

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: P871213

Luminaire Tested: **EMM2-HSN-SA2C-830-U-T3-HSS**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P871213  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA2C-830-U-T3-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 120W 80CRI 3000K  
FIXTURE w/ TYPE III DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (20) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

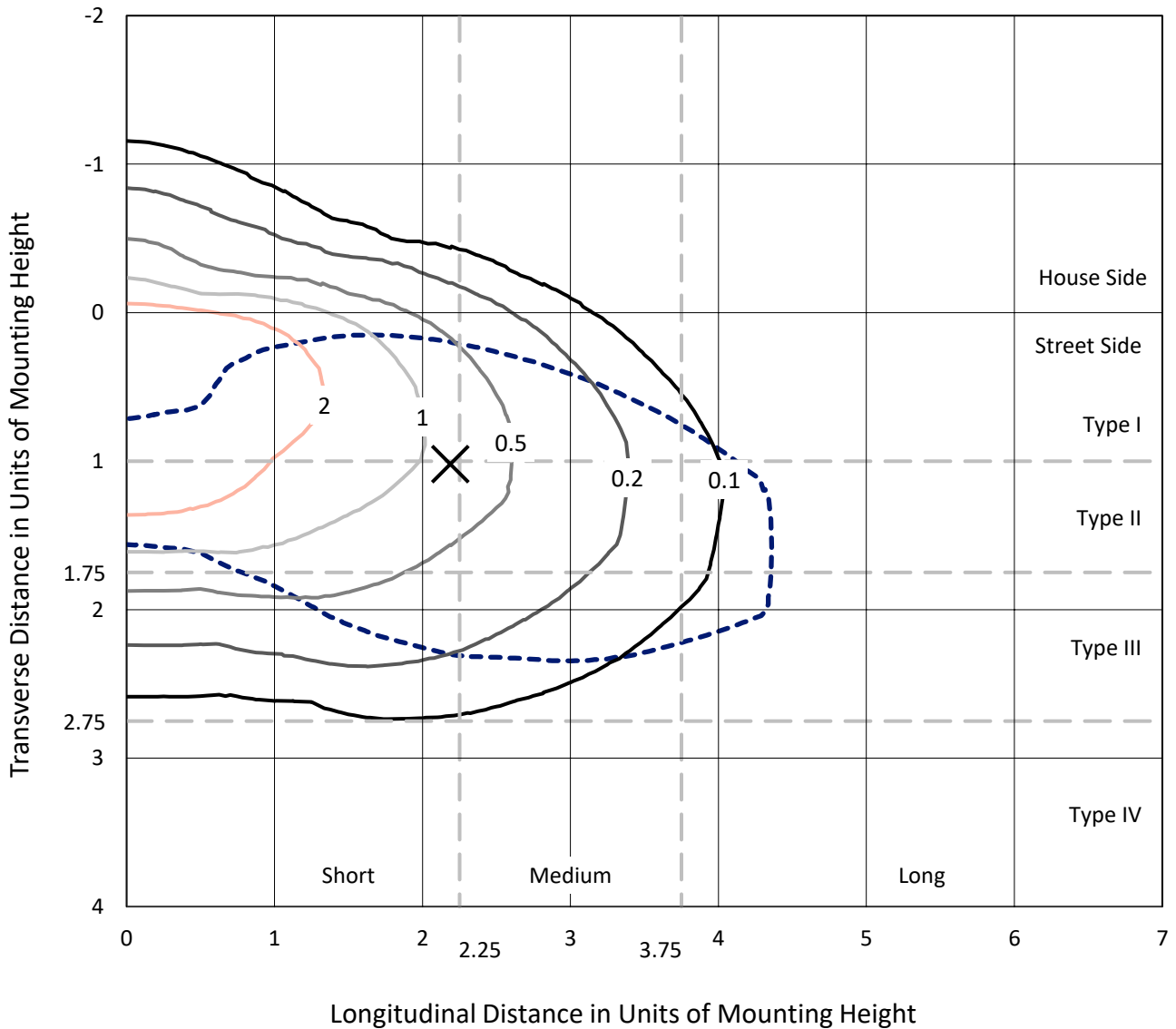
Lumens per Lamp: N/A  
Luminaire Lumens: 8392.8 lumens  
Efficiency: N/A  
Efficacy: 83.1 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 101  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P871213  
 CATALOG NUMBER: EMM2-HSN-SA2C-830-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

