

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: P868853

Luminaire Tested: **EMM2-HSN-SA2A-740-U-T2R-HSS**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868853  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA2A-740-U-T2R-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 70W 70CRI 4000K  
FITXURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (20) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

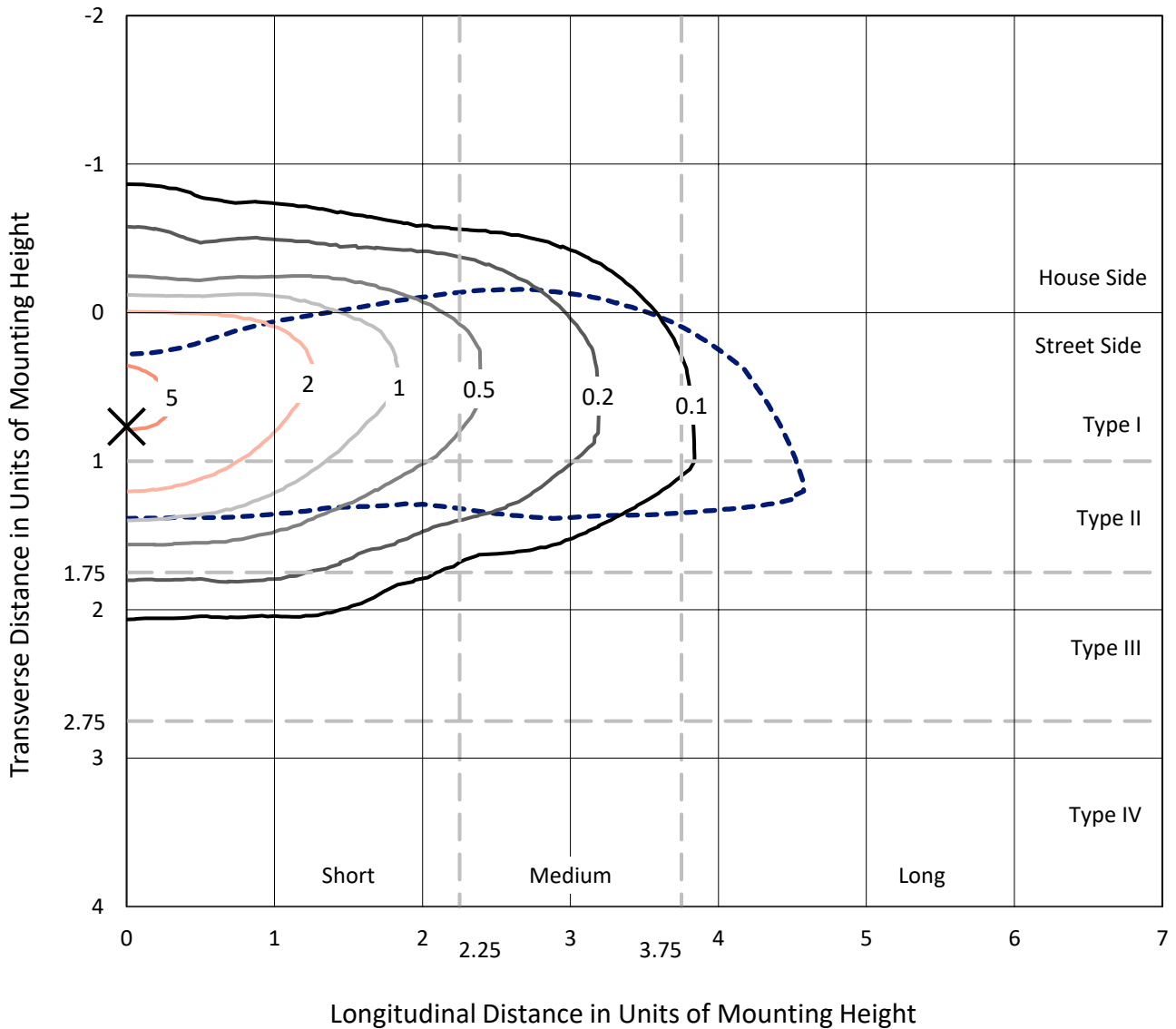
Lumens per Lamp: N/A  
Luminaire Lumens: 6673.5 lumens  
Efficiency: N/A  
Efficacy: 109.4 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 61  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 9.89%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P868853  
 CATALOG NUMBER: EMM2-HSN-SA2A-740-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

