

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: P868947

Luminaire Tested: **EMM2-HSN-SA3A-727-U-T3**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868947  
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-T3  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 130W 70CRI 2700K  
FIXTURE w/ TYPE III DISTRIBUTION OPTIC  
Light Source: (30) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

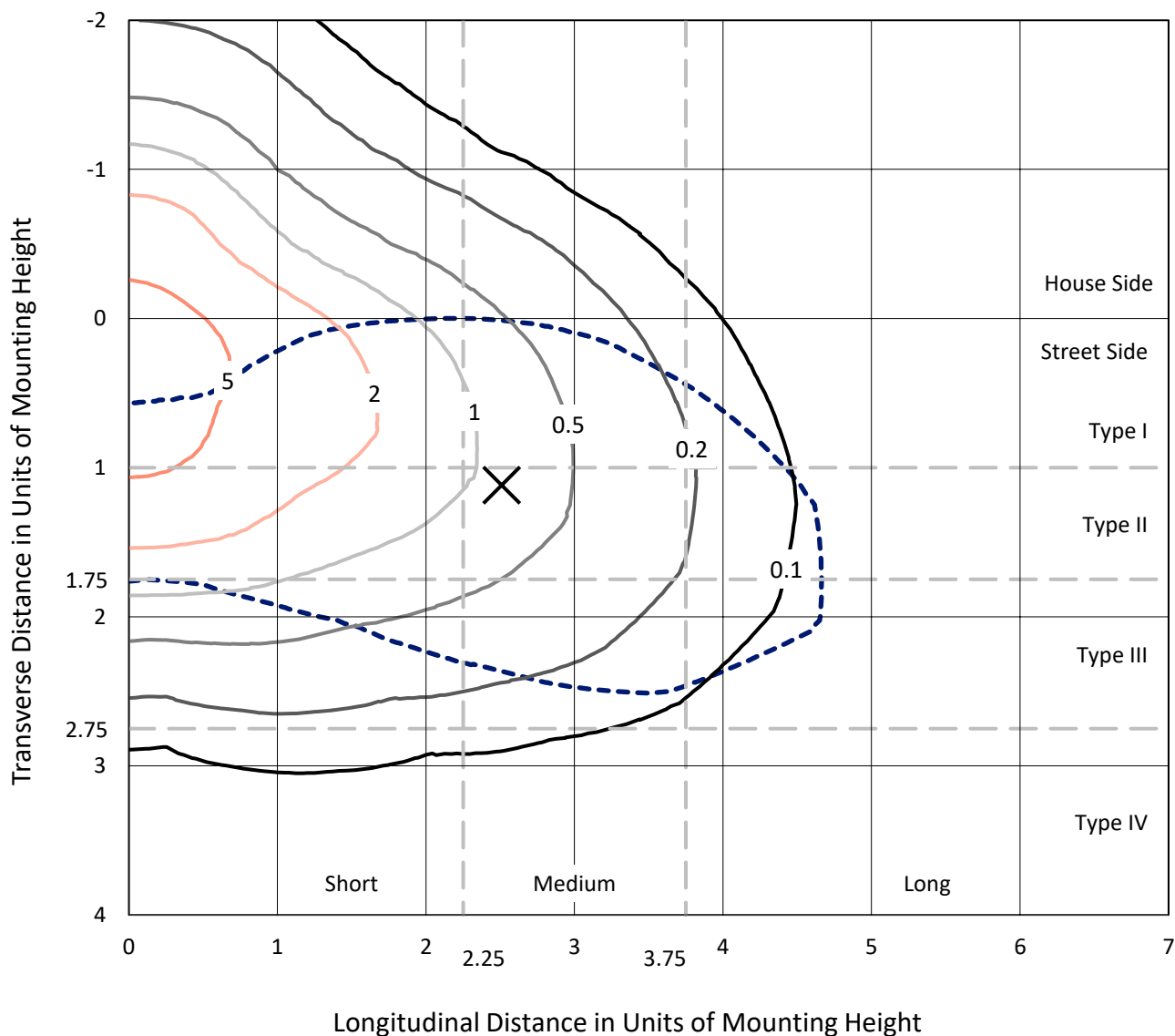
Lumens per Lamp: N/A  
Luminaire Lumens: 15634.8 lumens  
Efficiency: N/A  
Efficacy: 138.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

