

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: P870819

Luminaire Tested: **EMM2-HTN-SA2A-840-U-T3-HSS**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P870819  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA2A-840-U-T3-HSS  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 70W 80CRI 4000K  
FIXTURE w/ TYPE III DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (20) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

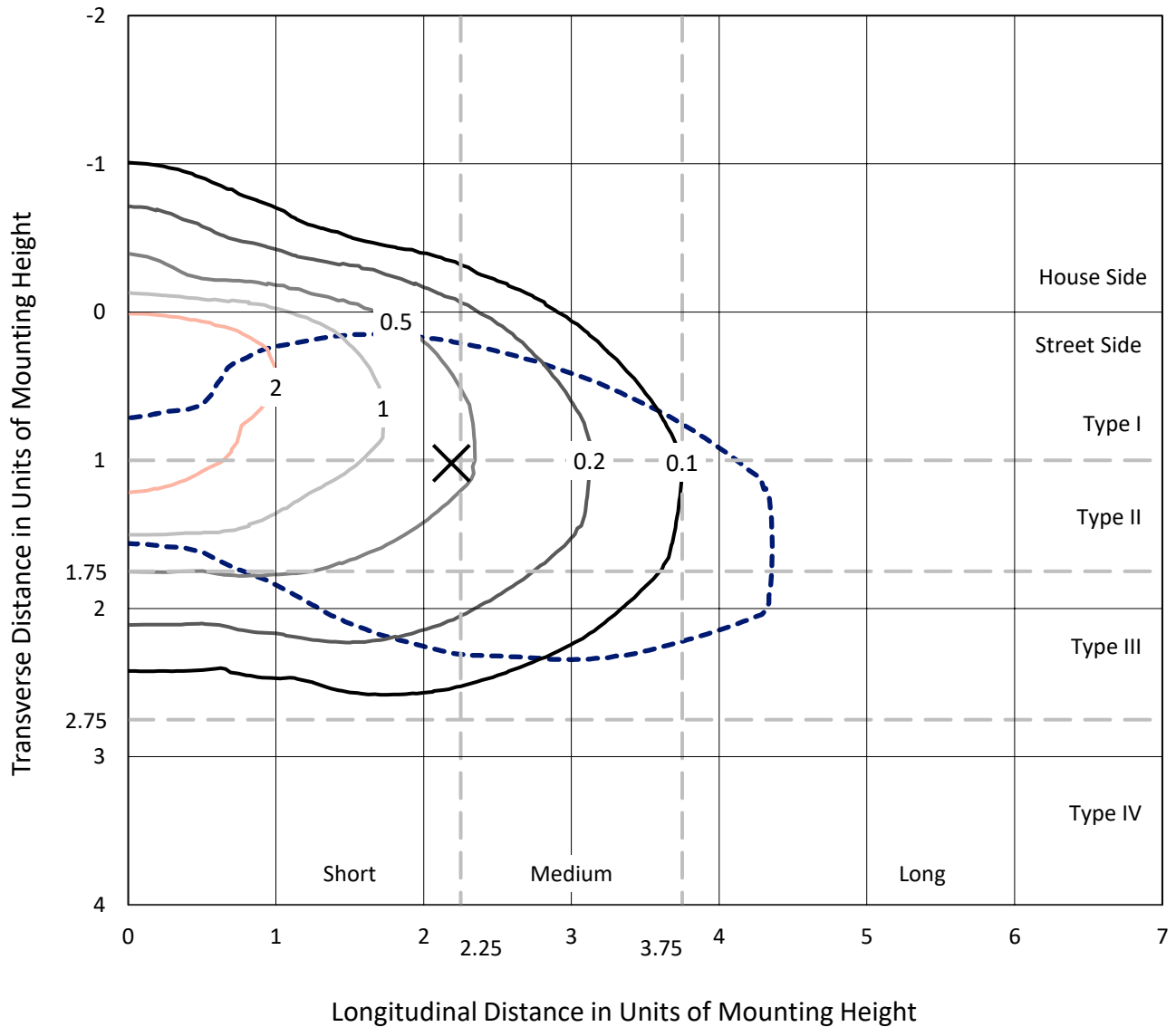
Lumens per Lamp: N/A  
Luminaire Lumens: 6195.7 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