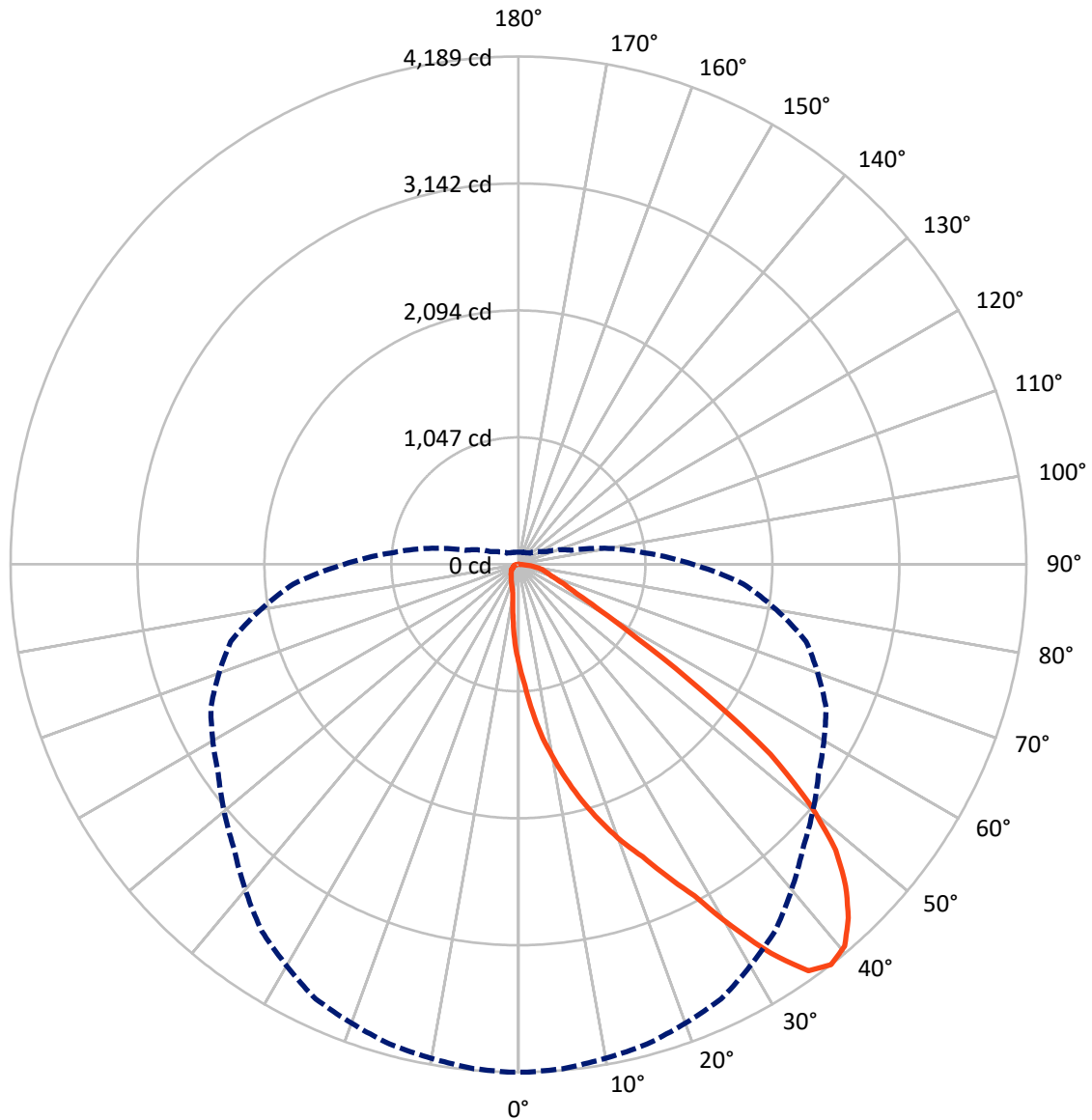
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.7 fc  
 Type II - Short - N/A

REPORT NUMBER: P868853  
CATALOG NUMBER: EMM2-HSN-SA2A-740-U-T2R-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 37.5-Deg Vertical



