	20.8
60°-70°	1168.6	20.6
70°-80°	790.7	14.0
80°-90°	197.3	3.5
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°	5662.4	100.0
0°-180°	5662.4	100.0



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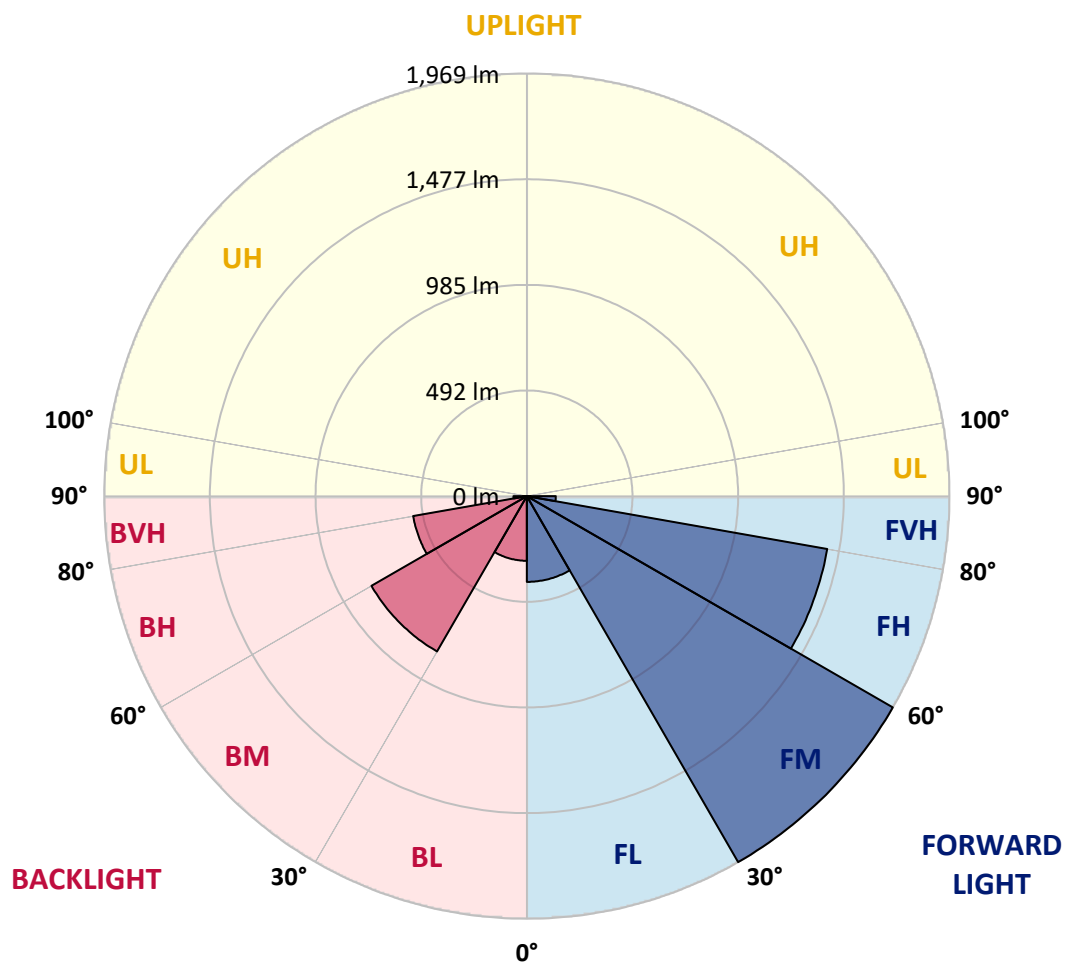
CATALOG NUMBER: CCP-VA4-827-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	399.5	7.1			
FM	(30°-60°)	1969.1	34.8			
FH	(60°-80°)	1421.3	25.1			G1/1800
FVH	(80°-90°)	135.0	2.4			G2/225
BL	(0°-30°)	301.1	5.3	B1/500		
BM	(30°-60°)	835.9	14.8	B1/1000		
BH	(60°-80°)	538.1	9.5	B2/1000		G2/1000
BVH	(80°-90°)	62.3	1.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	642.1	642.1	642.1	642.1	642.1	642.1	642.1	642.1	642.1	642.1	642.1
2.5°	661.2	660.3	659.4	659.4	657.7	656.0	655.1	653.4	654.2	656.0	656.8
5°	680.3	678.5	678.5	676.8	674.2	674.2	671.6	668.1	667.2	666.4	666.4
7.5°	709.8	707.2	708.0	705.4	702.8	699.4	695.0	690.7	688.9	682.9	677.7
10°	743.6	742.7	740.1	735.8	733.2	729.7	725.4	717.6	711.5	704.6	700.2
12.5°	783.5	781.8	782.7	779.2	774.8	768.8	761.8	754.0	742.7	729.7	721.0
15°	835.6	832.1	832.1	831.2	822.6	820.8	813.9	796.5	780.9	763.6	743.6
17.5°	898.9	898.1	894.6	891.1	885.9	879.8	872.9	853.8	830.4	803.5	776.6
20°	966.6	964.9	967.5	962.3	951.8	949.2	938.0	916.3	887.6	856.4	815.6
22.5°	1040.4	1042.1	1042.1	1040.4	1031.7	1021.3	1011.7	983.1	950.1	911.9	864.2
25°	1129.7	1130.6	1135.8	1141.0	1135.8	1119.3	1106.3	1062.0	1017.8	969.2	912.8
27.5°	1230.4	1224.3	1239.1	1248.6	1239.1	1234.7	1206.1	1157.5	1096.8	1036.0	965.7
30°	1327.6	1327.6	1339.7	1353.6	1347.5	1337.1	1313.7	1251.2	1181.8	1104.6	1019.5
32.5°	1417.8	1428.2	1433.4	1465.5	1462.0	1456.8	1429.9	1347.5	1260.7	1173.1	1071.6
35°	1524.5	1521.1	1542.7	1562.7	1578.3	1571.4	1551.4	1468.1	1354.5	1245.1	1128.9
37.5°	1605.2	1612.2	1631.2	1666.8	1678.1	1681.6	1656.4	1570.5	1441.2	1322.4	1192.2
40°	1666.8	1672.0	1708.5	1753.6	1777.0	1789.2	1764.0	1659.9	1522.8	1384.0	1241.7
42.5°	1716.3	1719.8	1757.9	1822.1	1861.2	1873.3	1850.8	1740.6	1592.2	1433.4	1282.4
45°	1749.3	1755.3	1800.4	1866.4	1927.1	1935.8	1924.5	1811.7	1653.8	1480.3	1311.9
47.5°	1777.9	1784.8	1835.2	1918.4	1986.1	1997.4	1987.0	1874.2	1712.8	1522.8	1337.1
50°	1816.1	1823.9	1874.2	1967.0	2041.7	2054.7	2051.2	1940.1	1768.3	1570.5	1363.1
52.5°	1852.5	1858.6	1918.4	2021.7	2102.4	2111.1	2108.5	2001.7	1824.7	1621.7	1396.1
55°	1881.1	1888.1	1959.2	2086.8	2173.5	2183.1	2164.9	2049.5	1869.0	1659.0	1427.3
57°	1866.4	1875.9	1962.7	2098.1	2191.8	2202.2	2178.8	2066.8	1882.0	1669.4	1438.6
57.5°	1862.1	1869.0	1959.2	2097.2	2192.6	2202.2	2178.8	2066.0	1881.1	1668.6	1438.6
60°	1798.7	1815.2	1916.7	2066.0	2167.5	2179.6	2157.1	2031.2	1859.4	1644.3	1415.2
62.5°	1713.7	1736.2	1843.0	1992.2	2106.7	2115.4	2092.9	1973.1	1810.9	1593.1	1366.6
65°	1591.3	1626.0	1738.0	1882.0	2006.1	2016.5	1993.9	1875.9	1730.2	1515.0	1293.7
67.5°	1471.6	1492.4	1612.2	1749.3	1864.7	1880.3	1861.2	1756.2	1619.1	1410.9	1196.5
70°	1335.4	1350.1	1449.0	1583.5	1699.8	1712.8	1696.3	1598.3	1469.0	1281.6	1082.9
72.5°	1171.4	1187.0	1271.2	1395.2	1498.5	1519.3	1508.0	1406.5	1289.4	1127.1	956.2
75°	986.6	1003.9	1079.4	1178.3	1279.0	1291.1	1278.1	1203.5	1097.6	951.0	801.7
77.5°	800.0	811.3	865.9	940.6	1018.7	1044.7	1041.2	988.3	881.6	765.3	643.8
