

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: P869052

Luminaire Tested: **EMM2-HSN-SA3A-727-U-T4W-HSS**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P869052  
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-T4W-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 130W 70CRI 2700K  
FIXTURE w/ TYPE IV WIDE DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (30) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

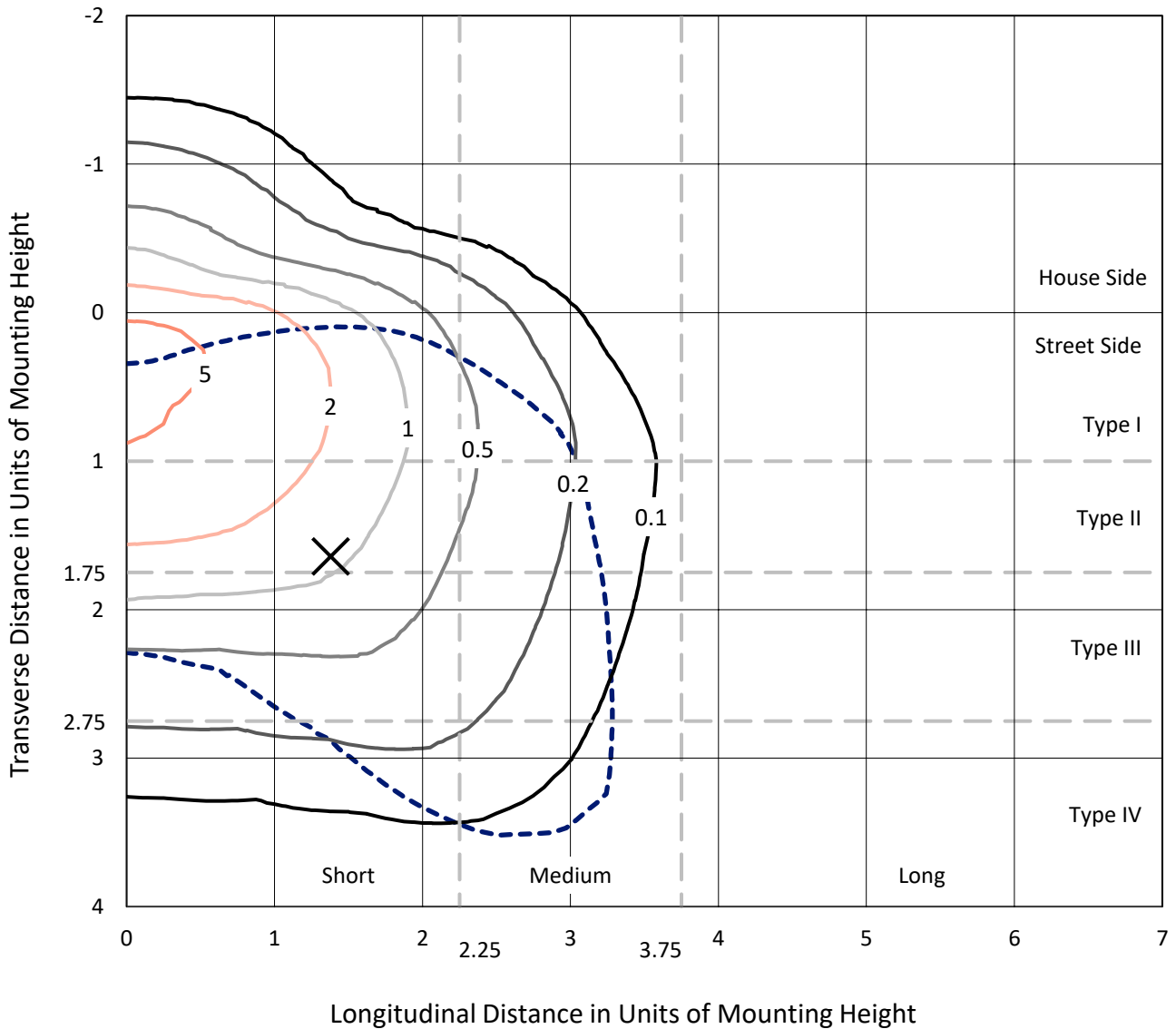
Lumens per Lamp: N/A  
Luminaire Lumens: 11021.7 lumens  
Efficiency: N/A  
Efficacy: 97.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