REPORT NUMBER: P868853

CATALOG NUMBER: EMM2-HSN-SA2A-740-U-T2R-HSS

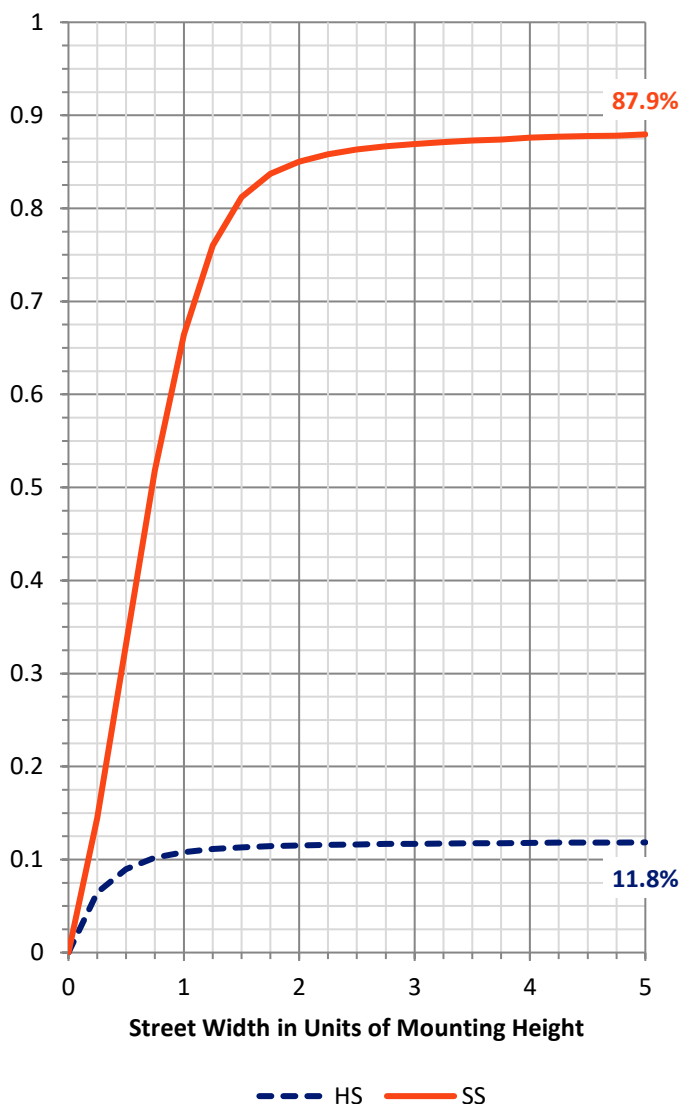
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	795.9	0.0	795.9
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	5877.6	0.0	5877.6
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	6673.5	0.0	6673.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.0	1.2
10°-20°	290.0	4.3
20°-30°	598.3	9.0
30°-40°	1052.8	15.8
40°-50°	1429.5	21.4
50°-60°	1416.3	21.2
60°-70°	1090.3	16.3
70°-80°	632.8	9.5
80°-90°	80.5	1.2
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°	6673.5	100.0
0°-180°	6673.5	100.0

**Coefficient of Utilization**



REPORT NUMBER: P868853

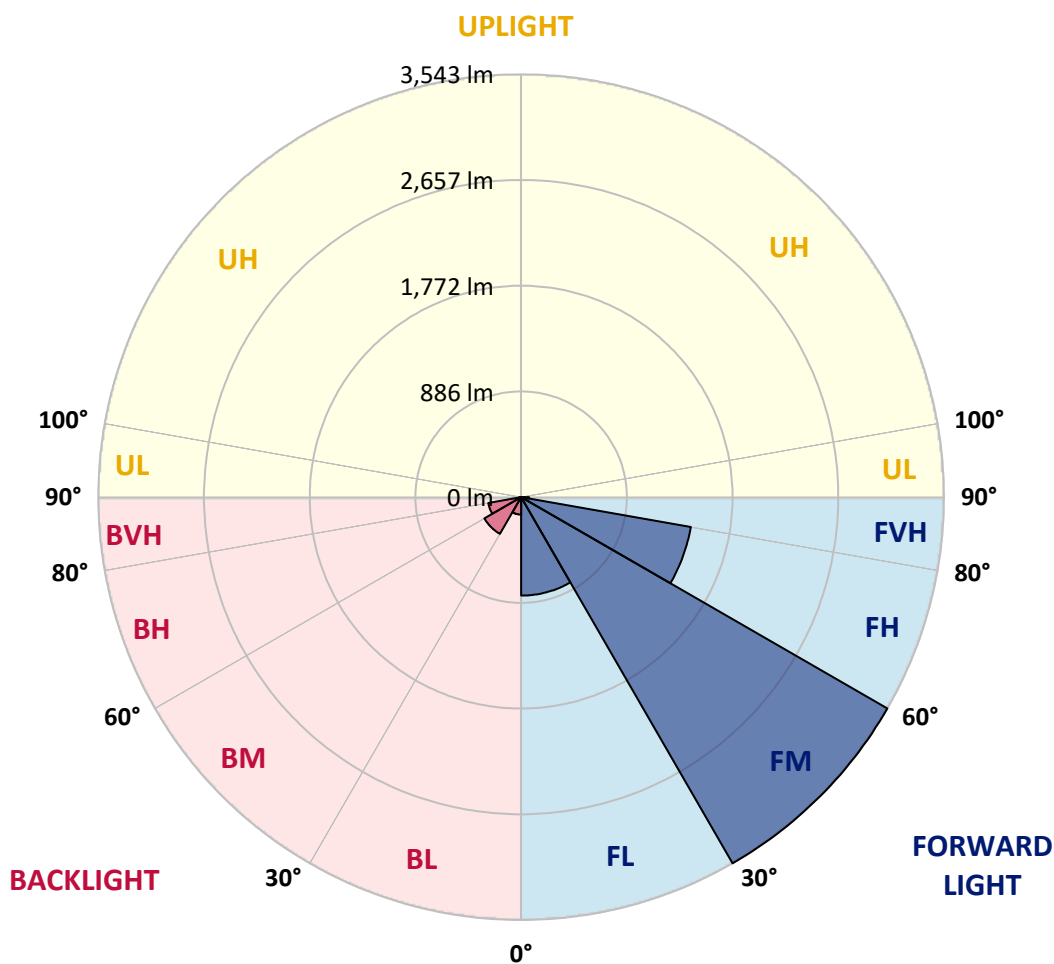
CATALOG NUMBER: EMM2-HSN-SA2A-740-U-T2R-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	825.0	12.4			
FM (30°-60°)	3543.1	53.1			
FH (60°-80°)	1443.9	21.6			G1/1800
FVH (80°-90°)	65.6	1.0			G1/100
BL (0°-30°)	146.3	2.2	B1/500		
BM (30°-60°)	355.5	5.3	B1/1000		
BH (60°-80°)	279.3	4.2	B1/500		G1/500
BVH (80°-90°)	14.8	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