80°	598.7	600.4	629.1	690.7	753.1	772.2	776.6	728.9	658.6	570.9	482.4
82.5°	378.3	384.4	400.0	446.0	476.4	502.4	508.5	480.7	436.4	381.8	327.1
85°	176.1	170.9	183.1	198.7	242.1	242.1	249.9	235.1	222.1	203.9	169.2
87.5°	14.8	13.9	13.9	14.8	23.4	25.2	39.9	44.3	47.7	47.7	50.3
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-VA4-827-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	642.1	642.1	642.1	642.1	642.1	642.1	642.1	642.1	642.1	642.1	642.1
2.5°	655.1	654.2	651.6	651.6	653.4	656.0	656.8	657.7	658.6	659.4	659.4
5°	665.5	664.6	662.9	661.2	662.9	663.8	666.4	668.1	668.1	669.9	669.0
7.5°	675.1	675.9	674.2	673.3	673.3	675.1	678.5	681.1	682.9	683.7	685.5
10°	696.8	691.5	684.6	681.1	681.1	684.6	688.1	691.5	695.0	696.8	696.8
12.5°	715.8	709.8	696.8	691.5	690.7	694.1	698.5	703.7	706.3	708.9	708.9
15°	733.2	728.0	712.4	700.2	696.8	699.4	704.6	710.6	715.0	717.6	717.6
17.5°	766.2	750.5	729.7	709.8	702.8	703.7	709.8	715.8	721.0	722.8	721.9
20°	797.4	777.4	746.2	717.6	706.3	702.8	708.9	716.7	721.0	723.6	723.6
22.5°	833.0	811.3	762.7	725.4	704.6	699.4	704.6	711.5	716.7	718.4	720.2
25°	883.3	845.1	780.9	731.5	702.0	691.5	695.0	702.0	708.0	708.9	708.0
27.5°	928.4	885.0	805.2	737.5	695.9	676.8	673.3	678.5	688.1	694.1	695.9
30°	967.5	927.6	830.4	742.7	684.6	652.5	648.2	649.9	656.0	672.5	673.3
32.5°	1025.6	964.0	855.5	747.1	671.6	639.5	633.4	631.7	633.4	642.1	642.1
35°	1065.5	1004.8	880.7	754.9	662.0	629.1	623.0	620.4	618.7	610.0	607.4
37.5°	1117.6	1049.9	905.0	761.8	657.7	624.7	616.1	617.8	609.1	584.8	577.9
40°	1174.8	1090.7	929.3	768.8	659.4	625.6	617.8	616.9	602.2	568.3	561.4
42.5°	1202.6	1125.4	954.5	778.3	666.4	628.2	621.3	618.7	600.4	562.3	552.7
45°	1229.5	1150.5	972.7	786.1	673.3	631.7	623.0	620.4	599.6	557.1	550.1
47.5°	1253.8	1166.2	981.4	790.5	678.5	634.3	623.9	619.5	595.2	554.5	547.5
50°	1265.1	1174.8	981.4	790.5	680.3	636.9	622.1	616.1	588.3	550.1	544.0
52.5°	1282.4	1180.1	973.5	785.3	677.7	636.9	618.7	609.1	579.6	544.0	538.8
55°	1308.5	1189.6	963.1	777.4	671.6	631.7	612.6	599.6	567.5	535.4	531.0
57°	1317.1	1193.1	956.2	767.9	664.6	624.7	605.6	589.2	556.2	526.7	522.3
57.5°	1315.4	1191.3	953.6	765.3	662.0	622.1	603.9	586.6	553.6	524.9	520.6
60°	1292.0	1174.8	937.1	748.8	648.2	608.2	588.3	569.2	535.4	510.2	506.7
62.5°	1253.8	1137.5	907.6	727.1	629.1	589.2	568.3	546.6	512.8	491.1	489.4
65°	1188.7	1075.1	865.1	695.9	604.8	564.0	541.4	518.0	488.5	469.4	464.2
67.5°	1080.3	991.8	805.2	652.5	567.5	532.8	508.5	484.2	457.3	440.8	437.3
70°	990.0	900.7	728.9	597.8	522.3	489.4	466.8	443.4	420.0	405.2	404.3
72.5°	875.5	789.6	633.4	530.2	465.1	433.0	415.6	394.8	376.6	363.6	363.6
75°	736.7	669.0	534.5	449.5	396.5	373.1	358.4	341.9	326.2	317.6	319.3
77.5°	585.7	534.5	436.4	363.6	324.5	308.9	295.0	285.5	275.9	268.1	269.0
80°	432.1	393.9	321.0	267.2	248.2	234.3	231.7	225.6	220.4	217.8	213.5
82.5°	295.9	262.0	213.5	183.1	169.2	164.9	165.7	165.7	166.6	166.6	164.9
85°	153.6	140.6	108.5	98.0	96.3	100.7	105.9	109.3	108.5	108.5	105.9
87.5°	44.3	39.9	34.7	31.2	33.0	35.6	31.2	30.4	29.5	28.6	28.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LM-79-08: Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

