

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: P868834

Luminaire Tested: **EMM2-HSN-SA2C-722-U-T2R-HSS**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868834  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA2C-722-U-T2R-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 120W 70CRI 2200K  
FITXURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (20) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

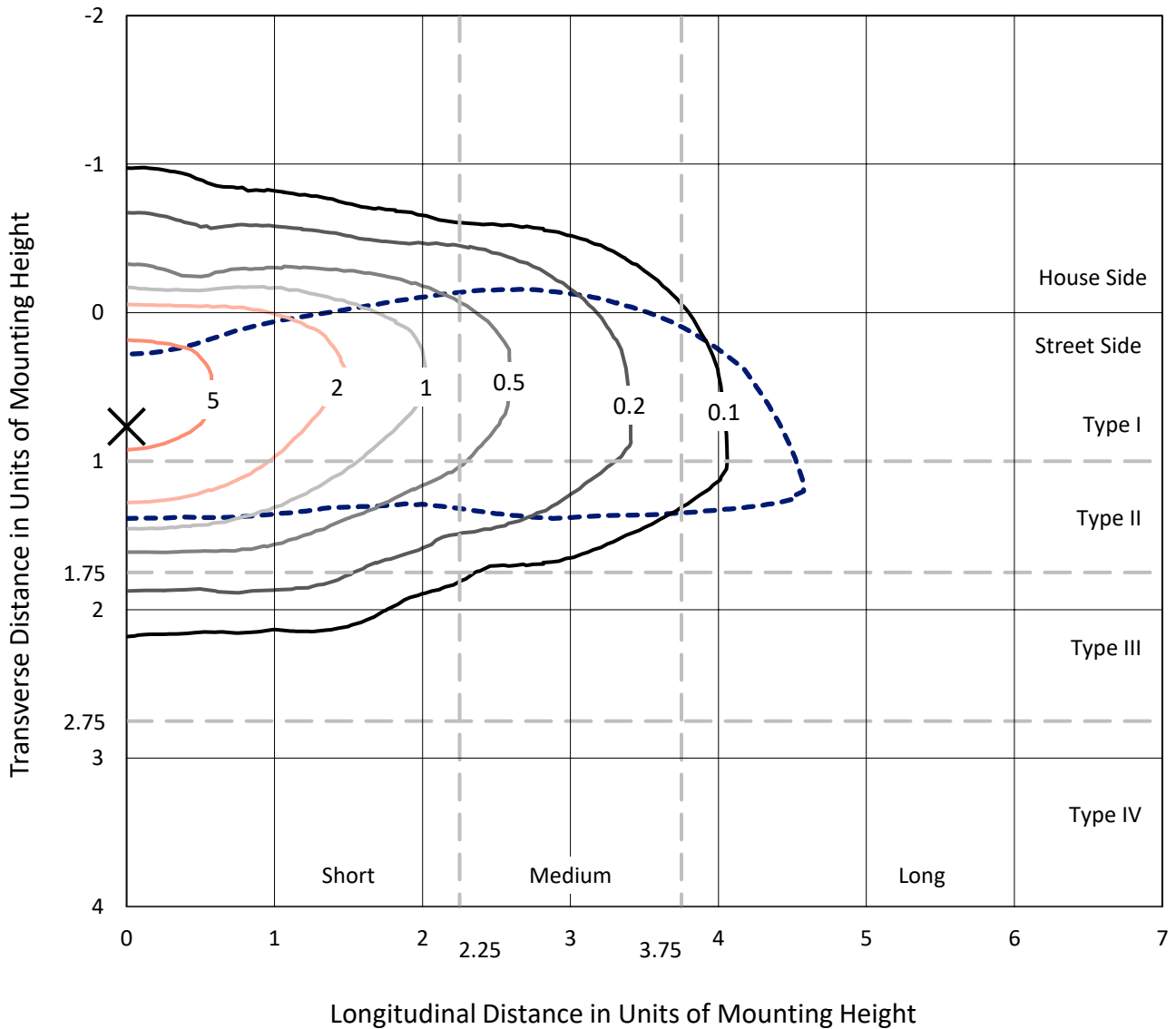
Lumens per Lamp: N/A  
Luminaire Lumens: 8453.8 lumens  
Efficiency: N/A  
Efficacy: 83.7 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 101  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 9.45%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P868834  
 CATALOG NUMBER: EMM2-HSN-SA2C-722-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

