

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: STREETWORKS

Report Number: P868093

Luminaire Tested: **MEM2-HSN-SA-40-722-U-T4W**

Issue Date: 08/21/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868093  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-SA-40-722-U-T4W  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 40W 70CRI 2200K  
FITXURE w/ TYPE IV WIDE DISTRIBUTION OPTIC  
Light Source: (10) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

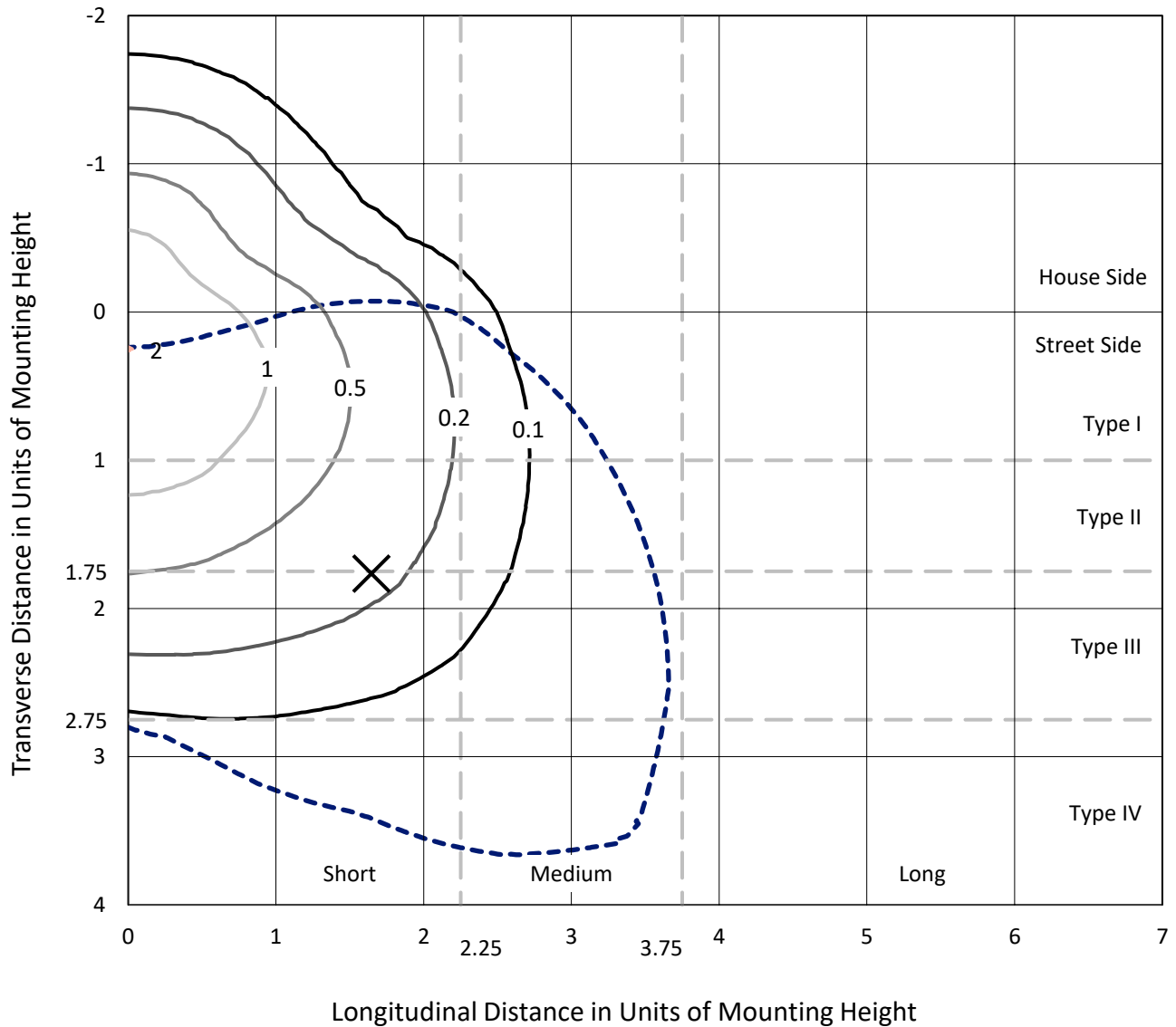
Lumens per Lamp: N/A  
Luminaire Lumens: 4201.1 lumens  
Efficiency: N/A  
Efficacy: 128.1 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

