

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: P869050

Luminaire Tested: **EMM2-HSN-SA2B-727-U-T4W-HSS**

Issue Date: 08/22/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P869050  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA2B-727-U-T4W-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 100W 70CRI 2700K  
FIXTURE w/ TYPE IV WIDE DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (20) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

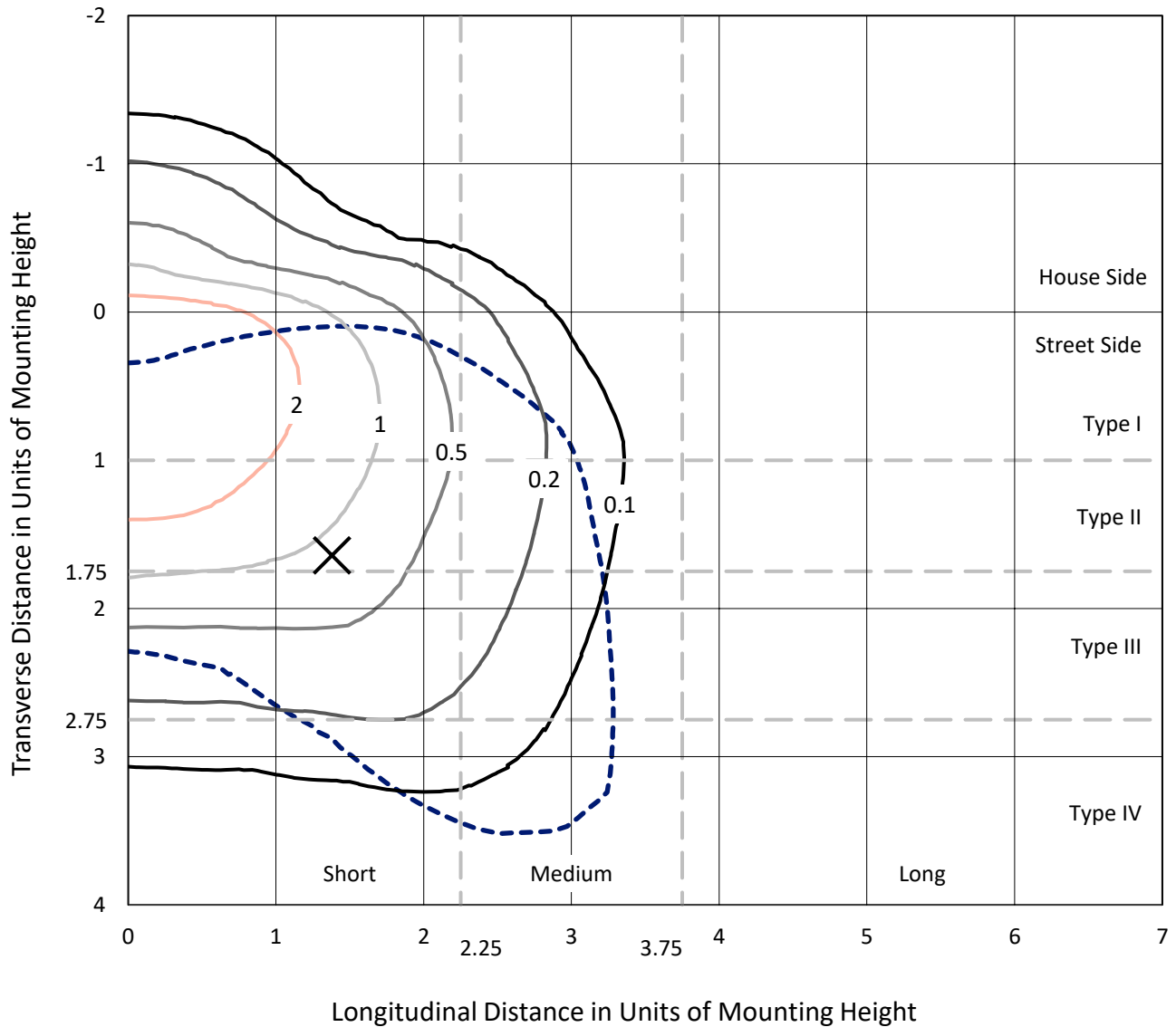
Lumens per Lamp: N/A  
Luminaire Lumens: 8384.3 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 90  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6.20%  
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

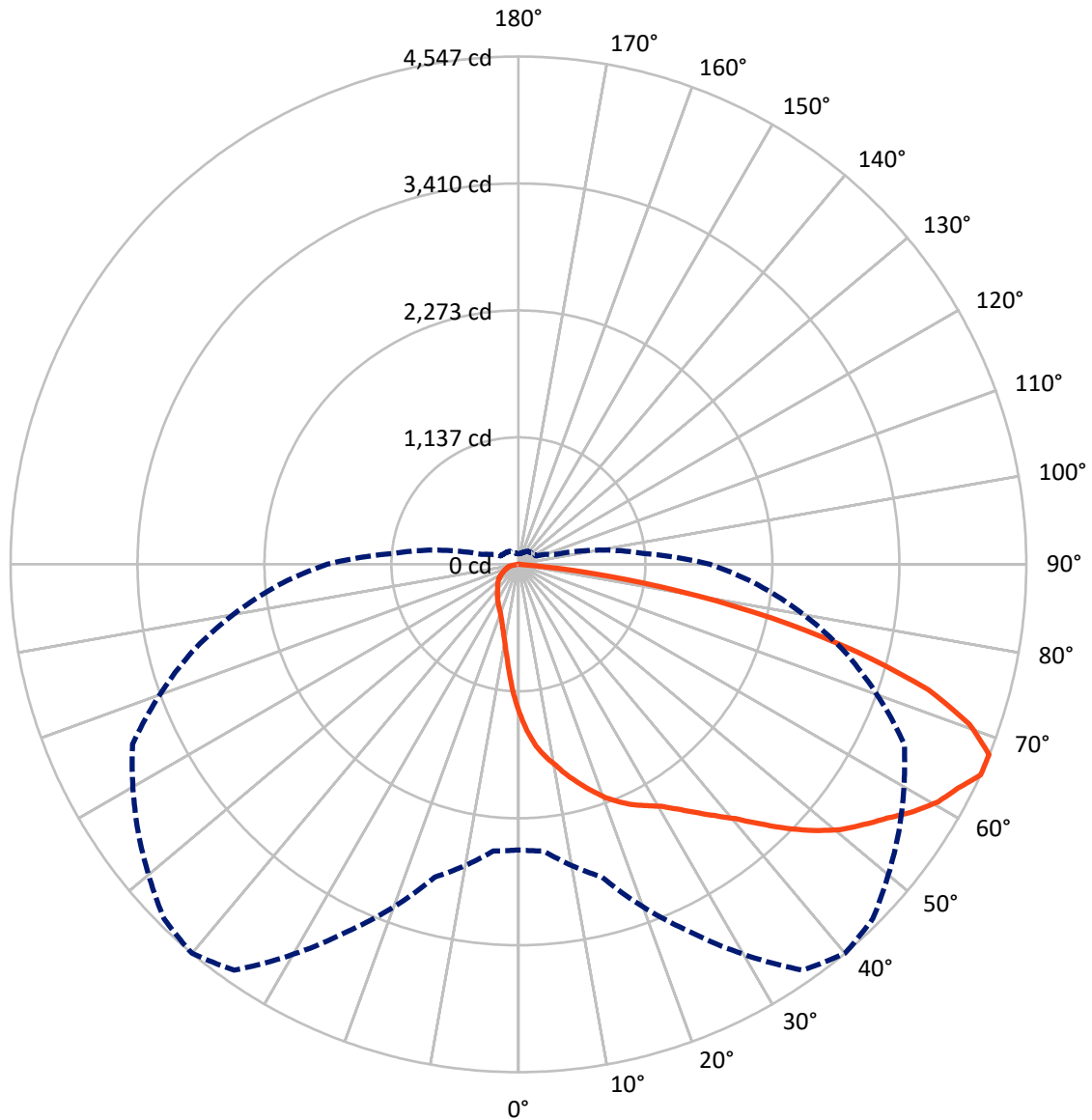
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.8 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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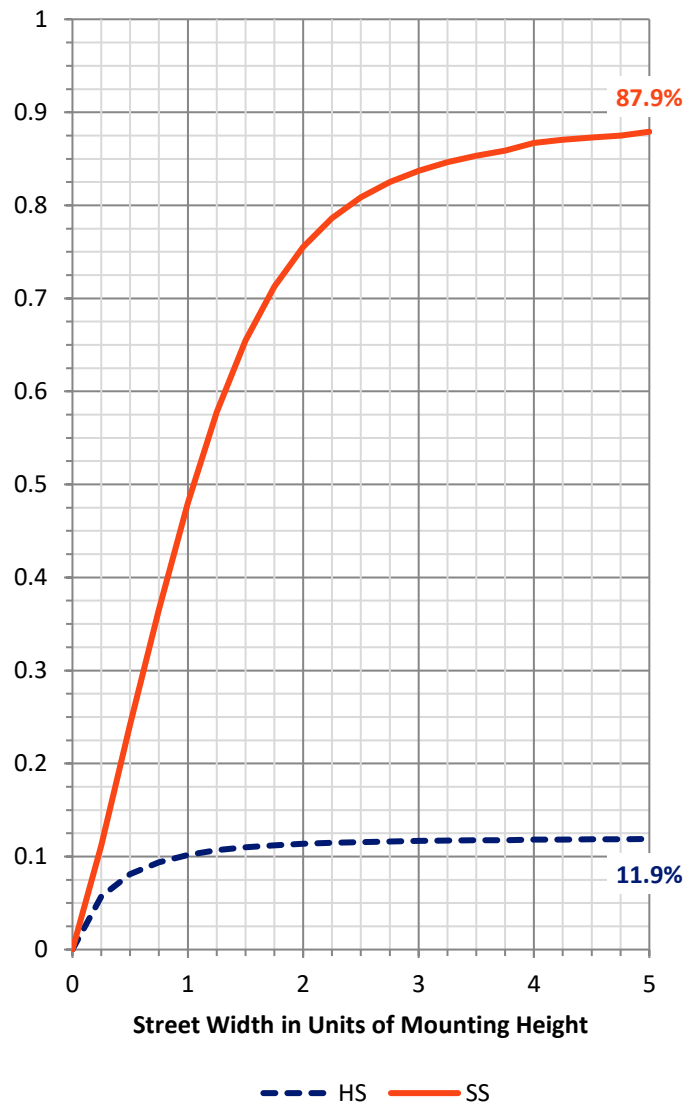
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1003.8	0.0	1003.8
	% Fixture	12.0	0.0	12.0
<b>Street Side</b>	Lumens	7380.5	0.0	7380.5
	% Fixture	88.0	0.0	88.0
<b>Total</b>	Lumens	8384.3	0.0	8384.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.8	1.5
10°-20°	375.1	4.5
