

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: P870742

Luminaire Tested: **EMM2-HTN-SA2A-830-U-T2U-HSS**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P870742  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA2A-830-U-T2U-HSS  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 70W 80CRI 3000K  
FIXTURE w/ TYPE II URBAN DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (20) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

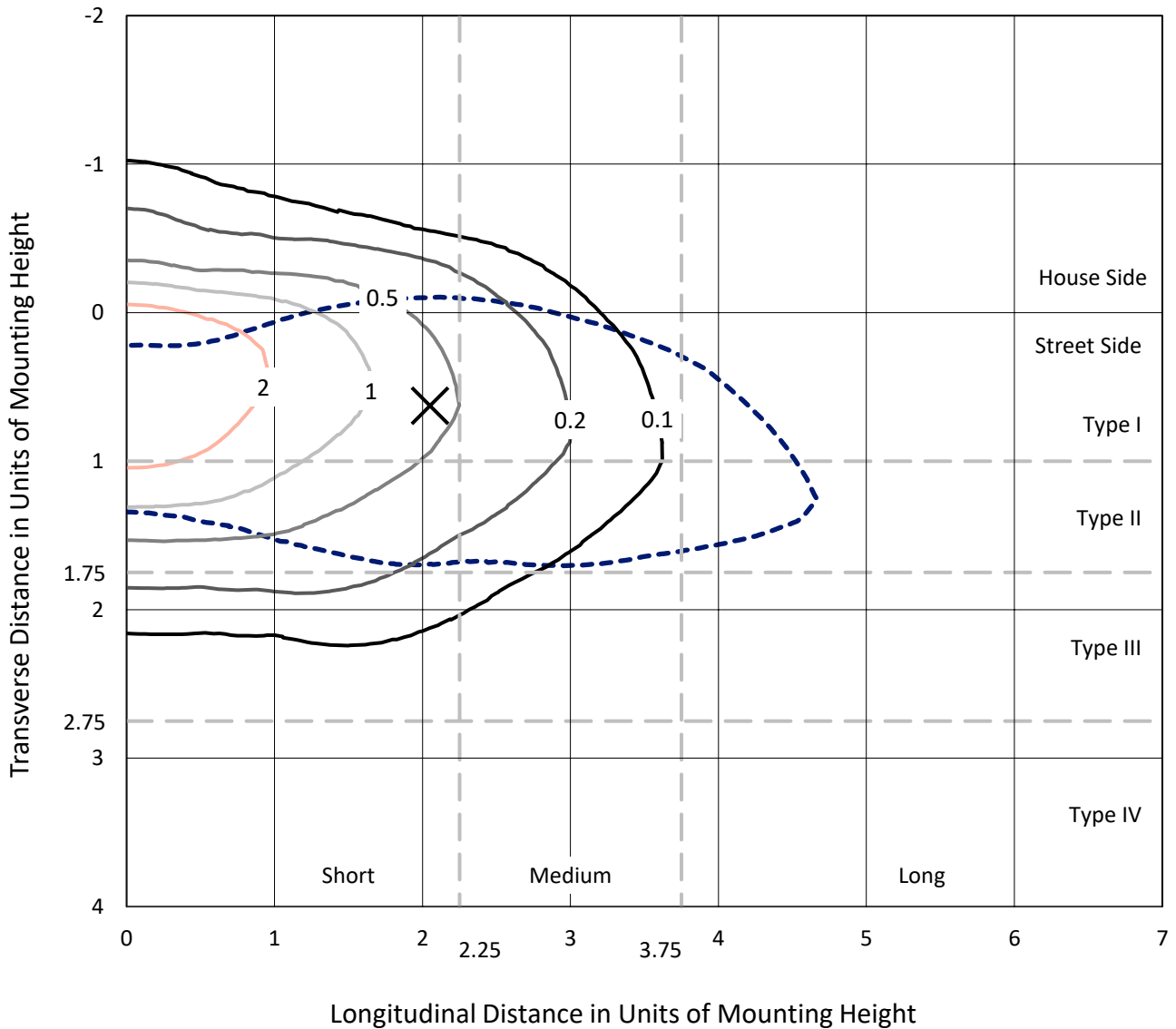
Lumens per Lamp: N/A  
Luminaire Lumens: 5529.3 lumens  