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

REPORT NUMBER: P868093  
 CATALOG NUMBER: MEM2-HSN-SA-40-722-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

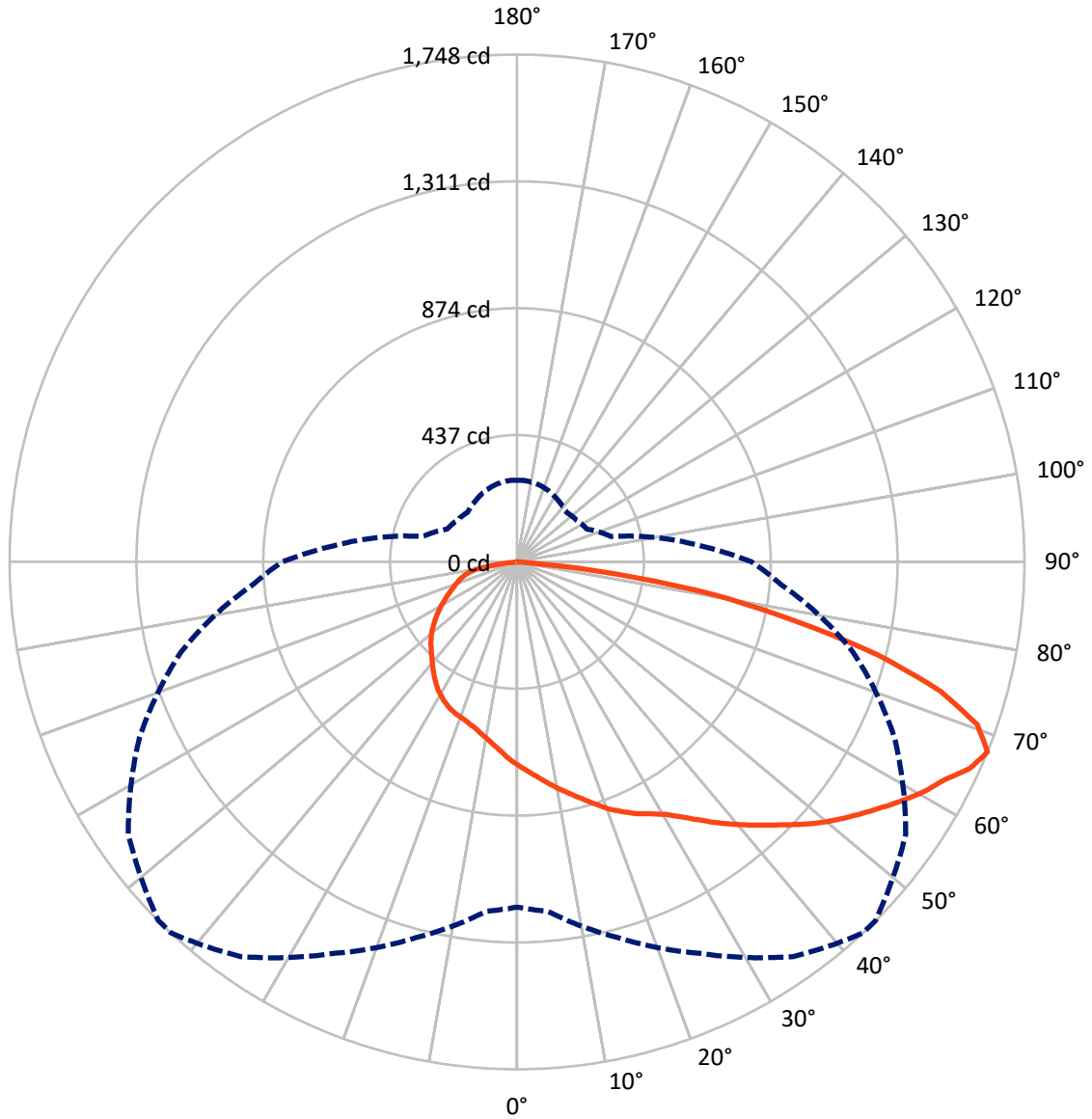
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 43-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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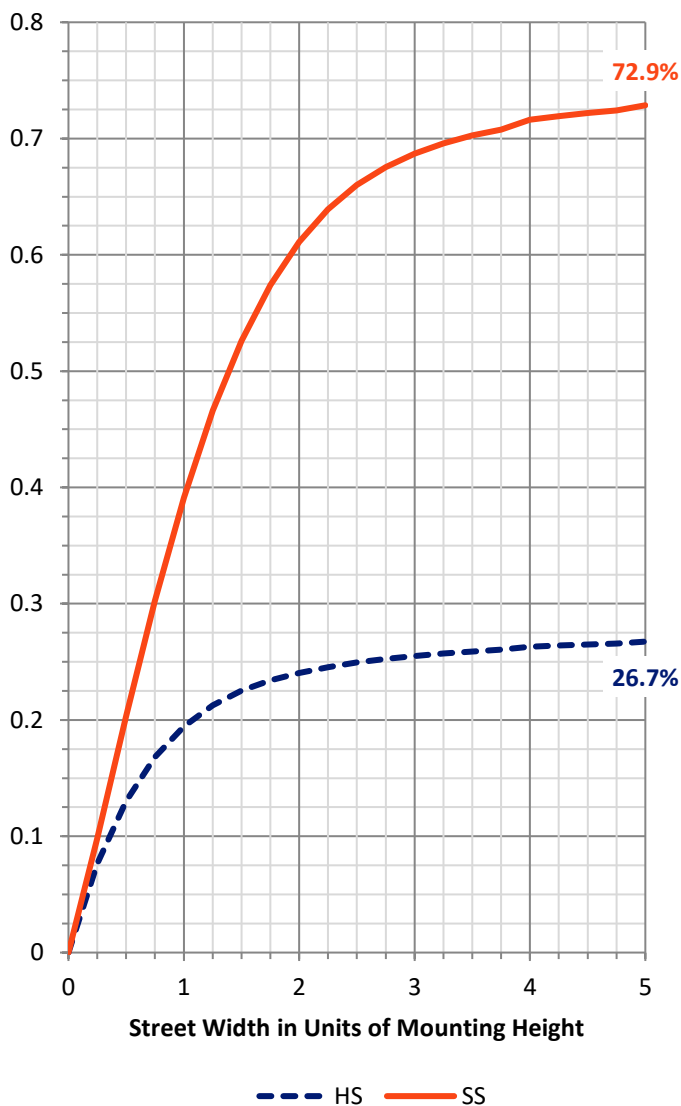
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1130.1	0.0	1130.1
	% Fixture	26.9	0.0	26.9
<b>Street Side</b>	Lumens	3070.9	0.0	3070.9
	% Fixture	73.1	0.0	73.1
<b>Total</b>	Lumens	4201.1	0.0	4201.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.1	1.6
10°-20°	205.0	4.9
20°-30°	349.7	8.3
30°-40°	510.0	12.1
40°-50°	685.1	16.3
50°-60°	838.7	20.0
60°-70°	882.7	21.0
70°-80°	576.3	13.7
80°-90°	86.5	2.1
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°	4201.1	100.0
0°-180°	4201.1	100.0



