

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: STREETWORKS

Report Number: P867919

Luminaire Tested: **MEM2-HSN-SA-40-722-U-T2R-HSS**

Issue Date: 08/21/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P867919  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-SA-40-722-U-T2R-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 40W 70CRI 2200K  
FIXTURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (10) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

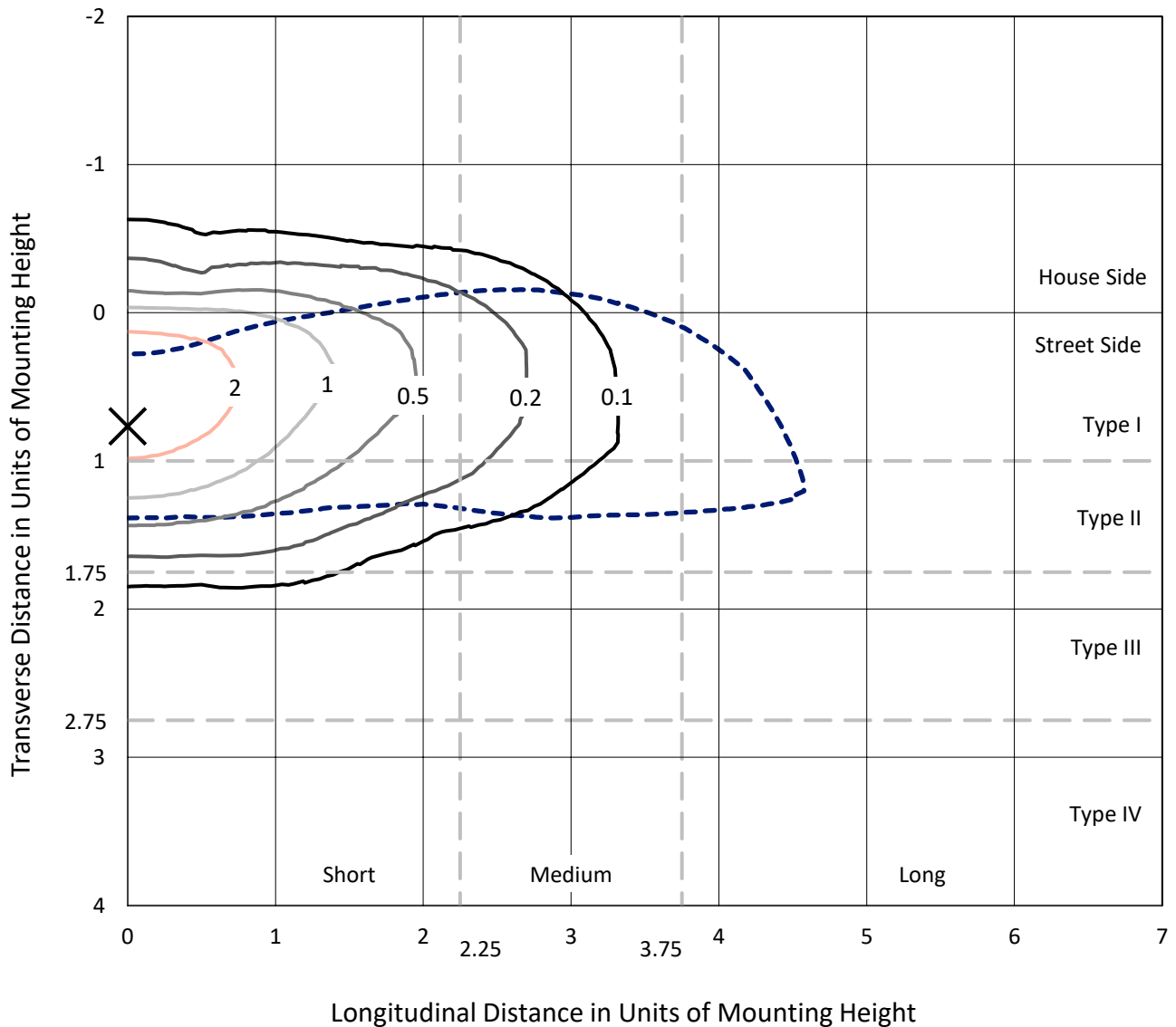
Lumens per Lamp: N/A  
Luminaire Lumens: 3844.3 lumens  
Efficiency: N/A  
Efficacy: 87.4 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 44  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6.91%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P867919  
 CATALOG NUMBER: MEM2-HSN-SA-40-722-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

