

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: P880254

Luminaire Tested: **EMM2-HSN-VA5-727-U-WT4**

Issue Date: 10/01/2024



Test Information

Test Method: LM-79-08
Report Number: P880254
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/01/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: EMM2-HSN-VA5-727-U-WT4
Description: EPIC MODERN SHORT HOUSING 5W 70CRI 2700K VISUAL COMFORT FIXTURE w/
DRIVE LANE TYPE IV DISTRIBUTION OPTIC
Light Source: (1) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

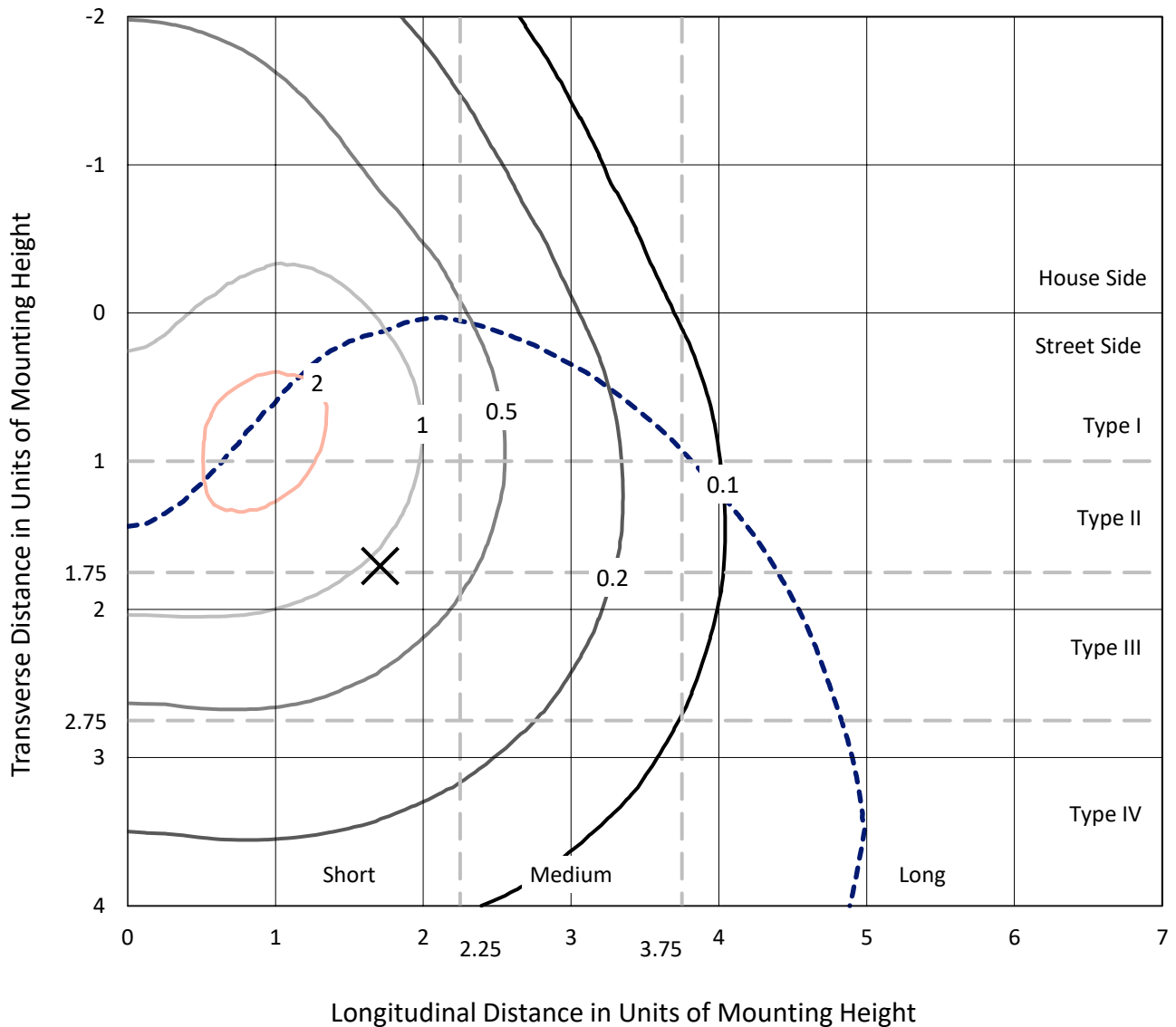
Lumens per Lamp: N/A
Luminaire Lumens: 7111.9 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 78
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 6%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

REPORT NUMBER: P880254
 CATALOG NUMBER: EMM2-HSN-VA5-727-U-WT4

Iso-Footcandle Lines of Horizontal Illumination

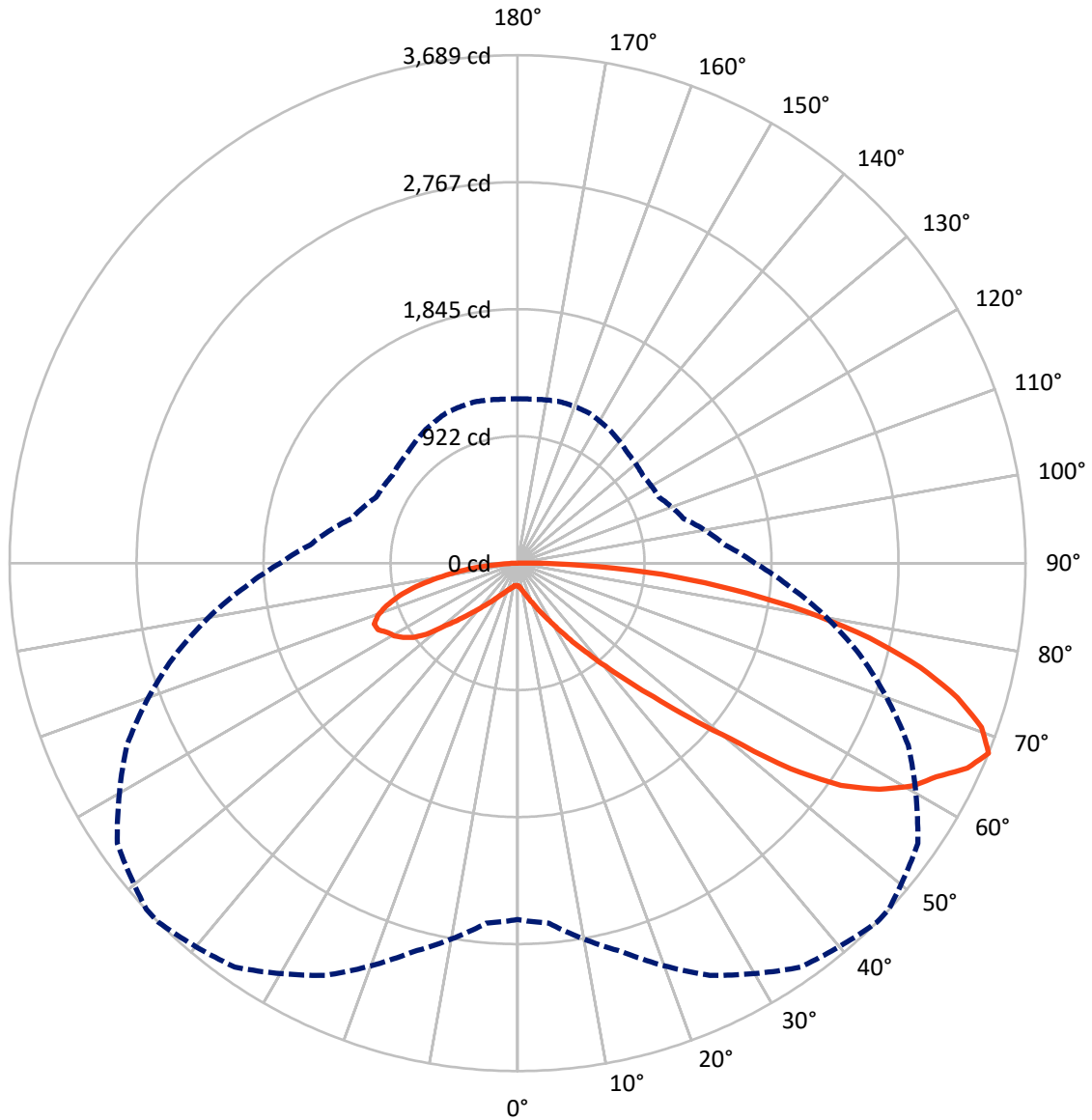
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.5 fc
 Type IV - Short - N/A