REPORT NUMBER: P868853

CATALOG NUMBER: EMM2-HSN-SA2A-740-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	996.4	1011.3	1000.1	990.8	977.8	964.8	946.1	925.7	899.6	867.9	840.0
5°	1221.8	1229.2	1225.5	1219.9	1178.9	1139.8	1100.7	1052.3	985.2	925.7	862.3
7.5°	1447.1	1443.4	1434.1	1417.3	1380.1	1335.4	1264.6	1184.5	1089.5	985.2	886.5
10°	1644.6	1650.2	1642.7	1616.6	1570.1	1508.6	1422.9	1331.7	1203.2	1057.9	920.1
12.5°	1851.3	1855.0	1855.0	1799.2	1767.5	1672.5	1581.2	1458.3	1314.9	1147.3	959.2
15°	2054.3	2046.9	2046.9	2009.6	1953.7	1847.6	1745.1	1596.1	1434.1	1231.1	1003.9
17.5°	2248.0	2251.7	2235.0	2194.0	2140.0	2037.5	1910.9	1747.0	1551.4	1331.7	1050.4
20°	2439.8	2428.7	2421.2	2380.2	2322.5	2201.4	2080.4	1894.1	1689.3	1445.3	1115.6
22.5°	2618.6	2624.2	2605.6	2540.4	2486.4	2376.5	2238.7	2067.3	1834.5	1558.9	1186.4
25°	2849.6	2831.0	2847.7	2769.5	2685.7	2555.3	2398.9	2229.4	1992.8	1698.6	1273.9
27.5°	3095.4	3106.6	3097.3	3011.6	2898.0	2722.9	2559.0	2378.4	2153.0	1830.8	1372.6
30°	3462.3	3456.8	3458.6	3330.1	3142.0	2933.4	2732.3	2534.8	2313.2	1992.8	1488.1
32.5°	3825.5	3846.0	3795.7	3682.1	3466.1	3151.3	2905.5	2685.7	2467.8	2132.5	1605.5
35°	4117.9	4112.3	4091.9	3965.2	3751.0	3445.6	3102.9	2853.3	2631.7	2303.9	1735.8
37.5°	4188.7	4188.7	4175.7	4097.4	3955.9	3691.4	3317.1	3020.9	2799.3	2456.6	1862.5
40°	4142.1	4132.8	4125.4	4073.2	3996.9	3840.4	3542.4	3194.1	2978.1	2654.0	2002.2
42.5°	3989.4	3991.3	3982.0	3952.2	3911.2	3851.6	3682.1	3378.5	3153.2	2840.3	2140.0
45°	3784.5	3788.3	3777.1	3773.4	3752.9	3752.9	3713.8	3523.8	3318.9	3030.2	2290.8
47.5°	3521.9	3520.1	3514.5	3505.2	3546.2	3590.9	3626.2	3605.8	3466.1	3235.1	2426.8
50°	3121.5	3117.8	3134.5	3181.1	3281.7	3380.4	3484.7	3581.5	3572.2	3425.1	2590.7
52.5°	2601.9	2577.7	2596.3	2739.7	2946.4	3166.2	3313.3	3466.1	3626.2	3626.2	2752.7
55°	1819.6	1840.1	1851.3	2061.8	2469.6	2847.7	3106.6	3304.0	3605.8	3786.4	2931.5
57.5°	1158.5	1165.9	1199.4	1426.7	1905.3	2378.4	2836.5	3160.6	3529.4	3920.5	3110.3
60°	780.4	754.3	780.4	910.8	1370.8	1866.2	2439.8	2980.0	3419.5	4017.4	3307.8
62.5°	551.3	549.4	556.9	633.2	977.8	1402.4	1942.6	2736.0	3332.0	4022.9	3454.9
65°	445.1	432.1	437.7	480.5	655.6	1028.1	1424.8	2294.6	3253.7	3924.2	3527.5
67.5°	357.6	352.0	355.7	383.7	491.7	772.9	1003.9	1745.1	3088.0	3756.6	3486.6
70°	292.4	294.3	296.1	324.1	391.1	584.8	717.1	1197.6	2734.1	3566.6	3302.2
72.5°	253.3	253.3	255.2	273.8	327.8	463.8	542.0	778.5	2212.6	3361.8	2963.2
75°	223.5	223.5	223.5	240.3	279.4	372.5	420.9	532.7	1588.7	2981.8	2451.0
77.5°	193.7	195.6	195.6	210.5	240.3	290.5	324.1	368.8	1013.2	2303.9	1855.0
80°	149.0	149.0	150.9	167.6	204.9	227.2	238.4	260.7	532.7	1447.1	1177.1
82.5°	104.3	106.2	106.2	108.0	137.8	139.7	128.5	130.4	193.7	480.5	447.0
85°	11.2	13.0	14.9	14.9	24.2	29.8	31.7	29.8	31.7	55.9	55.9
87.5°	0.0	0.0	0.0	0.0	1.9	3.7	3.7	5.6	5.6	5.6	5.6
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: P868853

