

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: P868970

Luminaire Tested: **EMM2-HSN-SA1A-722-U-T3-HSS**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868970  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA1A-722-U-T3-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 40W 70CRI 2200K  
FIXTURE w/ TYPE III DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (10) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

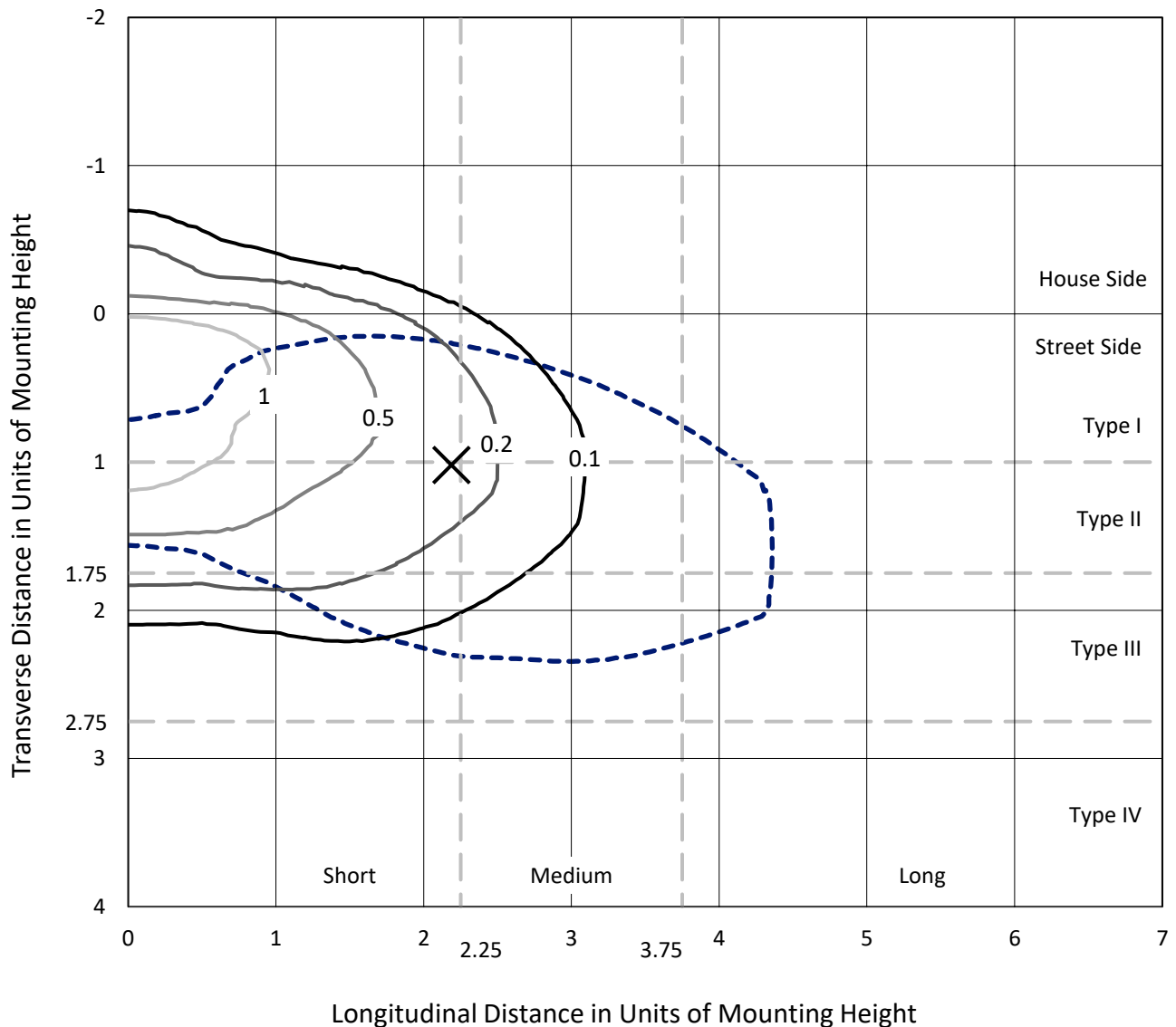
Lumens per Lamp: N/A  
Luminaire Lumens: 2978.4 lumens  
Efficiency: N/A  
Efficacy: 90.8 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1