REPORT NUMBER: P880254
CATALOG NUMBER: EMM2-HSN-VA5-727-U-WT4

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



REPORT NUMBER: P880254
 CATALOG NUMBER: EMM2-HSN-VA5-727-U-WT4

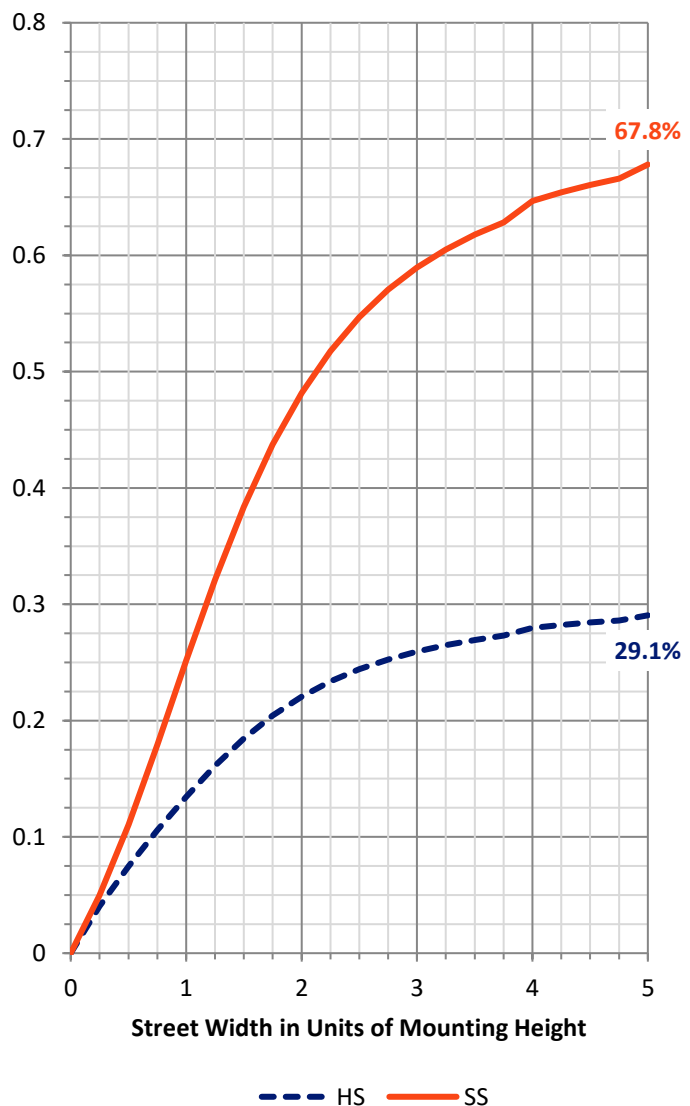
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2107.7	0.0	2107.7
	% Fixture	29.6	0.0	29.6
Street Side	Lumens	5004.2	0.0	5004.2
	% Fixture	70.4	0.0	70.4
Total	Lumens	7111.9	0.0	7111.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.9	0.2
10°-20°	63.3	0.9
20°-30°	149.1	2.1
30°-40°	326.9	4.6
40°-50°	711.7	10.0
50°-60°	1462.2	20.6
60°-70°	2060.0	29.0
70°-80°	1748.9	24.6
80°-90°	573.1	8.1
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°	7111.9	100.0
0°-180°	7111.9	100.0



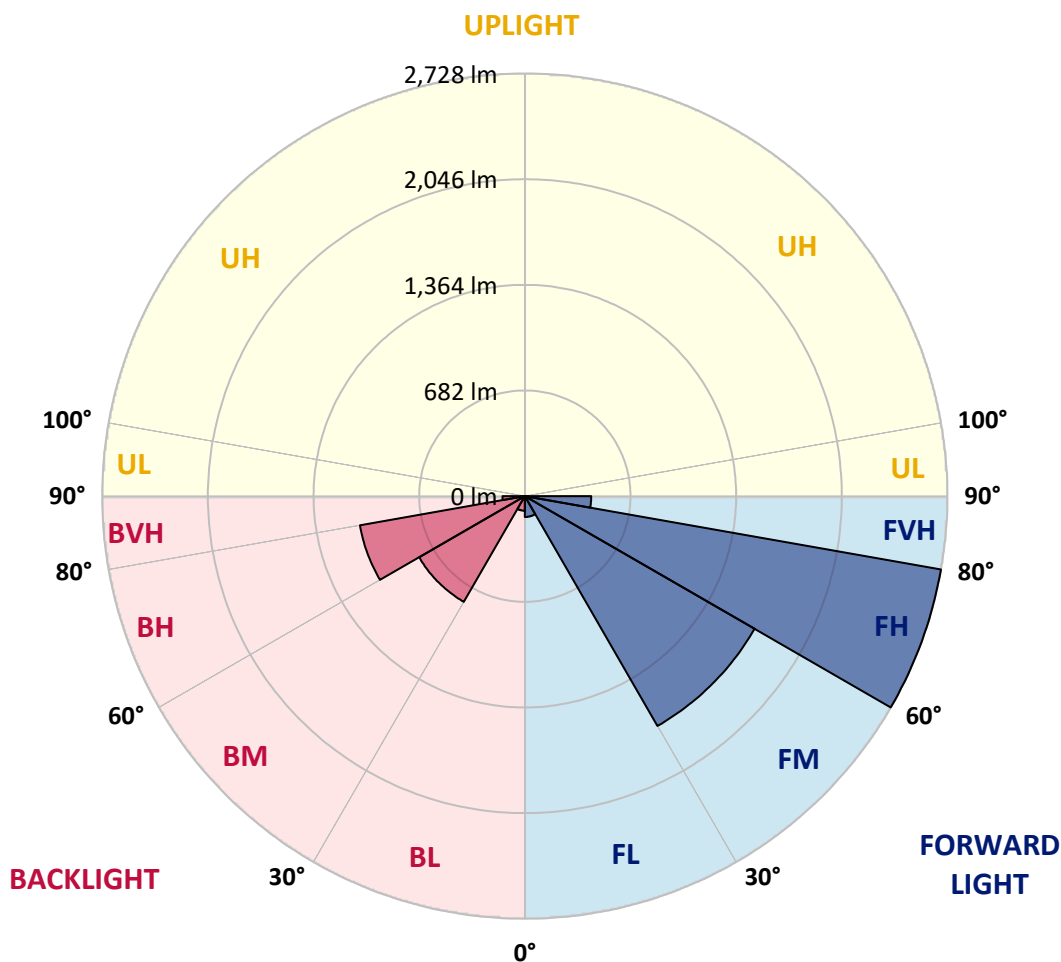
REPORT NUMBER: P880254
 CATALOG NUMBER: EMM2-HSN-VA5-727-U-WT4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	134.6	1.9			
FM (30°-60°)	1712.9	24.1			
FH (60°-80°)	2728.1	38.4			G2/5000
FVH (80°-90°)	428.6	6.0			G3/500
BL (0°-30°)	94.6	1.3	B0/110		
BM (30°-60°)	787.8	11.1	B1/1000		
BH (60°-80°)	1080.8	15.2	B3/2500		G3/2500
BVH (80°-90°)	144.5	2.0			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