CATALOG NUMBER: EMM2-HSN-SA2A-740-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	825.1	812.0	784.1	759.9	737.5	718.9	705.9	689.1	676.1	676.1	683.5
5°	830.7	800.9	743.1	689.1	646.3	605.3	568.1	543.8	525.2	514.0	514.0
7.5°	838.1	793.4	705.9	623.9	556.9	491.7	434.0	406.0	378.1	368.8	370.6
10°	853.0	789.7	672.4	566.2	465.6	383.7	327.8	298.0	283.1	275.6	275.6
12.5°	869.8	789.7	637.0	501.0	383.7	299.9	266.3	244.0	236.5	232.8	229.1
15°	892.1	793.4	607.2	432.1	312.9	253.3	229.1	216.0	208.6	204.9	204.9
17.5°	918.2	797.1	575.5	376.2	266.3	223.5	204.9	195.6	188.1	184.4	184.4
20°	951.7	806.5	543.8	325.9	232.8	204.9	188.1	178.8	171.3	169.5	167.6
22.5°	992.7	821.4	512.2	285.0	210.5	186.2	171.3	163.9	158.3	154.6	154.6
25°	1041.1	840.0	488.0	255.2	193.7	173.2	160.2	150.9	145.3	143.4	143.4
27.5°	1108.2	871.6	463.8	232.8	180.7	160.2	147.1	139.7	134.1	132.2	130.4
30°	1171.5	910.8	452.6	227.2	171.3	149.0	139.7	130.4	124.8	122.9	121.1
32.5°	1253.4	955.4	445.1	227.2	167.6	141.5	130.4	122.9	117.3	115.5	113.6
35°	1341.0	1007.6	445.1	234.7	169.5	136.0	122.9	115.5	109.9	106.2	106.2
37.5°	1436.0	1059.7	448.9	245.8	175.1	132.2	115.5	108.0	102.4	100.6	100.6
40°	1536.5	1130.5	456.3	255.2	180.7	130.4	108.0	102.4	96.8	93.1	93.1
42.5°	1629.7	1186.4	469.3	266.3	184.4	128.5	102.4	96.8	91.3	89.4	89.4
45°	1737.7	1247.9	480.5	273.8	184.4	122.9	96.8	91.3	87.5	85.7	83.8
47.5°	1823.4	1298.1	486.1	277.5	180.7	117.3	91.3	87.5	83.8	80.1	81.9
50°	1927.7	1352.2	495.4	279.4	173.2	109.9	87.5	81.9	78.2	76.4	76.4
52.5°	2028.2	1406.2	502.9	275.6	163.9	100.6	81.9	78.2	74.5	70.8	70.8
55°	2147.4	1465.8	514.0	270.1	149.0	91.3	76.4	72.6	67.0	65.2	63.3
57.5°	2283.4	1544.0	523.4	258.9	130.4	81.9	72.6	67.0	59.6	55.9	55.9
60°	2408.2	1633.4	530.8	230.9	113.6	76.4	67.0	61.5	54.0	52.1	52.1
62.5°	2542.3	1726.5	530.8	182.5	96.8	68.9	63.3	57.7	50.3	48.4	48.4
65°	2635.4	1810.3	514.0	136.0	81.9	65.2	61.5	54.0	46.6	44.7	44.7
67.5°	2661.5	1862.5	467.5	96.8	70.8	61.5	57.7	50.3	44.7	41.0	41.0
70°	2577.7	1821.5	381.8	74.5	61.5	55.9	52.1	46.6	41.0	39.1	39.1
72.5°	2337.4	1665.1	285.0	63.3	54.0	52.1	48.4	42.8	39.1	37.2	37.2
75°	1957.5	1383.8	201.1	55.9	50.3	46.6	42.8	39.1	35.4	35.4	35.4
77.5°	1482.5	1000.1	124.8	50.3	42.8	42.8	39.1	35.4	33.5	31.7	31.7
80°	957.3	631.4	70.8	35.4	29.8	31.7	27.9	24.2	24.2	22.3	22.3
82.5°	406.0	249.6	37.2	20.5	14.9	13.0	9.3	9.3	7.4	7.4	7.4
85°	41.0	14.9	7.4	5.6	5.6	3.7	3.7	3.7	3.7	1.9	1.9
87.5°	5.6	5.6	5.6	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-157-5