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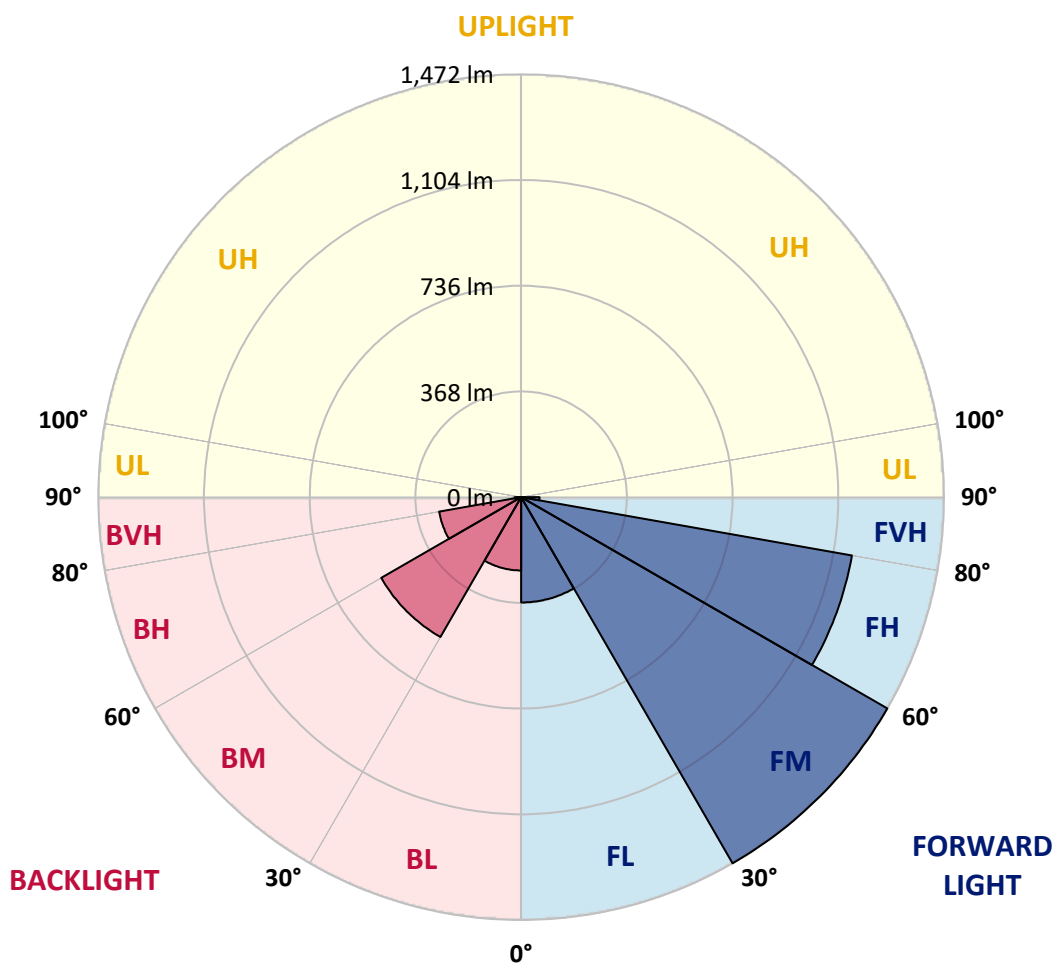
CATALOG NUMBER: MEM2-HSN-SA-40-722-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	366.6	8.7			
FM (30°-60°)	1471.6	35.0			
FH (60°-80°)	1168.9	27.8			G1/1800
FVH (80°-90°)	63.8	1.5			G1/100
BL (0°-30°)	255.1	6.1	B1/500		
BM (30°-60°)	562.3	13.4	B1/1000		
BH (60°-80°)	290.0	6.9	B1/500		G1/500
BVH (80°-90°)	22.7	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type IV Short