REPORT NUMBER: P880254

CATALOG NUMBER: EMM2-HSN-VA5-727-U-WT4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	164.2	164.2	164.2	164.2	164.2	164.2	164.2	164.2	164.2	164.2	164.2
2.5°	169.3	168.6	169.3	169.3	169.3	168.6	168.6	168.6	167.9	167.1	166.4
5°	179.5	179.5	179.5	178.8	178.8	177.3	177.3	176.6	175.1	173.7	172.2
7.5°	193.3	192.6	192.6	191.8	191.1	189.7	188.9	188.2	185.3	183.1	180.2
10°	210.0	210.0	209.3	207.8	207.8	204.2	204.9	203.5	199.8	195.5	190.4
12.5°	230.3	230.3	228.9	228.9	227.4	224.5	223.8	221.6	218.0	210.7	204.9
15°	252.9	252.9	254.3	252.9	251.4	247.8	247.8	244.9	236.9	231.1	222.3
17.5°	281.2	277.6	279.8	279.0	279.0	276.8	274.7	271.0	264.5	254.3	243.4
20°	310.3	311.0	308.8	311.0	311.7	308.8	308.8	304.5	295.0	282.7	265.2
22.5°	346.6	346.6	342.2	348.1	351.7	349.5	348.8	340.1	328.4	311.7	294.3
25°	384.4	382.9	390.2	391.7	399.6	398.9	398.2	390.2	372.8	352.4	325.5
27.5°	427.3	429.4	443.2	446.9	454.9	454.1	453.4	444.7	425.8	398.2	363.3
30°	480.3	483.2	496.3	508.6	522.4	523.9	522.4	515.2	487.6	451.2	412.0
32.5°	542.1	550.1	563.1	584.2	601.6	609.6	611.1	598.0	566.8	518.8	467.2
35°	626.4	619.8	638.0	672.9	701.9	717.9	717.2	699.7	665.6	604.6	531.2
37.5°	709.2	707.0	735.3	781.1	820.4	833.4	837.1	825.5	781.9	701.2	614.7
40°	795.7	813.8	846.5	899.6	957.7	985.3	987.5	970.8	911.2	820.4	706.3
42.5°	908.3	926.5	967.9	1033.3	1117.6	1163.3	1166.2	1147.3	1075.4	957.7	816.7
45°	1050.7	1060.9	1104.5	1204.0	1312.3	1385.7	1406.8	1383.5	1294.9	1131.4	954.1
47.5°	1204.0	1204.0	1275.2	1406.8	1570.2	1666.9	1682.9	1661.8	1529.6	1332.6	1107.4
50°	1374.8	1375.5	1488.9	1677.1	1883.4	2004.0	2016.4	1965.5	1805.7	1537.5	1263.6
52.5°	1552.1	1571.0	1736.6	2021.5	2298.3	2482.9	2495.2	2436.4	2223.5	1831.1	1430.0
55°	1796.2	1826.0	2066.5	2416.0	2703.8	2849.1	2849.8	2779.4	2523.6	2115.9	1629.1
57.5°	2134.8	2146.5	2371.0	2727.8	2999.5	3099.1	3091.8	2988.6	2693.6	2275.1	1792.6
60°	2414.6	2441.5	2624.6	2955.9	3221.1	3289.4	3281.5	3144.8	2809.9	2368.1	1871.1
62.5°	2598.4	2611.5	2801.2	3119.4	3357.8	3415.2	3406.4	3279.3	2952.3	2530.1	2001.9
65°	2642.7	2664.5	2905.1	3228.4	3459.5	3588.8	3583.0	3514.7	3179.0	2650.0	2063.6
67.5°	2589.0	2625.3	2920.3	3303.3	3581.6	3689.1	3686.2	3548.9	3130.3	2573.0	1985.9
70°	2479.3	2510.5	2876.7	3295.3	3545.9	3575.0	3552.5	3395.5	2987.2	2445.1	1869.6
72.5°	2306.3	2359.4	2716.9	3112.9	3322.1	3341.0	3333.0	3141.2	2772.1	2224.9	1693.8
75°	2079.6	2144.3	2468.4	2788.8	2987.9	3020.6	3005.3	2837.5	2464.0	1949.5	1475.8
77.5°	1792.6	1828.9	2076.0	2380.4	2609.3	2615.1	2606.4	2418.9	2075.3	1632.7	1241.8
80°	1412.6	1434.4	1648.7	1902.3	2092.0	2115.2	2107.2	1980.8	1648.0	1291.9	968.6
82.5°	1046.3	1031.8	1175.7	1383.5	1571.7	1573.2	1586.2	1446.0	1233.8	937.4	693.2
85°	602.4	608.2	733.2	874.9	988.9	1055.1	1054.3	986.8	793.5	596.6	422.9
87.5°	167.9	180.9	260.1	378.6	430.2	467.9	454.1	409.8	331.3	187.5	107.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P880254