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

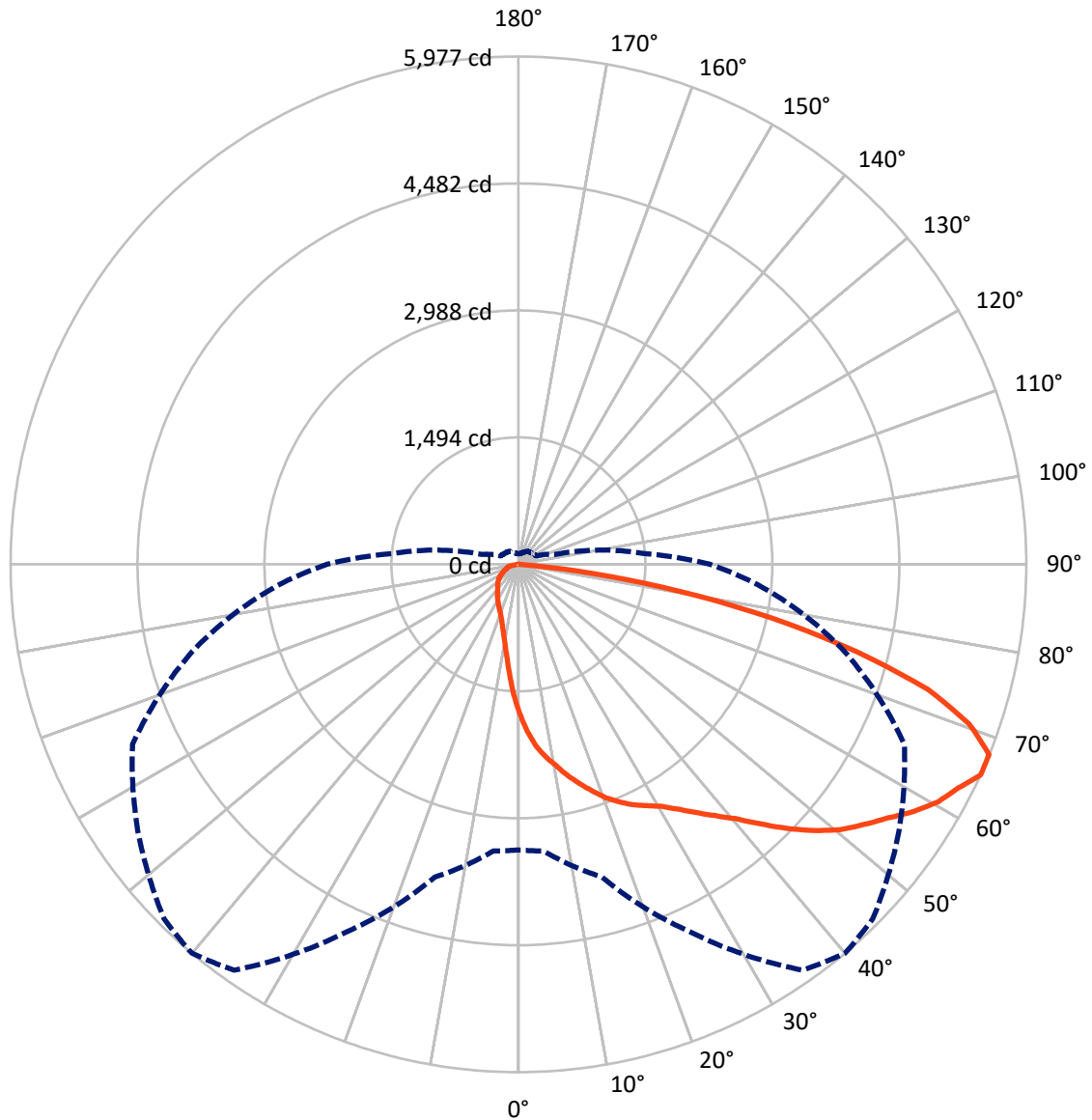
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.4 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1319.5	0.0	1319.5
	% Fixture	12.0	0.0	12.0
<b>Street Side</b>	Lumens	9702.1	0.0	9702.1
	% Fixture	88.0	0.0	88.0
<b>Total</b>	Lumens	11021.7	0.0	11021.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.0	1.5
10°-20°	493.1	4.5
20°-30°	848.3	7.7
30°-40°	1282.3	11.6
40°-50°	1875.0	17.0
50°-60°	2394.8	21.7
60°-70°	2390.0	21.7
70°-80°	1401.5	12.7
80°-90°	172.6	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°	11021.7	100.0
0°-180°	11021.7	100.0