Input Watts (W): 32.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 9.76%  
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

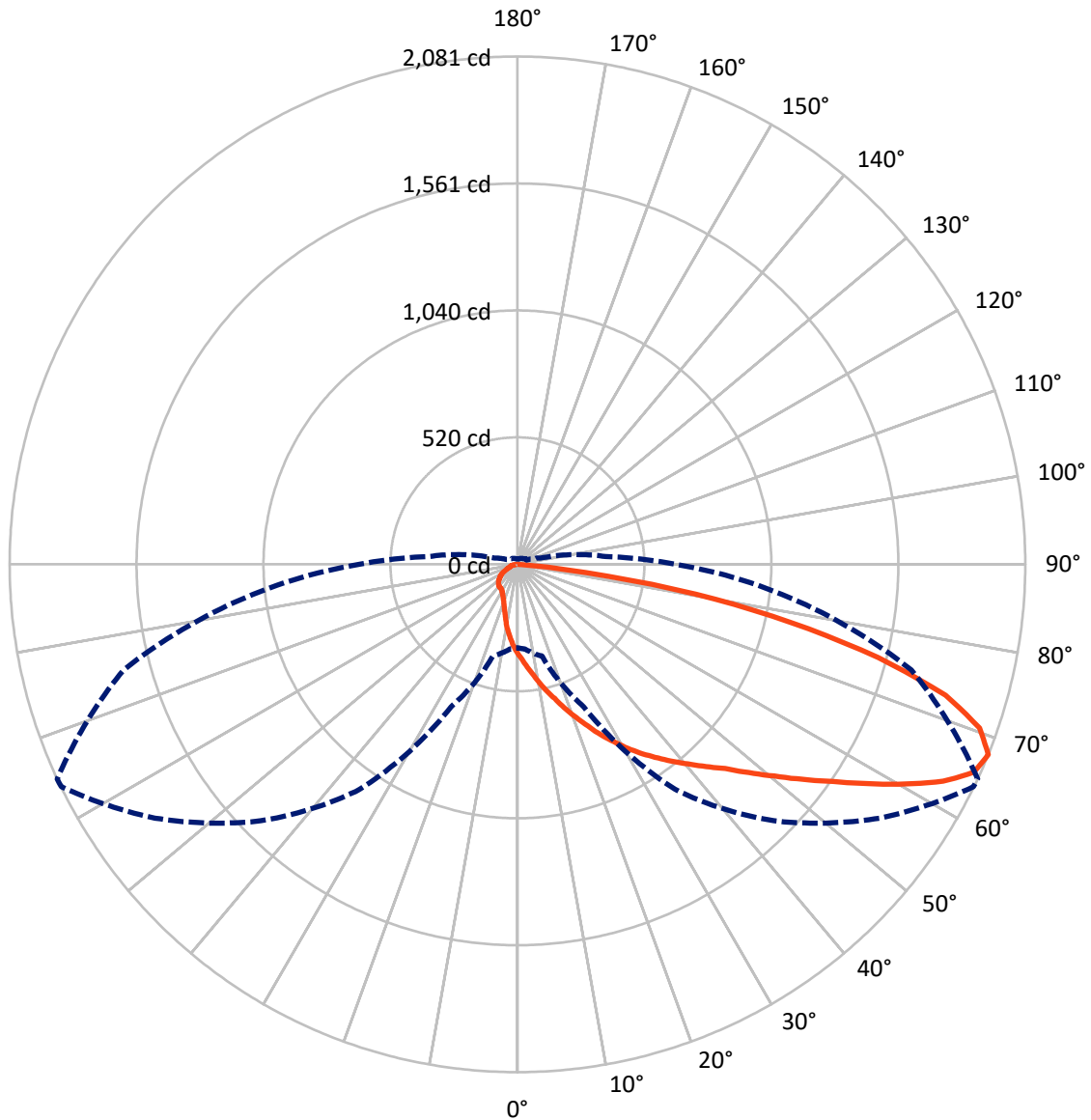
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 1.7 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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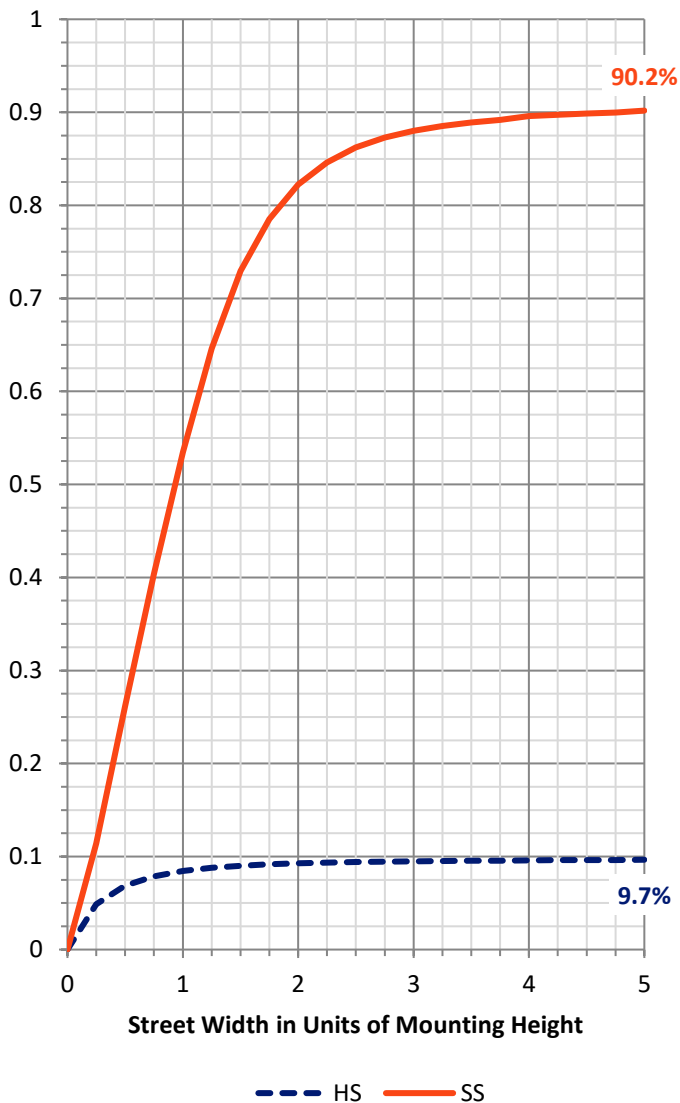
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	289.8	0.0	289.8
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	2688.6	0.0	2688.6
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	2978.4	0.0	2978.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.0	1.2
10°-20°	119.5	4.0
20°-30°	217.5	7.3
30°-40°	336.6	11.3
40°-50°	508.9	17.1
50°-60°	662.0	22.2
60°-70°	653.1	21.9
70°-80°	397.5	13.3
80°-90°	47.2	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°	2978.4	100.0
0°-180°	2978.4	100.0