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CATALOG NUMBER: MEM2-HSN-SA-40-722-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3
2.5°	733.6	732.7	730.2	728.5	723.4	722.5	722.5	717.4	711.5	708.1	704.7
5°	766.7	762.5	760.8	757.4	748.9	743.8	745.5	736.1	724.2	715.7	706.4
7.5°	796.5	794.8	788.8	784.6	774.4	769.3	767.6	753.1	737.8	725.1	709.8
10°	832.2	827.9	824.5	816.0	802.4	794.8	792.2	773.5	754.0	737.0	716.6
12.5°	864.5	859.4	855.1	846.6	833.0	820.3	816.9	795.6	771.0	748.0	722.5
15°	889.1	890.0	885.7	878.1	862.8	847.5	844.9	816.9	787.1	759.1	728.5
17.5°	912.1	915.5	912.9	907.8	892.5	877.2	874.7	843.2	807.5	771.8	735.3
20°	934.2	934.2	933.3	929.9	918.9	908.7	903.6	872.1	827.1	785.4	744.6
22.5°	946.9	950.3	950.3	950.3	943.5	935.0	933.3	902.7	853.4	802.4	753.1
25°	966.5	970.7	970.7	969.0	963.1	960.5	958.0	929.1	878.9	822.0	762.5
27.5°	1008.1	1007.3	1000.5	992.0	983.5	982.6	979.2	958.8	908.7	843.2	775.2
30°	1065.9	1067.6	1059.1	1032.8	1013.2	1009.0	1009.8	992.0	943.5	867.9	789.7
32.5°	1154.3	1154.3	1121.2	1087.2	1059.1	1048.1	1045.5	1030.2	979.2	895.1	805.8
35°	1220.6	1218.1	1199.4	1159.4	1124.6	1093.1	1088.9	1068.5	1019.2	925.7	823.7
37.5°	1270.8	1275.9	1261.4	1230.8	1196.8	1142.4	1133.9	1105.0	1055.7	955.4	841.5
40°	1367.7	1355.0	1320.1	1292.0	1251.2	1190.9	1183.2	1147.5	1093.1	988.6	863.6
42.5°	1438.3	1420.4	1380.5	1343.1	1292.0	1239.3	1232.5	1193.4	1136.5	1026.0	886.6
45°	1539.4	1499.5	1444.2	1411.1	1338.8	1292.0	1283.5	1241.0	1181.5	1065.9	915.5
47.5°	1637.2	1567.5	1508.8	1493.5	1389.8	1349.0	1342.2	1292.9	1230.0	1109.3	943.5
50°	1624.4	1578.5	1559.0	1544.5	1434.0	1402.6	1395.8	1345.6	1279.3	1155.2	971.6
52.5°	1592.1	1596.4	1597.2	1562.4	1475.7	1452.7	1445.9	1402.6	1330.3	1195.1	998.8
55°	1626.1	1631.2	1630.4	1577.7	1524.1	1502.9	1498.6	1460.4	1379.6	1232.5	1018.3
57.5°	1678.0	1661.0	1658.4	1615.9	1576.0	1556.4	1551.3	1518.2	1421.3	1259.7	1033.6
60°	1687.3	1653.3	1664.4	1624.4	1615.1	1609.1	1607.4	1568.3	1460.4	1281.8	1039.6
62.5°	1582.8	1576.8	1620.2	1604.0	1635.5	1652.5	1653.3	1604.0	1481.6	1290.3	1033.6
65°	1404.3	1428.1	1521.6	1568.3	1666.1	1714.5	1712.8	1625.3	1479.1	1265.7	997.1
67.5°	1189.2	1207.9	1339.7	1487.6	1659.3	1747.7	1746.8	1634.6	1434.9	1197.7	914.6
70°	901.9	960.5	1147.5	1342.2	1567.5	1682.2	1696.7	1581.9	1333.7	1073.6	789.7
72.5°	686.0	695.3	921.4	1125.4	1403.4	1526.7	1524.1	1413.6	1164.5	904.4	657.9
75°	487.1	507.5	693.6	872.1	1150.1	1286.9	1281.0	1159.4	929.1	703.8	503.2
77.5°	363.0	370.6	507.5	646.9	860.2	983.5	980.9	856.8	683.4	516.8	374.9
80°	265.2	278.0	365.5	451.4	583.1	689.4	686.0	568.7	438.6	361.3	273.7
82.5°	148.8	158.1	212.5	272.9	307.7	340.9	326.4	272.9	199.8	155.6	134.3
85°	4.3	5.1	7.7	9.4	16.2	27.2	29.8	26.4	31.5	19.6	21.3
87.5°	1.7	1.7	1.7	1.7	1.7	2.6	2.6	2.6	2.6	2.6	2.6