INVUE

Report Number: SP1-2005-785-16

Luminaire Tested: WIS-VA3-827-U-T4FT

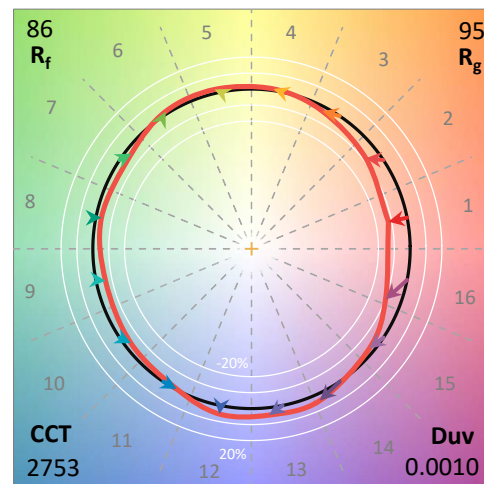
Test Date: 08/13/2020

Test Information

Test Method: LM-79-08
 Report Number: SP1-2005-785-16
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1
 Measurement Geometry: 4π
 Issue Date: 08/13/2020
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: INVUE
 Catalog Number: **WIS-VA-3-827-U-T4FT**
 Description: INVUE WALL PACK VA

Spectral Parameters

CCT (K):	2753	CRI (Ra):	81.6		
CIE u':	0.2598	R1:	79.8	R9:	0.8
CIE v':	0.5277	R2:	91.4	R10:	82.1
Duv:	0.0010	R3:	94.2	R11:	80.3
CIE x:	0.4571	R4:	79.8	R12:	79.0
CIE y:	0.4127	R5:	80.8	R13:	82.5
CIE z:	0.1302	R6:	91.4	R14:	97.2
Peak Wavelength (nm):	601	R7:	80.6		
Dominant Wavelength (nm):	583	R8:	54.5		
Purity:	61.5				
Rf:	85.7				
Rg:	94.8				



Test Conditions

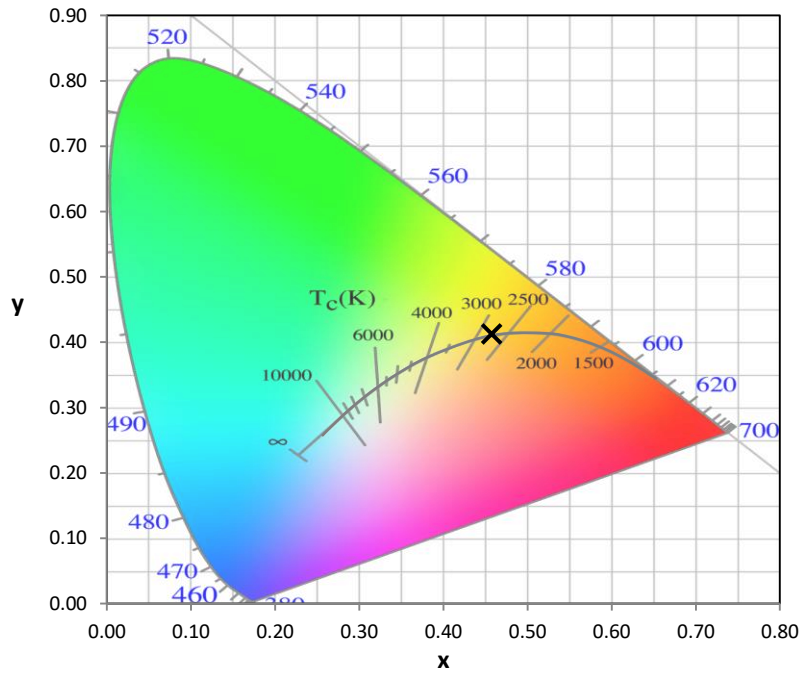
Stabilization Time: 81M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 24.1/43%
 Sphere Temperature (°C): 24.3

REPORT NUMBER: SP1-2005-785-16

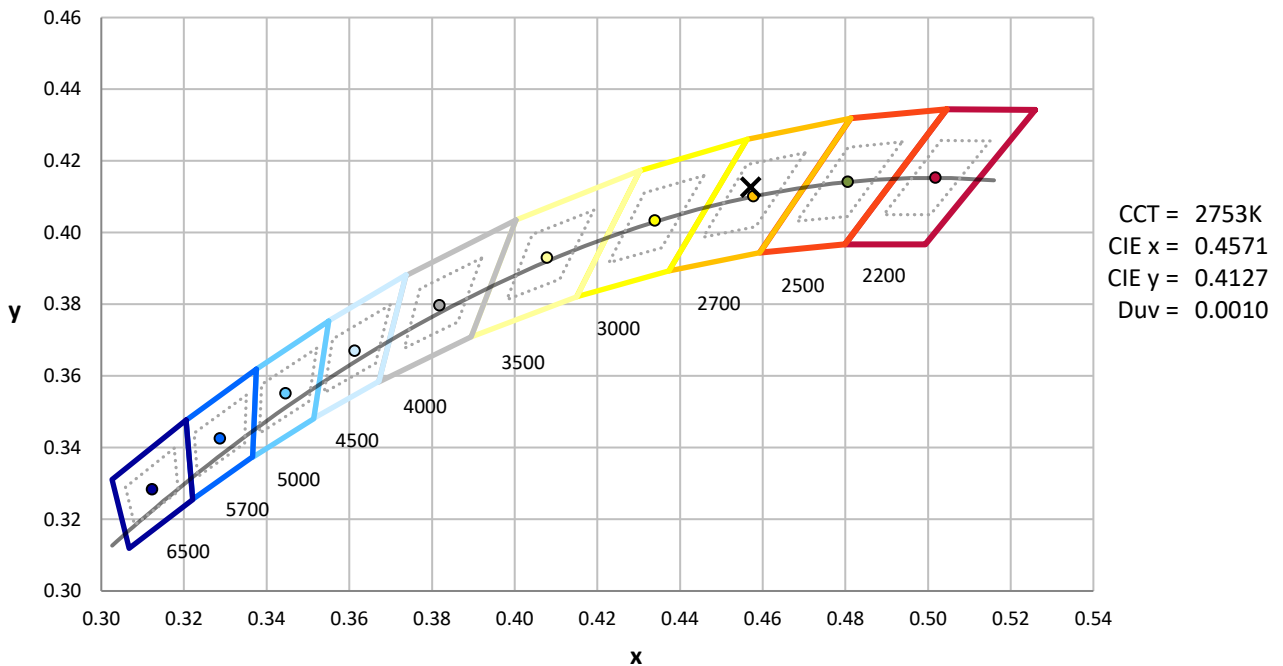
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	7/29/2020	1/29/2021
Power Meter	IN0071	12/3/2020	12/3/2020
AC Power Source	IN0063	12/3/2020	12/3/2020
DC Power Source	IN0208	12/3/2020	12/3/2020
Sphere Thermometer	IN0085	12/3/2020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