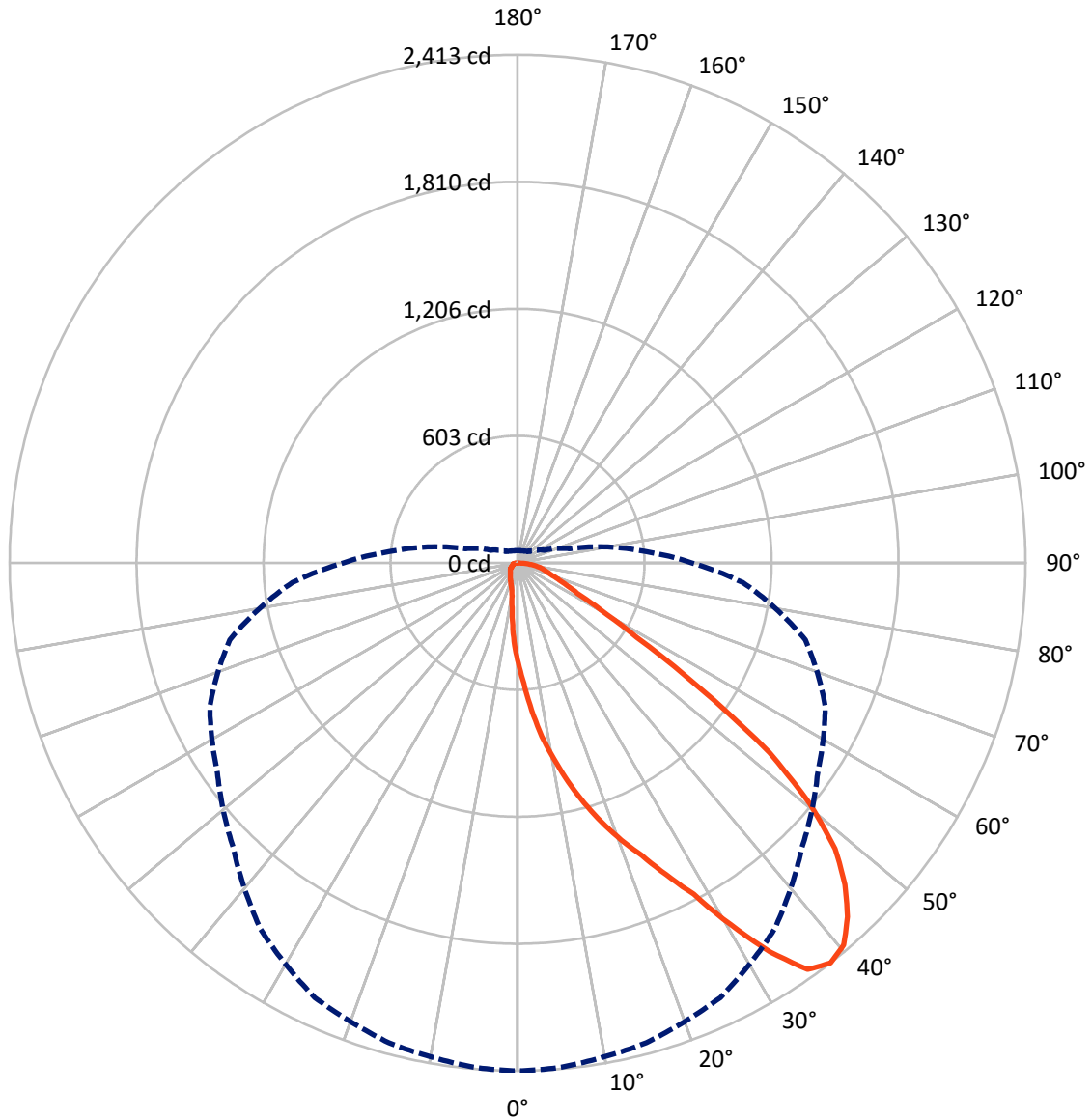
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.3 fc  
 Type II - Short - N/A

REPORT NUMBER: P867919  
CATALOG NUMBER: MEM2-HSN-SA-40-722-U-T2R-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P867919  
 CATALOG NUMBER: MEM2-HSN-SA-40-722-U-T2R-HSS