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

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### Iso-Footcandle Lines of Horizontal Illumination

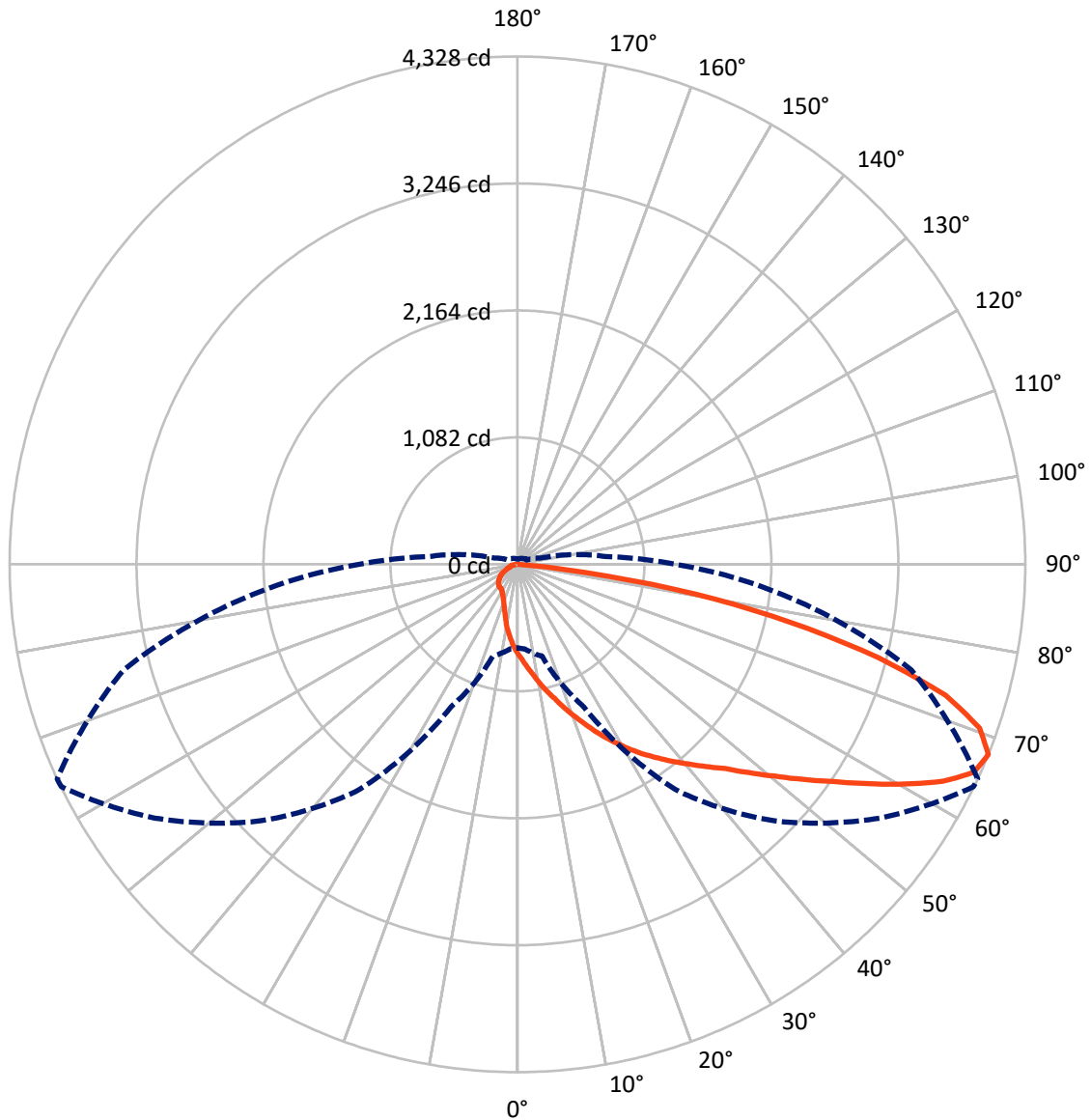
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	603.0	0.0	603.0
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	5592.7	0.0	5592.7
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	6195.7	0.0	6195.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.9	1.2
10°-20°	248.6	4.0
20°-30°	452.5	7.3
30°-40°	700.3	11.3
40°-50°	1058.6	17.1
50°-60°	1377.1	22.2
60°-70°	1358.5	21.9
70°-80°	827.0	13.3
80°-90°	98.3	1.6
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°	6195.7	100.0
0°-180°	6195.7	100.0