**Coefficient of Utilization**



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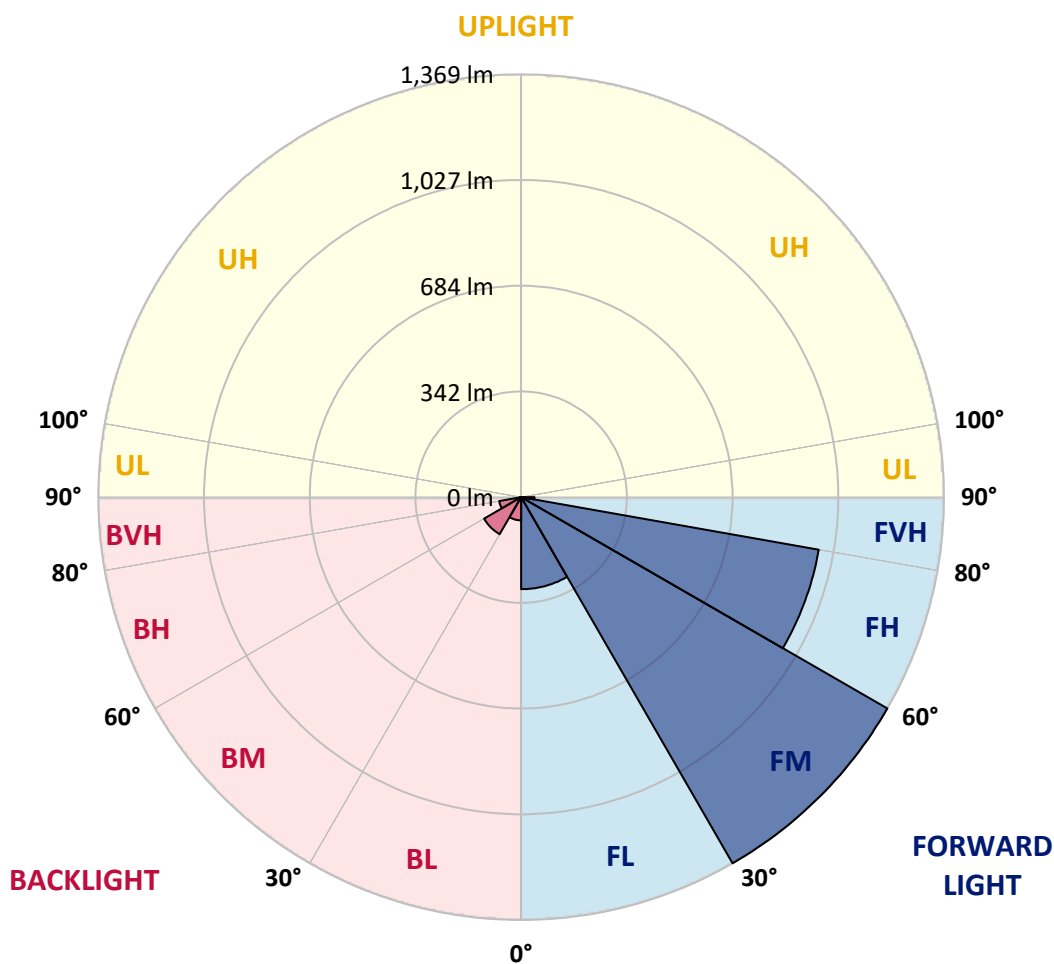
CATALOG NUMBER: EMM2-HSN-SA1A-722-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	298.0	10.0			
FM (30°-60°)	1368.9	46.0			
FH (60°-80°)	978.4	32.9			G1/1800
FVH (80°-90°)	43.2	1.4			G1/100
BL (0°-30°)	75.0	2.5	B0/110		
BM (30°-60°)	138.6	4.7	B0/220		
BH (60°-80°)	72.2	2.4	B0/110		G0/110
BVH (80°-90°)	4.0	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0
2.5°	430.1	426.7	429.2	423.3	416.5	411.4	401.2	392.7	391.8	383.3	374.0
5°	512.5	501.5	502.3	490.4	476.0	460.7	444.5	423.3	423.3	402.9	381.6
7.5°	586.5	584.8	577.1	558.4	541.4	517.6	487.9	460.7	454.7	423.3	390.1
10°	657.9	655.3	648.5	634.1	605.2	578.8	541.4	500.6	493.0	447.9	400.3
12.5°	714.8	715.7	708.0	696.1	670.6	639.2	589.9	538.9	532.1	471.7	410.5
15°	765.0	764.1	762.4	752.2	727.6	698.7	640.9	581.4	570.3	497.2	420.7
17.5°	803.2	801.5	798.1	789.6	777.7	749.7	694.4	626.4	617.1	527.0	432.6
20°	814.3	813.4	813.4	819.4	814.3	797.3	748.0	673.2	663.0	558.4	448.8
22.5°	834.7	833.8	833.0	838.9	842.3	840.6	798.1	720.8	711.4	595.0	469.2
25°	861.0	859.3	856.8	862.7	867.0	877.2	848.3	776.9	765.8	637.5	489.6
27.5°	895.9	897.6	894.2	893.3	893.3	899.3	892.5	827.0	816.8	678.3	513.4
30°	941.8	944.3	938.4	934.1	926.5	925.6	927.3	883.1	868.7	722.5	538.0
32.5°	986.8	989.4	986.0	980.0	960.5	952.8	959.6	930.7	921.4	770.9	569.5
35°	1023.4	1029.3	1029.3	1017.4	990.2	986.0	997.0	977.5	970.7	827.9	606.9
37.5°	1072.7	1076.1	1072.7	1050.6	1016.6	1021.7	1038.7	1026.8	1022.5	889.1	651.1
40°	1178.1	1182.3	1160.2	1107.5	1053.1	1059.1	1088.8	1082.0	1075.2	949.4	691.9
42.5°	1325.1	1314.9	1310.7	1193.4	1109.2	1105.8	1143.2	1133.9	1133.0	1010.6	729.3
45°	1422.0	1425.4	1404.2	1292.8	1227.4	1163.6	1203.6	1200.2	1193.4	1072.7	774.3