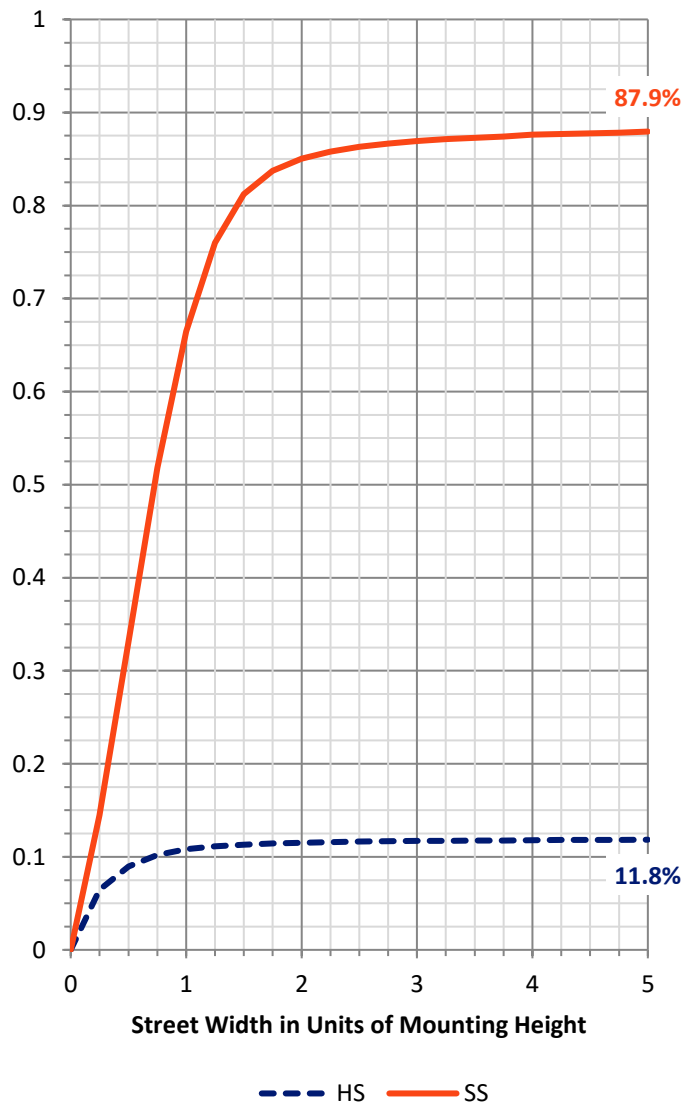
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	458.5	0.0	458.5
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	3385.8	0.0	3385.8
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	3844.3	0.0	3844.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.8	1.2
10°-20°	167.1	4.3
20°-30°	344.7	9.0
30°-40°	606.5	15.8
40°-50°	823.5	21.4
50°-60°	815.9	21.2
60°-70°	628.1	16.3
70°-80°	364.5	9.5
80°-90°	46.4	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°	3844.3	100.0
0°-180°	3844.3	100.0