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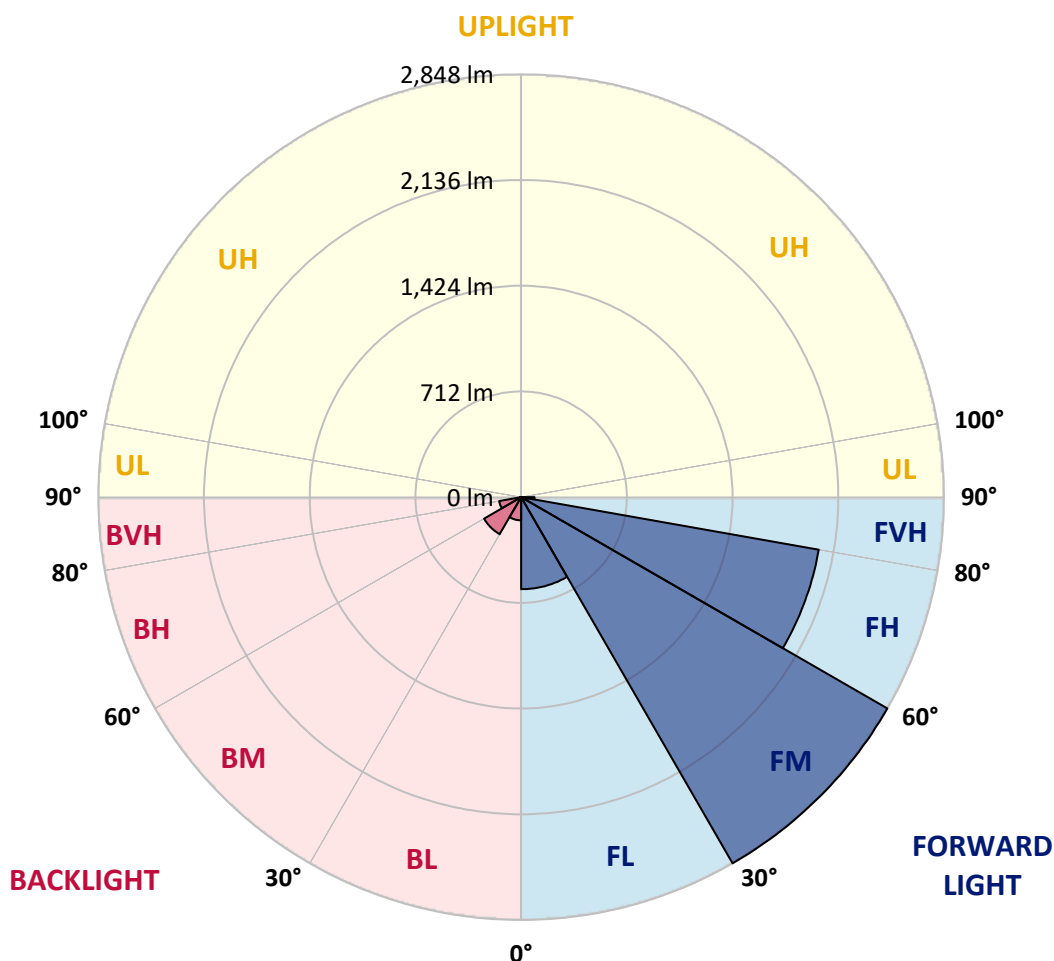
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	620.0	10.0			
FM	(30°-60°)	2847.5	46.0			
FH	(60°-80°)	2035.3	32.9			G2/5000
FVH	(80°-90°)	89.9	1.5			G1/100
BL	(0°-30°)	156.0	2.5	B1/500		
BM	(30°-60°)	288.4	4.7	B1/1000		
BH	(60°-80°)	150.2	2.4	B1/500		G1/500
BVH	(80°-90°)	8.4	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6
2.5°	894.7	887.6	892.9	880.5	866.4	855.8	834.5	816.9	815.1	797.4	778.0
5°	1066.2	1043.2	1044.9	1020.2	990.1	958.3	924.7	880.5	880.5	838.1	793.9
7.5°	1220.0	1216.5	1200.5	1161.6	1126.3	1076.8	1014.9	958.3	945.9	880.5	811.6
10°	1368.5	1363.2	1349.1	1319.0	1258.9	1204.1	1126.3	1041.4	1025.5	931.8	832.8
12.5°	1487.0	1488.7	1472.8	1448.1	1395.0	1329.6	1227.1	1121.0	1106.8	981.3	854.0
15°	1591.3	1589.5	1586.0	1564.8	1513.5	1453.4	1333.1	1209.4	1186.4	1034.3	875.2
17.5°	1670.9	1667.3	1660.2	1642.6	1617.8	1559.5	1444.5	1303.1	1283.6	1096.2	900.0
20°	1693.8	1692.1	1692.1	1704.4	1693.8	1658.5	1555.9	1400.3	1379.1	1161.6	933.6
22.5°	1736.3	1734.5	1732.7	1745.1	1752.2	1748.7	1660.2	1499.3	1479.9	1237.7	976.0
25°	1791.1	1787.5	1782.2	1794.6	1803.5	1824.7	1764.6	1616.0	1593.1	1326.1	1018.4
27.5°	1863.6	1867.1	1860.0	1858.3	1858.3	1870.6	1856.5	1720.4	1699.1	1410.9	1067.9
30°	1959.1	1964.4	1952.0	1943.1	1927.2	1925.5	1929.0	1837.1	1807.0	1502.9	1119.2
32.5°	2052.8	2058.1	2051.0	2038.6	1998.0	1982.0	1996.2	1936.1	1916.6	1603.7	1184.6
35°	2128.8	2141.2	2141.2	2116.4	2059.8	2051.0	2074.0	2033.3	2019.2	1722.1	1262.4
37.5°	2231.3	2238.4	2231.3	2185.4	2114.6	2125.3	2160.6	2135.9	2127.0	1849.4	1354.4
40°	2450.6	2459.4	2413.5	2303.8	2190.7	2203.1	2264.9	2250.8	2236.6	1975.0	1439.2
42.5°	2756.5	2735.3	2726.4	2482.4	2307.4	2300.3	2378.1	2358.6	2356.9	2102.3	1517.0
45°	2958.0	2965.1	2920.9	2689.3	2553.1	2420.5	2503.6	2496.6	2482.4	2231.3	1610.7