**Coefficient of Utilization**



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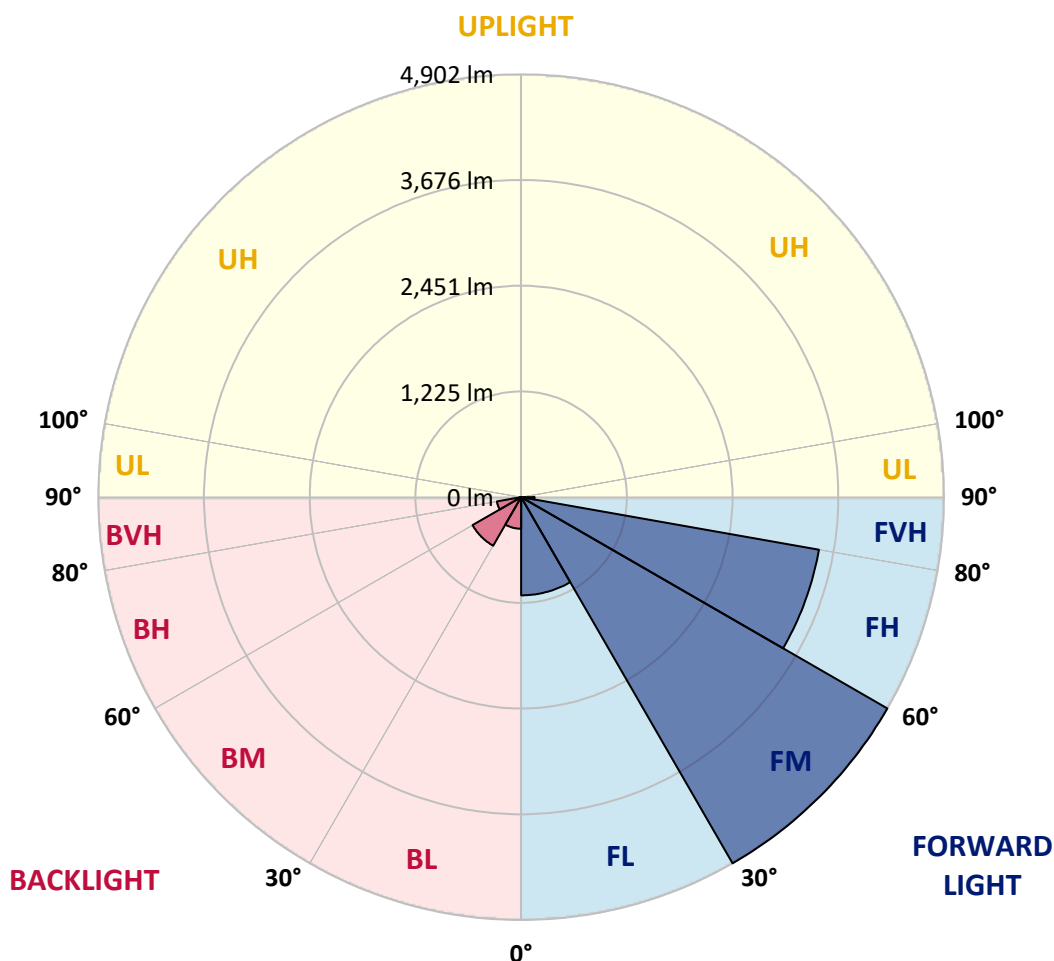
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1138.4	10.3			
FM (30°-60°)	4901.9	44.5			
FH (60°-80°)	3505.8	31.8			G2/5000
FVH (80°-90°)	156.0	1.4			G2/225
BL (0°-30°)	367.0	3.3	B1/500		
BM (30°-60°)	650.2	5.9	B1/1000		
BH (60°-80°)	285.7	2.6	B1/500		G1/500
BVH (80°-90°)	16.6	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0
2.5°	2044.0	2034.7	2016.0	2000.5	1978.7	1960.1	1941.5	1907.3	1863.8	1826.5	1779.9
5°	2245.9	2230.4	2217.9	2199.3	2162.0	2146.5	2134.1	2062.6	1988.1	1910.4	1807.9
7.5°	2388.8	2401.2	2376.4	2348.4	2301.8	2283.2	2264.5	2193.1	2099.9	1988.1	1842.1
10°	2553.4	2556.5	2525.5	2491.3	2441.6	2404.3	2379.5	2292.5	2190.0	2065.7	1879.3
12.5°	2711.8	2711.8	2693.2	2643.5	2578.3	2544.1	2500.6	2401.2	2277.0	2131.0	1922.8
15°	2839.2	2845.4	2829.9	2792.6	2721.2	2674.6	2631.1	2516.1	2357.7	2205.5	1957.0
17.5°	2954.1	2951.0	2941.7	2907.5	2839.2	2801.9	2758.4	2631.1	2450.9	2264.5	2009.8
20°	3031.8	3031.8	3028.7	3010.1	2960.4	2932.4	2879.6	2746.0	2553.4	2351.5	2065.7
22.5°	3090.8	3087.7	3087.7	3090.8	3062.9	3034.9	3013.2	2879.6	2659.0	2426.1	2121.6
25°	3140.5	3137.4	3146.7	3152.9	3140.5	3134.3	3109.5	3006.9	2789.5	2513.0	2177.6
27.5°	3205.8	3215.1	3212.0	3212.0	3208.9	3215.1	3212.0	3125.0	2916.9	2606.2	2236.6
30°	3308.3	3323.8	3314.5	3302.1	3302.1	3305.2	3320.7	3264.8	3066.0	2721.2	2301.8
32.5°	3547.5	3531.9	3466.7	3423.2	3429.4	3432.5	3448.1	3417.0	3215.1	2851.6	2370.1
35°	3820.8	3802.2	3730.7	3631.3	3597.2	3584.7	3581.6	3563.0	3376.6	2991.4	2450.9
37.5°	4174.9	4181.2	4075.5	3932.6	3830.1	3752.5	3736.9	3696.6	3516.4	3118.8	2534.8
40°	4535.3	4510.4	4420.3	4280.6	4078.6	3935.7	3889.2	3833.2	3674.8	3252.4	2615.5
42.5°	4883.2	4836.6	4718.6	4566.3	4330.3	4174.9	4069.3	3997.9	3820.8	3398.4	2693.2
45°	5336.7	5203.1	4991.9	4855.2	4560.1	4432.8	4336.5	4178.0	3994.8	3544.3	2786.4
47.5°	5693.9	5436.1	5243.5	5184.5	4799.3	4681.3	4594.3	4373.7	4171.8	3709.0	2882.7
50°	5628.7	5470.3	5423.7	5370.9	4979.5	4908.0	4827.3	4597.4	4352.0	3882.9	2975.9