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CIE 1931 Chromaticity Diagram



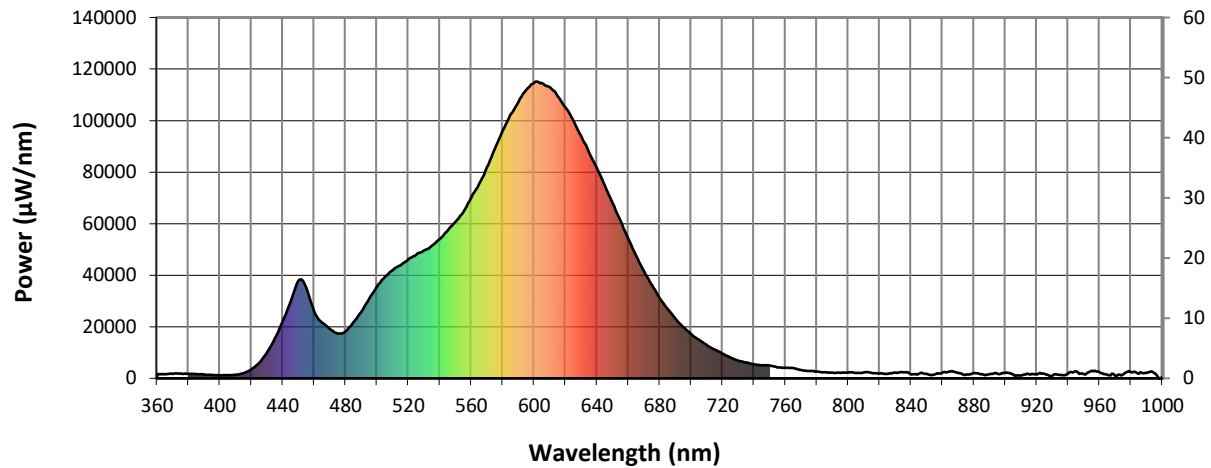
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 2700K 4-step quadrangle

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Photopic Flux vs. Wavelength

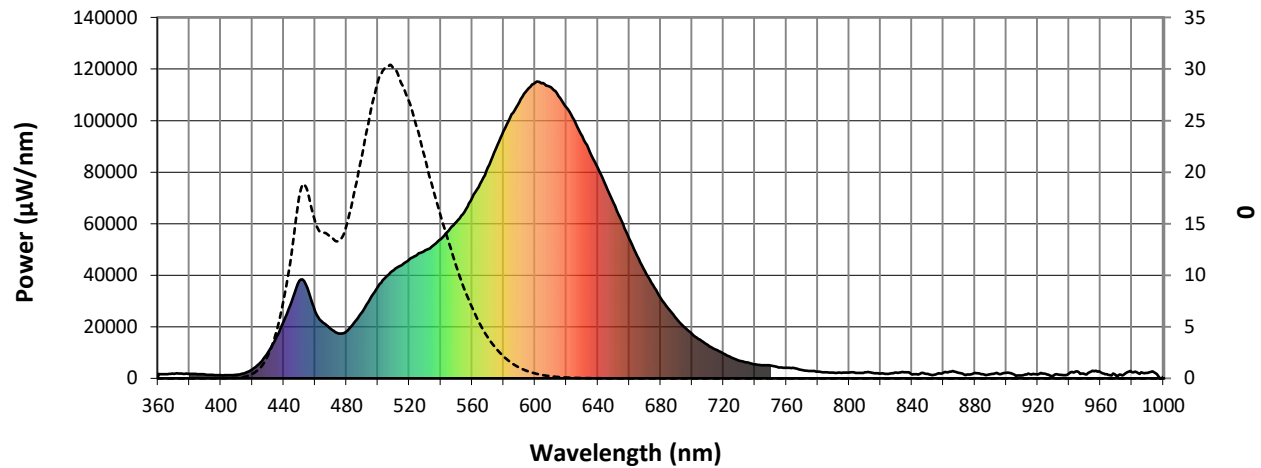


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λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)
360	1795	0.0	490	25874	3.7	620	105030	27.3	750	4991	0.0	880	2071	0.0
365	1611	0.0	495	30796	5.6	625	100202	22.1	755	4287	0.0	885	1578	0.0
370	1776	0.0	500	35638	7.9	630	94026	17.0	760	4129	0.0	890	1633	0.0
375	1813	0.0	505	39281	11.0	635	87734	13.2	765	3942	0.0	895	1779	0.0
380	1756	0.0	510	41915	14.4	640	81563	9.7	770	3235	0.0	900	2147	0.0
385	1668	0.0	515	43836	18.2	645	74752	7.2	775	2898	0.0	905	1526	0.0
390	1473	0.0	520	46153	22.4	650	68076	5.0	780	2609	0.0	910	1117	0.0
395	1330	0.0	525	47948	25.7	655	61086	3.5	785	2416	0.0	915	1611	0.0
400	1199	0.0	530	49667	29.2	660	54155	2.3	790	2217	0.0	920	1532	0.0
405	1244	0.0	535	51509	31.9	665	47463	1.5	795	2175	0.0	925	1719	0.0
410	1390	0.0	540	54052	35.2	670	41564	0.9	800	2276	0.0	930	1059	0.0
415	2019	0.0	545	57395	38.2	675	36235	0.6	805	2163	0.0	935	1344	0.0
420	3533	0.0	550	60674	41.2	680	31220	0.4	810	2360	0.0	940	1936	0.0
425	6120	0.0	555	64616	44.1	685	27007	0.2	815	2081	0.0	945	2748	0.0
430	10047	0.1	560	69984	47.6	690	23223	0.1	820	1877	0.0	950	1655	0.0
435	15593	0.2	565	75433	50.2	695	19912	0.1	825	1692	0.0	955	2936	0.0
440	22108	0.3	570	81800	53.2	700	17238	0.0	830	2247	0.0	960	2317	0.0
445	29752	0.6	575	89003	55.4	705	14973	0.0	835	2348	0.0	965	1395	0.0
450	37921	1.0	580	95982	57.0	710	12860	0.0	840	1547	0.0	970	972	0.0
455	35084	1.2	585	102371	56.9	715	11188	0.0	845	1767	0.0	975	1501	0.0
460	26102	1.1	590	107222	55.4	720	9613	0.0	850	1731	0.0	980	2417	0.0
465	21642	1.1	595	111829	53.0	725	8124	0.0	855	1548	0.0	985	1775	0.0
470	19153	1.2	600	114731	49.4	730	6861	0.0	860	2199	0.0	990	2177	0.0
475	17436	1.4	605	114580	44.4	735	6153	0.0	865	2652	0.0	995	1983	0.0
480	18301	1.7	610	113006	38.8	740	5483	0.0	870	2084	0.0	1000	568	0.0
485	21736	2.6	615	109545	33.1	745	5110	0.0	875	1539	0.0			