20°-30°	645.3	7.7
30°-40°	975.5	11.6
40°-50°	1426.3	17.0
50°-60°	1821.8	21.7
60°-70°	1818.1	21.7
70°-80°	1066.1	12.7
80°-90°	131.3	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°	8384.3	100.0
0°-180°	8384.3	100.0



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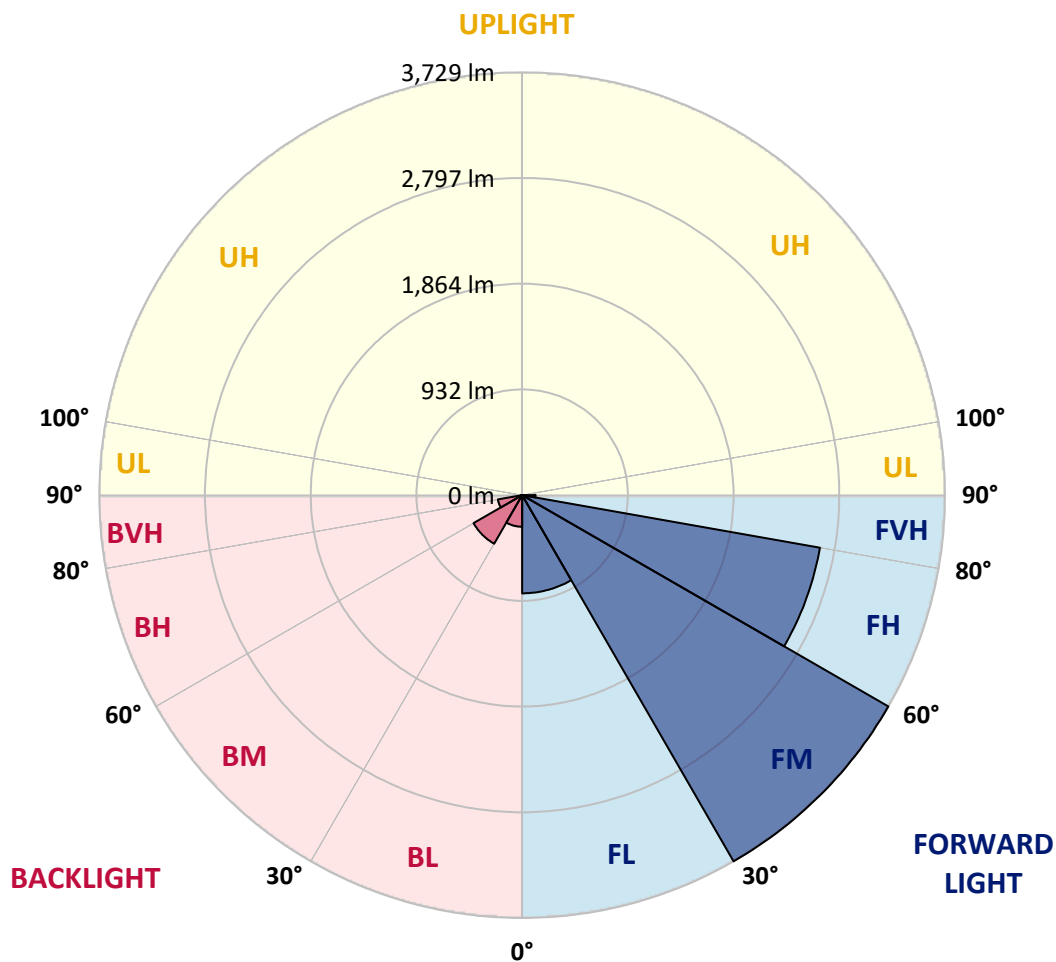
CATALOG NUMBER: EMM2-HSN-SA2B-727-U-T4W-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	866.0	10.3			
FM (30°-60°)	3729.0	44.5			
FH (60°-80°)	2666.9	31.8			G2/5000
FVH (80°-90°)	118.7	1.4			G2/225
BL (0°-30°)	279.2	3.3	B1/500		
BM (30°-60°)	494.6	5.9	B1/1000		
BH (60°-80°)	217.3	2.6	B1/500		G1/500
BVH (80°-90°)	12.6	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°	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8
2.5°	1554.9	1547.8	1533.6	1521.8	1505.3	1491.1	1476.9	1450.9	1417.8	1389.5	1354.0
5°	1708.5	1696.7	1687.2	1673.0	1644.7	1632.9	1623.4	1569.1	1512.3	1453.3	1375.3
7.5°	1817.2	1826.6	1807.7	1786.5	1751.0	1736.8	1722.7	1668.3	1597.4	1512.3	1401.3
10°	1942.4	1944.8	1921.1	1895.2	1857.3	1829.0	1810.1	1743.9	1665.9	1571.4	1429.6
12.5°	2062.9	2062.9	2048.8	2010.9	1961.3	1935.3	1902.2	1826.6	1732.1	1621.0	1462.7
15°	2159.8	2164.5	2152.7	2124.4	2070.0	2034.6	2001.5	1914.1	1793.5	1677.8	1488.7