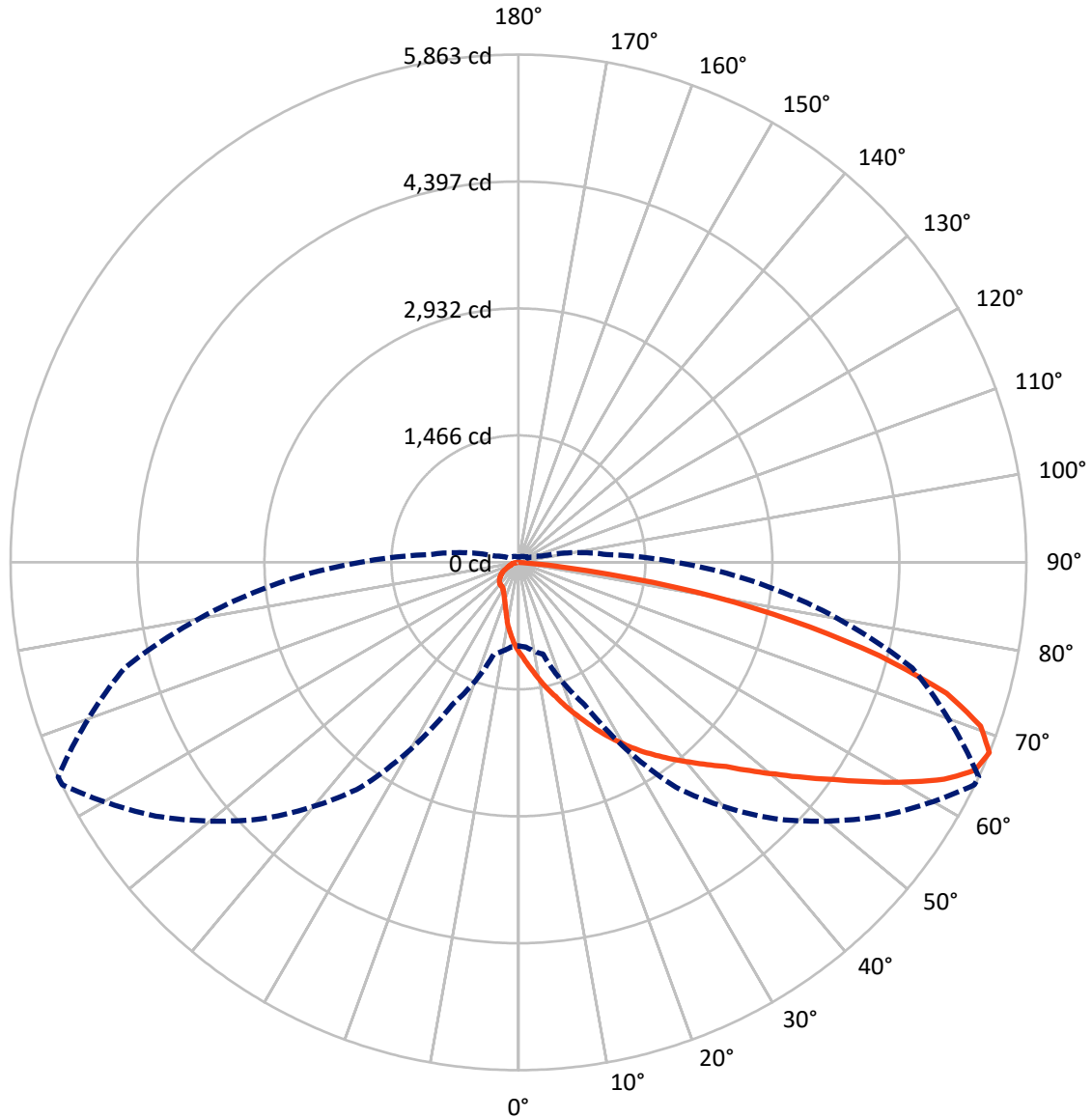
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.8 fc  
 Type III - Short - N/A

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CATALOG NUMBER: EMM2-HSN-SA2C-830-U-T3-HSS