CATALOG NUMBER: EMM2-HSN-VA5-727-U-WT4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	164.2	164.2	164.2	164.2	164.2	164.2	164.2	164.2	164.2	164.2	164.2
2.5°	166.4	165.7	164.9	164.2	162.8	162.8	162.0	162.8	162.8	162.8	162.8
5°	170.8	170.0	167.9	166.4	164.2	162.8	162.0	162.0	162.0	162.0	162.0
7.5°	178.0	177.3	173.7	170.8	167.9	166.4	164.9	164.2	163.5	162.8	163.5
10°	188.9	186.0	182.4	178.0	173.7	171.5	169.3	168.6	167.9	167.1	167.1
12.5°	201.3	199.1	192.6	186.7	182.4	178.8	175.8	174.4	173.7	172.9	172.9
15°	218.0	213.6	204.9	197.6	191.1	186.7	183.8	182.4	181.7	180.9	180.9
17.5°	236.9	231.1	219.4	210.0	202.7	196.9	193.3	191.1	189.7	190.4	191.1
20°	258.7	249.2	236.2	224.5	215.1	208.5	204.9	202.0	200.5	201.3	202.0
22.5°	284.1	273.9	255.0	241.2	229.6	221.6	218.0	215.8	214.4	213.6	212.2
25°	313.2	300.1	278.3	259.4	245.6	237.6	233.2	231.8	230.3	228.9	228.9
27.5°	348.1	332.8	303.0	282.7	265.9	258.0	252.9	250.7	250.7	248.5	248.5
30°	388.7	368.4	332.1	305.2	288.5	278.3	272.5	271.8	270.3	272.5	272.5
32.5°	437.4	409.8	365.5	334.2	315.4	305.9	300.1	298.6	296.5	297.9	302.3
35°	498.5	462.9	409.8	372.8	349.5	340.1	332.8	332.1	328.4	332.1	326.3
37.5°	566.8	527.5	457.0	413.5	388.0	377.1	372.0	369.9	369.1	369.1	364.8
40°	650.3	603.1	517.4	463.6	434.5	421.4	416.4	415.6	414.2	419.3	414.2
42.5°	753.5	681.6	579.8	518.8	489.0	475.2	469.4	467.2	470.9	473.0	472.3
45°	868.3	790.6	659.8	589.3	555.1	541.3	533.3	531.2	532.6	532.6	539.9
47.5°	1000.6	909.0	751.3	666.3	635.1	618.4	613.3	606.0	602.4	600.9	613.3
50°	1138.6	1024.5	845.1	749.9	721.5	708.5	709.9	695.4	690.3	684.5	683.0
52.5°	1277.4	1148.1	951.9	866.1	833.4	840.0	837.1	821.8	792.0	784.8	767.3
55°	1443.8	1287.6	1054.3	951.9	923.5	928.6	940.3	940.3	933.7	917.7	903.9
57.5°	1584.8	1403.1	1131.4	1003.5	978.8	991.8	1015.1	1032.5	1047.8	1059.4	1058.7
60°	1663.3	1474.3	1181.5	1042.7	1013.6	1039.1	1074.0	1103.7	1136.4	1170.6	1169.1
62.5°	1771.5	1573.9	1270.9	1112.5	1062.3	1070.3	1110.3	1161.9	1191.7	1220.0	1228.0
65°	1799.9	1592.0	1304.3	1161.9	1121.2	1122.6	1149.5	1191.7	1217.1	1224.4	1228.7
67.5°	1723.6	1512.1	1249.1	1132.8	1111.0	1131.4	1175.0	1208.4	1212.0	1194.6	1193.1
70°	1608.8	1414.0	1161.9	1064.5	1050.7	1082.0	1139.4	1179.3	1170.6	1135.0	1132.8
72.5°	1446.7	1265.8	1044.9	974.4	960.6	999.8	1050.7	1092.8	1079.8	1052.9	1050.7
75°	1252.0	1082.7	903.2	850.9	850.2	893.0	937.4	962.8	962.1	943.2	937.4
77.5°	1040.5	903.2	744.1	696.8	714.3	755.0	787.7	806.6	800.0	793.5	791.3
80°	814.6	692.5	574.0	545.7	572.6	586.4	621.3	619.8	623.4	609.6	619.8
82.5°	579.8	499.2	411.3	398.9	402.6	430.2	449.1	446.9	437.4	427.3	422.9
85°	351.7	307.4	263.8	246.3	258.7	256.5	268.1	258.7	252.9	247.8	252.1
87.5°	97.4	84.3	80.7	58.1	71.9	56.7	59.6	41.4	36.3	43.6	37.8
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

Streetworks

Report Number: SP1-2407-176-2

Test Date: 09/24/2024

Luminaire Tested: MEM2-HTN-VA-30-727-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-727-U-WQ

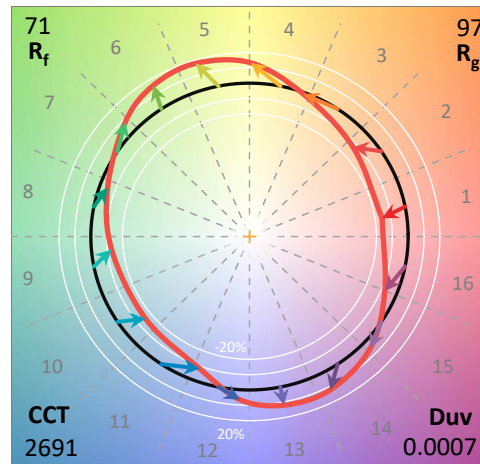
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-176-2
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 09/27/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Streetworks
 Catalog Number: **MEM2-HTN-VA-30-727-U-WQ**
 Description: EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

Spectral Parameters

CCT (K): 2691
 CIE u': 0.2627
 CIE v': 0.5285
 Duv: 0.0007
 CIE x: 0.4618
 CIE y: 0.4129
 CIE z: 0.1254
 Peak Wavelength (nm): 601
 Dominant Wavelength (nm): 584
 Purity: 62.54863
 R_f: 70.6
 R_g: 97.2

CRI (Ra):	70.6		
R1:	67.7	R9:	-27.1
R2:	79.8	R10:	53.1
R3:	90.6	R11:	61.9
R4:	67.7	R12:	42.2
R5:	65.3	R13:	69.4
R6:	71.1	R14:	94.1
R7:	78.1	R15:	60.4
R8:	44.7		



Test Conditions

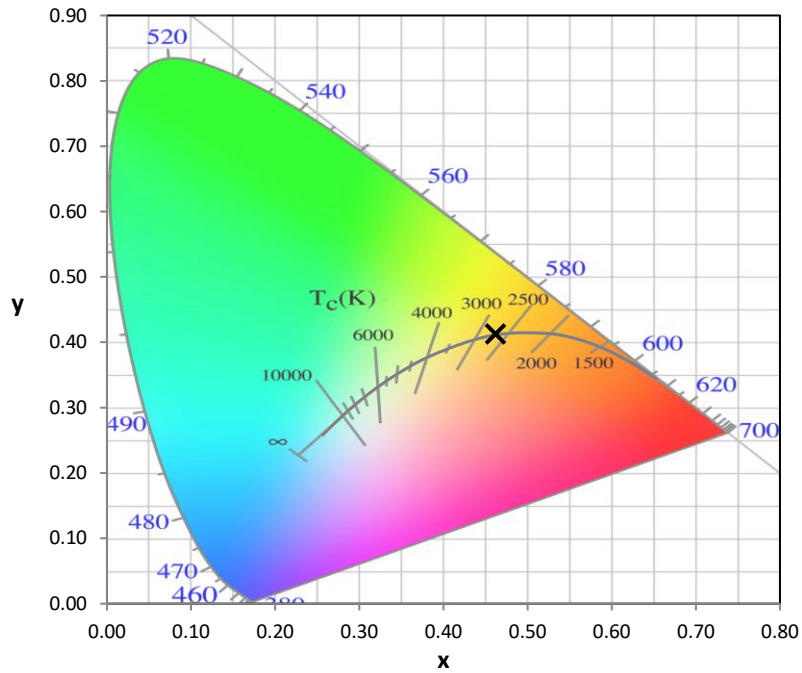
Stabilization Time: 28M
 Operation Time: 1H 28M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-176-2

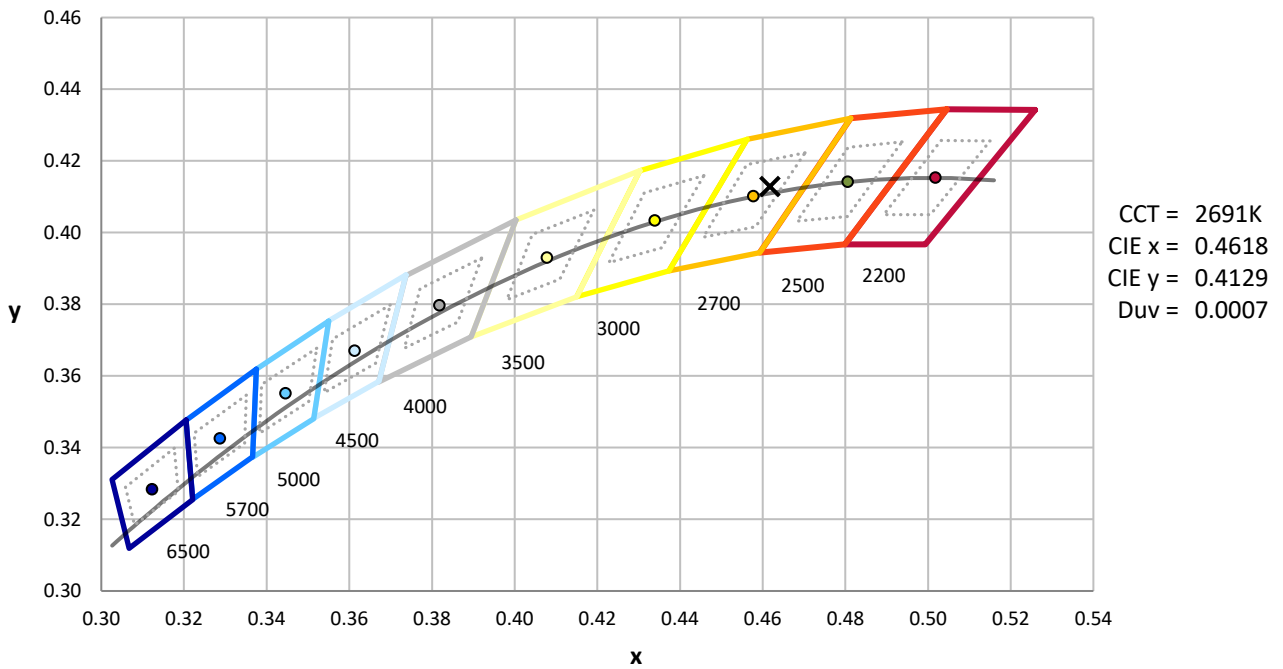
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-176-2