Efficiency: N/A  
Efficacy: 90.6 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 61  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 9.89%  
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

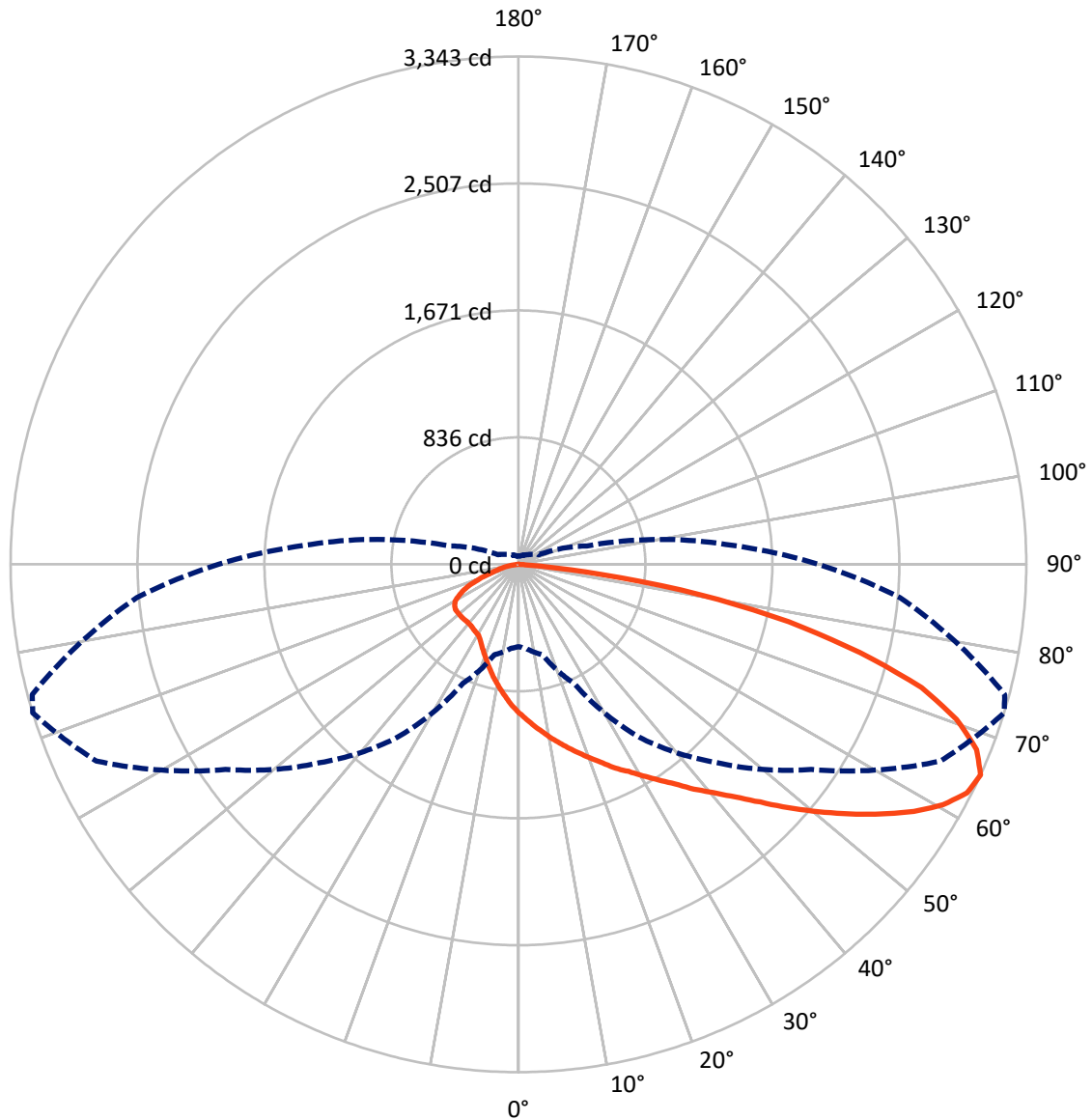
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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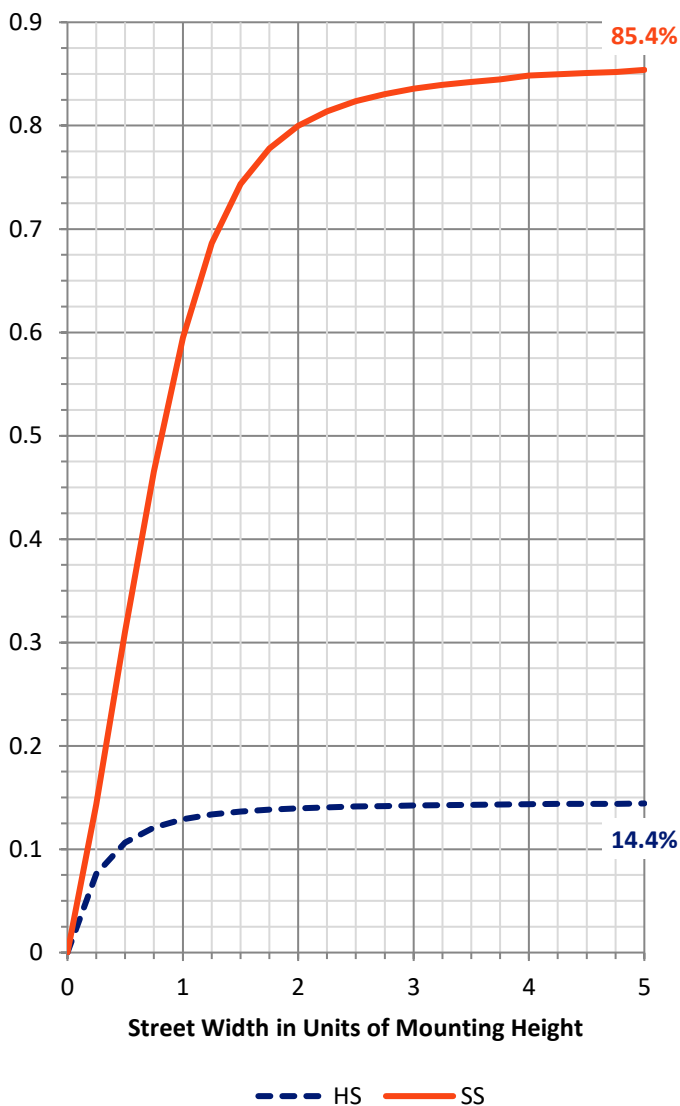
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	804.1	0.0	804.1
	% Fixture	14.5	0.0	14.5
<b>Street Side</b>	Lumens	4725.3	0.0	4725.3
	% Fixture	85.5	0.0	85.5