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

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### Iso-Footcandle Lines of Horizontal Illumination

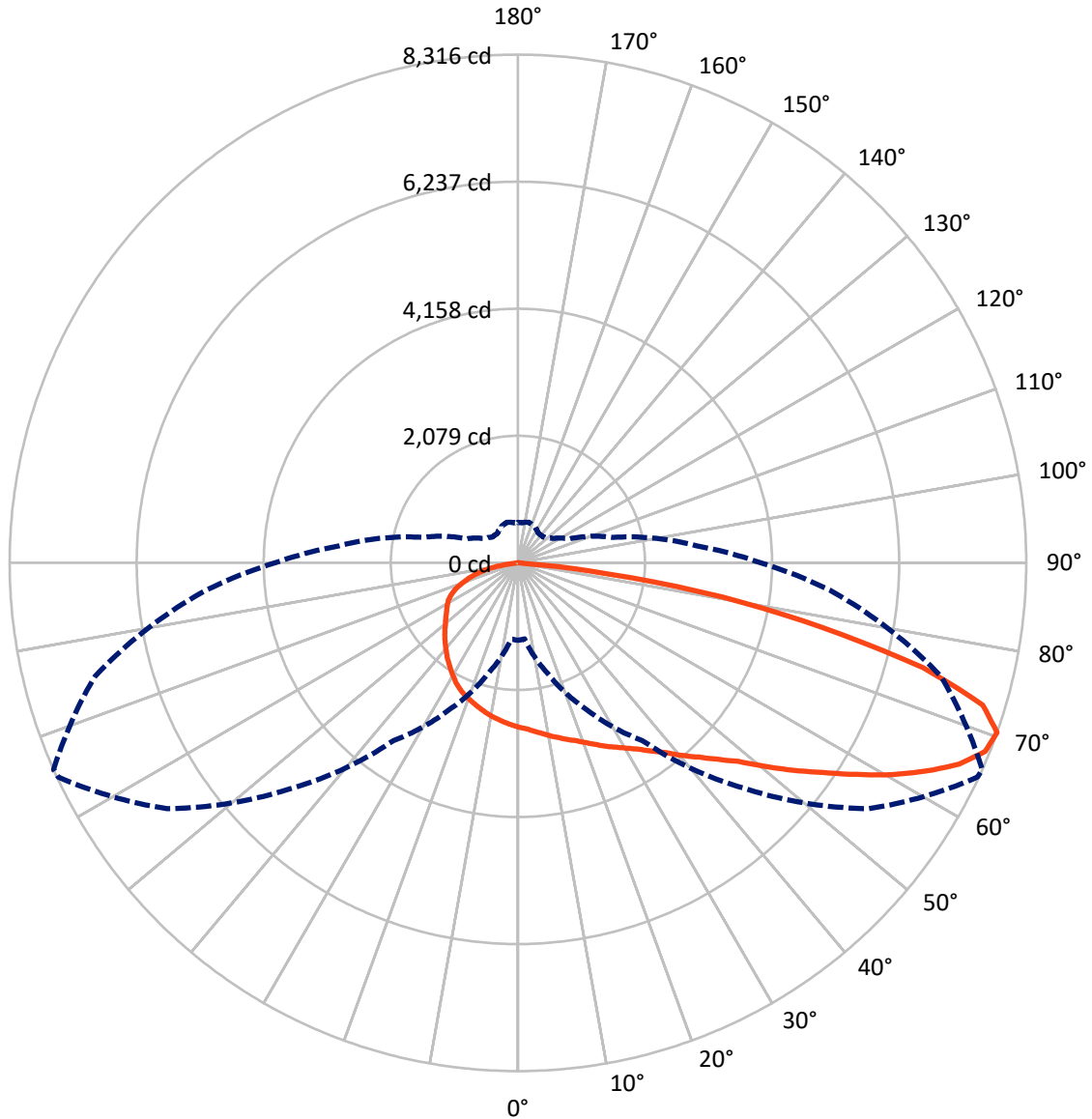
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4029.2	0.0	4029.2
	% Fixture	25.8	0.0	25.8
<b>Street Side</b>	Lumens	11605.6	0.0	11605.6
	% Fixture	74.2	0.0	74.2
<b>Total</b>	Lumens	15634.8	0.0	15634.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	257.4	1.6
10°-20°	766.8	4.9
20°-30°	1288.0	8.2
30°-40°	1940.4	12.4
40°-50°	2634.3	16.8
50°-60°	3130.4	20.0
60°-70°	3194.8	20.4
70°-80°	2136.8	13.7
80°-90°	285.9	1.8
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°	15634.8	100.0
0°-180°	15634.8	100.0