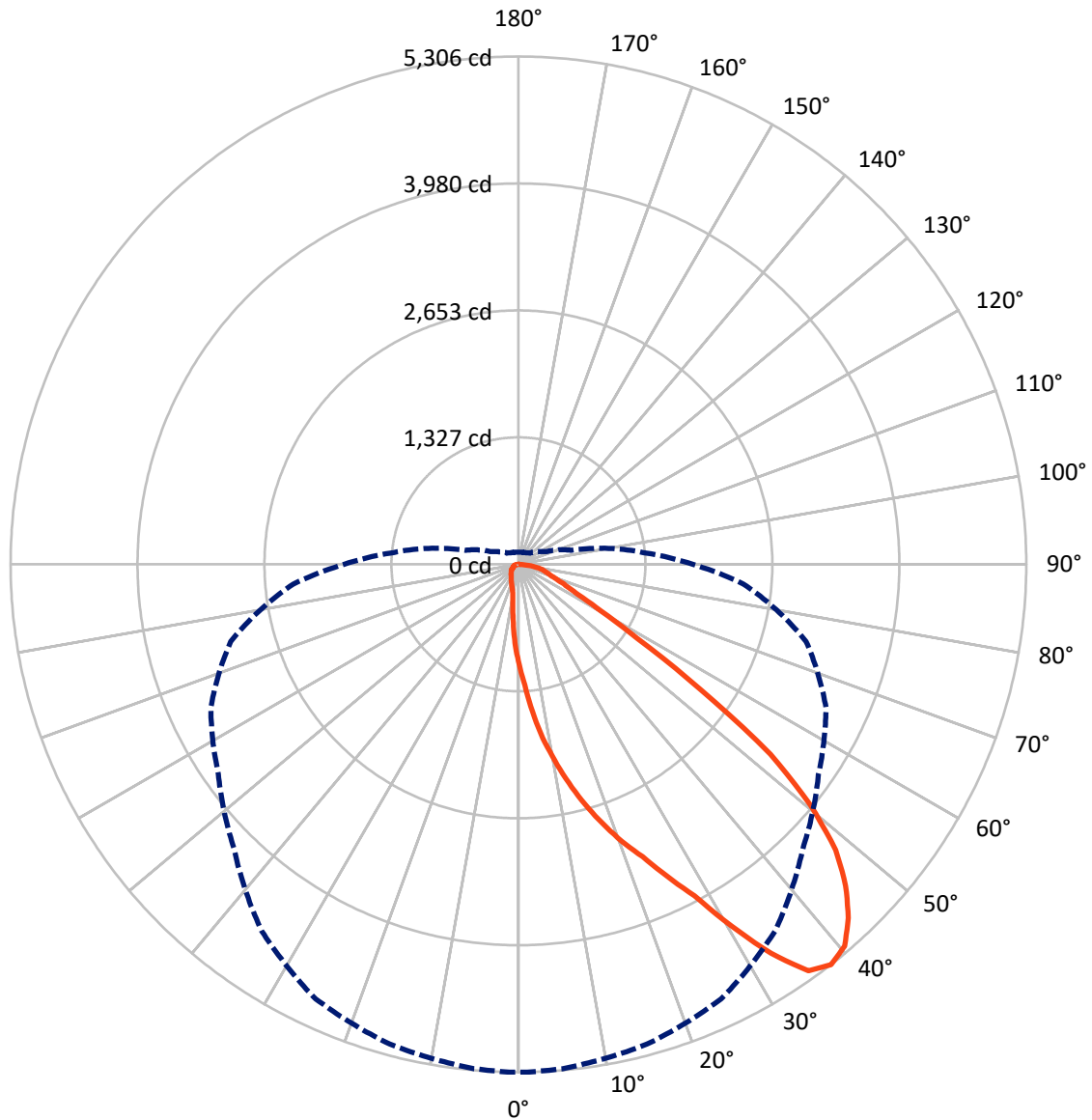
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.2 fc  
 Type II - Short - N/A

REPORT NUMBER: P868834  
CATALOG NUMBER: EMM2-HSN-SA2C-722-U-T2R-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P868834

CATALOG NUMBER: EMM2-HSN-SA2C-722-U-T2R-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1008.3	0.0	1008.3
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	7445.6	0.0	7445.6
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	8453.8	0.0	8453.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.1	1.2
10°-20°	367.4	4.3
20°-30°	758.0	9.0
30°-40°	1333.7	15.8
40°-50°	1810.8	21.4
50°-60°	1794.1	21.2
60°-70°	1381.2	16.3
70°-80°	801.6	9.5
80°-90°	102.0	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°	8453.8	100.0
0°-180°	8453.8	100.0

