

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: P868877

Luminaire Tested: **EMM2-HSN-SA3A-727-U-T2U**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868877  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA3A-727-U-T2U  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 130W 70CRI 2700K  
FITXURE w/ TYPE II URBAN DISTRIBUTION OPTIC  
Light Source: (30) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

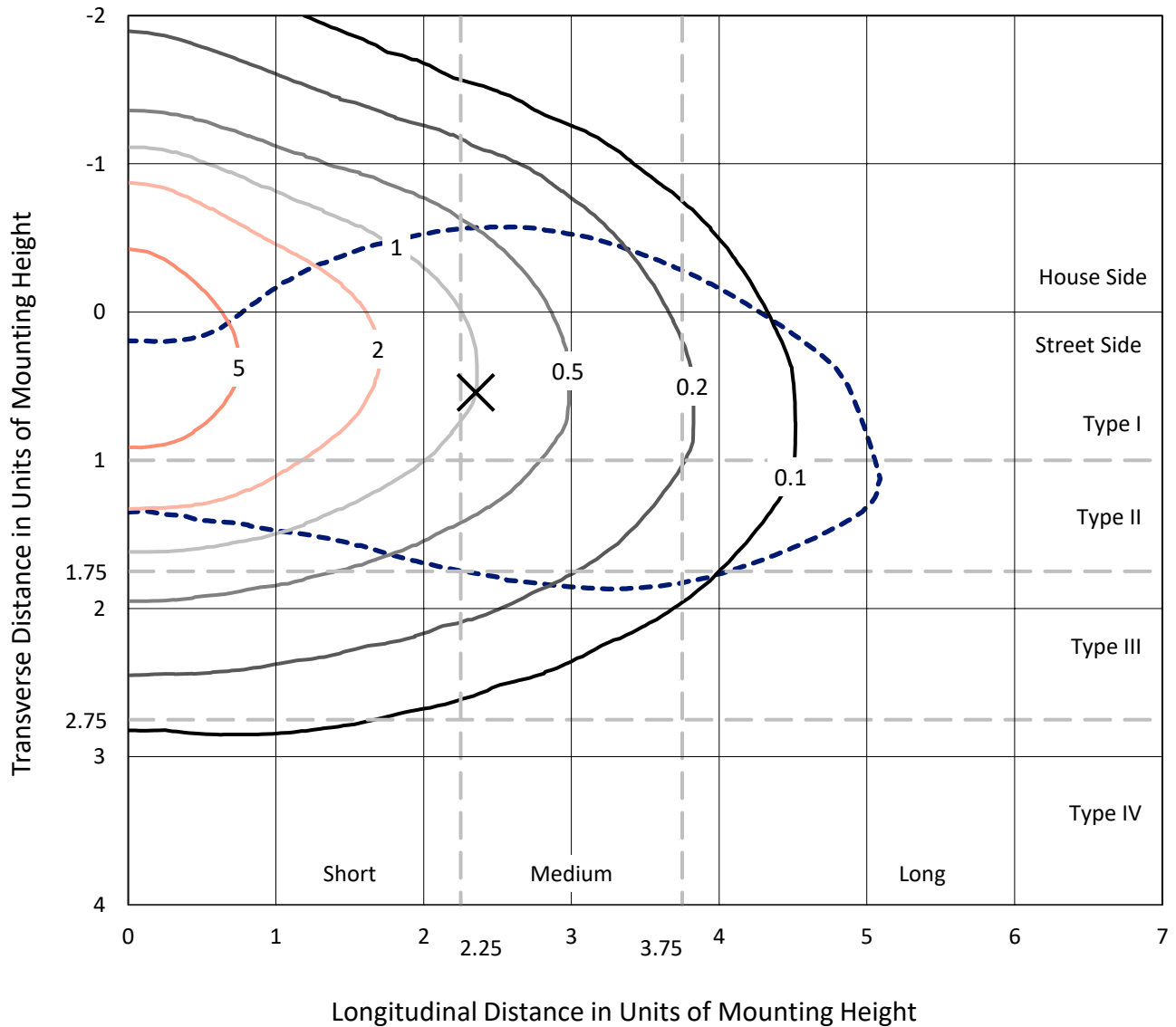
Lumens per Lamp: N/A  
Luminaire Lumens: 15705.4 lumens  
Efficiency: N/A  
Efficacy: 139.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 113  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 7.77%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P868877  
 CATALOG NUMBER: EMM2-HSN-SA3A-727-U-T2U