**Coefficient of Utilization**



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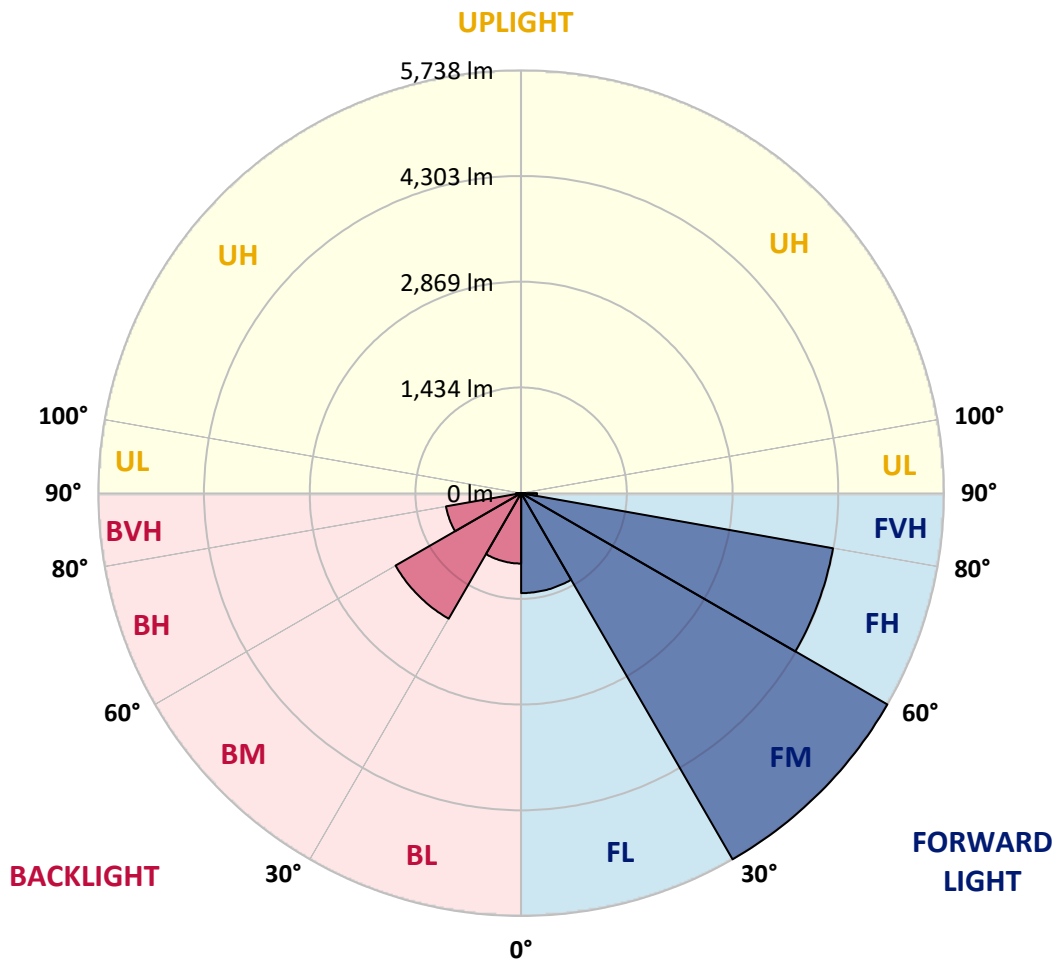
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1356.8	8.7			
FM (30°-60°)	5737.7	36.7			
FH (60°-80°)	4297.0	27.5			G2/5000
FVH (80°-90°)	214.1	1.4			G2/225
BL (0°-30°)	955.4	6.1	B2/1000		
BM (30°-60°)	1967.5	12.6	B2/2500		
BH (60°-80°)	1034.6	6.6	B3/2500		G3/2500
BVH (80°-90°)	71.8	0.5			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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0
2.5°	2786.3	2773.9	2764.6	2770.8	2752.2	2758.4	2736.6	2721.1	2718.0	2711.8	2705.6
5°	2873.3	2873.3	2857.8	2857.8	2836.0	2832.9	2801.9	2767.7	2767.7	2746.0	2721.1
7.5°	2966.5	2960.3	2941.7	2938.5	2913.7	2907.5	2873.3	2820.5	2817.4	2777.0	2739.7
10°	3031.7	3034.8	3022.4	3022.4	3003.8	2988.3	2938.5	2882.6	2876.4	2823.6	2764.6
12.5°	3081.4	3087.7	3084.5	3084.5	3069.0	3069.0	3013.1	2938.5	2932.3	2864.0	2780.1
15°	3134.2	3131.1	3140.5	3143.6	3137.4	3128.0	3087.7	3000.7	2997.6	2907.5	2801.9
17.5°	3180.8	3177.7	3180.8	3196.4	3199.5	3199.5	3159.1	3069.0	3056.6	2960.3	2820.5
20°	3208.8	3215.0	3227.4	3246.1	3255.4	3280.2	3246.1	3149.8	3137.4	3016.2	2860.9
22.5°	3314.4	3295.8	3305.1	3317.5	3329.9	3364.1	3333.0	3233.6	3224.3	3100.1	2907.5
25°	3494.6	3494.6	3472.8	3451.1	3435.6	3451.1	3426.2	3329.9	3323.7	3174.6	2960.3
27.5°	3808.3	3808.3	3761.7	3681.0	3578.4	3550.5	3531.9	3432.4	3413.8	3255.4	2994.5
30°	4205.9	4218.3	4134.5	3997.8	3808.3	3684.1	3637.5	3528.7	3519.4	3336.2	3047.3
32.5°	4631.5	4656.3	4594.2	4395.4	4084.8	3842.5	3767.9	3656.1	3634.4	3432.4	3115.6
35°	5013.6	5038.4	4954.5	4768.2	4370.5	4072.3	3923.2	3795.9	3783.5	3556.7	3218.1
37.5°	5324.2	5330.4	5277.6	5050.8	4609.7	4264.9	4115.8	3963.6	3938.8	3705.8	3326.8
40°	5653.4	5678.3	5625.5	5345.9	4827.2	4473.1	4308.4	4165.5	4143.8	3861.1	3429.3
42.5°	5998.2	5995.1	5995.1	5600.6	5044.6	4647.0	4516.5	4358.1	4345.7	4019.5	3541.2
45°	6209.5	6221.9	6187.7	5752.8	5364.6	4827.2	4718.5	4603.5	4581.8	4240.1	3687.2
47.5°	6262.3	6234.3	6079.0	5870.9	5724.9	5013.6	4973.2	4904.8	4855.1	4482.4	3867.3