**Coefficient of Utilization**



REPORT NUMBER: P868834

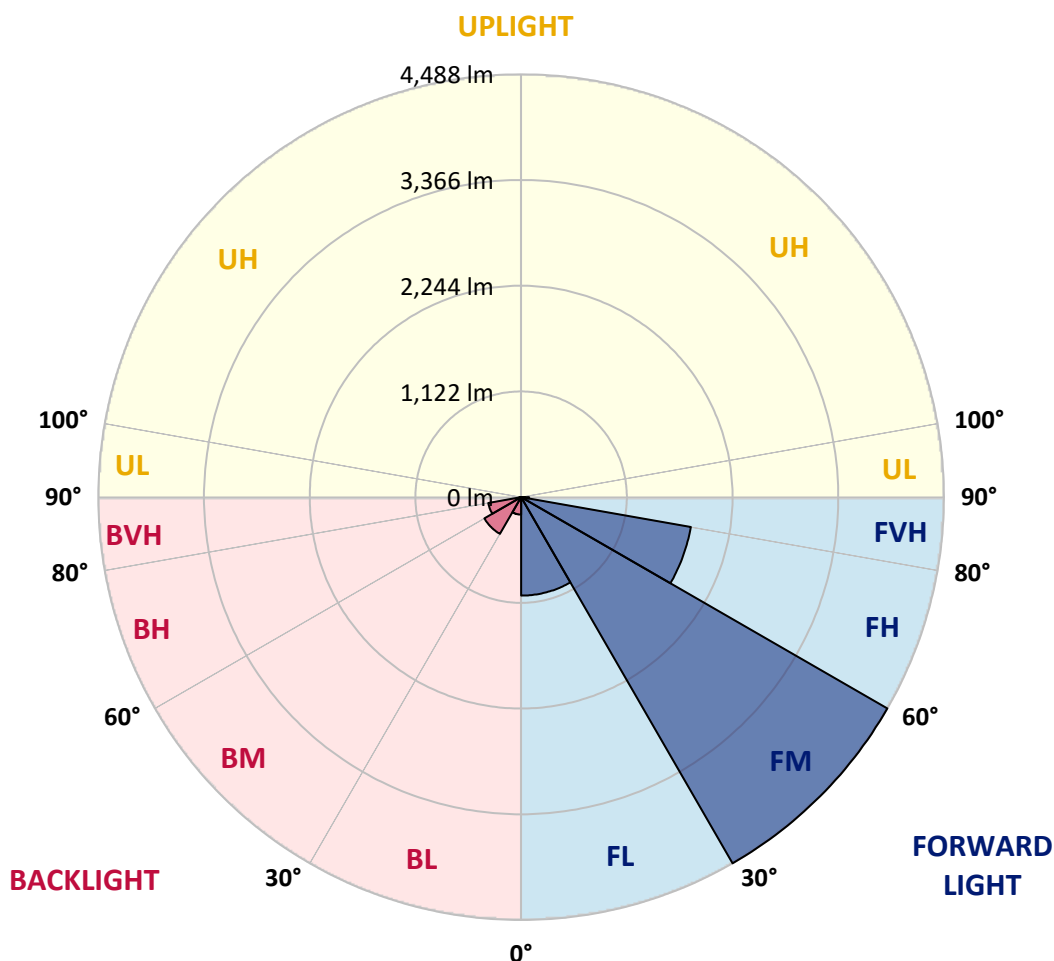
CATALOG NUMBER: EMM2-HSN-SA2C-722-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1045.1	12.4			
FM (30°-60°)	4488.3	53.1			
FH (60°-80°)	1829.1	21.6			G2/5000
FVH (80°-90°)	83.2	1.0			G1/100
BL (0°-30°)	185.4	2.2	B1/500		
BM (30°-60°)	450.3	5.3	B1/1000		
BH (60°-80°)	353.8	4.2	B1/500		G1/500
BVH (80°-90°)	18.8	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-G2**