47.5°	3097.7	3081.8	2972.2	2860.8	2887.3	2577.9	2643.3	2661.0	2652.1	2378.1	1725.7
50°	3156.1	3140.1	3067.7	2993.4	3025.2	2758.2	2786.5	2844.9	2836.0	2526.6	1822.9
52.5°	3083.6	3064.1	3069.4	3088.9	3073.0	2899.7	2963.3	3055.3	3044.7	2699.9	1936.1
55°	2622.1	2673.4	2871.4	3069.4	3064.1	3007.5	3152.5	3286.9	3265.7	2880.2	2033.3
57.5°	2114.6	2142.9	2394.0	2929.7	3035.8	3097.7	3368.2	3534.4	3527.4	3060.6	2121.7
60°	1681.5	1711.5	1902.5	2639.8	2970.4	3191.4	3589.2	3808.5	3801.4	3242.7	2185.4
62.5°	1336.7	1336.7	1506.4	2222.5	2844.9	3246.2	3764.3	4084.3	4071.9	3389.4	2201.3
65°	961.8	974.2	1101.5	1787.5	2641.5	3232.1	3849.2	4280.6	4273.5	3472.5	2167.7
67.5°	710.8	724.9	809.8	1340.2	2341.0	3090.6	3771.4	4324.8	4328.3	3474.3	2058.1
70°	555.2	558.7	622.4	931.8	1918.4	2775.9	3479.6	4178.0	4178.0	3387.7	1895.4
72.5°	422.6	426.1	480.9	634.7	1412.7	2295.0	3042.9	3789.0	3815.6	3157.8	1654.9
75°	327.1	334.2	371.3	456.2	885.8	1632.0	2500.1	3103.0	3175.5	2712.3	1363.2
77.5°	252.8	259.9	290.0	334.2	516.3	1006.0	1757.5	2319.7	2385.2	2135.9	1052.0
80°	203.3	206.9	226.3	251.1	313.0	518.1	1073.2	1524.1	1543.6	1451.6	696.6
82.5°	93.7	100.8	122.0	137.9	155.6	240.5	457.9	564.0	588.8	576.4	286.4
85°	10.6	10.6	12.4	14.1	15.9	24.8	31.8	28.3	28.3	33.6	30.1
87.5°	0.0	0.0	0.0	1.8	3.5	3.5	5.3	5.3	5.3	5.3	5.3
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: EMM2-HTN-SA2A-840-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6	765.6
2.5°	767.4	755.0	732.0	712.5	694.9	677.2	668.3	647.1	641.8	645.4	633.0
5°	770.9	746.1	698.4	654.2	617.1	581.7	551.6	519.8	512.7	502.1	496.8
7.5°	776.2	739.1	664.8	595.8	539.3	488.0	450.9	426.1	406.7	401.4	399.6
10°	783.3	730.2	627.7	541.0	463.2	410.2	376.6	358.9	351.9	346.5	348.3
12.5°	788.6	721.4	592.3	479.2	403.1	355.4	339.5	325.3	321.8	320.0	320.0
15°	795.6	712.5	549.9	424.3	351.9	323.6	307.6	302.3	302.3	300.6	300.6
17.5°	804.5	705.5	514.5	381.9	321.8	295.3	288.2	281.1	281.1	281.1	279.4