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Scotopic Flux vs. Wavelength



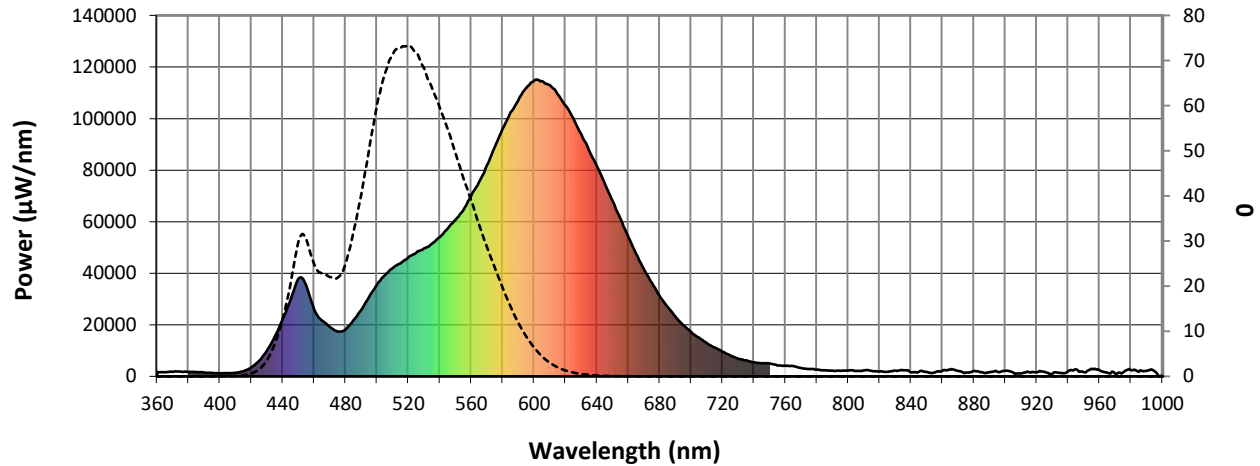
Scotopic Lumens: 2412.3

S/P: 0.46

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	1795	0.0	490	25874	39.8	620	105030	1.3	750	4991	0.0	880	2071	0.0
365	1611	0.0	495	30796	49.8	625	100202	0.8	755	4287	0.0	885	1578	0.0
370	1776	0.0	500	35638	59.6	630	94026	0.5	760	4129	0.0	890	1633	0.0
375	1813	0.0	505	39281	66.8	635	87734	0.3	765	3942	0.0	895	1779	0.0
380	1756	0.0	510	41915	71.0	640	81563	0.2	770	3235	0.0	900	2147	0.0
385	1668	0.0	515	43836	72.7	645	74752	0.1	775	2898	0.0	905	1526	0.0
390	1473	0.0	520	46153	73.4	650	68076	0.1	780	2609	0.0	910	1117	0.0
395	1330	0.0	525	47948	71.7	655	61086	0.0	785	2416	0.0	915	1611	0.0
400	1199	0.0	530	49667	68.5	660	54155	0.0	790	2217	0.0	920	1532	0.0
405	1244	0.0	535	51509	64.2	665	47463	0.0	795	2175	0.0	925	1719	0.0
410	1390	0.1	540	54052	59.7	670	41564	0.0	800	2276	0.0	930	1059	0.0
415	2019	0.2	545	57395	55.0	675	36235	0.0	805	2163	0.0	935	1344	0.0
420	3533	0.6	550	60674	49.6	680	31220	0.0	810	2360	0.0	940	1936	0.0
425	6120	1.5	555	64616	44.2	685	27007	0.0	815	2081	0.0	945	2748	0.0
430	10047	3.4	560	69984	39.1	690	23223	0.0	820	1877	0.0	950	1655	0.0
435	15593	7.0	565	75433	33.8	695	19912	0.0	825	1692	0.0	955	2936	0.0
440	22108	12.4	570	81800	28.9	700	17238	0.0	830	2247	0.0	960	2317	0.0
445	29752	19.9	575	89003	24.2	705	14973	0.0	835	2348	0.0	965	1395	0.0
450	37921	29.4	580	95982	19.8	710	12860	0.0	840	1547	0.0	970	972	0.0
455	35084	30.7	585	102371	15.6	715	11188	0.0	845	1767	0.0	975	1501	0.0
460	26102	25.2	590	107222	11.9	720	9613	0.0	850	1731	0.0	980	2417	0.0
465	21642	22.9	595	111829	8.9	725	8124	0.0	855	1548	0.0	985	1775	0.0
470	19153	22.1	600	114731	6.5	730	6861	0.0	860	2199	0.0	990	2177	0.0
475	17436	21.8	605	114580	4.5	735	6153	0.0	865	2652	0.0	995	1983	0.0
480	18301	24.7	610	113006	3.1	740	5483	0.0	870	2084	0.0	1000	568	0.0
485	21736	31.5	615	109545	2.0	745	5110	0.0	875	1539	0.0			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: 6507.1 S/P: 1.24