### Iso-Footcandle Lines of Horizontal Illumination

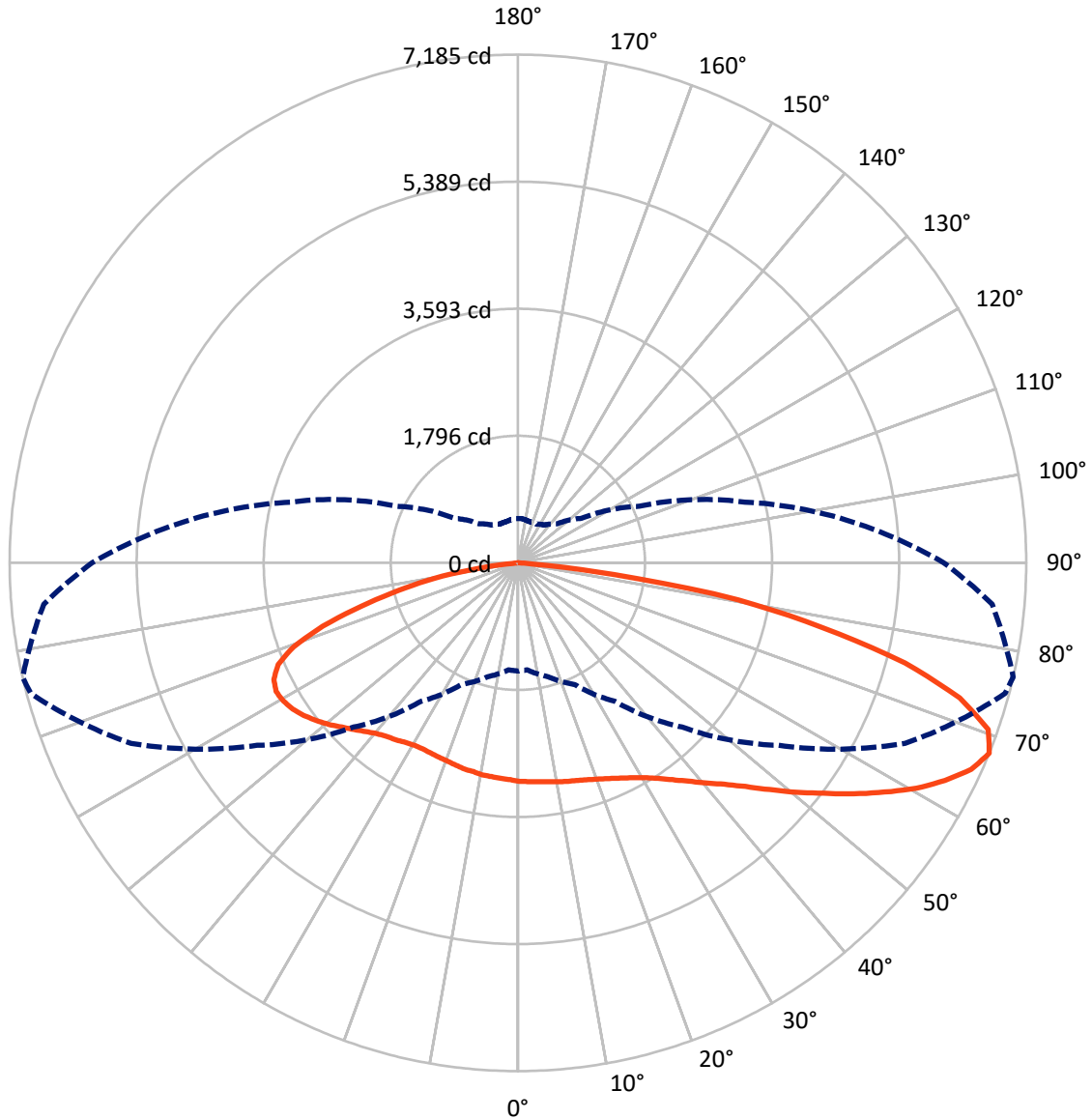
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.5 fc  
 Type III - Medium - N/A

REPORT NUMBER: P868877  
CATALOG NUMBER: EMM2-HSN-SA3A-727-U-T2U

### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P868877  
 CATALOG NUMBER: EMM2-HSN-SA3A-727-U-T2U