17.5°	2247.2	2244.9	2237.8	2211.8	2159.8	2131.5	2098.4	2001.5	1864.4	1722.7	1528.9
20°	2306.3	2306.3	2304.0	2289.8	2252.0	2230.7	2190.5	2088.9	1942.4	1788.8	1571.4
22.5°	2351.2	2348.9	2348.9	2351.2	2330.0	2308.7	2292.1	2190.5	2022.8	1845.5	1614.0
25°	2389.0	2386.7	2393.8	2398.5	2389.0	2384.3	2365.4	2287.4	2122.0	1911.7	1656.5
27.5°	2438.7	2445.7	2443.4	2443.4	2441.0	2445.7	2443.4	2377.2	2218.9	1982.6	1701.4
30°	2516.6	2528.5	2521.4	2511.9	2511.9	2514.3	2526.1	2483.6	2332.3	2070.0	1751.0
32.5°	2698.6	2686.8	2637.2	2604.1	2608.8	2611.2	2623.0	2599.3	2445.7	2169.3	1803.0
35°	2906.5	2892.4	2838.0	2762.4	2736.4	2726.9	2724.6	2710.4	2568.6	2275.6	1864.4
37.5°	3175.9	3180.6	3100.3	2991.6	2913.6	2854.5	2842.7	2812.0	2675.0	2372.5	1928.2
40°	3450.0	3431.1	3362.6	3256.3	3102.7	2994.0	2958.5	2916.0	2795.5	2474.1	1989.7
42.5°	3714.7	3679.2	3589.5	3473.7	3294.1	3175.9	3095.6	3041.2	2906.5	2585.2	2048.8
45°	4059.7	3958.1	3797.4	3693.4	3468.9	3372.1	3298.8	3178.3	3038.9	2696.2	2119.6
47.5°	4331.4	4135.3	3988.8	3943.9	3650.9	3561.1	3494.9	3327.2	3173.6	2821.5	2192.9
50°	4281.8	4161.3	4125.9	4085.7	3787.9	3733.6	3672.2	3497.3	3310.6	2953.8	2263.8
52.5°	4154.2	4168.4	4213.3	4144.8	3908.5	3870.7	3830.5	3679.2	3447.7	3062.5	2327.6
55°	4052.6	4081.0	4201.5	4180.2	4052.6	4010.1	3981.7	3858.8	3580.0	3161.7	2381.9