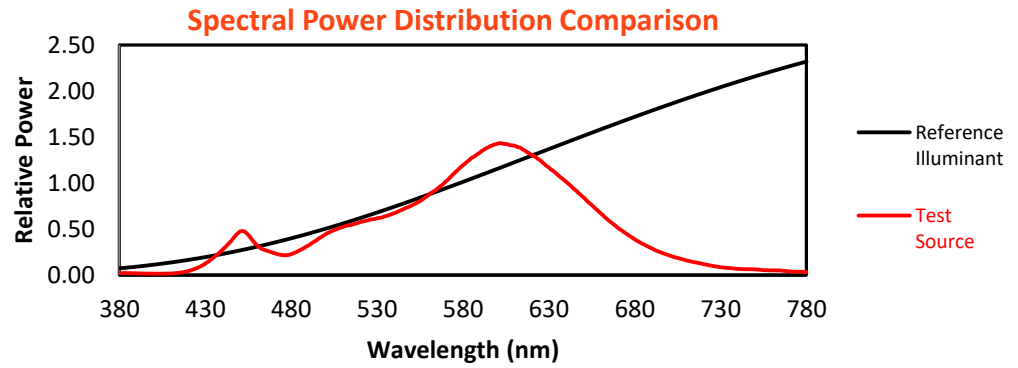
λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)	λ (nm)	Power (μW/nm)	Lumens (Φ/nm)
360	1795	0.0	490	25874	21.5	620	105030	0.1	750	4991	0.0	880	2071	0.0
365	1611	0.0	495	30796	25.4	625	100202	0.1	755	4287	0.0	885	1578	0.0
370	1776	0.0	500	35638	28.6	630	94026	0.0	760	4129	0.0	890	1633	0.0
375	1813	0.0	505	39281	30.1	635	87734	0.0	765	3942	0.0	895	1779	0.0
380	1756	0.0	510	41915	30.1	640	81563	0.0	770	3235	0.0	900	2147	0.0
385	1668	0.0	515	43836	28.6	645	74752	0.0	775	2898	0.0	905	1526	0.0
390	1473	0.0	520	46153	26.9	650	68076	0.0	780	2609	0.0	910	1117	0.0
395	1330	0.0	525	47948	24.3	655	61086	0.0	785	2416	0.0	915	1611	0.0
400	1199	0.0	530	49667	21.5	660	54155	0.0	790	2217	0.0	920	1532	0.0
405	1244	0.0	535	51509	18.5	665	47463	0.0	795	2175	0.0	925	1719	0.0
410	1390	0.1	540	54052	15.8	670	41564	0.0	800	2276	0.0	930	1059	0.0
415	2019	0.1	545	57395	13.3	675	36235	0.0	805	2163	0.0	935	1344	0.0
420	3533	0.4	550	60674	10.9	680	31220	0.0	810	2360	0.0	940	1936	0.0
425	6120	1.0	555	64616	8.7	685	27007	0.0	815	2081	0.0	945	2748	0.0
430	10047	2.1	560	69984	6.9	690	23223	0.0	820	1877	0.0	950	1655	0.0
435	15593	4.2	565	75433	5.3	695	19912	0.0	825	1692	0.0	955	2936	0.0
440	22108	7.4	570	81800	4.0	700	17238	0.0	830	2247	0.0	960	2317	0.0
445	29752	11.7	575	89003	3.0	705	14973	0.0	835	2348	0.0	965	1395	0.0
450	37921	17.5	580	95982	2.1	710	12860	0.0	840	1547	0.0	970	972	0.0
455	35084	18.4	585	102371	1.5	715	11188	0.0	845	1767	0.0	975	1501	0.0
460	26102	15.4	590	107222	1.1	720	9613	0.0	850	1731	0.0	980	2417	0.0
465	21642	14.1	595	111829	0.7	725	8124	0.0	855	1548	0.0	985	1775	0.0
470	19153	13.7	600	114731	0.5	730	6861	0.0	860	2199	0.0	990	2177	0.0
475	17436	13.3	605	114580	0.3	735	6153	0.0	865	2652	0.0	995	1983	0.0
480	18301	14.7	610	113006	0.2	740	5483	0.0	870	2084	0.0	1000	568	0.0
485	21736	17.9	615	109545	0.1	745	5110	0.0	875	1539	0.0			

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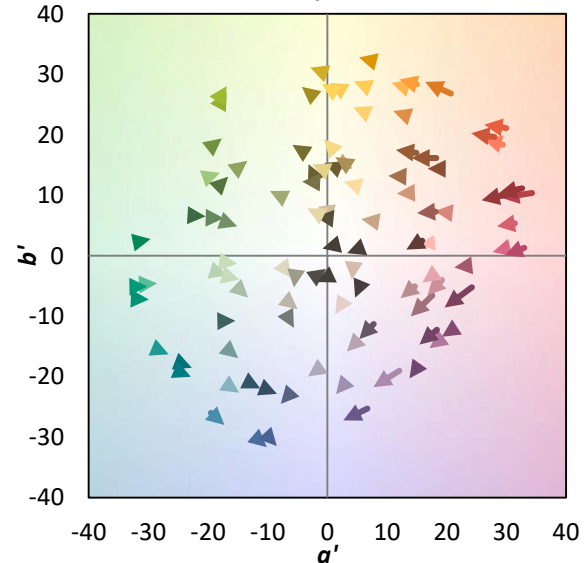
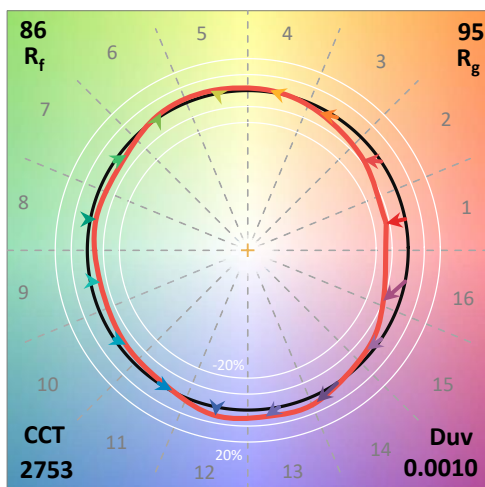
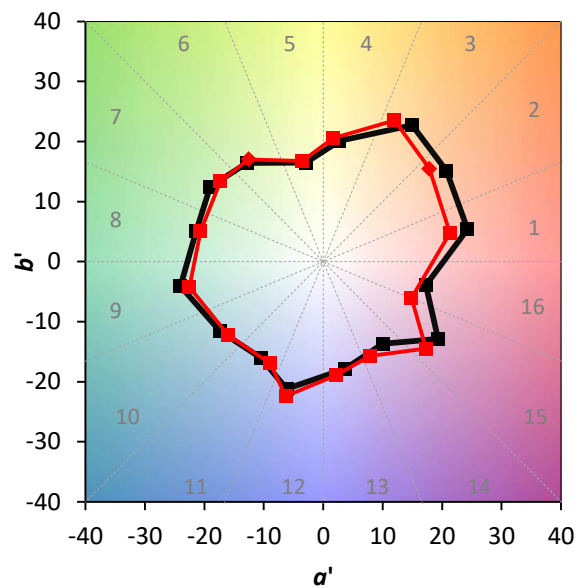
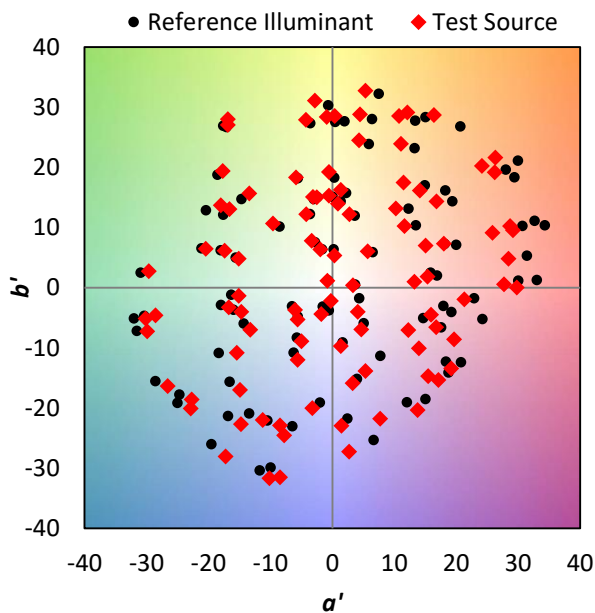
TM-30-18