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5222.6	0.0	5222.6
	% Fixture	33.3	0.0	33.3
<b>Street Side</b>	Lumens	10482.8	0.0	10482.8
	% Fixture	66.7	0.0	66.7
<b>Total</b>	Lumens	15705.4	0.0	15705.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	296.8	1.9
10°-20°	900.1	5.7
20°-30°	1517.5	9.7
30°-40°	2153.4	13.7
40°-50°	2724.5	17.3
50°-60°	2984.6	19.0
60°-70°	2885.0	18.4
70°-80°	1940.4	12.4
80°-90°	303.2	1.9
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°	15705.4	100.0
0°-180°	15705.4	100.0



REPORT NUMBER: P868877

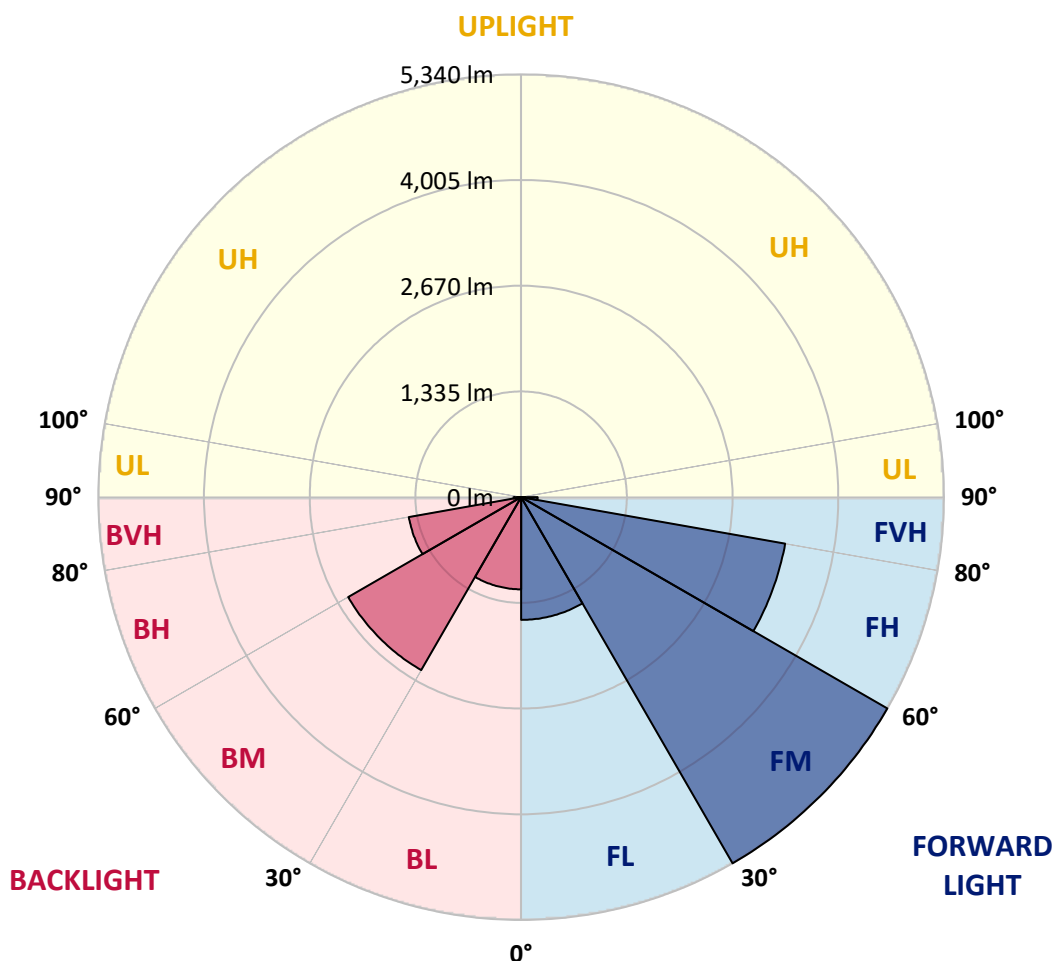
CATALOG NUMBER: EMM2-HSN-SA3A-727-U-T2U

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1550.1	9.9			
FM (30°-60°)	5340.0	34.0			
FH (60°-80°)	3385.0	21.6			G2/5000
FVH (80°-90°)	207.6	1.3			G2/225
BL (0°-30°)	1164.2	7.4	B3/2500		
BM (30°-60°)	2522.4	16.1	B3/5000		
BH (60°-80°)	1440.4	9.2	B3/2500		G3/2500
BVH (80°-90°)	95.6	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Medium