20°	822.2	701.9	482.7	346.5	295.3	277.6	267.0	261.7	259.9	258.1	258.1
22.5°	839.8	701.9	447.3	320.0	277.6	258.1	247.5	242.2	240.5	240.5	240.5
25°	864.6	700.2	419.0	297.0	261.7	238.7	228.1	222.8	219.2	219.2	217.5
27.5°	892.9	700.2	394.3	279.4	244.0	221.0	208.6	203.3	198.0	198.0	196.3
30°	921.2	703.7	373.1	265.2	226.3	205.1	189.2	182.1	178.6	176.8	176.8
32.5°	958.3	714.3	358.9	254.6	210.4	189.2	173.3	166.2	162.7	160.9	160.9
35°	1014.9	740.8	360.7	249.3	199.8	175.0	159.1	150.3	148.5	148.5	146.8
37.5°	1075.0	765.6	366.0	245.8	189.2	164.4	148.5	139.7	137.9	137.9	137.9
40°	1126.3	786.8	373.1	244.0	180.3	153.8	139.7	132.6	129.1	129.1	129.1
42.5°	1177.6	799.2	374.8	238.7	175.0	145.0	132.6	125.5	122.0	123.8	123.8
45°	1228.8	808.0	369.5	231.6	169.7	137.9	125.5	118.5	114.9	114.9	114.9
47.5°	1290.7	827.5	360.7	221.0	166.2	132.6	118.5	111.4	109.6	109.6	109.6
50°	1352.6	843.4	353.6	208.6	157.4	125.5	113.2	104.3	102.5	102.5	102.5
52.5°	1403.9	850.5	344.8	192.7	148.5	118.5	106.1	97.2	93.7	93.7	93.7
55°	1442.8	852.2	332.4	180.3	136.1	111.4	99.0	90.2	86.6	84.9	84.9
57.5°	1474.6	850.5	320.0	168.0	125.5	102.5	90.2	83.1	77.8	76.0	76.0
60°	1492.3	845.2	302.3	152.1	111.4	93.7	83.1	74.3	70.7	69.0	69.0
62.5°	1481.7	831.0	277.6	127.3	100.8	84.9	76.0	69.0	63.7	61.9	61.9
65°	1432.2	802.7	245.8	104.3	90.2	76.0	69.0	61.9	54.8	53.0	53.0
67.5°	1345.5	755.0	203.3	88.4	83.1	69.0	61.9	54.8	49.5	46.0	46.0
70°	1225.3	691.3	159.1	76.0	74.3	63.7	56.6	49.5	44.2	40.7	40.7
72.5°	1053.8	587.0	118.5	65.4	65.4	58.3	51.3	46.0	40.7	37.1	37.1
75°	852.2	443.8	90.2	60.1	58.3	53.0	46.0	40.7	37.1	33.6	33.6
77.5°	622.4	295.3	74.3	54.8	54.8	47.7	42.4	37.1	33.6	31.8	31.8
80°	378.4	169.7	53.0	42.4	42.4	40.7	35.4	31.8	30.1	26.5	24.8
82.5°	153.8	65.4	28.3	21.2	21.2	19.4	12.4	10.6	10.6	10.6	8.8
85°	15.9	10.6	7.1	5.3	5.3	5.3	3.5	3.5	3.5	3.5	3.5
87.5°	5.3	5.3	3.5	3.5	3.5	3.5	1.8	1.8	1.8	1.8	1.8
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: SP1-2407-157-8