50°	6190.8	6147.3	6057.3	5923.7	5858.5	5237.2	5231.0	5265.2	5231.0	4777.5	4075.5
52.5°	5923.7	5917.5	5901.9	5933.0	5827.4	5414.3	5523.0	5641.0	5634.8	5078.8	4292.9
55°	5361.5	5401.8	5588.2	5783.9	5709.4	5535.4	5849.1	6075.9	6051.1	5432.9	4516.5
57.5°	4786.8	4827.2	5066.4	5532.3	5594.4	5665.9	6215.7	6569.8	6529.4	5818.1	4721.6
60°	4286.7	4243.2	4482.4	5153.3	5432.9	5783.9	6579.1	7069.9	7035.7	6203.3	4932.8
62.5°	3494.6	3538.1	3920.1	4600.4	5206.1	5858.5	6877.3	7523.4	7501.7	6557.4	5103.6
65°	2764.6	2705.6	3280.2	4019.5	4814.7	5833.6	7135.1	7949.0	7933.5	6905.3	5234.1
67.5°	1879.3	1838.9	2596.9	3441.8	4283.6	5634.8	7194.2	8234.8	8241.0	7110.3	5268.3
70°	1267.4	1248.7	1866.9	2646.6	3547.4	5206.1	7010.9	8293.8	8315.5	7163.1	5116.1
72.5°	935.0	931.9	1366.8	1888.6	2640.3	4395.4	6510.8	7908.6	7949.0	6790.3	4668.8
75°	736.2	745.5	975.4	1341.9	1761.3	3252.3	5476.4	6781.0	6843.2	5864.7	3876.6
77.5°	602.6	602.6	683.4	962.9	1177.3	2019.1	3938.8	4963.8	5088.1	4525.9	2985.1
80°	487.7	497.0	506.3	671.0	779.7	1152.4	2292.4	3311.3	3401.4	3152.9	2155.8
82.5°	267.1	285.8	276.5	347.9	391.4	534.3	910.1	1338.8	1475.5	1314.0	978.5
85°	18.6	12.4	21.7	28.0	34.2	52.8	71.4	99.4	93.2	133.6	68.3
87.5°	3.1	3.1	3.1	6.2	6.2	9.3	12.4	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0	2690.0
2.5°	2702.5	2686.9	2662.1	2655.9	2646.6	2634.1	2621.7	2603.1	2596.9	2603.1	2609.3
5°	2705.6	2683.8	2643.5	2618.6	2593.8	2572.0	2547.2	2522.3	2506.8	2509.9	2522.3
7.5°	2714.9	2683.8	2621.7	2581.3	2540.9	2506.8	2466.4	2438.4	2419.8	2422.9	2432.2
10°	2727.3	2683.8	2609.3	2540.9	2485.0	2435.3	2394.9	2360.8	2342.1	2339.0	2342.1
12.5°	2730.4	2680.7	2581.3	2497.5	2429.1	2363.9	2320.4	2289.3	2270.7	2261.4	2267.6
15°	2739.7	2671.4	2553.4	2450.9	2367.0	2298.7	2245.8	2208.6	2196.1	2189.9	2186.8
17.5°	2752.2	2668.3	2528.5	2404.3	2304.9	2227.2	2180.6	2143.3	2127.8	2121.6	2127.8
20°	2770.8	2671.4	2500.6	2357.7	2249.0	2171.3	2118.5	2081.2	2068.8	2065.7	2062.6
22.5°	2795.7	2677.6	2478.8	2314.2	2186.8	2109.2	2056.4	2031.5	2022.2	2025.3	2025.3