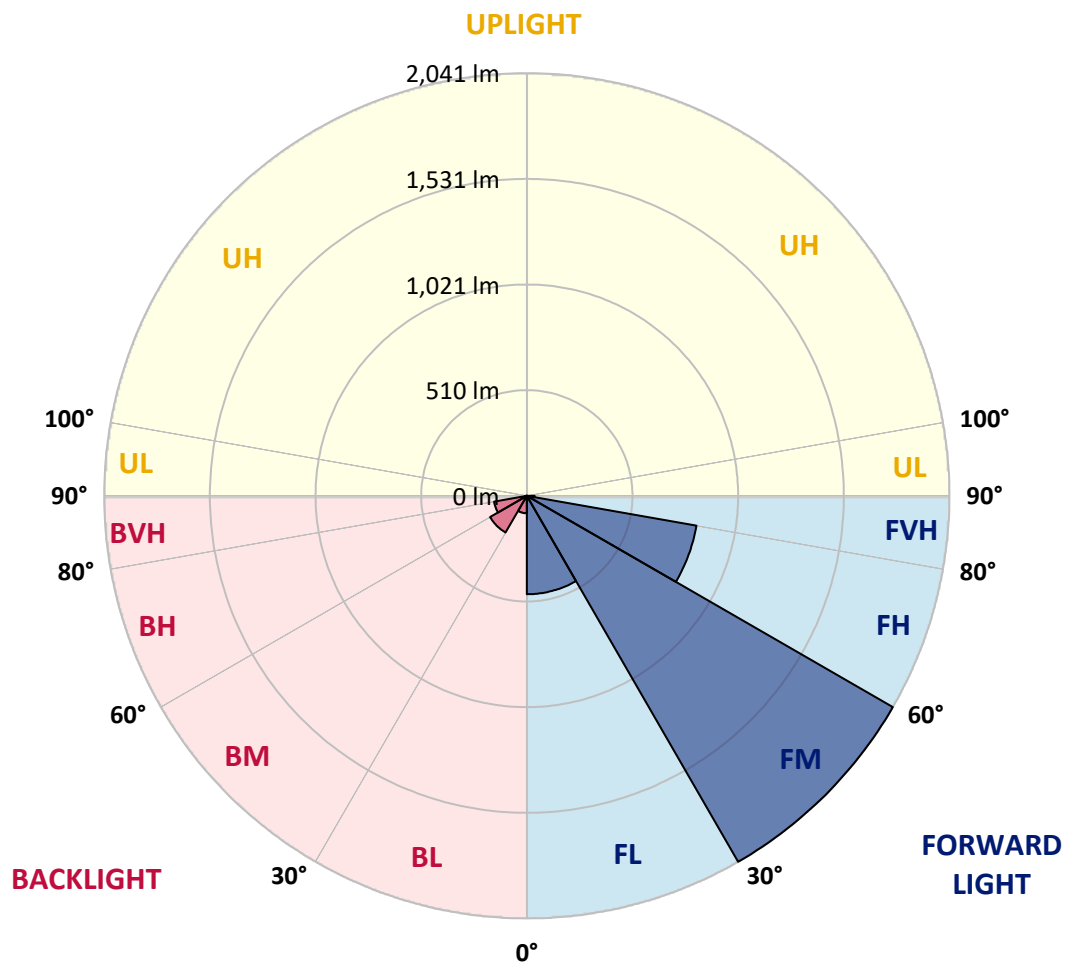


REPORT NUMBER: P867919  
 CATALOG NUMBER: MEM2-HSN-SA-40-722-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	475.2	12.4			
FM (30°-60°)	2041.0	53.1			
FH (60°-80°)	831.8	21.6			G1/1800
FVH (80°-90°)	37.8	1.0			G1/100
BL (0°-30°)	84.3	2.2	B0/110		
BM (30°-60°)	204.8	5.3	B0/220		
BH (60°-80°)	160.9	4.2	B1/500		G1/500
BVH (80°-90°)	8.5	0.2			G0/10
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: P867919

CATALOG NUMBER: MEM2-HSN-SA-40-722-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4
2.5°	574.0	582.6	576.1	570.8	563.3	555.8	545.0	533.2	518.2	500.0	483.9
5°	703.8	708.1	706.0	702.7	679.1	656.6	634.1	606.2	567.6	533.2	496.8
7.5°	833.6	831.5	826.1	816.5	795.0	769.3	728.5	682.4	627.6	567.6	510.7
10°	947.4	950.6	946.3	931.3	904.5	869.0	819.7	767.1	693.1	609.4	530.0
12.5°	1066.5	1068.6	1068.6	1036.4	1018.2	963.5	910.9	840.1	757.5	660.9	552.5
15°	1183.4	1179.1	1179.1	1157.7	1125.5	1064.3	1005.3	919.5	826.1	709.2	578.3
17.5°	1295.0	1297.1	1287.5	1263.9	1232.8	1173.7	1100.8	1006.4	893.7	767.1	605.1
20°	1405.5	1399.1	1394.8	1371.2	1337.9	1268.2	1198.4	1091.1	973.1	832.6	642.7
22.5°	1508.5	1511.7	1501.0	1463.4	1432.3	1369.0	1289.6	1190.9	1056.8	898.0	683.4
25°	1641.5	1630.8	1640.5	1595.4	1547.1	1472.0	1381.9	1284.3	1148.0	978.5	733.9
27.5°	1783.2	1789.6	1784.2	1734.9	1669.4	1568.6	1474.2	1370.1	1240.3	1054.7	790.7
30°	1994.5	1991.3	1992.4	1918.3	1810.0	1689.8	1573.9	1460.2	1332.5	1148.0	857.2
32.5°	2203.7	2215.5	2186.6	2121.1	1996.7	1815.3	1673.7	1547.1	1421.6	1228.5	924.8
35°	2372.2	2369.0	2357.2	2284.2	2160.8	1984.9	1787.4	1643.7	1516.0	1327.2	999.9
37.5°	2412.9	2412.9	2405.4	2360.4	2278.8	2126.5	1910.8	1740.2	1612.6	1415.2	1072.9
40°	2386.1	2380.8	2376.5	2346.4	2302.4	2212.3	2040.6	1840.0	1715.6	1528.9	1153.4
42.5°	2298.1	2299.2	2293.9	2276.7	2253.1	2218.8	2121.1	1946.2	1816.4	1636.2	1232.8
45°	2180.1	2182.3	2175.8	2173.7	2161.9	2161.9	2139.4	2029.9	1911.9	1745.6	1319.7
47.5°	2028.8	2027.8	2024.6	2019.2	2042.8	2068.5	2088.9	2077.1	1996.7	1863.6	1398.0
50°	1798.2	1796.0	1805.7	1832.5	1890.4	1947.3	2007.4	2063.2	2057.8	1973.1	1492.4
52.5°	1498.8	1484.9	1495.6	1578.2	1697.3	1823.9	1908.7	1996.7	2088.9	2088.9	1585.7
55°	1048.2	1060.0	1066.5	1187.7	1422.7	1640.5	1789.6	1903.3	2077.1	2181.2	1688.7
57.5°	667.3	671.6	690.9	821.8	1097.6	1370.1	1634.0	1820.7	2033.1	2258.4	1791.7
60°	449.5	434.5	449.5	524.6	789.7	1075.0	1405.5	1716.6	1969.8	2314.2	1905.5
62.5°	317.6	316.5	320.8	364.8	563.3	807.9	1119.0	1576.1	1919.4	2317.5	1990.2
65°	256.4	248.9	252.1	276.8	377.7	592.2	820.8	1321.8	1874.4	2260.6	2032.1
67.5°	206.0	202.8	204.9	221.0	283.2	445.3	578.3	1005.3	1778.9	2164.0	2008.5
70°	168.4	169.5	170.6	186.7	225.3	336.9	413.1	689.9	1575.0	2054.6	1902.2
72.5°	145.9	145.9	147.0	157.7	188.8	267.2	312.2	448.5	1274.6	1936.6	1707.0
75°	128.7	128.7	128.7	138.4	160.9	214.6	242.5	306.8	915.2	1717.7	1411.9
77.5°	111.6	112.7	112.7	121.2	138.4	167.4	186.7	212.4	583.7	1327.2	1068.6
80°	85.8	85.8	86.9	96.6	118.0	130.9	137.3	150.2	306.8	833.6	678.1
82.5°	60.1	61.2	61.2	62.2	79.4	80.5	74.0	75.1	111.6	276.8	257.5
85°	6.4	7.5	8.6	8.6	13.9	17.2	18.2	17.2	18.2	32.2	32.2
87.5°	0.0	0.0	0.0	0.0	1.1	2.1	2.1	3.2	3.2	3.2	3.2
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: P867919