### 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	816.9	0.0	816.9
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	7575.9	0.0	7575.9
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	8392.8	0.0	8392.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.5	1.2
10°-20°	336.8	4.0
20°-30°	612.9	7.3
30°-40°	948.6	11.3
40°-50°	1433.9	17.1
50°-60°	1865.5	22.2
60°-70°	1840.3	21.9
70°-80°	1120.2	13.3
80°-90°	133.2	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°	8392.8	100.0
0°-180°	8392.8	100.0

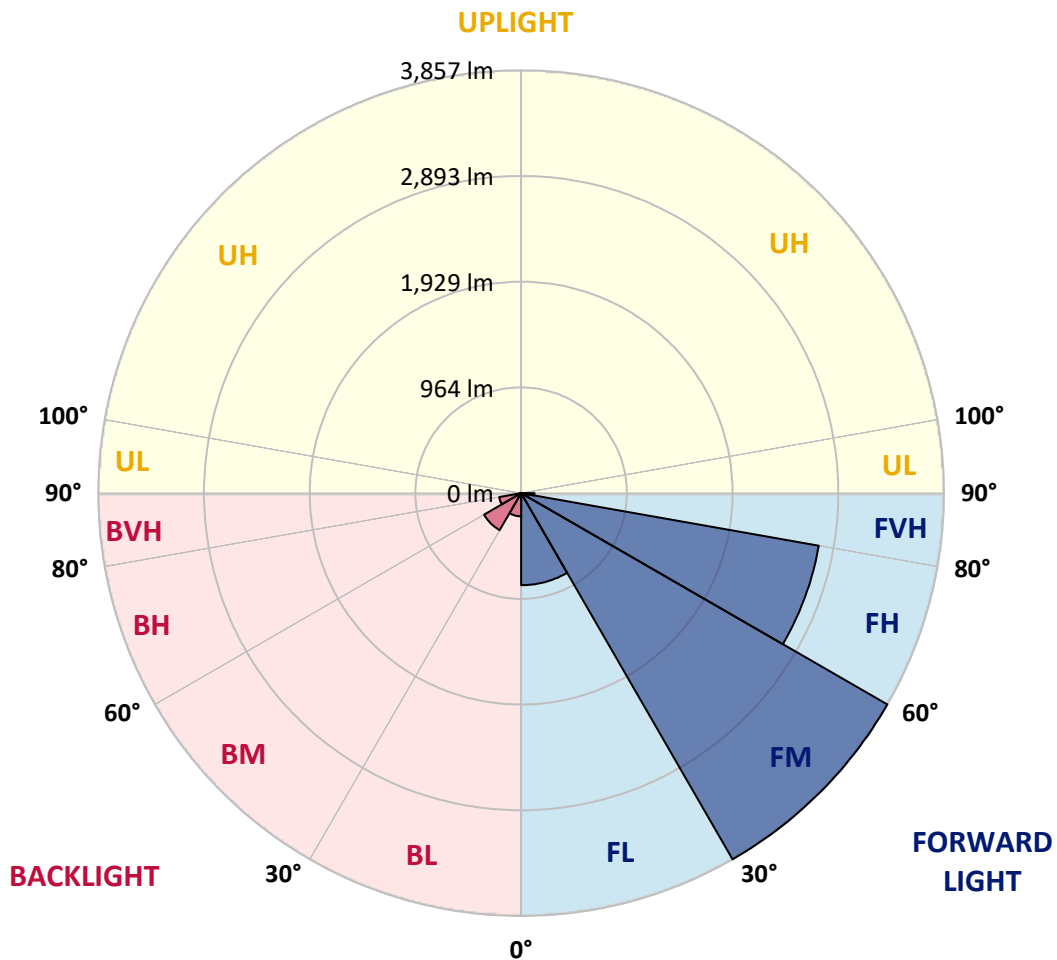


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 CATALOG NUMBER: EMM2-HSN-SA2C-830-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	839.8	10.0			
FM (30°-60°)	3857.3	46.0			
FH (60°-80°)	2757.1	32.9			G2/5000
FVH (80°-90°)	121.7	1.5			G2/225
BL (0°-30°)	211.4	2.5	B1/500		
BM (30°-60°)	390.7	4.7	B1/1000		
BH (60°-80°)	203.4	2.4	B1/500		G1/500
BVH (80°-90°)	11.4	0.1			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 III Short