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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CATALOG NUMBER: MEM2-HSN-SA-40-722-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3
2.5°	703.0	699.6	692.8	688.5	686.0	682.6	677.5	674.1	671.5	674.9	674.1
5°	702.1	695.3	683.4	674.9	666.4	659.6	652.0	646.0	642.6	644.3	643.5
7.5°	702.1	693.6	674.9	661.3	648.6	638.4	629.9	622.2	618.8	619.7	618.8
10°	705.5	693.6	669.0	649.4	632.4	620.5	611.2	604.4	601.8	604.4	605.2
12.5°	708.9	693.6	663.9	639.2	617.1	604.4	595.9	591.6	593.3	594.2	595.0
15°	710.6	692.8	658.8	627.3	602.7	589.1	584.0	583.1	587.4	591.6	592.5
17.5°	714.9	691.9	651.1	615.4	589.9	578.9	576.3	579.7	588.2	594.2	595.9
20°	720.0	693.6	642.6	601.0	577.2	568.7	572.9	580.6	590.8	599.3	601.0
22.5°	725.1	694.5	635.0	588.2	563.6	561.9	571.2	582.3	594.2	602.7	604.4
25°	731.0	694.5	624.8	572.1	550.0	552.5	567.0	581.4	592.5	603.5	605.2
27.5°	737.0	696.2	613.7	554.2	533.0	540.6	558.5	576.3	588.2	599.3	601.8
30°	747.2	699.6	604.4	538.9	516.0	526.2	547.4	567.8	580.6	592.5	595.0
32.5°	757.4	704.7	596.7	522.8	499.0	510.9	534.7	557.6	571.2	582.3	584.0
35°	771.0	711.5	590.8	506.6	482.0	491.3	516.8	542.3	557.6	566.1	570.4
37.5°	785.4	720.8	585.7	492.2	463.3	471.8	499.0	526.2	542.3	550.8	552.5
40°	803.3	733.6	582.3	478.6	445.4	452.2	479.4	509.2	524.5	530.4	533.8
42.5°	822.8	747.2	579.7	465.0	425.9	432.7	461.6	490.5	505.8	510.9	513.4
45°	847.5	765.0	578.0	450.5	409.7	415.7	444.6	473.5	486.2	493.0	495.6
47.5°	870.4	782.9	572.9	433.5	391.9	400.4	426.7	452.2	466.7	470.9	473.5
50°	893.4	798.2	562.7	414.8	375.7	383.4	407.2	425.9	436.9	442.0	443.7
52.5°	915.5	809.2	546.6	395.3	358.7	363.8	383.4	401.2	408.9	410.6	415.7
55°	929.9	815.2	523.6	372.3	341.7	343.4	357.9	374.0	378.3	379.1	379.1
57.5°	940.1	811.8	496.4	349.4	324.7	324.7	333.2	346.0	347.7	348.5	350.2
60°	941.8	799.9	461.6	328.1	306.0	303.5	312.0	319.6	320.5	322.2	323.9
62.5°	929.1	773.5	424.2	307.7	288.2	282.2	289.9	297.5	301.8	304.3	306.0
65°	890.0	720.0	381.7	287.3	271.2	261.0	270.3	283.1	291.6	292.4	292.4
67.5°	808.4	633.3	336.6	266.1	250.8	241.4	253.3	266.9	277.1	281.4	280.5
70°	685.1	537.2	295.0	244.0	230.4	224.4	237.2	252.5	261.0	264.4	266.1
72.5°	551.7	430.1	258.4	221.9	212.5	209.1	221.9	237.2	249.1	254.2	255.0
75°	429.3	338.3	227.8	198.9	191.3	192.1	205.7	221.0	233.8	236.3	228.7
77.5°	333.2	269.5	198.9	171.7	167.5	173.4	187.0	203.2	210.8	213.4	208.3
80°	240.6	206.6	160.7	135.2	135.2	144.5	156.4	175.1	177.7	174.3	176.0
82.5°	113.9	100.3	79.1	65.5	61.2	68.0	72.3	78.2	85.0	86.7	82.5
85°	15.3	10.2	7.7	8.5	7.7	5.1	3.4	3.4	3.4	2.6	2.6
87.5°	2.6	2.6	1.7	1.7	1.7	1.7	1.7	1.7	0.9	0.9	0.9
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  
 R2: 88.7  
 R3: 85.4  
 R4: 63.5  
 R5: 69.0  
 R6: 88.9  
 R7: 68.5  
 R8: 32.0  
 R9: -36.0  
 R10: 78.2  
 R11: 61.0  
 R12: 74.2  
 R13: 72.8  
 R14: 92.2  
 R15: 58.0