25°	2820.5	2683.8	2447.8	2255.2	2121.6	2040.8	2003.6	1984.9	1991.1	2003.6	2003.6
27.5°	2842.3	2680.7	2404.3	2193.0	2043.9	1969.4	1941.4	1944.5	1960.1	1981.8	1984.9
30°	2870.2	2680.7	2357.7	2115.4	1957.0	1885.5	1879.3	1904.2	1929.0	1950.7	1950.7
32.5°	2913.7	2699.4	2320.4	2037.7	1866.9	1811.0	1838.9	1873.1	1901.0	1922.8	1929.0
35°	2988.3	2739.7	2295.5	1960.1	1779.9	1739.5	1792.3	1848.2	1866.9	1882.4	1885.5
37.5°	3059.7	2777.0	2264.5	1885.5	1689.8	1674.3	1745.7	1804.8	1807.9	1817.2	1817.2
40°	3128.0	2805.0	2224.1	1804.8	1602.8	1602.8	1686.7	1736.4	1730.2	1720.9	1724.0
42.5°	3202.6	2820.5	2177.5	1730.2	1531.4	1531.4	1599.7	1643.2	1640.1	1652.5	1661.9
45°	3292.7	2851.6	2115.4	1661.9	1456.8	1444.4	1500.3	1537.6	1584.2	1640.1	1655.7
47.5°	3416.9	2895.1	2065.7	1587.3	1394.7	1351.2	1373.0	1450.6	1503.4	1550.0	1556.3
50°	3547.4	2957.2	2022.2	1509.7	1320.2	1242.5	1261.2	1348.1	1379.2	1397.8	1407.1
52.5°	3687.2	3006.9	1984.9	1444.4	1242.5	1130.7	1155.5	1239.4	1261.2	1276.7	1279.8
55°	3808.3	3047.3	1938.3	1382.3	1158.6	1025.1	1056.1	1136.9	1158.6	1177.3	1177.3
57.5°	3935.7	3084.5	1907.3	1329.5	1068.6	938.1	959.8	1040.6	1071.7	1077.9	1087.2
60°	4041.3	3118.7	1879.3	1279.8	984.7	860.4	876.0	947.4	984.7	987.8	994.0
62.5°	4115.8	3140.5	1863.8	1217.7	900.8	782.8	795.2	866.7	910.1	919.5	922.6
65°	4162.4	3152.9	1835.8	1136.9	829.4	717.6	717.6	789.0	832.5	854.2	860.4
67.5°	4140.7	3131.1	1761.3	1043.7	764.1	652.3	649.2	720.7	757.9	770.4	773.5
70°	3972.9	3003.8	1609.1	928.8	695.8	593.3	587.1	652.3	686.5	658.5	661.6
72.5°	3631.3	2714.9	1400.9	813.8	624.4	537.4	531.2	587.1	590.2	590.2	587.1
75°	3059.7	2217.9	1118.3	692.7	549.8	478.4	481.5	525.0	528.1	543.6	534.3
77.5°	2345.2	1643.2	872.9	552.9	465.9	425.6	441.1	456.6	478.4	500.1	478.4
80°	1705.4	1133.8	605.7	413.1	360.3	360.3	366.5	382.1	413.1	434.9	413.1
82.5°	730.0	500.1	279.6	205.0	177.1	174.0	177.1	177.1	217.4	223.7	195.7
85°	55.9	46.6	34.2	34.2	28.0	15.5	15.5	12.4	9.3	9.3	9.3
87.5°	12.4	9.3	9.3	9.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
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