CIE 1931 Chromaticity Diagram



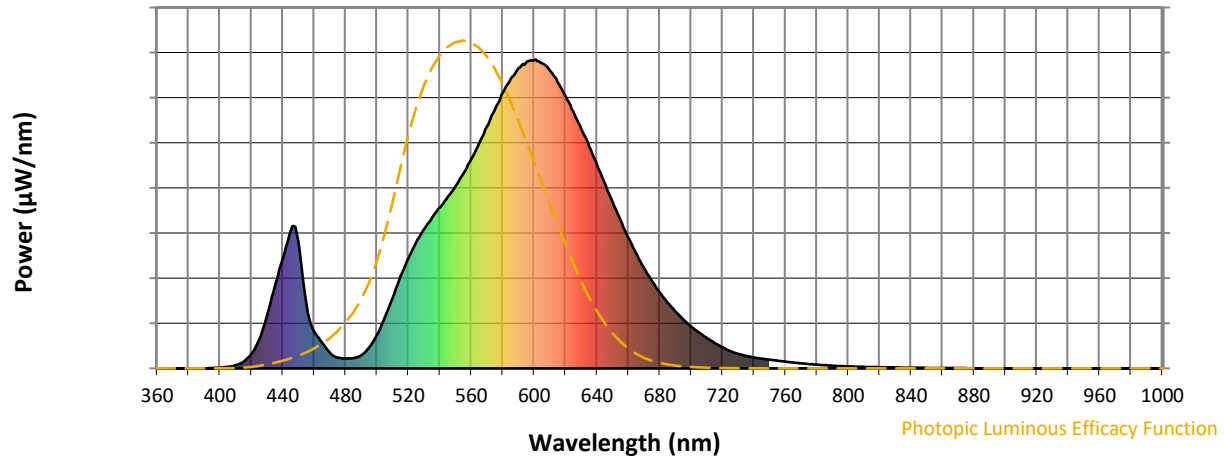
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-176-2

Photopic Flux vs. Wavelength

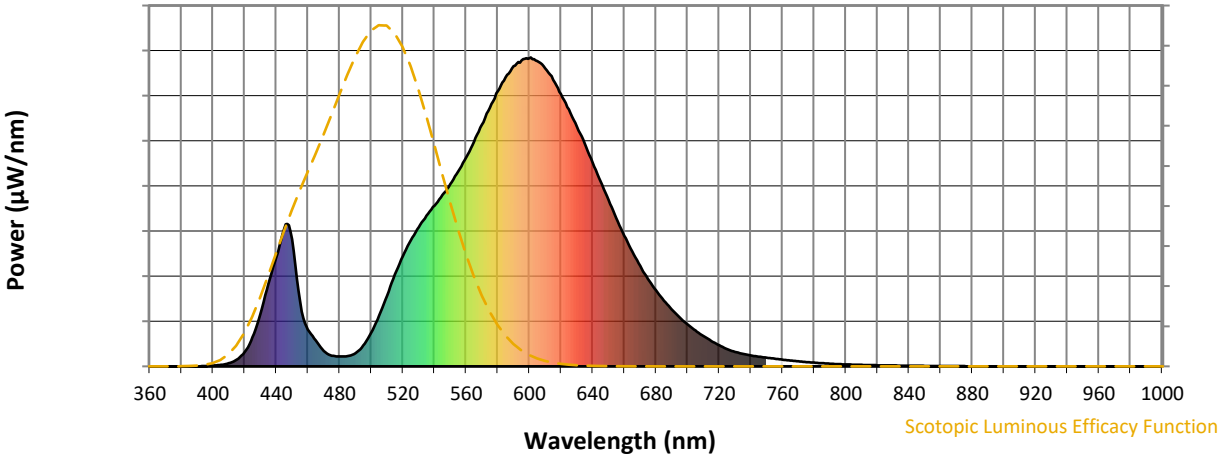


Photopic Lumens: NR

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	43	NR	620	881	NR	750	28	NR	880	0	NR
365	0	NR	495	67	NR	625	832	NR	755	25	NR	885	0	NR
370	0	NR	500	108	NR	630	776	NR	760	22	NR	890	0	NR
375	0	NR	505	165	NR	635	720	NR	765	19	NR	895	0	NR
380	0	NR	510	229	NR	640	660	NR	770	16	NR	900	0	NR
385	0	NR	515	297	NR	645	599	NR	775	14	NR	905	0	NR
390	0	NR	520	357	NR	650	538	NR	780	12	NR	910	0	NR
395	1	NR	525	408	NR	655	480	NR	785	10	NR	915	0	NR
400	3	NR	530	451	NR	660	423	NR	790	9	NR	920	0	NR
405	5	NR	535	488	NR	665	372	NR	795	7	NR	925	0	NR
410	10	NR	540	521	NR	670	325	NR	800	6	NR	930	0	NR
415	21	NR	545	555	NR	675	282	NR	805	5	NR	935	0	NR
420	46	NR	550	590	NR	680	246	NR	810	5	NR	940	0	NR
425	94	NR	555	631	NR	685	213	NR	815	4	NR	945	0	NR
430	169	NR	560	677	NR	690	185	NR	820	4	NR	950	0	NR
435	268	NR	565	728	NR	695	158	NR	825	3	NR	955	0	NR
440	354	NR	570	782	NR	700	136	NR	830	3	NR	960	0	NR
445	445	NR	575	838	NR	705	116	NR	835	2	NR	965	0	NR
450	411	NR	580	891	NR	710	98	NR	840	2	NR	970	0	NR
455	210	NR	585	935	NR	715	82	NR	845	2	NR	975	0	NR
460	119	NR	590	972	NR	720	68	NR	850	2	NR	980	0	NR
465	84	NR	595	991	NR	725	56	NR	855	1	NR	985	0	NR
470	50	NR	600	997	NR	730	47	NR	860	1	NR	990	0	NR
475	35	NR	605	988	NR	735	40	NR	865	1	NR	995	0	NR
480	32	NR	610	965	NR	740	35	NR	870	1	NR	1000	0	NR
485	33	NR	615	927	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-176-2