52.5°	5461.0	5479.6	5538.6	5448.5	5137.9	5088.2	5035.4	4836.6	4532.2	4025.8	3059.8
55°	5327.4	5364.7	5523.1	5495.1	5327.4	5271.5	5234.2	5072.7	4706.1	4156.3	3131.2
57.5°	5085.1	5054.0	5252.8	5575.9	5529.3	5485.8	5448.5	5321.2	4883.2	4249.5	3177.8
60°	4703.0	4588.1	4855.2	5476.5	5669.1	5675.3	5653.6	5507.6	5026.1	4249.5	3152.9
62.5°	4165.6	4056.9	4386.2	5144.1	5743.6	5802.7	5790.2	5572.8	5088.2	4156.3	3056.7
65°	3361.1	3385.9	3811.5	4768.3	5830.6	5976.6	5899.0	5467.2	5010.5	3976.1	2839.2
67.5°	2683.9	2758.4	3140.5	4280.6	5790.2	5973.5	5864.8	5169.0	4678.2	3724.5	2506.8
70°	2118.5	2168.2	2485.1	3622.0	5436.1	5628.7	5492.0	4712.3	4115.9	3336.2	2084.4
72.5°	1655.7	1702.3	1972.5	2898.2	4821.1	5044.7	4873.9	4097.3	3413.9	2829.9	1655.7
75°	1258.1	1292.2	1494.2	2233.5	3839.5	4119.0	3994.8	3280.3	2665.3	2239.7	1267.4
77.5°	810.8	857.4	1084.1	1565.6	2711.8	3047.3	3062.9	2450.9	1916.6	1618.4	931.9
80°	537.4	556.0	695.8	1018.9	1668.1	1929.0	2019.1	1655.7	1223.9	1031.3	671.0
82.5°	223.7	248.5	332.4	512.5	835.6	838.7	959.9	698.9	497.0	438.0	282.7
85°	6.2	12.4	9.3	24.9	21.7	34.2	40.4	55.9	40.4	43.5	43.5
87.5°	0.0	0.0	3.1	3.1	6.2	6.2	6.2	6.2	6.2	9.3	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0	1752.0
2.5°	1758.2	1730.2	1674.3	1630.8	1584.2	1550.1	1519.0	1484.8	1463.1	1466.2	1444.5
5°	1758.2	1705.4	1593.6	1494.2	1404.1	1338.8	1267.4	1211.5	1171.1	1164.9	1183.5
7.5°	1767.5	1680.5	1512.8	1363.7	1239.4	1136.9	1062.4	1006.5	978.5	959.9	956.8
10°	1776.8	1661.9	1438.2	1248.8	1093.4	981.6	916.4	854.2	823.2	820.1	810.8
12.5°	1783.0	1640.2	1369.9	1133.8	972.3	866.7	801.4	751.7	726.9	726.9	723.8
15°	1804.8	1633.9	1298.5	1046.8	879.1	776.6	720.7	680.3	664.8	655.4	652.3
17.5°	1823.4	1621.5	1236.3	959.9	795.2	705.1	652.3	624.4	608.8	602.6	599.5
20°	1851.4	1615.3	1177.3	888.4	733.1	646.1	605.7	580.9	571.6	565.4	565.4
22.5°	1879.3	1609.1	1118.3	826.3	680.3	602.6	565.4	543.6	534.3	531.2	528.1
25°	1913.5	1606.0	1068.6	773.5	633.7	568.5	534.3	515.7	503.2	497.0	497.0
27.5°	1947.7	1609.1	1018.9	720.7	593.3	537.4	503.2	481.5	472.2	459.7	462.8