Summary

$R_f = 85.7$
 $R_g = 94.8$
 CIE $R_a = 81.6$
 $R_9 = 0.8$

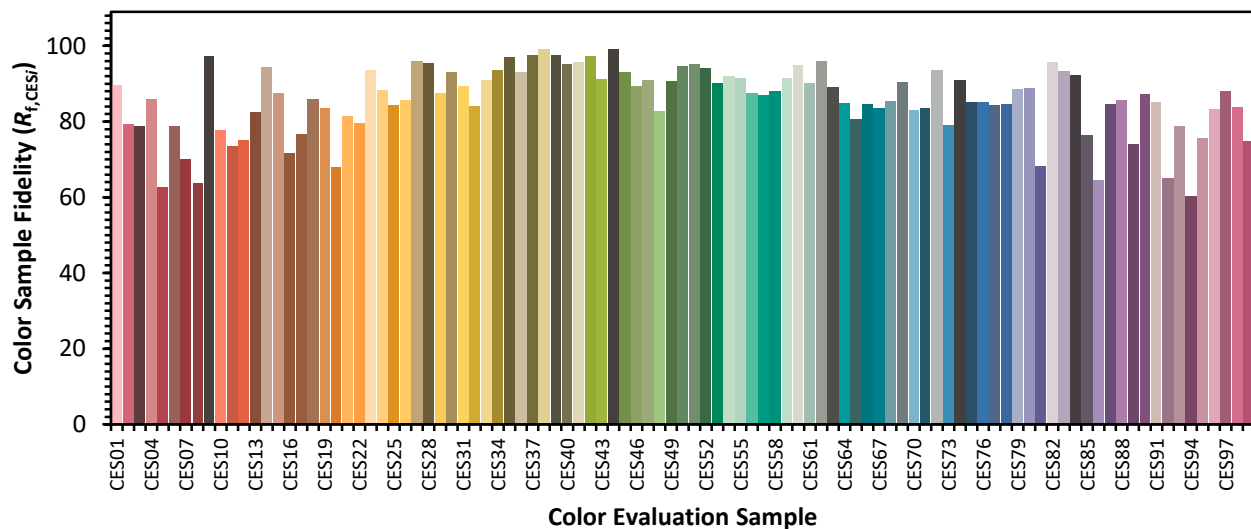


Color Vector Graphics

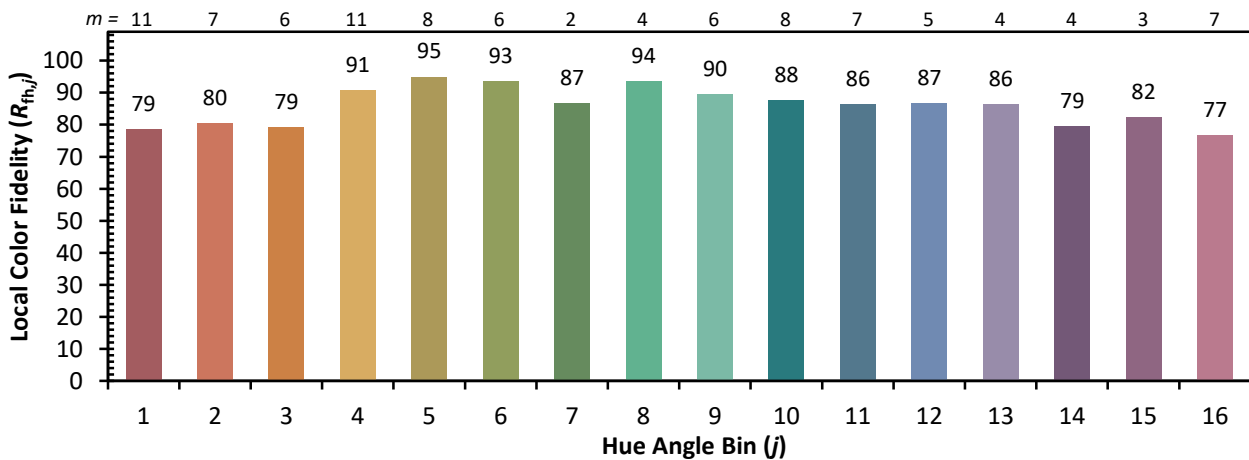
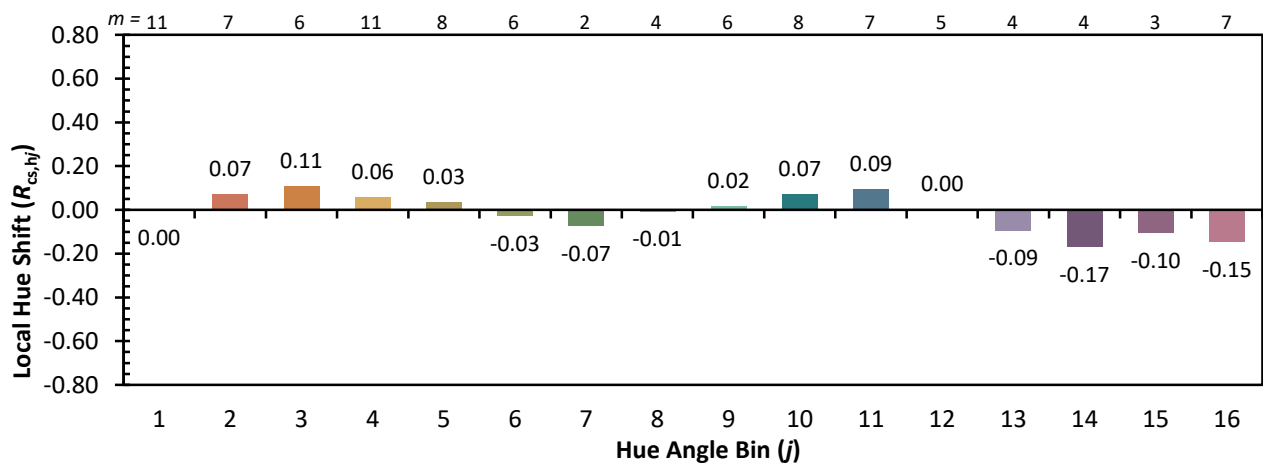
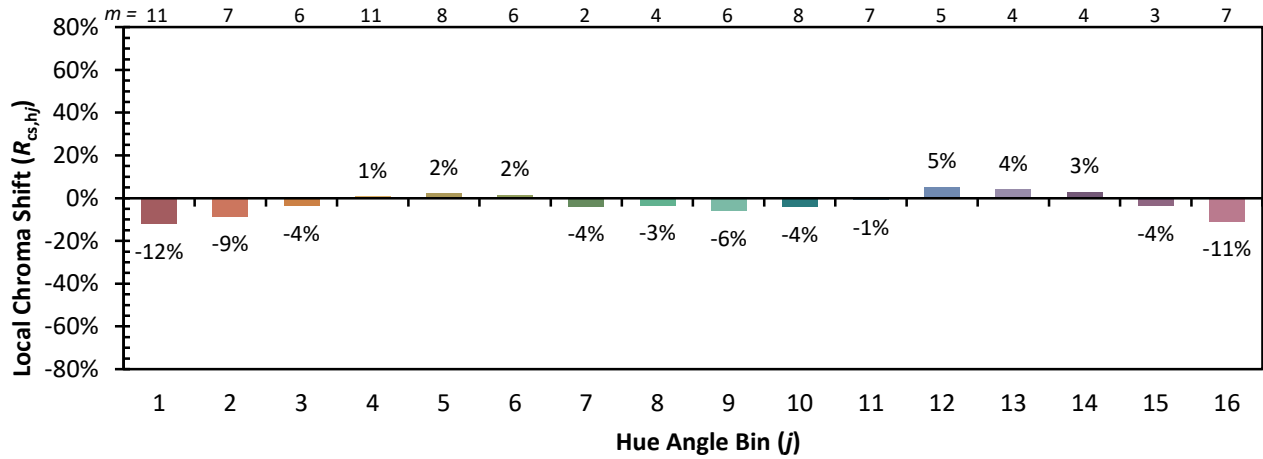