47.5°	1489.2	1481.5	1428.8	1375.3	1388.0	1239.3	1270.7	1279.2	1275.0	1143.2	829.6
50°	1517.2	1509.6	1474.7	1439.0	1454.3	1326.0	1339.6	1367.6	1363.4	1214.6	876.3
52.5°	1482.4	1473.0	1475.6	1484.9	1477.3	1394.0	1424.6	1468.8	1463.7	1297.9	930.7
55°	1260.5	1285.2	1380.4	1475.6	1473.0	1445.8	1515.5	1580.1	1569.9	1384.6	977.5
57.5°	1016.6	1030.2	1150.9	1408.4	1459.4	1489.2	1619.2	1699.1	1695.7	1471.3	1020.0
60°	808.3	822.8	914.6	1269.0	1428.0	1534.2	1725.5	1830.9	1827.5	1558.9	1050.6
62.5°	642.6	642.6	724.2	1068.4	1367.6	1560.6	1809.6	1963.5	1957.5	1629.4	1058.2
65°	462.4	468.3	529.5	859.3	1269.9	1553.8	1850.4	2057.8	2054.4	1669.4	1042.1
67.5°	341.7	348.5	389.3	644.3	1125.4	1485.8	1813.0	2079.1	2080.8	1670.2	989.4
70°	266.9	268.6	299.2	447.9	922.2	1334.5	1672.8	2008.5	2008.5	1628.6	911.2
72.5°	203.1	204.8	231.2	305.1	679.1	1103.3	1462.8	1821.5	1834.3	1518.1	795.6
75°	157.2	160.6	178.5	219.3	425.8	784.5	1201.9	1491.7	1526.6	1303.9	655.3
77.5°	121.5	124.9	139.4	160.6	248.2	483.6	844.9	1115.2	1146.6	1026.8	505.7
80°	97.7	99.4	108.8	120.7	150.4	249.0	515.9	732.7	742.0	697.8	334.9
82.5°	45.0	48.4	58.6	66.3	74.8	115.6	220.1	271.1	283.0	277.1	137.7
85°	5.1	5.1	5.9	6.8	7.6	11.9	15.3	13.6	13.6	16.1	14.4
87.5°	0.0	0.0	0.0	0.8	1.7	1.7	2.5	2.5	2.5	2.5	2.5
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°	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0	368.0
2.5°	368.9	362.9	351.9	342.5	334.0	325.5	321.3	311.1	308.5	310.2	304.3
5°	370.6	358.7	335.7	314.5	296.6	279.6	265.2	249.9	246.5	241.4	238.8
7.5°	373.1	355.3	319.6	286.4	259.2	234.6	216.7	204.8	195.5	192.9	192.1
10°	376.5	351.0	301.7	260.1	222.7	197.2	181.0	172.5	169.1	166.6	167.4
12.5°	379.1	346.8	284.7	230.3	193.8	170.8	163.2	156.4	154.7	153.8	153.8
15°	382.5	342.5	264.3	204.0	169.1	155.5	147.9	145.3	145.3	144.5	144.5
17.5°	386.7	339.1	247.3	183.6	154.7	141.9	138.5	135.1	135.1	135.1	134.3