57.5°	3868.3	3844.7	3995.9	4241.7	4206.2	4173.1	4144.8	4047.9	3714.7	3232.6	2417.4
60°	3577.6	3490.2	3693.4	4166.0	4312.5	4317.3	4300.7	4189.7	3823.4	3232.6	2398.5
62.5°	3168.8	3086.1	3336.6	3913.2	4369.3	4414.2	4404.7	4239.3	3870.7	3161.7	2325.2
65°	2556.8	2575.7	2899.4	3627.3	4435.4	4546.5	4487.4	4158.9	3811.6	3024.7	2159.8
67.5°	2041.7	2098.4	2389.0	3256.3	4404.7	4544.1	4461.4	3932.1	3558.7	2833.3	1907.0
70°	1611.6	1649.4	1890.4	2755.3	4135.3	4281.8	4177.9	3584.7	3131.0	2537.9	1585.6
72.5°	1259.5	1294.9	1500.5	2204.7	3667.4	3837.6	3707.6	3116.8	2597.0	2152.7	1259.5
75°	957.0	983.0	1136.6	1699.0	2920.7	3133.4	3038.9	2495.4	2027.5	1703.8	964.1
77.5°	616.8	652.2	824.7	1191.0	2062.9	2318.1	2330.0	1864.4	1458.0	1231.1	708.9
80°	408.8	423.0	529.3	775.1	1269.0	1467.4	1536.0	1259.5	931.0	784.5	510.4
82.5°	170.1	189.0	252.8	389.9	635.7	638.0	730.2	531.7	378.1	333.2	215.0
85°	4.7	9.5	7.1	18.9	16.5	26.0	30.7	42.5	30.7	33.1	33.1
87.5°	0.0	0.0	2.4	2.4	4.7	4.7	4.7	4.7	4.7	7.1	4.7
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°	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8
2.5°	1337.5	1316.2	1273.7	1240.6	1205.1	1179.2	1155.5	1129.5	1113.0	1115.4	1098.8
5°	1337.5	1297.3	1212.2	1136.6	1068.1	1018.5	964.1	921.6	890.9	886.1	900.3