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-840-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-840-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-8  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 09/05/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-SA-40-840-U-5WQ**  
 Description: Epic Modern Light Square 40W 5WQ Optic

**Spectral Parameters**

CCT (K): 3996  
 CIE u': 0.2245  
 CIE v': 0.5031  
 Duv: 0.0012  
 CIE x: 0.3815  
 CIE y: 0.3799  
 CIE z: 0.2386  
 Peak Wavelength (nm): 449  
 Dominant Wavelength (nm): 578  
 Purity: 28.49233  
 Rf: 82.6  
 Rg: 95.1

CRI (Ra):	80.6		
R1:	78.1	R9:	-5.8
R2:	87.1	R10:	70.3
R3:	94.5	R11:	78.7
R4:	79.7	R12:	60.5
R5:	78.7	R13:	80.2
R6:	82.7	R14:	97.2
R7:	84.3	R15:	70.6
R8:	59.5		



**Test Conditions**

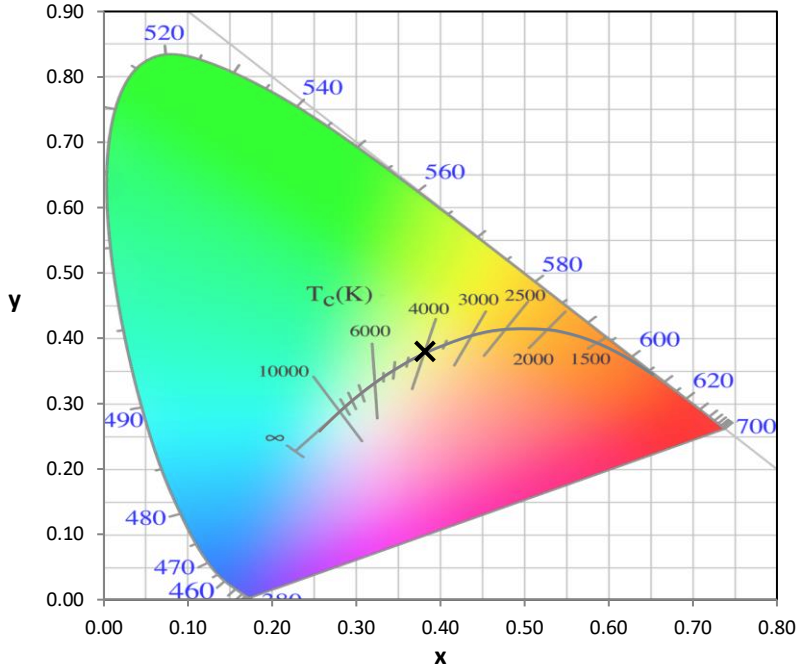
Stabilization Time: 29M  
 Operation Time: 1H 29M  
 Sphere Temperature (°C): 24.3

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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

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CIE 1931 Chromaticity Diagram



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



CCT = 3996K  
 CIE x = 0.3815  
 CIE y = 0.3799  
 Duv = 0.0012

Point lies inside the ANSI 4000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.66**

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	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

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**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 3.37**

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	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