30°	1994.3	1612.2	978.5	677.2	559.1	506.3	475.3	447.3	434.9	428.7	428.7
32.5°	2040.9	1624.6	938.1	636.8	525.0	481.5	444.2	419.4	403.8	400.7	397.6
35°	2090.6	1633.9	900.8	602.6	497.0	453.5	416.3	391.4	379.0	375.9	375.9
37.5°	2146.5	1649.5	872.9	571.6	469.1	425.6	391.4	366.5	357.2	354.1	354.1
40°	2205.5	1674.3	851.1	543.6	447.3	400.7	369.7	347.9	341.7	338.6	338.6
42.5°	2264.5	1696.1	832.5	521.9	425.6	379.0	354.1	332.4	323.1	323.1	323.1
45°	2320.4	1711.6	813.9	500.1	403.8	363.4	335.5	316.8	307.5	307.5	307.5
47.5°	2370.1	1727.1	785.9	478.4	382.1	341.7	320.0	301.3	292.0	292.0	292.0
50°	2423.0	1736.5	754.8	450.4	360.3	326.2	304.4	282.7	276.5	273.4	273.4
52.5°	2466.4	1736.5	714.5	422.5	335.5	304.4	285.8	267.1	257.8	251.6	251.6
55°	2497.5	1736.5	671.0	388.3	310.6	285.8	267.1	248.5	236.1	226.8	226.8
57.5°	2516.1	1727.1	621.3	347.9	285.8	260.9	248.5	226.8	201.9	183.3	177.1
60°	2500.6	1699.2	568.5	304.4	257.8	239.2	229.9	201.9	167.7	158.4	158.4
62.5°	2435.4	1633.9	515.7	267.1	236.1	217.4	208.1	177.1	152.2	142.9	142.9
65°	2252.1	1475.5	450.4	233.0	211.2	198.8	186.4	158.4	136.7	124.3	124.3
67.5°	1985.0	1273.6	375.9	205.0	189.5	180.2	170.8	142.9	121.1	108.7	108.7
70°	1609.1	1028.2	320.0	180.2	167.7	161.5	152.2	130.5	105.6	96.3	96.3
72.5°	1264.3	807.7	267.1	161.5	155.3	142.9	136.7	114.9	96.3	87.0	87.0
75°	941.2	602.6	236.1	142.9	142.9	127.4	124.3	102.5	83.9	77.7	77.7
77.5°	692.7	447.3	205.0	124.3	124.3	111.8	105.6	90.1	77.7	71.4	71.4
80°	469.1	304.4	152.2	93.2	93.2	90.1	83.9	77.7	65.2	59.0	55.9
82.5°	198.8	127.4	74.6	46.6	43.5	34.2	28.0	21.7	21.7	18.6	18.6
85°	34.2	15.5	15.5	12.4	9.3	9.3	9.3	6.2	6.2	6.2	6.2
87.5°	6.2	6.2	6.2	6.2	6.2	6.2	3.1	3.1	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  
 R<sub>f</sub>: 75.5  
 R<sub>g</sub>: 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**

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			

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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**

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



**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)