CATALOG NUMBER: MEM2-HSN-SA-40-722-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4
2.5°	475.3	467.8	451.7	437.7	424.9	414.1	406.6	397.0	389.5	389.5	393.8
5°	478.5	461.3	428.1	397.0	372.3	348.7	327.2	313.3	302.6	296.1	296.1
7.5°	482.8	457.1	406.6	359.4	320.8	283.2	250.0	233.9	217.8	212.4	213.5
10°	491.4	454.9	387.3	326.2	268.2	221.0	188.8	171.7	163.1	158.8	158.8
12.5°	501.0	454.9	366.9	288.6	221.0	172.7	153.4	140.5	136.3	134.1	132.0
15°	513.9	457.1	349.8	248.9	180.2	145.9	132.0	124.5	120.2	118.0	118.0
17.5°	528.9	459.2	331.5	216.7	153.4	128.7	118.0	112.7	108.4	106.2	106.2
20°	548.3	464.6	313.3	187.8	134.1	118.0	108.4	103.0	98.7	97.6	96.6
22.5°	571.9	473.1	295.0	164.2	121.2	107.3	98.7	94.4	91.2	89.1	89.1
25°	599.7	483.9	281.1	147.0	111.6	99.8	92.3	86.9	83.7	82.6	82.6
27.5°	638.4	502.1	267.2	134.1	104.1	92.3	84.8	80.5	77.2	76.2	75.1
30°	674.9	524.6	260.7	130.9	98.7	85.8	80.5	75.1	71.9	70.8	69.7
32.5°	722.1	550.4	256.4	130.9	96.6	81.5	75.1	70.8	67.6	66.5	65.4
35°	772.5	580.4	256.4	135.2	97.6	78.3	70.8	66.5	63.3	61.2	61.2
37.5°	827.2	610.5	258.6	141.6	100.9	76.2	66.5	62.2	59.0	57.9	57.9
40°	885.1	651.2	262.9	147.0	104.1	75.1	62.2	59.0	55.8	53.6	53.6
42.5°	938.8	683.4	270.4	153.4	106.2	74.0	59.0	55.8	52.6	51.5	51.5
45°	1001.0	718.8	276.8	157.7	106.2	70.8	55.8	52.6	50.4	49.4	48.3
47.5°	1050.4	747.8	280.0	159.9	104.1	67.6	52.6	50.4	48.3	46.1	47.2
50°	1110.4	778.9	285.4	160.9	99.8	63.3	50.4	47.2	45.1	44.0	44.0
52.5°	1168.4	810.0	289.7	158.8	94.4	57.9	47.2	45.1	42.9	40.8	40.8
55°	1237.0	844.4	296.1	155.6	85.8	52.6	44.0	41.8	38.6	37.6	36.5
57.5°	1315.4	889.4	301.5	149.1	75.1	47.2	41.8	38.6	34.3	32.2	32.2
60°	1387.3	940.9	305.8	133.0	65.4	44.0	38.6	35.4	31.1	30.0	30.0
62.5°	1464.5	994.6	305.8	105.1	55.8	39.7	36.5	33.3	29.0	27.9	27.9
65°	1518.1	1042.9	296.1	78.3	47.2	37.6	35.4	31.1	26.8	25.7	25.7
67.5°	1533.2	1072.9	269.3	55.8	40.8	35.4	33.3	29.0	25.7	23.6	23.6
70°	1484.9	1049.3	219.9	42.9	35.4	32.2	30.0	26.8	23.6	22.5	22.5
72.5°	1346.5	959.2	164.2	36.5	31.1	30.0	27.9	24.7	22.5	21.5	21.5
75°	1127.6	797.2	115.9	32.2	29.0	26.8	24.7	22.5	20.4	20.4	20.4
77.5°	854.0	576.1	71.9	29.0	24.7	24.7	22.5	20.4	19.3	18.2	18.2
80°	551.5	363.7	40.8	20.4	17.2	18.2	16.1	13.9	13.9	12.9	12.9
82.5°	233.9	143.8	21.5	11.8	8.6	7.5	5.4	5.4	4.3	4.3	4.3
85°	23.6	8.6	4.3	3.2	3.2	2.1	2.1	2.1	2.1	1.1	1.1
87.5°	3.2	3.2	3.2	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1
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: SP1-2407-157-2