20°	395.2	337.4	232.0	166.6	141.9	133.4	128.3	125.8	124.9	124.1	124.1
22.5°	403.7	337.4	215.0	153.8	133.4	124.1	119.0	116.4	115.6	115.6	115.6
25°	415.6	336.6	201.4	142.8	125.8	114.7	109.6	107.1	105.4	105.4	104.5
27.5°	429.2	336.6	189.5	134.3	117.3	106.2	100.3	97.7	95.2	95.2	94.3
30°	442.8	338.3	179.3	127.5	108.8	98.6	90.9	87.5	85.8	85.0	85.0
32.5°	460.7	343.4	172.5	122.4	101.1	90.9	83.3	79.9	78.2	77.3	77.3
35°	487.9	356.1	173.4	119.8	96.0	84.1	76.5	72.2	71.4	71.4	70.5
37.5°	516.8	368.0	175.9	118.1	90.9	79.0	71.4	67.1	66.3	66.3	66.3
40°	541.4	378.2	179.3	117.3	86.7	73.9	67.1	63.7	62.0	62.0	62.0
42.5°	566.1	384.2	180.2	114.7	84.1	69.7	63.7	60.3	58.6	59.5	59.5
45°	590.7	388.4	177.6	111.3	81.6	66.3	60.3	56.9	55.2	55.2	55.2
47.5°	620.5	397.8	173.4	106.2	79.9	63.7	56.9	53.5	52.7	52.7	52.7
50°	650.2	405.4	170.0	100.3	75.6	60.3	54.4	50.1	49.3	49.3	49.3
52.5°	674.9	408.8	165.7	92.6	71.4	56.9	51.0	46.7	45.0	45.0	45.0
55°	693.6	409.7	159.8	86.7	65.4	53.5	47.6	43.3	41.6	40.8	40.8
57.5°	708.9	408.8	153.8	80.7	60.3	49.3	43.3	39.9	37.4	36.5	36.5
60°	717.4	406.3	145.3	73.1	53.5	45.0	39.9	35.7	34.0	33.1	33.1
62.5°	712.3	399.5	133.4	61.2	48.4	40.8	36.5	33.1	30.6	29.7	29.7
65°	688.5	385.9	118.1	50.1	43.3	36.5	33.1	29.7	26.3	25.5	25.5
67.5°	646.8	362.9	97.7	42.5	39.9	33.1	29.7	26.3	23.8	22.1	22.1
70°	589.0	332.3	76.5	36.5	35.7	30.6	27.2	23.8	21.2	19.5	19.5
72.5°	506.6	282.2	56.9	31.4	31.4	28.0	24.6	22.1	19.5	17.8	17.8
75°	409.7	213.3	43.3	28.9	28.0	25.5	22.1	19.5	17.8	16.1	16.1
77.5°	299.2	141.9	35.7	26.3	26.3	22.9	20.4	17.8	16.1	15.3	15.3
80°	181.9	81.6	25.5	20.4	20.4	19.5	17.0	15.3	14.4	12.7	11.9
82.5°	73.9	31.4	13.6	10.2	10.2	9.3	5.9	5.1	5.1	5.1	4.2
85°	7.6	5.1	3.4	2.5	2.5	2.5	1.7	1.7	1.7	1.7	1.7
87.5°	2.5	2.5	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8
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: SP1-2407-157-2