**Test Conditions**

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

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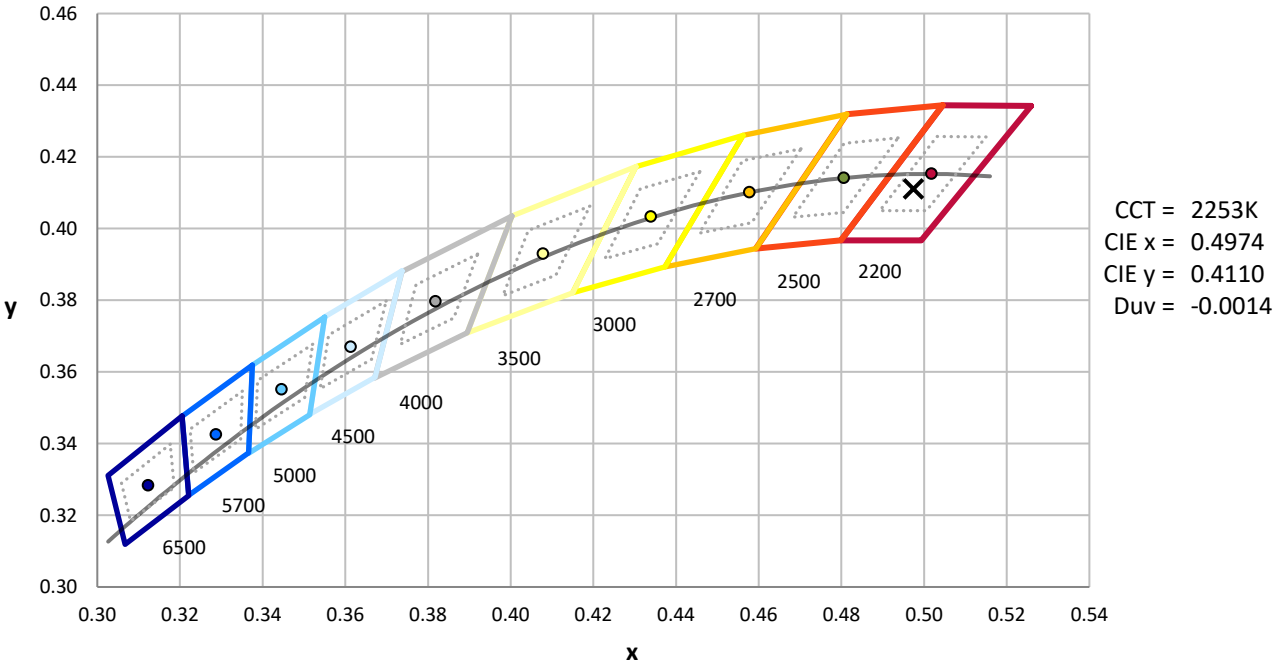
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	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**

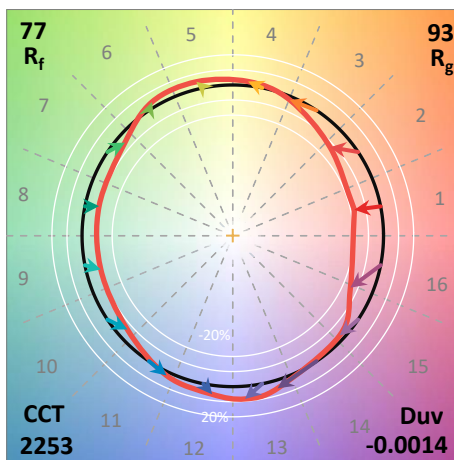
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	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			

**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)