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-740-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-740-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-5  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 08/20/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-SA-40-740-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 3915  
 CIE u': 0.2262  
 CIE v': 0.5044  
 Duv: 0.0010  
 CIE x: 0.3850  
 CIE y: 0.3816  
 CIE z: 0.2334  
 Peak Wavelength (nm): 449  
 Dominant Wavelength (nm): 578  
 Purity: 30.05482  
 Rf: 73.2  
 Rg: 93.9

CRI (Ra):	71.0		
R1:	67.6	R9:	-38.4
R2:	78.3	R10:	48.9
R3:	87.1	R11:	65.3
R4:	69.7	R12:	40.4
R5:	67.4	R13:	69.3
R6:	69.3	R14:	92.6
R7:	79.7	R15:	59.9
R8:	48.7		



**Test Conditions**

Stabilization Time: 21M  
 Operation Time: 1H 21M  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2407-157-5

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: SP1-2407-157-5

CIE 1931 Chromaticity Diagram



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

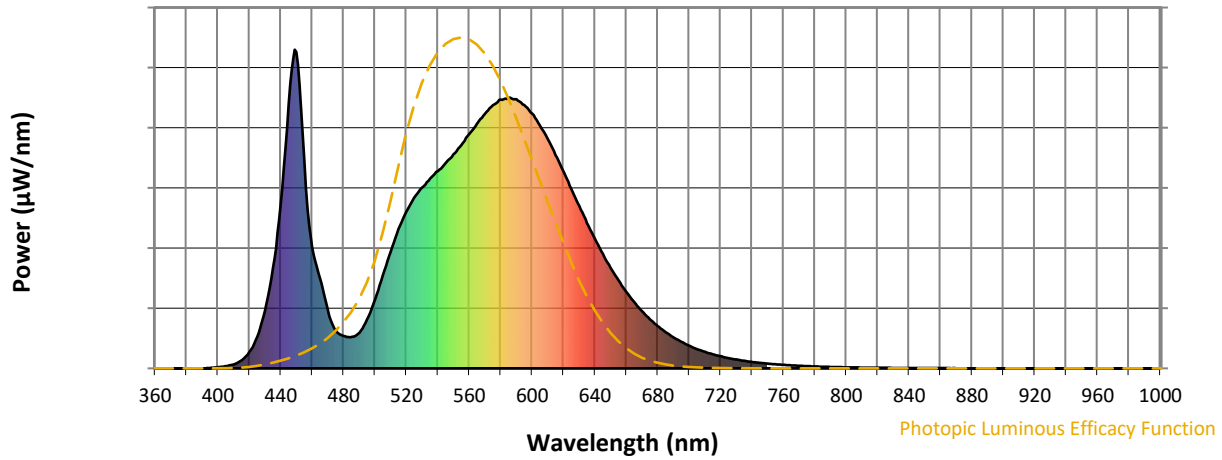


CCT = 3915K  
 CIE x = 0.3850  
 CIE y = 0.3816  
 Duv = 0.0010

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-5

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

REPORT NUMBER: SP1-2407-157-5

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.49**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