7.5°	1344.6	1278.4	1150.8	1037.4	942.9	864.9	808.2	765.6	744.4	730.2	727.8
10°	1351.7	1264.2	1094.1	949.9	831.8	746.7	697.1	649.8	626.2	623.8	616.8
12.5°	1356.4	1247.7	1042.1	862.5	739.6	659.3	609.7	571.9	553.0	553.0	550.6
15°	1372.9	1243.0	987.7	796.3	668.7	590.8	548.2	517.5	505.7	498.6	496.2
17.5°	1387.1	1233.5	940.5	730.2	604.9	536.4	496.2	475.0	463.2	458.4	456.1
20°	1408.4	1228.8	895.6	675.8	557.7	491.5	460.8	441.9	434.8	430.1	430.1
22.5°	1429.6	1224.1	850.7	628.6	517.5	458.4	430.1	413.5	406.4	404.1	401.7
25°	1455.6	1221.7	812.9	588.4	482.1	432.4	406.4	392.3	382.8	378.1	378.1
27.5°	1481.6	1224.1	775.1	548.2	451.3	408.8	382.8	366.3	359.2	349.7	352.1
30°	1517.1	1226.4	744.4	515.1	425.3	385.2	361.5	340.3	330.8	326.1	326.1
32.5°	1552.5	1235.9	713.6	484.4	399.4	366.3	337.9	319.0	307.2	304.8	302.5
35°	1590.3	1243.0	685.3	458.4	378.1	345.0	316.6	297.7	288.3	285.9	285.9
37.5°	1632.9	1254.8	664.0	434.8	356.8	323.7	297.7	278.8	271.7	269.4	269.4
40°	1677.8	1273.7	647.5	413.5	340.3	304.8	281.2	264.7	259.9	257.6	257.6
42.5°	1722.7	1290.2	633.3	397.0	323.7	288.3	269.4	252.8	245.8	245.8	245.8
45°	1765.2	1302.0	619.1	380.4	307.2	276.5	255.2	241.0	233.9	233.9	233.9
47.5°	1803.0	1313.8	597.8	363.9	290.7	259.9	243.4	229.2	222.1	222.1	222.1