Type II Short





REPORT NUMBER: P868834

CATALOG NUMBER: EMM2-HSN-SA2C-722-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5
2.5°	1262.2	1281.1	1267.0	1255.2	1238.7	1222.1	1198.5	1172.6	1139.6	1099.5	1064.1
5°	1547.7	1557.2	1552.4	1545.4	1493.5	1443.9	1394.4	1333.0	1248.1	1172.6	1092.4
7.5°	1833.2	1828.5	1816.7	1795.5	1748.3	1691.6	1602.0	1500.5	1380.2	1248.1	1123.0
10°	2083.3	2090.4	2080.9	2047.9	1988.9	1911.1	1802.5	1686.9	1524.1	1340.1	1165.5
12.5°	2345.2	2349.9	2349.9	2279.1	2239.0	2118.7	2003.1	1847.4	1665.7	1453.4	1215.1
15°	2602.4	2592.9	2592.9	2545.7	2475.0	2340.5	2210.7	2022.0	1816.7	1559.5	1271.7
17.5°	2847.7	2852.4	2831.2	2779.3	2710.9	2581.1	2420.7	2213.1	1965.3	1686.9	1330.7
20°	3090.7	3076.6	3067.1	3015.2	2942.1	2788.7	2635.4	2399.5	2139.9	1830.9	1413.2
22.5°	3317.2	3324.3	3300.7	3218.1	3149.7	3010.5	2835.9	2618.9	2324.0	1974.8	1502.9
25°	3609.8	3586.2	3607.4	3508.3	3402.2	3237.0	3038.8	2824.1	2524.5	2151.7	1613.8
27.5°	3921.2	3935.4	3923.6	3815.1	3671.1	3449.4	3241.7	3012.9	2727.4	2319.2	1738.8
30°	4386.0	4378.9	4381.3	4218.5	3980.2	3716.0	3461.2	3211.1	2930.3	2524.5	1885.1
32.5°	4846.1	4872.0	4808.3	4664.4	4390.7	3992.0	3680.6	3402.2	3126.1	2701.4	2033.8
35°	5216.5	5209.4	5183.5	5023.0	4751.7	4364.8	3930.7	3614.5	3333.8	2918.5	2198.9
37.5°	5306.2	5306.2	5289.6	5190.6	5011.2	4676.2	4202.0	3826.9	3546.1	3112.0	2359.3
40°	5247.2	5235.4	5225.9	5159.9	5063.1	4865.0	4487.5	4046.3	3772.6	3362.1	2536.3
42.5°	5053.7	5056.1	5044.3	5006.5	4954.6	4879.1	4664.4	4279.8	3994.4	3598.0	2710.9
45°	4794.2	4798.9	4784.7	4780.0	4754.1	4754.1	4704.5	4463.9	4204.3	3838.7	2902.0
47.5°	4461.5	4459.2	4452.1	4440.3	4492.2	4548.8	4593.6	4567.7	4390.7	4098.2	3074.2
50°	3954.3	3949.5	3970.8	4029.8	4157.2	4282.2	4414.3	4537.0	4525.2	4338.8	3281.8
52.5°	3296.0	3265.3	3288.9	3470.6	3732.5	4010.9	4197.3	4390.7	4593.6	4593.6	3487.1
55°	2305.1	2331.0	2345.2	2611.8	3128.5	3607.4	3935.4	4185.5	4567.7	4796.5	3713.6
57.5°	1467.5	1476.9	1519.4	1807.3	2413.6	3012.9	3593.3	4003.8	4471.0	4966.4	3940.1
60°	988.6	955.5	988.6	1153.7	1736.5	2364.1	3090.7	3774.9	4331.8	5089.1	4190.2
62.5°	698.4	696.0	705.4	802.2	1238.7	1776.6	2460.8	3465.9	4220.9	5096.2	4376.6
65°	563.9	547.4	554.4	608.7	830.5	1302.4	1804.9	2906.7	4121.8	4971.1	4468.6
67.5°	453.0	445.9	450.6	486.0	622.9	979.1	1271.7	2210.7	3911.8	4758.8	4416.7
70°	370.4	372.8	375.1	410.5	495.5	740.8	908.3	1517.1	3463.5	4518.1	4183.1
72.5°	320.9	320.9	323.2	346.8	415.2	587.5	686.6	986.2	2802.9	4258.6	3753.7
75°	283.1	283.1	283.1	304.4	353.9	471.9	533.2	674.8	2012.5	3777.3	3104.9
77.5°	245.4	247.7	247.7	266.6	304.4	368.1	410.5	467.1	1283.5	2918.5	2349.9
80°	188.7	188.7	191.1	212.3	259.5	287.8	302.0	330.3	674.8	1833.2	1491.1
82.5°	132.1	134.5	134.5	136.8	174.6	177.0	162.8	165.2	245.4	608.7	566.2
85°	14.2	16.5	18.9	18.9	30.7	37.7	40.1	37.7	40.1	70.8	70.8
87.5°	0.0	0.0	0.0	0.0	2.4	4.7	4.7	7.1	7.1	7.1	7.1
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: P868834