REPORT NUMBER: P868877

CATALOG NUMBER: EMM2-HSN-SA3A-727-U-T2U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8
2.5°	3156.2	3153.1	3137.5	3143.8	3125.1	3137.5	3118.9	3103.4	3100.3	3097.2	3100.3
5°	3255.6	3240.1	3224.5	3215.2	3199.7	3193.5	3162.4	3131.3	3112.7	3109.6	3103.4
7.5°	3370.5	3364.3	3342.6	3330.1	3286.7	3264.9	3221.4	3165.5	3137.5	3125.1	3109.6
10°	3488.6	3504.1	3476.2	3451.3	3401.6	3355.0	3280.4	3209.0	3153.1	3146.9	3112.7
12.5°	3634.6	3631.5	3612.8	3569.3	3510.3	3445.1	3355.0	3255.6	3181.0	3168.6	3118.9
15°	3765.1	3762.0	3737.1	3696.7	3619.1	3538.3	3417.1	3302.2	3209.0	3190.4	3131.3
17.5°	3886.2	3880.0	3864.5	3821.0	3724.7	3625.3	3507.2	3355.0	3243.2	3221.4	3140.7
20°	3991.8	3998.0	3979.4	3935.9	3845.8	3740.2	3591.1	3423.3	3286.7	3261.8	3168.6
22.5°	4106.8	4109.9	4100.6	4085.0	3970.1	3858.3	3696.7	3501.0	3336.4	3311.5	3199.7
25°	4227.9	4231.0	4237.2	4227.9	4097.5	3976.3	3805.4	3597.3	3404.7	3370.5	3243.2
27.5°	4367.7	4370.8	4383.2	4364.6	4224.8	4097.5	3926.6	3699.8	3476.2	3438.9	3280.4
30°	4526.1	4538.6	4529.3	4523.0	4361.5	4237.2	4047.7	3805.4	3569.3	3522.8	3345.7
32.5°	4715.6	4712.5	4693.9	4675.3	4510.6	4380.1	4184.4	3942.1	3684.3	3631.5	3451.3
35°	4852.3	4852.3	4824.4	4815.0	4662.8	4526.1	4333.5	4094.3	3814.8	3765.1	3563.1
37.5°	4936.2	4948.6	4926.9	4933.1	4787.1	4659.7	4482.7	4249.7	3957.7	3914.2	3699.8
40°	4967.3	4998.3	5017.0	5041.8	4895.8	4787.1	4641.1	4417.4	4140.9	4091.2	3864.5
42.5°	4973.5	5020.1	5085.3	5138.1	4973.5	4883.4	4793.3	4588.3	4321.1	4277.6	4044.6
45°	4942.4	4920.7	5079.1	5085.3	5017.0	4961.1	4926.9	4793.3	4582.1	4510.6	4268.3
47.5°	4706.3	4681.5	4725.0	4923.8	4964.2	4995.2	5063.6	5032.5	4843.0	4787.1	4526.1
50°	4324.2	4311.8	4485.8	4700.1	4833.7	4992.1	5175.4	5262.4	5131.9	5097.7	4852.3
52.5°	3693.6	3659.4	4013.6	4429.8	4662.8	4961.1	5253.1	5498.5	5458.1	5408.4	5131.9
55°	3292.9	3292.9	3532.1	4050.9	4445.4	4849.2	5302.8	5747.0	5818.4	5762.5	5451.9
57.5°	2864.2	2898.3	3146.9	3504.1	4131.6	4644.2	5296.6	5955.1	6166.4	6113.6	5790.5
60°	2497.6	2525.6	2668.5	3028.8	3762.0	4373.9	5228.2	6126.0	6489.4	6470.8	6088.7
62.5°	2124.8	2159.0	2273.9	2612.6	3274.2	4063.3	5085.3	6219.2	6793.9	6775.2	6390.0
65°	1826.6	1829.7	1944.7	2227.3	2786.5	3687.4	4833.7	6200.5	7030.0	7042.4	6644.8
67.5°	1528.4	1519.1	1668.2	1898.1	2388.9	3283.6	4498.2	6035.9	7129.4	7185.3	6728.6
70°	1124.5	1137.0	1345.1	1599.8	2019.2	2817.6	4029.1	5715.9	6967.8	7054.8	6536.0
72.5°	845.0	869.8	1071.7	1335.8	1686.8	2351.6	3516.5	5159.9	6517.4	6529.8	5948.9
75°	686.5	692.7	872.9	1109.0	1382.4	1885.6	2823.8	4308.7	5510.9	5653.8	5054.2
77.5°	584.0	577.8	664.8	894.7	1115.2	1506.6	2127.9	3277.3	4327.3	4392.6	3957.7
80°	497.0	493.9	525.0	723.8	872.9	1074.8	1456.9	2283.3	3087.8	3159.3	2811.4
82.5°	260.9	279.6	273.4	447.3	493.9	565.4	699.0	1037.6	1348.2	1366.9	1292.3
85°	12.4	12.4	12.4	18.6	31.1	49.7	96.3	96.3	105.6	201.9	229.9
87.5°	3.1	3.1	6.2	6.2	6.2	9.3	9.3	12.4	12.4	12.4	12.4
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: P868877  
 CATALOG NUMBER: EMM2-HSN-SA3A-727-U-T2U