Individual Sample Fidelity Index (R_{fi})

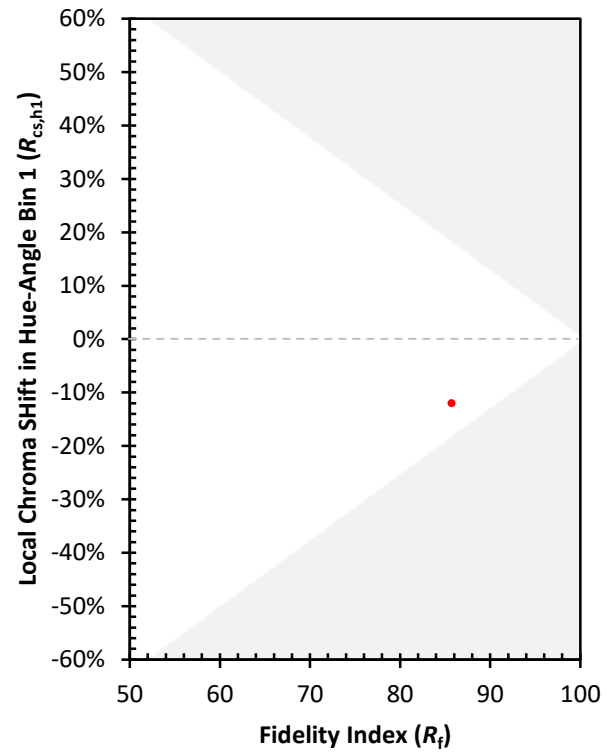
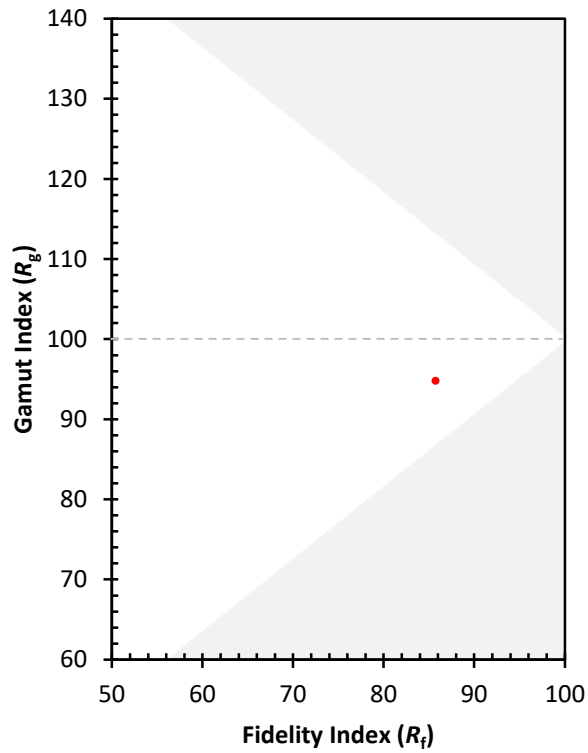
CES01 = 86	CES26 = 86	CES51 = 95	CES76 = 85
CES02 = 63	CES27 = 96	CES52 = 94	CES77 = 84
CES03 = 31	CES28 = 96	CES53 = 90	CES78 = 85
CES04 = 71	CES29 = 87	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 93	CES55 = 91	CES80 = 89
CES06 = 52	CES31 = 89	CES56 = 87	CES81 = 68
CES07 = 43	CES32 = 84	CES57 = 87	CES82 = 96
CES08 = 41	CES33 = 91	CES58 = 88	CES83 = 93
CES09 = 29	CES34 = 94	CES59 = 92	CES84 = 92
CES10 = 77	CES35 = 97	CES60 = 95	CES85 = 76
CES11 = 60	CES36 = 93	CES61 = 90	CES86 = 65
CES12 = 66	CES37 = 98	CES62 = 96	CES87 = 85
CES13 = 44	CES38 = 99	CES63 = 89	CES88 = 86
CES14 = 74	CES39 = 98	CES64 = 85	CES89 = 74
CES15 = 72	CES40 = 95	CES65 = 81	CES90 = 87
CES16 = 48	CES41 = 96	CES66 = 85	CES91 = 85
CES17 = 50	CES42 = 97	CES67 = 84	CES92 = 65
CES18 = 57	CES43 = 91	CES68 = 85	CES93 = 79
CES19 = 73	CES44 = 99	CES69 = 90	CES94 = 60
CES20 = 67	CES45 = 93	CES70 = 83	CES95 = 76
CES21 = 87	CES46 = 89	CES71 = 83	CES96 = 83
CES22 = 79	CES47 = 91	CES72 = 94	CES97 = 88
CES23 = 92	CES48 = 83	CES73 = 79	CES98 = 84
CES24 = 91	CES49 = 91	CES74 = 91	CES99 = 75
CES25 = 72	CES50 = 95	CES75 = 85	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)