Scotopic Flux vs. Wavelength

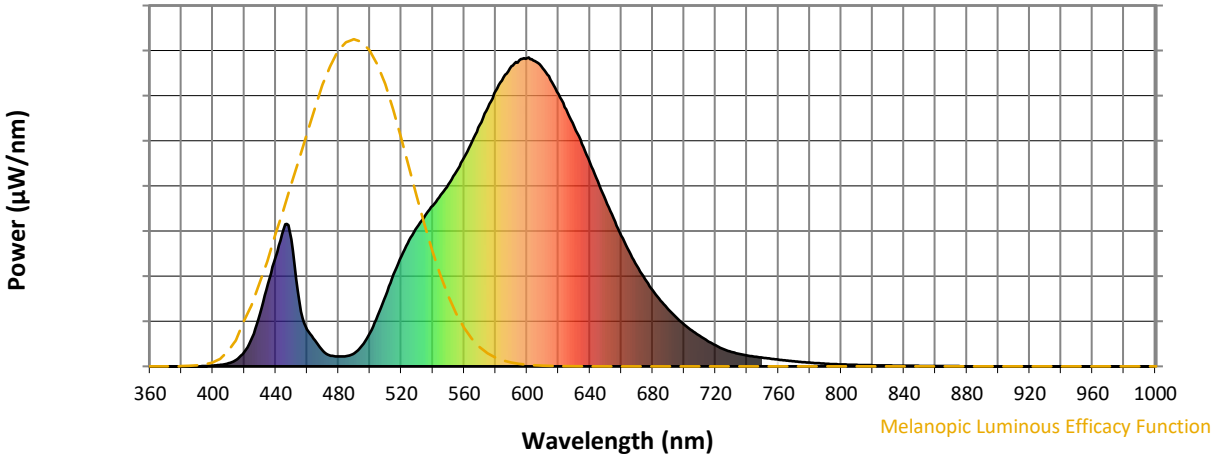


Scotopic Lumens: NR S/P: 1.03

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	43	NR	620	881	NR	750	28	NR	880	0	NR
365	0	NR	495	67	NR	625	832	NR	755	25	NR	885	0	NR
370	0	NR	500	108	NR	630	776	NR	760	22	NR	890	0	NR
375	0	NR	505	165	NR	635	720	NR	765	19	NR	895	0	NR
380	0	NR	510	229	NR	640	660	NR	770	16	NR	900	0	NR
385	0	NR	515	297	NR	645	599	NR	775	14	NR	905	0	NR
390	0	NR	520	357	NR	650	538	NR	780	12	NR	910	0	NR
395	1	NR	525	408	NR	655	480	NR	785	10	NR	915	0	NR
400	3	NR	530	451	NR	660	423	NR	790	9	NR	920	0	NR
405	5	NR	535	488	NR	665	372	NR	795	7	NR	925	0	NR
410	10	NR	540	521	NR	670	325	NR	800	6	NR	930	0	NR
415	21	NR	545	555	NR	675	282	NR	805	5	NR	935	0	NR
420	46	NR	550	590	NR	680	246	NR	810	5	NR	940	0	NR
425	94	NR	555	631	NR	685	213	NR	815	4	NR	945	0	NR
430	169	NR	560	677	NR	690	185	NR	820	4	NR	950	0	NR
435	268	NR	565	728	NR	695	158	NR	825	3	NR	955	0	NR
440	354	NR	570	782	NR	700	136	NR	830	3	NR	960	0	NR
445	445	NR	575	838	NR	705	116	NR	835	2	NR	965	0	NR
450	411	NR	580	891	NR	710	98	NR	840	2	NR	970	0	NR
455	210	NR	585	935	NR	715	82	NR	845	2	NR	975	0	NR
460	119	NR	590	972	NR	720	68	NR	850	2	NR	980	0	NR
465	84	NR	595	991	NR	725	56	NR	855	1	NR	985	0	NR
470	50	NR	600	997	NR	730	47	NR	860	1	NR	990	0	NR
475	35	NR	605	988	NR	735	40	NR	865	1	NR	995	0	NR
480	32	NR	610	965	NR	740	35	NR	870	1	NR	1000	0	NR
485	33	NR	615	927	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-176-2

Melanopic Flux vs. Wavelength



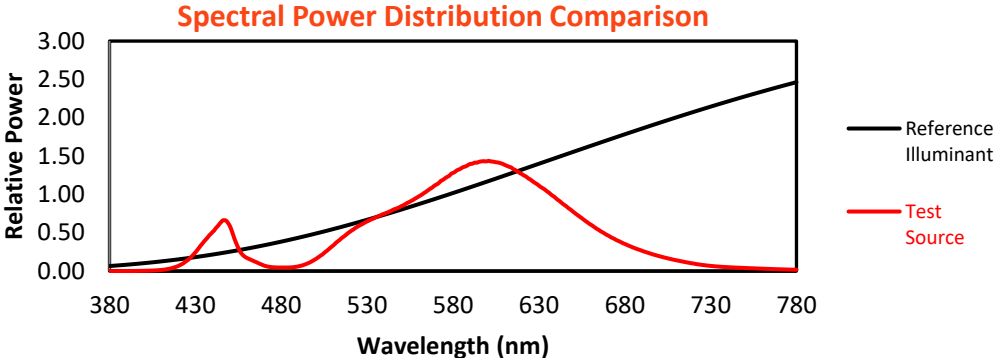
Melanopic Lumens: NR

M/P: 1.73

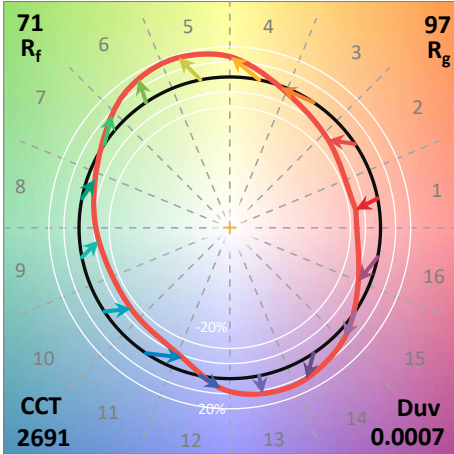
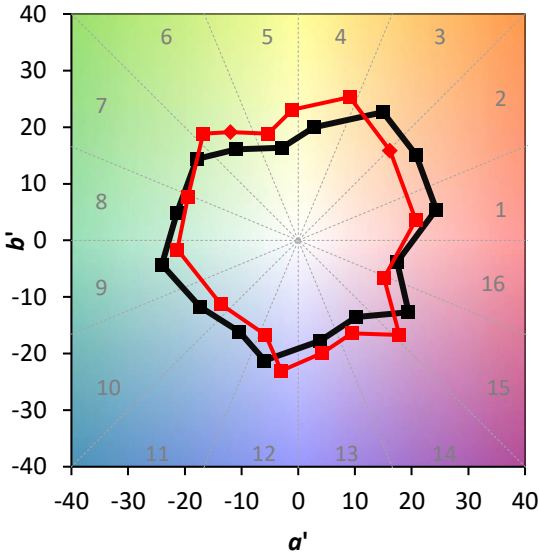
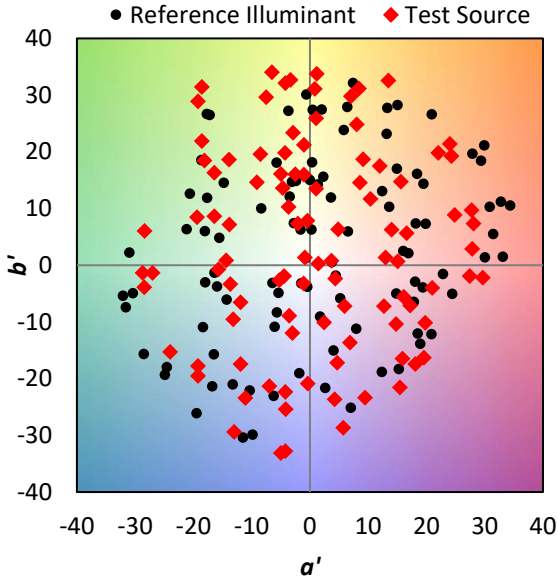
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	881	NR	750	28	NR	880	0	NR
365	0	NR	495	67	NR	625	832	NR	755	25	NR	885	0	NR
370	0	NR	500	108	NR	630	776	NR	760	22	NR	890	0	NR
375	0	NR	505	165	NR	635	720	NR	765	19	NR	895	0	NR
380	0	NR	510	229	NR	640	660	NR	770	16	NR	900	0	NR
385	0	NR	515	297	NR	645	599	NR	775	14	NR	905	0	NR
390	0	NR	520	357	NR	650	538	NR	780	12	NR	910	0	NR
395	1	NR	525	408	NR	655	480	NR	785	10	NR	915	0	NR
400	3	NR	530	451	NR	660	423	NR	790	9	NR	920	0	NR
405	5	NR	535	488	NR	665	372	NR	795	7	NR	925	0	NR
410	10	NR	540	521	NR	670	325	NR	800	6	NR	930	0	NR
415	21	NR	545	555	NR	675	282	NR	805	5	NR	935	0	NR
420	46	NR	550	590	NR	680	246	NR	810	5	NR	940	0	NR
425	94	NR	555	631	NR	685	213	NR	815	4	NR	945	0	NR
430	169	NR	560	677	NR	690	185	NR	820	4	NR	950	0	NR
435	268	NR	565	728	NR	695	158	NR	825	3	NR	955	0	NR
440	354	NR	570	782	NR	700	136	NR	830	3	NR	960	0	NR
445	445	NR	575	838	NR	705	116	NR	835	2	NR	965	0	NR
450	411	NR	580	891	NR	710	98	NR	840	2	NR	970	0	NR
455	210	NR	585	935	NR	715	82	NR	845	2	NR	975	0	NR
460	119	NR	590	972	NR	720	68	NR	850	2	NR	980	0	NR
465	84	NR	595	991	NR	725	56	NR	855	1	NR	985	0	NR
470	50	NR	600	997	NR	730	47	NR	860	1	NR	990	0	NR
475	35	NR	605	988	NR	735	40	NR	865	1	NR	995	0	NR
480	32	NR	610	965	NR	740	35	NR	870	1	NR	1000	0	NR
485	33	NR	615	927	NR	745	31	NR	875	1	NR			