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-722-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-722-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-2  
 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-40-722-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 2253  
 CIE u': 0.2868  
 CIE v': 0.5332  
 Duv: -0.0014  
 CIE x: 0.4974  
 CIE y: 0.4110  
 CIE z: 0.0915  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 587  
 Purity: 72.69432  
 Rf: 76.9  
 Rg: 92.7

CRI (Ra):	70.6		
R1:	68.4	R9:	-36.0
R2:	88.7	R10:	78.2
R3:	85.4	R11:	61.0
R4:	63.5	R12:	74.2
R5:	69.0	R13:	72.8
R6:	88.9	R14:	92.2
R7:	68.5	R15:	58.0
R8:	32.0		



**Test Conditions**

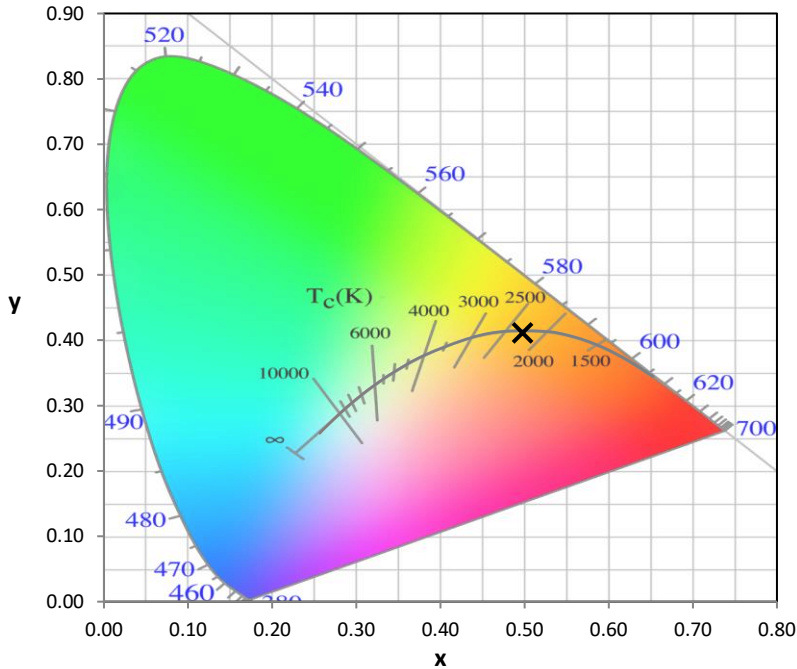
Stabilization Time: 29M  
 Operation Time: 1H 29M  
 Sphere Temperature (°C): 24.1