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8	3087.8
2.5°	3094.1	3081.6	3063.0	3066.1	3063.0	3063.0	3047.5	3035.0	3031.9	3038.1	3050.6
5°	3097.2	3078.5	3050.6	3041.2	3031.9	3025.7	3000.9	2982.2	2972.9	2979.1	2982.2
7.5°	3097.2	3069.2	3038.1	3019.5	2994.6	2976.0	2948.1	2923.2	2910.8	2913.9	2920.1
10°	3091.0	3059.9	3035.0	2997.8	2957.4	2935.6	2892.1	2861.1	2845.5	2848.6	2833.1
12.5°	3091.0	3056.8	3007.1	2972.9	2917.0	2870.4	2836.2	2802.0	2789.6	2777.2	2771.0
15°	3094.1	3050.6	3000.9	2929.4	2864.2	2814.5	2771.0	2749.2	2730.6	2724.4	2727.5
17.5°	3094.1	3050.6	2976.0	2892.1	2817.6	2755.5	2718.2	2693.3	2687.1	2680.9	2680.9
20°	3109.6	3053.7	2954.3	2854.9	2761.7	2696.4	2662.3	2646.7	2646.7	2637.4	2637.4
22.5°	3134.4	3059.9	2941.8	2823.8	2715.1	2643.6	2606.3	2587.7	2597.0	2590.8	2587.7
25°	3162.4	3081.6	2926.3	2780.3	2652.9	2578.4	2541.1	2528.7	2525.6	2510.0	2531.8
27.5°	3184.1	3097.2	2917.0	2736.8	2597.0	2510.0	2463.4	2441.7	2426.2	2432.4	2426.2
30°	3243.2	3140.7	2920.1	2699.5	2534.9	2429.3	2373.4	2348.5	2342.3	2342.3	2342.3
32.5°	3323.9	3196.6	2941.8	2684.0	2475.9	2351.6	2283.3	2258.4	2252.2	2239.8	2246.0
35°	3426.5	3280.4	2976.0	2659.1	2429.3	2261.5	2187.0	2152.8	2143.5	2131.0	2131.0
37.5°	3541.4	3364.3	3000.9	2646.7	2367.1	2168.3	2084.4	2041.0	2034.7	2022.3	2028.5
40°	3687.4	3479.3	3041.2	2621.9	2295.7	2084.4	1972.6	1901.2	1916.7	1922.9	1935.3
42.5°	3852.0	3625.3	3103.4	2597.0	2239.8	1997.5	1832.8	1761.4	1780.0	1773.8	1786.2
45°	4075.7	3796.1	3181.0	2587.7	2171.4	1891.8	1689.9	1609.2	1602.9	1593.6	1599.8
47.5°	4308.7	4001.1	3255.6	2569.1	2096.9	1761.4	1528.4	1425.9	1401.0	1388.6	1376.2
50°	4551.0	4206.2	3342.6	2556.6	1997.5	1615.4	1366.9	1248.8	1202.2	1186.7	1171.1
52.5°	4824.4	4426.7	3417.1	2525.6	1888.7	1463.2	1220.8	1087.3	1034.5	1003.4	1006.5
55°	5113.3	4628.7	3485.5	2488.3	1764.5	1320.3	1074.8	963.0	910.2	900.9	900.9
57.5°	5380.4	4836.8	3535.2	2423.1	1640.2	1180.5	953.7	857.4	832.5	845.0	845.0
60°	5653.8	5004.5	3560.0	2351.6	1512.9	1062.4	869.8	792.2	779.7	804.6	807.7
62.5°	5874.4	5138.1	3553.8	2252.2	1373.1	959.9	789.0	726.9	733.1	776.6	785.9
65°	6032.8	5203.4	3476.2	2103.1	1239.5	869.8	717.6	658.6	658.6	689.6	699.0
67.5°	6020.4	5119.5	3320.8	1895.0	1096.6	779.7	652.4	605.8	605.8	627.5	624.4
70°	5765.6	4830.6	3025.7	1643.3	956.8	702.1	596.4	562.3	559.2	568.5	565.4
72.5°	5153.7	4243.5	2566.0	1357.5	826.3	624.4	540.5	509.5	503.3	490.8	481.5
75°	4252.8	3485.5	2003.7	1081.1	699.0	549.8	487.7	459.8	434.9	450.4	441.1
77.5°	3299.1	2674.7	1491.1	838.8	568.5	478.4	434.9	403.8	397.6	453.5	434.9
80°	2407.5	1848.4	1053.1	599.6	441.1	388.3	363.5	338.6	428.7	574.7	571.6
82.5°	1068.6	891.6	481.5	285.8	205.0	170.9	142.9	161.5	270.3	264.1	273.4
85°	96.3	99.4	52.8	34.2	21.7	18.6	12.4	12.4	9.3	9.3	9.3
87.5°	12.4	12.4	9.3	9.3	6.2	6.2	6.2	6.2	3.1	3.1	3.1
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: SP1-2407-157-3