REPORT NUMBER: SP1-2407-157-5

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.88**

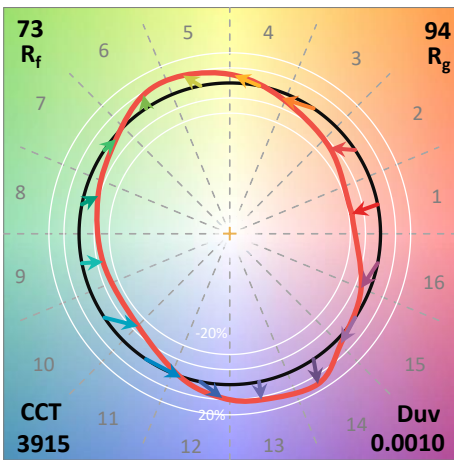
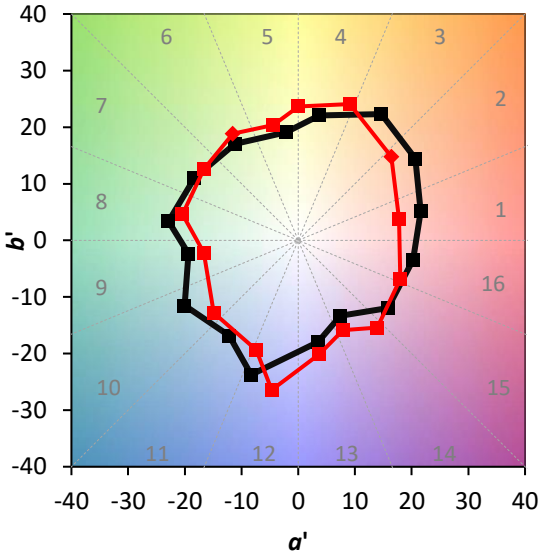
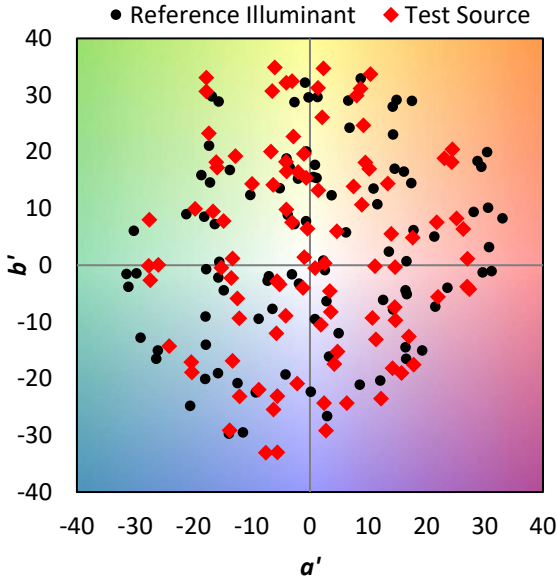
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