Summary

$R_f = 70.6$
 $R_g = 97.2$
 CIE $R_a = 70.6$
 $R_9 = -27.1$

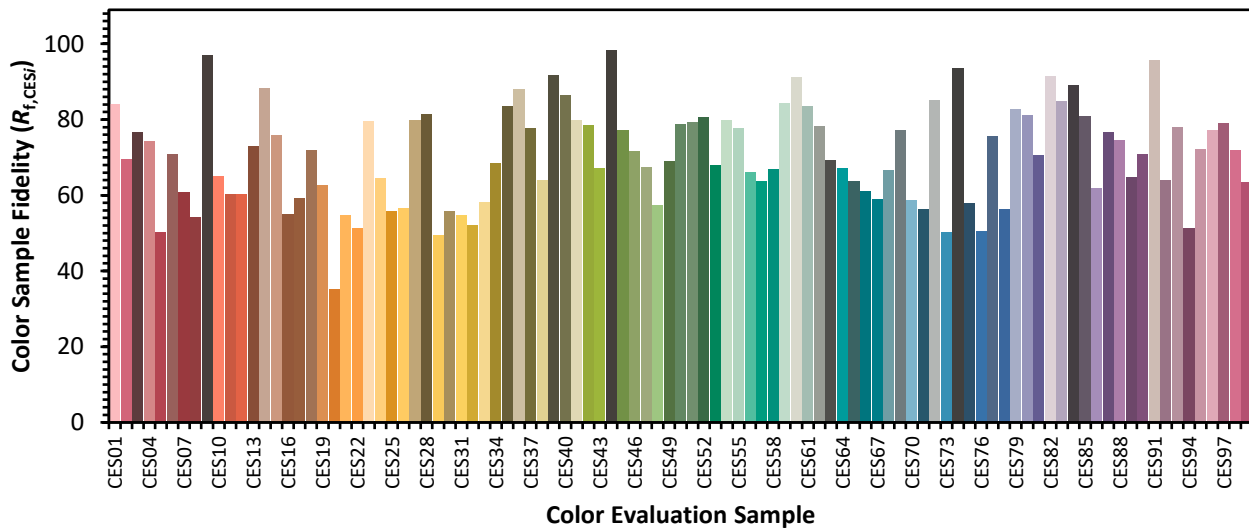


Color Vector Graphics

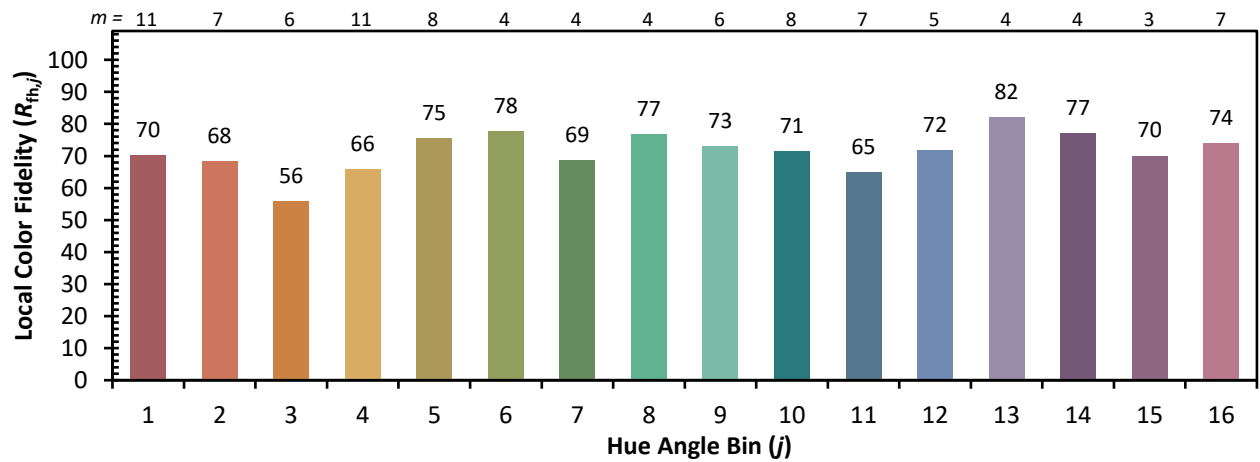
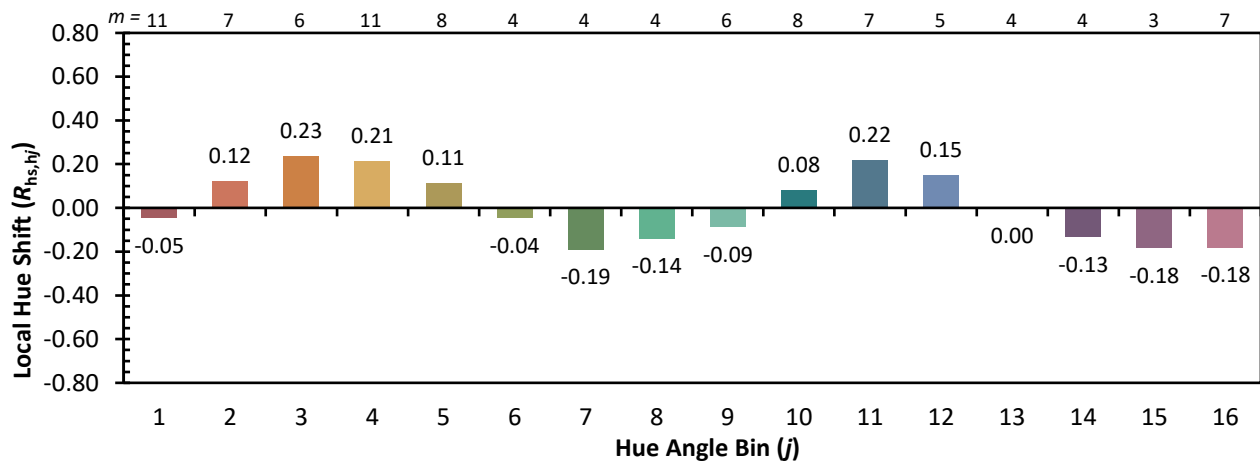
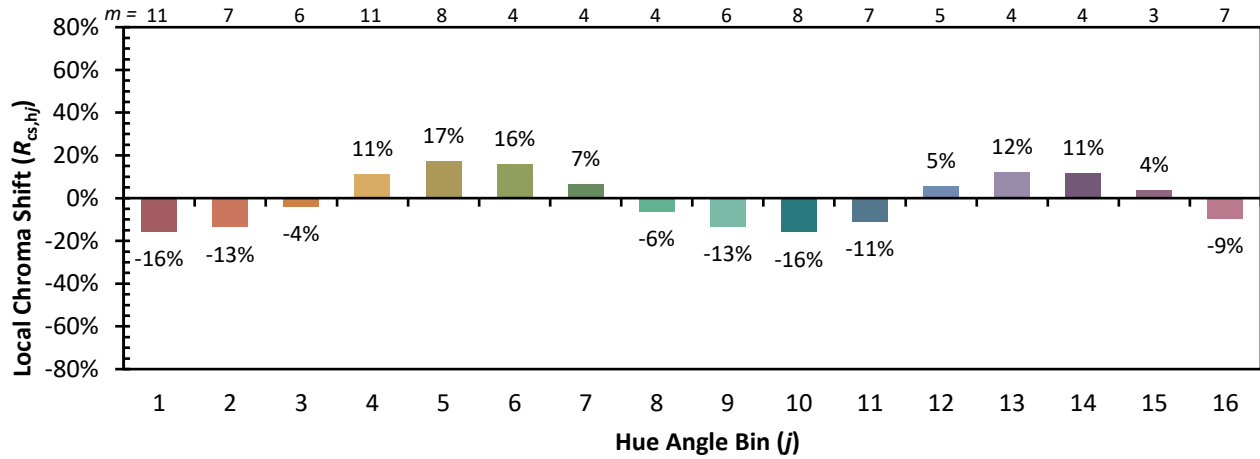