REPORT NUMBER: SP1-2407-157-2

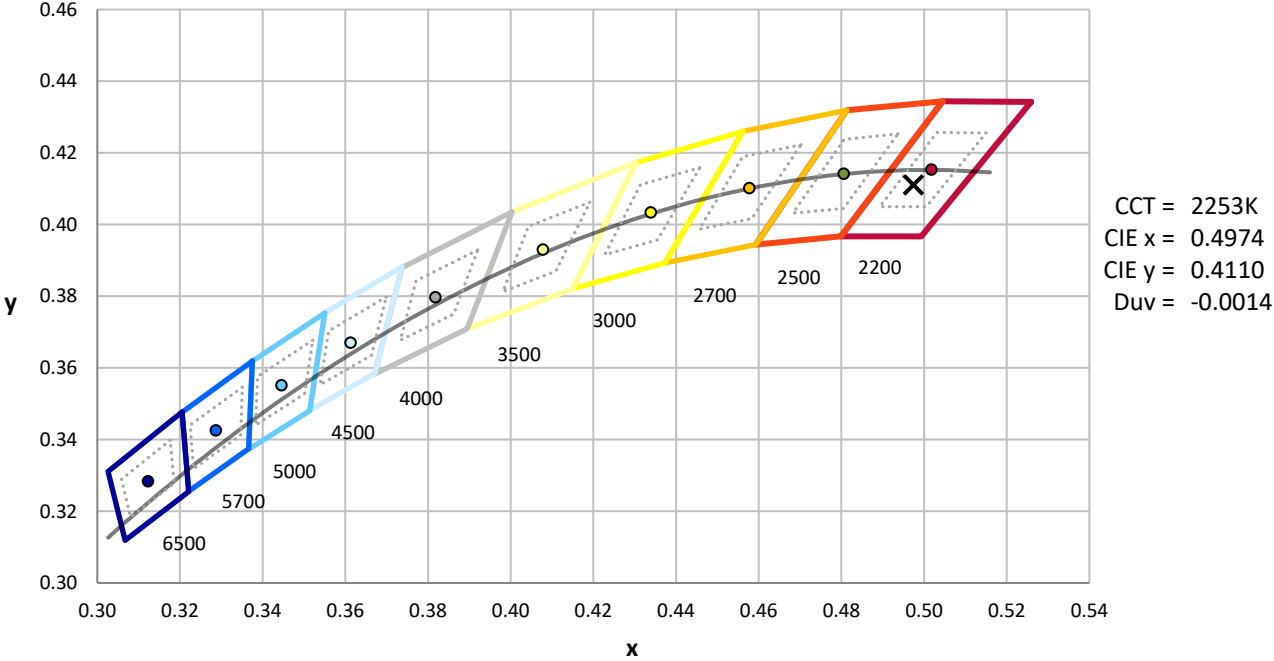
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-157-2

**CIE 1931 Chromaticity Diagram**



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



Point lies inside the ANSI 2200K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-2

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

REPORT NUMBER: SP1-2407-157-2

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 0.96**

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	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

REPORT NUMBER: SP1-2407-157-2

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 1.71**

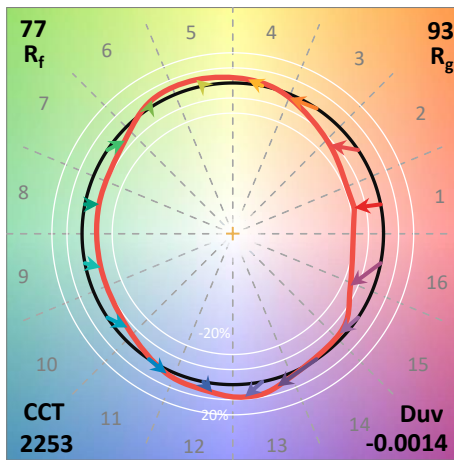
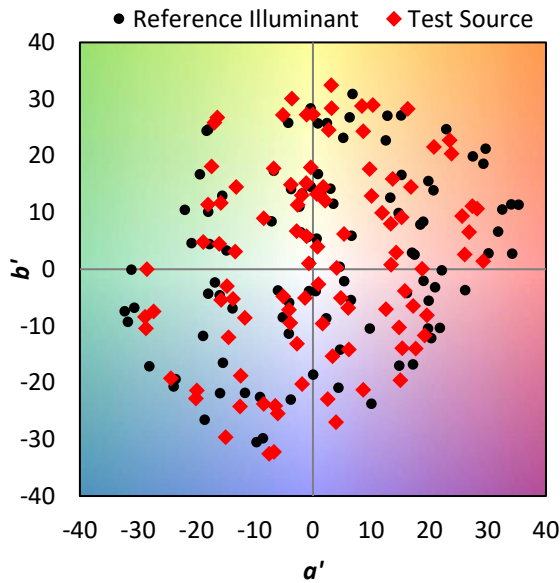
λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)
360	0	NR	490	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