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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



Point lies inside the ANSI 2700K 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	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			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.13**

$\lambda$ (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			

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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**

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



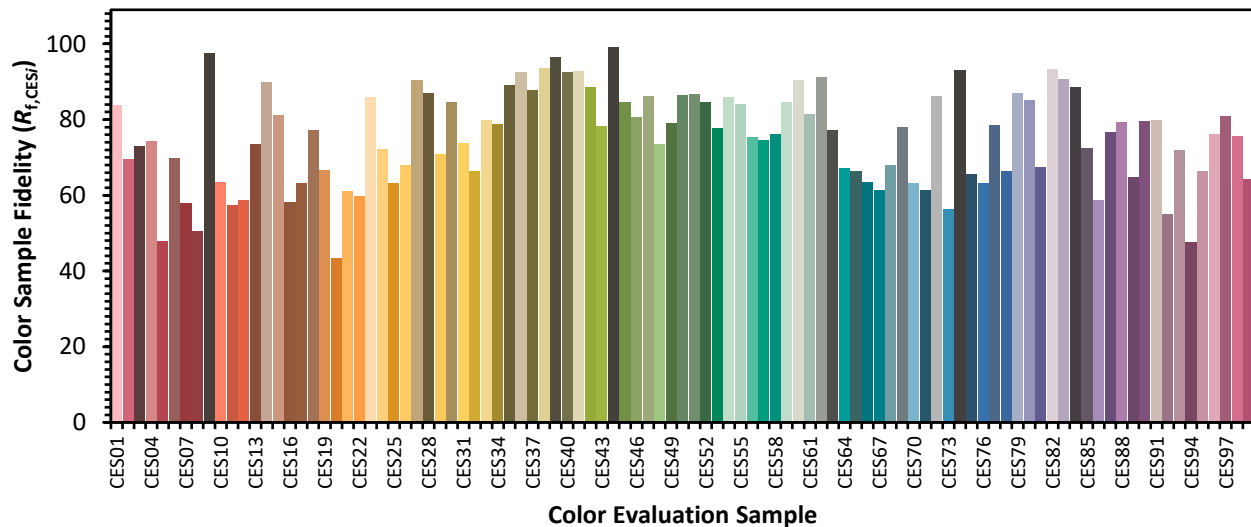
**Color Vector Graphics**





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)