Individual Sample Fidelity Index ($R_{f,i}$)

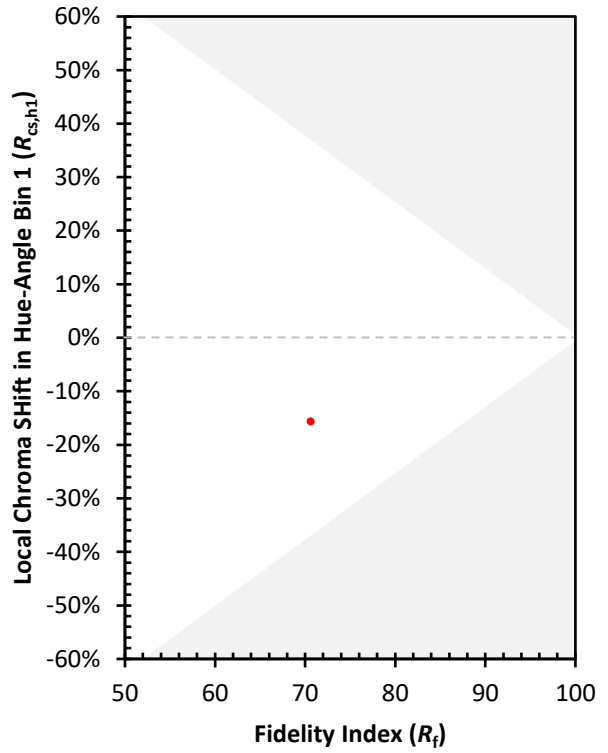
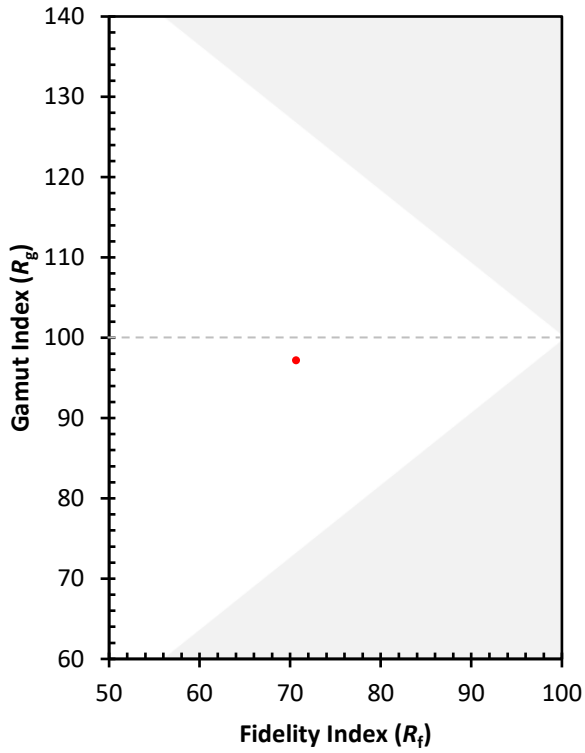
CES01 = 86	CES26 = 57	CES51 = 79	CES76 = 50
CES02 = 63	CES27 = 80	CES52 = 81	CES77 = 76
CES03 = 31	CES28 = 81	CES53 = 68	CES78 = 56
CES04 = 71	CES29 = 49	CES54 = 80	CES79 = 83
CES05 = 50	CES30 = 56	CES55 = 78	CES80 = 81
CES06 = 52	CES31 = 55	CES56 = 66	CES81 = 71
CES07 = 42	CES32 = 52	CES57 = 64	CES82 = 92
CES08 = 41	CES33 = 58	CES58 = 67	CES83 = 85
CES09 = 29	CES34 = 69	CES59 = 84	CES84 = 89
CES10 = 77	CES35 = 84	CES60 = 91	CES85 = 81
CES11 = 60	CES36 = 88	CES61 = 84	CES86 = 62
CES12 = 66	CES37 = 78	CES62 = 78	CES87 = 77
CES13 = 44	CES38 = 64	CES63 = 69	CES88 = 75
CES14 = 74	CES39 = 92	CES64 = 67	CES89 = 65
CES15 = 72	CES40 = 86	CES65 = 64	CES90 = 71
CES16 = 48	CES41 = 80	CES66 = 61	CES91 = 96
CES17 = 51	CES42 = 79	CES67 = 59	CES92 = 64
CES18 = 57	CES43 = 67	CES68 = 67	CES93 = 78
CES19 = 73	CES44 = 98	CES69 = 77	CES94 = 51
CES20 = 67	CES45 = 77	CES70 = 59	CES95 = 72
CES21 = 88	CES46 = 72	CES71 = 56	CES96 = 77
CES22 = 80	CES47 = 67	CES72 = 85	CES97 = 79
CES23 = 92	CES48 = 57	CES73 = 50	CES98 = 72
CES24 = 92	CES49 = 69	CES74 = 94	CES99 = 63
CES25 = 73	CES50 = 79	CES75 = 58	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)