**Summary**

$R_f = 76.9$   
 $R_g = 92.7$   
 CIE  $R_a = 70.6$   
 $R_9 = -36.0$



**Color Vector Graphics**



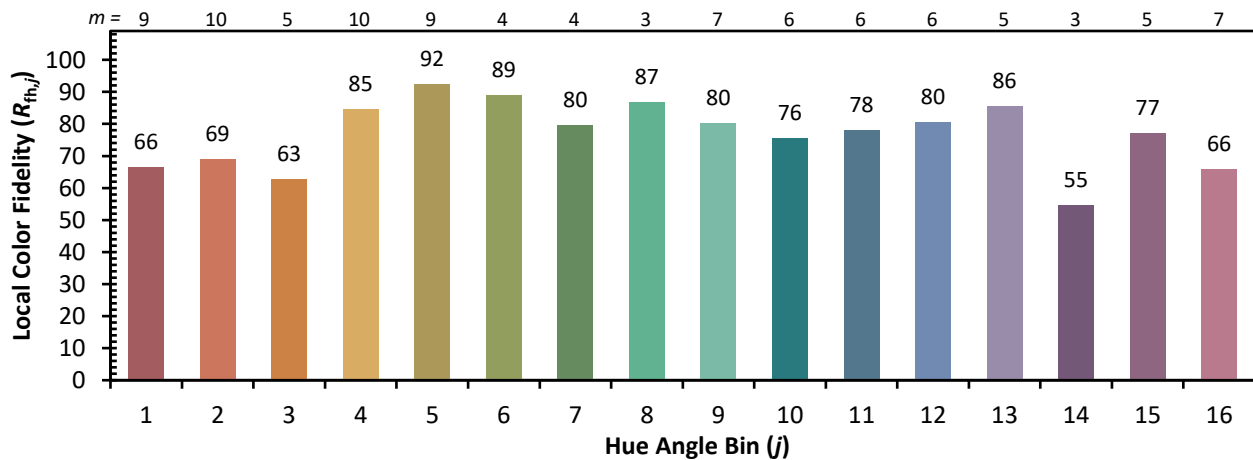


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 87	CES26 = 76	CES51 = 88	CES76 = 78
CES02 = 65	CES27 = 94	CES52 = 85	CES77 = 75
CES03 = 32	CES28 = 93	CES53 = 80	CES78 = 79
CES04 = 72	CES29 = 81	CES54 = 86	CES79 = 82
CES05 = 51	CES30 = 91	CES55 = 83	CES80 = 81
CES06 = 52	CES31 = 83	CES56 = 77	CES81 = 51
CES07 = 44	CES32 = 75	CES57 = 75	CES82 = 92
CES08 = 42	CES33 = 88	CES58 = 76	CES83 = 88
CES09 = 29	CES34 = 88	CES59 = 84	CES84 = 90
CES10 = 79	CES35 = 94	CES60 = 91	CES85 = 65
CES11 = 62	CES36 = 90	CES61 = 82	CES86 = 48
CES12 = 68	CES37 = 97	CES62 = 91	CES87 = 76
CES13 = 45	CES38 = 98	CES63 = 86	CES88 = 78
CES14 = 75	CES39 = 97	CES64 = 70	CES89 = 61
CES15 = 72	CES40 = 94	CES65 = 71	CES90 = 80
CES16 = 48	CES41 = 95	CES66 = 71	CES91 = 80
CES17 = 51	CES42 = 89	CES67 = 70	CES92 = 51
CES18 = 57	CES43 = 80	CES68 = 74	CES93 = 68
CES19 = 74	CES44 = 99	CES69 = 84	CES94 = 44
CES20 = 68	CES45 = 83	CES70 = 72	CES95 = 66
CES21 = 88	CES46 = 81	CES71 = 75	CES96 = 75
CES22 = 81	CES47 = 88	CES72 = 89	CES97 = 76
CES23 = 92	CES48 = 73	CES73 = 68	CES98 = 72
CES24 = 92	CES49 = 82	CES74 = 85	CES99 = 63
CES25 = 73	CES50 = 87	CES75 = 80	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)