REPORT NUMBER: P871213

CATALOG NUMBER: EMM2-HSN-SA2C-830-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1
2.5°	1211.9	1202.3	1209.5	1192.8	1173.6	1159.2	1130.5	1106.5	1104.1	1080.2	1053.8
5°	1444.2	1413.1	1415.5	1382.0	1341.2	1298.1	1252.6	1192.8	1192.8	1135.3	1075.4
7.5°	1652.6	1647.8	1626.3	1573.6	1525.7	1458.6	1374.8	1298.1	1281.4	1192.8	1099.3
10°	1853.8	1846.6	1827.5	1786.7	1705.3	1631.1	1525.7	1410.7	1389.2	1262.2	1128.1
12.5°	2014.3	2016.7	1995.1	1961.6	1889.7	1801.1	1662.2	1518.5	1499.3	1329.3	1156.8
15°	2155.6	2153.2	2148.4	2119.7	2050.2	1968.8	1805.9	1638.2	1607.1	1401.1	1185.6
17.5°	2263.4	2258.6	2249.0	2225.0	2191.5	2112.5	1956.8	1765.2	1738.8	1485.0	1219.1
20°	2294.5	2292.1	2292.1	2308.9	2294.5	2246.6	2107.7	1896.9	1868.2	1573.6	1264.6
22.5°	2352.0	2349.6	2347.2	2364.0	2373.5	2368.7	2249.0	2031.0	2004.7	1676.6	1322.1
25°	2426.2	2421.4	2414.2	2431.0	2443.0	2471.7	2390.3	2189.1	2158.0	1796.3	1379.6
27.5°	2524.4	2529.2	2519.6	2517.2	2517.2	2534.0	2514.8	2330.4	2301.7	1911.3	1446.6
30°	2653.8	2660.9	2644.2	2632.2	2610.6	2608.3	2613.0	2488.5	2447.8	2035.8	1516.1
32.5°	2780.7	2787.9	2778.3	2761.5	2706.4	2684.9	2704.1	2622.6	2596.3	2172.3	1604.7
35°	2883.7	2900.5	2900.5	2866.9	2790.3	2778.3	2809.4	2754.4	2735.2	2332.8	1710.1
37.5°	3022.6	3032.2	3022.6	2960.3	2864.5	2878.9	2926.8	2893.3	2881.3	2505.3	1834.6
40°	3319.6	3331.6	3269.3	3120.8	2967.5	2984.3	3068.1	3048.9	3029.8	2675.3	1949.6
42.5°	3733.9	3705.2	3693.2	3362.7	3125.6	3116.0	3221.4	3195.0	3192.7	2847.8	2055.0
45°	4007.0	4016.6	3956.7	3642.9	3458.5	3278.9	3391.4	3381.9	3362.7	3022.6	2181.9
47.5°	4196.2	4174.6	4026.1	3875.3	3911.2	3492.0	3580.7	3604.6	3592.6	3221.4	2337.6
50°	4275.2	4253.7	4155.5	4054.9	4098.0	3736.3	3774.7	3853.7	3841.7	3422.6	2469.3
52.5°	4177.0	4150.7	4157.9	4184.2	4162.7	3927.9	4014.2	4138.7	4124.3	3657.3	2622.6
55°	3551.9	3621.4	3889.6	4157.9	4150.7	4074.0	4270.4	4452.5	4423.7	3901.6	2754.4
57.5°	2864.5	2902.8	3242.9	3968.7	4112.4	4196.2	4562.6	4787.8	4778.2	4145.9	2874.1
60°	2277.7	2318.4	2577.1	3575.9	4023.7	4323.1	4862.0	5159.0	5149.4	4392.6	2960.3
62.5°	1810.7	1810.7	2040.6	3010.6	3853.7	4397.4	5099.1	5532.7	5515.9	4591.4	2981.9
65°	1302.9	1319.7	1492.1	2421.4	3578.3	4378.2	5214.1	5798.5	5788.9	4704.0	2936.4
67.5°	962.8	982.0	1097.0	1815.5	3171.1	4186.6	5108.7	5858.4	5863.2	4706.3	2787.9
70°	752.1	756.8	843.1	1262.2	2598.7	3760.3	4713.5	5659.6	5659.6	4589.0	2567.5
72.5°	572.4	577.2	651.5	859.8	1913.7	3108.8	4121.9	5132.7	5168.6	4277.6	2241.8
75°	443.1	452.7	503.0	617.9	1199.9	2210.7	3386.7	4203.4	4301.6	3674.1	1846.6
77.5°	342.5	352.1	392.8	452.7	699.4	1362.8	2380.7	3142.4	3231.0	2893.3	1425.1
80°	275.4	280.2	306.6	340.1	423.9	701.8	1453.8	2064.6	2090.9	1966.4	943.7
82.5°	126.9	136.5	165.3	186.8	210.8	325.7	620.3	764.0	797.6	780.8	388.0
85°	14.4	14.4	16.8	19.2	21.6	33.5	43.1	38.3	38.3	45.5	40.7
87.5°	0.0	0.0	0.0	2.4	4.8	4.8	7.2	7.2	7.2	7.2	7.2
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: P871213