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-722-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-722-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-2  
 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-40-722-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 2253  
 CIE u': 0.2868  
 CIE v': 0.5332  
 Duv: -0.0014  
 CIE x: 0.4974  
 CIE y: 0.4110  
 CIE z: 0.0915  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 587  
 Purity: 72.69432  
 Rf: 76.9  
 Rg: 92.7

CRI (Ra):	70.6		
R1:	68.4	R9:	-36.0
R2:	88.7	R10:	78.2
R3:	85.4	R11:	61.0
R4:	63.5	R12:	74.2
R5:	69.0	R13:	72.8
R6:	88.9	R14:	92.2
R7:	68.5	R15:	58.0
R8:	32.0		



**Test Conditions**

Stabilization Time: 29M  
 Operation Time: 1H 29M  
 Sphere Temperature (°C): 24.1

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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 2200K 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	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 0.96**

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	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.71

λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)
360	0	NR	490	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

**Summary**

$R_f = 76.9$   
 $R_g = 92.7$   
 CIE  $R_a = 70.6$   
 $R_9 = -36.0$



**Color Vector Graphics**





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

CES01 = 87	CES26 = 76	CES51 = 88	CES76 = 78
CES02 = 65	CES27 = 94	CES52 = 85	CES77 = 75
CES03 = 32	CES28 = 93	CES53 = 80	CES78 = 79
CES04 = 72	CES29 = 81	CES54 = 86	CES79 = 82
CES05 = 51	CES30 = 91	CES55 = 83	CES80 = 81
CES06 = 52	CES31 = 83	CES56 = 77	CES81 = 51
CES07 = 44	CES32 = 75	CES57 = 75	CES82 = 92
CES08 = 42	CES33 = 88	CES58 = 76	CES83 = 88
CES09 = 29	CES34 = 88	CES59 = 84	CES84 = 90
CES10 = 79	CES35 = 94	CES60 = 91	CES85 = 65
CES11 = 62	CES36 = 90	CES61 = 82	CES86 = 48
CES12 = 68	CES37 = 97	CES62 = 91	CES87 = 76
CES13 = 45	CES38 = 98	CES63 = 86	CES88 = 78
CES14 = 75	CES39 = 97	CES64 = 70	CES89 = 61
CES15 = 72	CES40 = 94	CES65 = 71	CES90 = 80
CES16 = 48	CES41 = 95	CES66 = 71	CES91 = 80
CES17 = 51	CES42 = 89	CES67 = 70	CES92 = 51
CES18 = 57	CES43 = 80	CES68 = 74	CES93 = 68
CES19 = 74	CES44 = 99	CES69 = 84	CES94 = 44
CES20 = 68	CES45 = 83	CES70 = 72	CES95 = 66
CES21 = 88	CES46 = 81	CES71 = 75	CES96 = 75
CES22 = 81	CES47 = 88	CES72 = 89	CES97 = 76
CES23 = 92	CES48 = 73	CES73 = 68	CES98 = 72
CES24 = 92	CES49 = 82	CES74 = 85	CES99 = 63
CES25 = 73	CES50 = 87	CES75 = 80	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)