**Summary**

$R_f = 73.2$   
 $R_g = 93.9$   
 $CIE R_a = 71.0$   
 $R_g = -38.4$



**Color Vector Graphics**



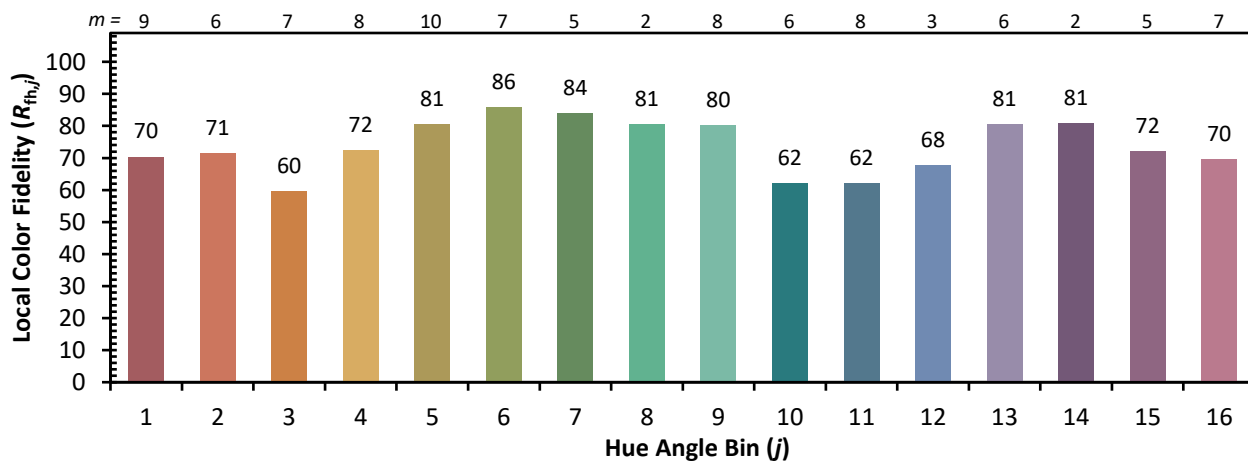
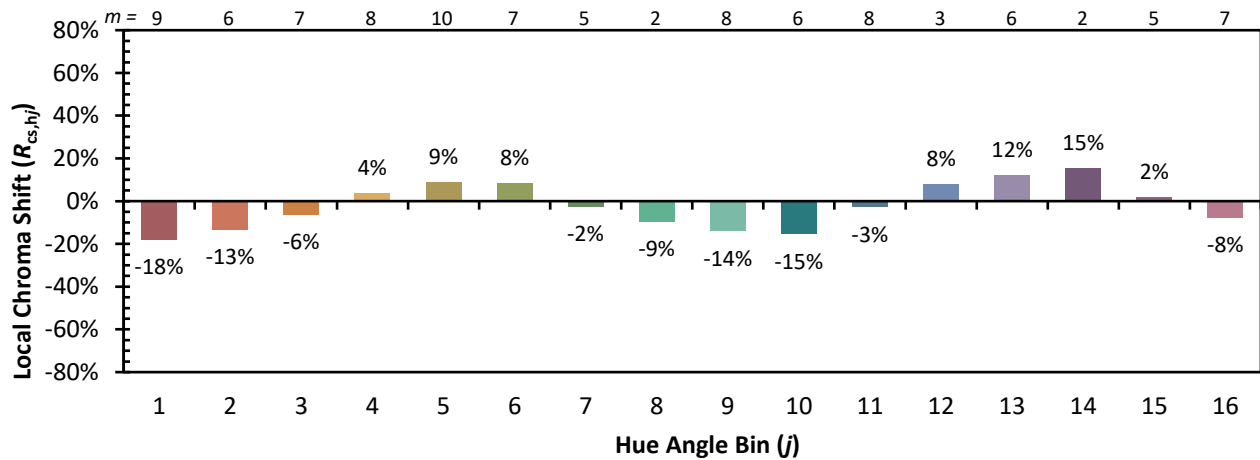


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 85	CES26 = 61	CES51 = 88	CES76 = 50
CES02 = 61	CES27 = 88	CES52 = 87	CES77 = 69
CES03 = 30	CES28 = 81	CES53 = 77	CES78 = 53
CES04 = 70	CES29 = 65	CES54 = 84	CES79 = 81
CES05 = 47	CES30 = 81	CES55 = 83	CES80 = 78
CES06 = 50	CES31 = 69	CES56 = 73	CES81 = 77
CES07 = 40	CES32 = 60	CES57 = 72	CES82 = 91
CES08 = 39	CES33 = 76	CES58 = 73	CES83 = 89
CES09 = 29	CES34 = 70	CES59 = 85	CES84 = 86
CES10 = 74	CES35 = 83	CES60 = 89	CES85 = 77
CES11 = 57	CES36 = 91	CES61 = 81	CES86 = 71
CES12 = 63	CES37 = 79	CES62 = 85	CES87 = 76
CES13 = 42	CES38 = 92	CES63 = 72	CES88 = 80
CES14 = 74	CES39 = 96	CES64 = 64	CES89 = 70
CES15 = 71	CES40 = 91	CES65 = 61	CES90 = 79
CES16 = 46	CES41 = 93	CES66 = 57	CES91 = 74
CES17 = 49	CES42 = 80	CES67 = 54	CES92 = 57
CES18 = 56	CES43 = 76	CES68 = 63	CES93 = 74
CES19 = 72	CES44 = 99	CES69 = 73	CES94 = 51
CES20 = 65	CES45 = 85	CES70 = 55	CES95 = 65
CES21 = 86	CES46 = 82	CES71 = 48	CES96 = 76
CES22 = 78	CES47 = 86	CES72 = 83	CES97 = 84
CES23 = 92	CES48 = 77	CES73 = 45	CES98 = 75
CES24 = 91	CES49 = 80	CES74 = 93	CES99 = 62
CES25 = 72	CES50 = 88	CES75 = 51	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)