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-727-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-727-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-3  
 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-40-727-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 2747  
 CIE u': 0.2606  
 CIE v': 0.5257  
 Duv: -0.0005  
 CIE x: 0.4552  
 CIE y: 0.4082  
 CIE z: 0.1366  
 Peak Wavelength (nm): 597  
 Dominant Wavelength (nm): 584  
 Purity: 59.16856  
 Rf: 75.5  
 Rg: 93.6

CRI (Ra):	71.7		
R1:	68.1	R9:	-35.3
R2:	83.9	R10:	64.2
R3:	94.7	R11:	61.7
R4:	66.3	R12:	53.9
R5:	67.4	R13:	71.2
R6:	78.7	R14:	97.6
R7:	75.0	R15:	59.3
R8:	39.4		



**Test Conditions**

Stabilization Time: 22M  
 Operation Time: 1H 22M  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2407-157-3

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: SP1-2407-157-3

CIE 1931 Chromaticity Diagram



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



CCT = 2747K  
 CIE x = 0.4552  
 CIE y = 0.4082  
 Duv = -0.0005

Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-3

**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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-3

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.13**

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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.04

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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

**Summary**

$R_f = 75.5$   
 $R_g = 93.6$   
 $CIE R_a = 71.7$   
 $R_9 = -35.3$



**Color Vector Graphics**





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

CES01 = 86	CES26 = 68	CES51 = 87	CES76 = 63
CES02 = 63	CES27 = 90	CES52 = 85	CES77 = 79
CES03 = 31	CES28 = 87	CES53 = 78	CES78 = 66
CES04 = 71	CES29 = 71	CES54 = 86	CES79 = 87
CES05 = 50	CES30 = 85	CES55 = 84	CES80 = 85
CES06 = 52	CES31 = 74	CES56 = 75	CES81 = 67
CES07 = 42	CES32 = 66	CES57 = 75	CES82 = 93
CES08 = 41	CES33 = 80	CES58 = 76	CES83 = 91
CES09 = 29	CES34 = 79	CES59 = 85	CES84 = 89
CES10 = 77	CES35 = 89	CES60 = 90	CES85 = 72
CES11 = 60	CES36 = 93	CES61 = 81	CES86 = 59
CES12 = 66	CES37 = 88	CES62 = 91	CES87 = 77
CES13 = 43	CES38 = 93	CES63 = 77	CES88 = 79
CES14 = 74	CES39 = 97	CES64 = 67	CES89 = 65
CES15 = 72	CES40 = 93	CES65 = 66	CES90 = 80
CES16 = 48	CES41 = 93	CES66 = 63	CES91 = 80
CES17 = 51	CES42 = 89	CES67 = 61	CES92 = 55
CES18 = 57	CES43 = 78	CES68 = 68	CES93 = 72
CES19 = 73	CES44 = 99	CES69 = 78	CES94 = 48
CES20 = 67	CES45 = 85	CES70 = 63	CES95 = 66
CES21 = 88	CES46 = 81	CES71 = 61	CES96 = 76
CES22 = 80	CES47 = 86	CES72 = 86	CES97 = 81
CES23 = 92	CES48 = 74	CES73 = 56	CES98 = 76
CES24 = 91	CES49 = 79	CES74 = 93	CES99 = 64
CES25 = 73	CES50 = 86	CES75 = 66	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)