50°	1843.2	1320.9	574.2	342.6	274.1	248.1	231.6	215.0	210.3	207.9	207.9
52.5°	1876.3	1320.9	543.5	321.4	255.2	231.6	217.4	203.2	196.1	191.4	191.4
55°	1899.9	1320.9	510.4	295.4	236.3	217.4	203.2	189.0	179.6	172.5	172.5
57.5°	1914.1	1313.8	472.6	264.7	217.4	198.5	189.0	172.5	153.6	139.4	134.7
60°	1902.2	1292.6	432.4	231.6	196.1	182.0	174.9	153.6	127.6	120.5	120.5
62.5°	1852.6	1243.0	392.3	203.2	179.6	165.4	158.3	134.7	115.8	108.7	108.7
65°	1713.2	1122.4	342.6	177.2	160.7	151.2	141.8	120.5	104.0	94.5	94.5
67.5°	1510.0	968.8	285.9	156.0	144.1	137.1	130.0	108.7	92.2	82.7	82.7
70°	1224.1	782.2	243.4	137.1	127.6	122.9	115.8	99.2	80.3	73.3	73.3
72.5°	961.8	614.4	203.2	122.9	118.2	108.7	104.0	87.4	73.3	66.2	66.2
75°	716.0	458.4	179.6	108.7	108.7	96.9	94.5	78.0	63.8	59.1	59.1
77.5°	527.0	340.3	156.0	94.5	94.5	85.1	80.3	68.5	59.1	54.3	54.3
80°	356.8	231.6	115.8	70.9	70.9	68.5	63.8	59.1	49.6	44.9	42.5
82.5°	151.2	96.9	56.7	35.4	33.1	26.0	21.3	16.5	16.5	14.2	14.2
85°	26.0	11.8	11.8	9.5	7.1	7.1	7.1	4.7	4.7	4.7	4.7
87.5°	4.7	4.7	4.7	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: SP1-2407-157-3

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:  $4\pi$   
 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**

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)