CATALOG NUMBER: EMM2-HSN-SA2C-830-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1	1037.1
2.5°	1039.5	1022.7	991.6	965.2	941.3	917.3	905.3	876.6	869.4	874.2	857.4
5°	1044.3	1010.7	946.1	886.2	835.9	788.0	747.3	704.2	694.6	680.2	673.0
7.5°	1051.4	1001.1	900.6	807.1	730.5	661.0	610.7	577.2	550.9	543.7	541.3
10°	1061.0	989.2	850.3	732.9	627.5	555.7	510.2	486.2	476.6	469.4	471.8
12.5°	1068.2	977.2	802.4	649.1	546.1	481.4	459.9	440.7	435.9	433.5	433.5
15°	1077.8	965.2	744.9	574.8	476.6	438.3	416.7	409.6	409.6	407.2	407.2
17.5°	1089.8	955.6	697.0	517.3	435.9	400.0	390.4	380.8	380.8	380.8	378.4
20°	1113.7	950.8	653.9	469.4	400.0	376.0	361.7	354.5	352.1	349.7	349.7
22.5°	1137.7	950.8	606.0	433.5	376.0	349.7	335.3	328.1	325.7	325.7	325.7
25°	1171.2	948.5	567.6	402.4	354.5	323.3	309.0	301.8	297.0	297.0	294.6
27.5°	1209.5	948.5	534.1	378.4	330.5	299.4	282.6	275.4	268.2	268.2	265.9
30°	1247.8	953.2	505.4	359.3	306.6	277.8	256.3	246.7	241.9	239.5	239.5
32.5°	1298.1	967.6	486.2	344.9	285.0	256.3	234.7	225.1	220.3	218.0	218.0
35°	1374.8	1003.5	488.6	337.7	270.6	237.1	215.6	203.6	201.2	201.2	198.8
37.5°	1456.2	1037.1	495.8	332.9	256.3	222.7	201.2	189.2	186.8	186.8	186.8
40°	1525.7	1065.8	505.4	330.5	244.3	208.4	189.2	179.6	174.8	174.8	174.8
42.5°	1595.1	1082.6	507.8	323.3	237.1	196.4	179.6	170.1	165.3	167.7	167.7
45°	1664.6	1094.6	500.6	313.8	229.9	186.8	170.1	160.5	155.7	155.7	155.7
47.5°	1748.4	1120.9	488.6	299.4	225.1	179.6	160.5	150.9	148.5	148.5	148.5
50°	1832.2	1142.5	479.0	282.6	213.2	170.1	153.3	141.3	138.9	138.9	138.9
52.5°	1901.7	1152.0	467.0	261.1	201.2	160.5	143.7	131.7	126.9	126.9	126.9
55°	1954.4	1154.4	450.3	244.3	184.4	150.9	134.1	122.1	117.4	115.0	115.0
57.5°	1997.5	1152.0	433.5	227.5	170.1	138.9	122.1	112.6	105.4	103.0	103.0
60°	2021.5	1144.9	409.6	206.0	150.9	126.9	112.6	100.6	95.8	93.4	93.4
62.5°	2007.1	1125.7	376.0	172.4	136.5	115.0	103.0	93.4	86.2	83.8	83.8
65°	1940.0	1087.4	332.9	141.3	122.1	103.0	93.4	83.8	74.2	71.9	71.9
67.5°	1822.7	1022.7	275.4	119.8	112.6	93.4	83.8	74.2	67.1	62.3	62.3
70°	1659.8	936.5	215.6	103.0	100.6	86.2	76.6	67.1	59.9	55.1	55.1
72.5°	1427.5	795.2	160.5	88.6	88.6	79.0	69.5	62.3	55.1	50.3	50.3
75°	1154.4	601.2	122.1	81.4	79.0	71.9	62.3	55.1	50.3	45.5	45.5
77.5°	843.1	400.0	100.6	74.2	74.2	64.7	57.5	50.3	45.5	43.1	43.1
80°	512.5	229.9	71.9	57.5	57.5	55.1	47.9	43.1	40.7	35.9	33.5
82.5°	208.4	88.6	38.3	28.7	28.7	26.3	16.8	14.4	14.4	14.4	12.0
85°	21.6	14.4	9.6	7.2	7.2	7.2	4.8	4.8	4.8	4.8	4.8
87.5°	7.2	7.2	4.8	4.8	4.8	4.8	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