CATALOG NUMBER: EMM2-HSN-SA2C-722-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5	1047.5
2.5°	1045.2	1028.7	993.3	962.6	934.3	910.7	894.2	873.0	856.4	856.4	865.9
5°	1052.3	1014.5	941.4	873.0	818.7	766.8	719.6	688.9	665.3	651.2	651.2
7.5°	1061.7	1005.1	894.2	790.4	705.4	622.9	549.7	514.3	478.9	467.1	469.5
10°	1080.6	1000.4	851.7	717.2	589.8	486.0	415.2	377.5	358.6	349.2	349.2
12.5°	1101.8	1000.4	806.9	634.7	486.0	379.9	337.4	309.1	299.6	294.9	290.2
15°	1130.1	1005.1	769.1	547.4	396.4	320.9	290.2	273.7	264.2	259.5	259.5
17.5°	1163.2	1009.8	729.0	476.6	337.4	283.1	259.5	247.7	238.3	233.6	233.6
20°	1205.6	1021.6	688.9	412.9	294.9	259.5	238.3	226.5	217.1	214.7	212.3
22.5°	1257.5	1040.5	648.8	361.0	266.6	235.9	217.1	207.6	200.5	195.8	195.8
25°	1318.9	1064.1	618.1	323.2	245.4	219.4	202.9	191.1	184.0	181.7	181.7
27.5°	1403.8	1104.2	587.5	294.9	228.9	202.9	186.4	177.0	169.9	167.5	165.2
30°	1484.0	1153.7	573.3	287.8	217.1	188.7	177.0	165.2	158.1	155.7	153.4
32.5°	1587.8	1210.3	563.9	287.8	212.3	179.3	165.2	155.7	148.6	146.3	143.9
35°	1698.7	1276.4	563.9	297.3	214.7	172.2	155.7	146.3	139.2	134.5	134.5
37.5°	1819.1	1342.5	568.6	311.4	221.8	167.5	146.3	136.8	129.8	127.4	127.4
40°	1946.5	1432.1	578.0	323.2	228.9	165.2	136.8	129.8	122.7	118.0	118.0
42.5°	2064.4	1502.9	594.6	337.4	233.6	162.8	129.8	122.7	115.6	113.2	113.2
45°	2201.3	1580.8	608.7	346.8	233.6	155.7	122.7	115.6	110.9	108.5	106.2
47.5°	2309.8	1644.5	615.8	351.5	228.9	148.6	115.6	110.9	106.2	101.5	103.8
50°	2441.9	1712.9	627.6	353.9	219.4	139.2	110.9	103.8	99.1	96.7	96.7
52.5°	2569.3	1781.3	637.0	349.2	207.6	127.4	103.8	99.1	94.4	89.7	89.7
55°	2720.3	1856.8	651.2	342.1	188.7	115.6	96.7	92.0	84.9	82.6	80.2
57.5°	2892.6	1955.9	663.0	327.9	165.2	103.8	92.0	84.9	75.5	70.8	70.8
60°	3050.6	2069.1	672.4	292.6	143.9	96.7	84.9	77.9	68.4	66.1	66.1
62.5°	3220.5	2187.1	672.4	231.2	122.7	87.3	80.2	73.1	63.7	61.3	61.3
65°	3338.5	2293.3	651.2	172.2	103.8	82.6	77.9	68.4	59.0	56.6	56.6
67.5°	3371.5	2359.3	592.2	122.7	89.7	77.9	73.1	63.7	56.6	51.9	51.9
70°	3265.3	2307.4	483.7	94.4	77.9	70.8	66.1	59.0	51.9	49.5	49.5
72.5°	2961.0	2109.3	361.0	80.2	68.4	66.1	61.3	54.3	49.5	47.2	47.2
75°	2479.7	1753.0	254.8	70.8	63.7	59.0	54.3	49.5	44.8	44.8	44.8
77.5°	1878.0	1267.0	158.1	63.7	54.3	54.3	49.5	44.8	42.5	40.1	40.1
80°	1212.7	799.8	89.7	44.8	37.7	40.1	35.4	30.7	30.7	28.3	28.3
82.5°	514.3	316.2	47.2	26.0	18.9	16.5	11.8	11.8	9.4	9.4	9.4
85°	51.9	18.9	9.4	7.1	7.1	4.7	4.7	4.7	4.7	2.4	2.4
87.5°	7.1	7.1	7.1	4.7	4.7	4.7	2.4	2.4	2.4	2.4	2.4
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 ( $\phi$ /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	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>^</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			

**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)