**Summary**

$R_f = 82.6$   
 $R_g = 95.1$   
 CIE  $R_a = 80.6$   
 $R_g = -5.8$



**Color Vector Graphics**



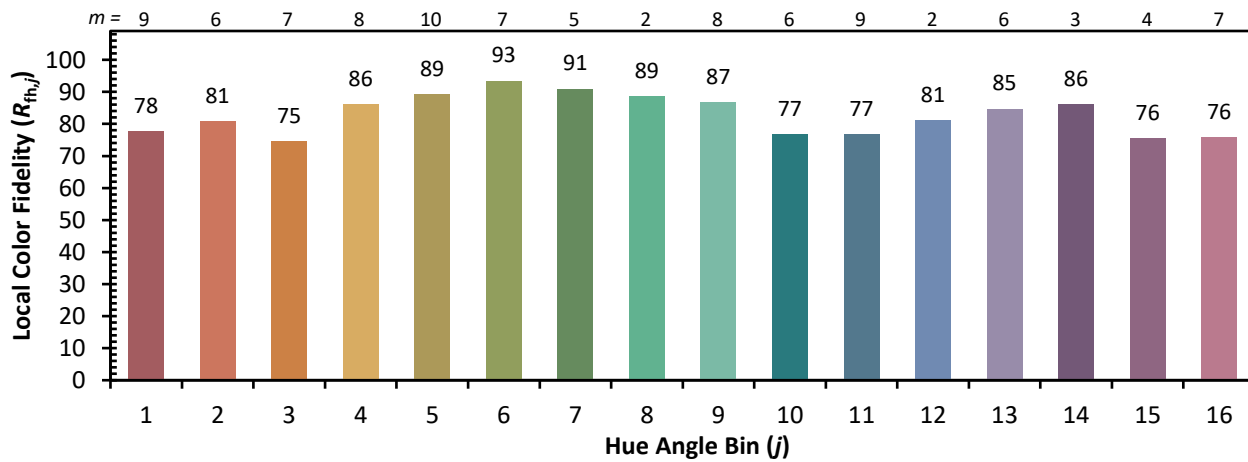


Individual Sample Fidelity Index ( $R_{f,i}$ )

CES01 = 85	CES26 = 79	CES51 = 94	CES76 = 72
CES02 = 61	CES27 = 93	CES52 = 94	CES77 = 82
CES03 = 31	CES28 = 90	CES53 = 88	CES78 = 71
CES04 = 69	CES29 = 83	CES54 = 89	CES79 = 91
CES05 = 48	CES30 = 95	CES55 = 88	CES80 = 88
CES06 = 50	CES31 = 86	CES56 = 84	CES81 = 80
CES07 = 40	CES32 = 78	CES57 = 84	CES82 = 95
CES08 = 39	CES33 = 90	CES58 = 84	CES83 = 95
CES09 = 29	CES34 = 85	CES59 = 90	CES84 = 90
CES10 = 74	CES35 = 92	CES60 = 91	CES85 = 78
CES11 = 57	CES36 = 85	CES61 = 87	CES86 = 73
CES12 = 63	CES37 = 91	CES62 = 87	CES87 = 83
CES13 = 42	CES38 = 95	CES63 = 84	CES88 = 86
CES14 = 74	CES39 = 98	CES64 = 78	CES89 = 76
CES15 = 71	CES40 = 94	CES65 = 75	CES90 = 87
CES16 = 46	CES41 = 98	CES66 = 75	CES91 = 72
CES17 = 49	CES42 = 92	CES67 = 73	CES92 = 62
CES18 = 56	CES43 = 88	CES68 = 77	CES93 = 78
CES19 = 71	CES44 = 99	CES69 = 82	CES94 = 60
CES20 = 65	CES45 = 93	CES70 = 72	CES95 = 70
CES21 = 86	CES46 = 90	CES71 = 67	CES96 = 82
CES22 = 78	CES47 = 95	CES72 = 89	CES97 = 90
CES23 = 91	CES48 = 84	CES73 = 65	CES98 = 84
CES24 = 90	CES49 = 89	CES74 = 93	CES99 = 73
CES25 = 71	CES50 = 94	CES75 = 69	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)