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1121 Highway 74 South  
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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-157-7

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-830-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-830-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-7  
 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-40-830-U-5WQ**  
 Description: Epic Modern Light Square 40W 5WQ Optic

**Spectral Parameters**

CCT (K): 3126  
 CIE u': 0.2465  
 CIE v': 0.5182  
 Duv: -0.0004  
 CIE x: 0.4277  
 CIE y: 0.3997  
 CIE z: 0.1727  
 Peak Wavelength (nm): 601  
 Dominant Wavelength (nm): 582  
 Purity: 48.31913  
 Rf: 84.4  
 Rg: 94.7

CRI (Ra):	82.6		
R1:	81.4	R9:	5.1
R2:	92.2	R10:	82.2
R3:	94.9	R11:	79.8
R4:	80.1	R12:	70.4
R5:	81.8	R13:	84.2
R6:	90.5	R14:	97.9
R7:	81.8	R15:	73.6
R8:	58.0		



**Test Conditions**

Stabilization Time: 22M  
 Operation Time: 1H 22M  
 Sphere Temperature (°C): 24.3

REPORT NUMBER: SP1-2407-157-7

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: SP1-2407-157-7

CIE 1931 Chromaticity Diagram



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



CCT = 3126K  
 CIE x = 0.4277  
 CIE y = 0.3997  
 Duv = -0.0004

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-7

**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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-7

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR S/P: 1.42

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.79

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

**Summary**

$R_f = 84.4$   
 $R_g = 94.7$   
 $CIE R_a = 82.6$   
 $R_9 = 5.1$



**Color Vector Graphics**





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

CES01 = 86	CES26 = 86	CES51 = 93	CES76 = 82
CES02 = 63	CES27 = 92	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 94	CES53 = 89	CES78 = 81
CES04 = 70	CES29 = 92	CES54 = 89	CES79 = 90
CES05 = 49	CES30 = 91	CES55 = 86	CES80 = 89
CES06 = 51	CES31 = 93	CES56 = 85	CES81 = 72
CES07 = 42	CES32 = 85	CES57 = 83	CES82 = 95
CES08 = 41	CES33 = 97	CES58 = 84	CES83 = 94
CES09 = 29	CES34 = 92	CES59 = 91	CES84 = 91
CES10 = 76	CES35 = 96	CES60 = 90	CES85 = 74
CES11 = 59	CES36 = 81	CES61 = 87	CES86 = 68
CES12 = 65	CES37 = 96	CES62 = 83	CES87 = 84
CES13 = 43	CES38 = 86	CES63 = 87	CES88 = 88
CES14 = 74	CES39 = 98	CES64 = 79	CES89 = 75
CES15 = 71	CES40 = 96	CES65 = 78	CES90 = 89
CES16 = 47	CES41 = 96	CES66 = 77	CES91 = 73
CES17 = 50	CES42 = 97	CES67 = 76	CES92 = 63
CES18 = 56	CES43 = 91	CES68 = 80	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 85	CES94 = 61
CES20 = 66	CES45 = 93	CES70 = 78	CES95 = 73
CES21 = 87	CES46 = 90	CES71 = 74	CES96 = 84
CES22 = 79	CES47 = 94	CES72 = 91	CES97 = 88
CES23 = 92	CES48 = 83	CES73 = 74	CES98 = 85
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 76
CES25 = 72	CES50 = 93	CES75 = 78	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)