<b>Total</b>	Lumens	5529.3	0.0	5529.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.7	1.7
10°-20°	287.8	5.2
20°-30°	481.9	8.7
30°-40°	727.0	13.1
40°-50°	1027.2	18.6
50°-60°	1155.8	20.9
60°-70°	1036.4	18.7
70°-80°	630.4	11.4
80°-90°	88.2	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°	5529.3	100.0
0°-180°	5529.3	100.0

**Coefficient of Utilization**



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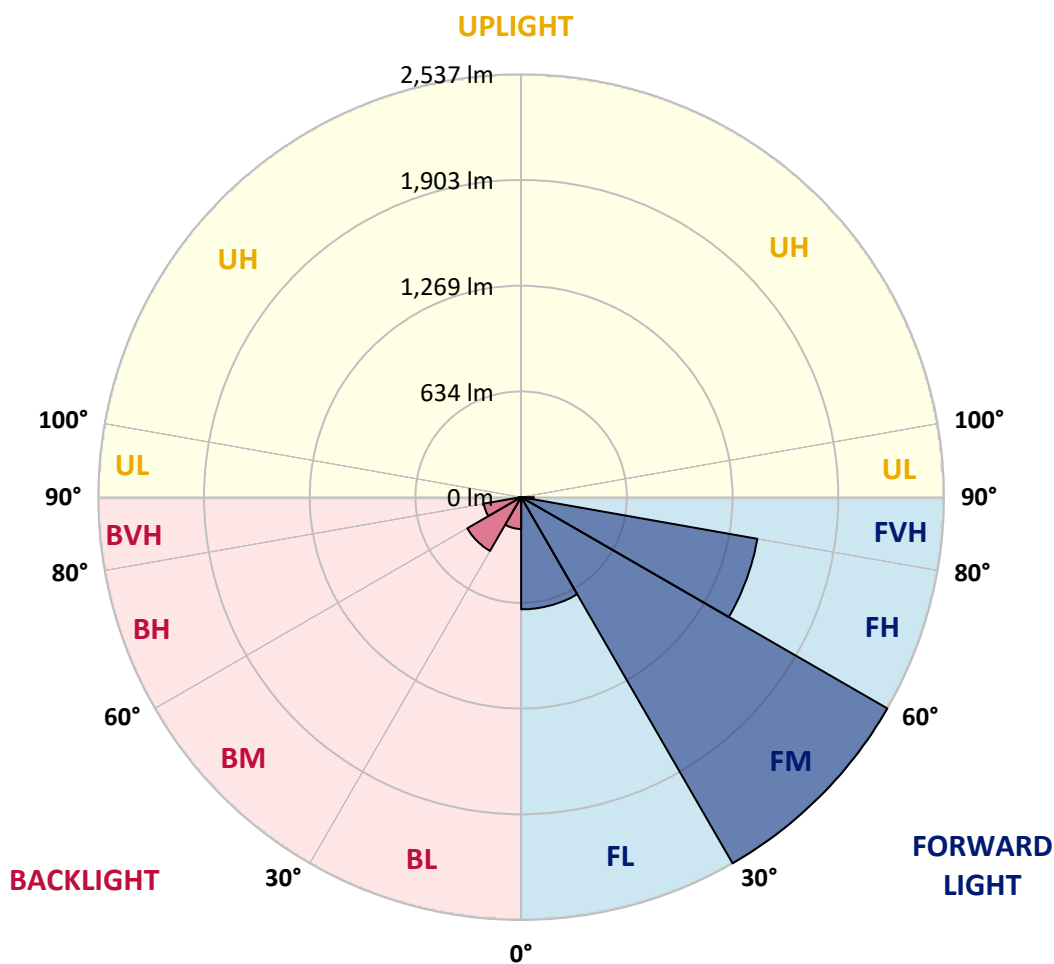
CATALOG NUMBER: EMM2-HTN-SA2A-830-U-T2U-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	673.4	12.2			
FM (30°-60°)	2537.1	45.9			
FH (60°-80°)	1439.1	26.0			G1/1800
FVH (80°-90°)	75.8	1.4			G1/100
BL (0°-30°)	191.0	3.5	B1/500		
BM (30°-60°)	372.8	6.7	B1/1000		
BH (60°-80°)	227.8	4.1	B1/500		G1/500
BVH (80°-90°)	12.4	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-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	980.9	980.9	980.9	980.9	980.9	980.9	980.9	980.9	980.9	980.9	980.9
2.5°	1132.2	1125.7	1115.9	1107.8	1093.2	1073.6	1057.4	1036.2	1021.6	1016.7	995.6
5°	1296.5	1288.4	1277.0	1257.5	1218.4	1195.6	1153.3	1104.5	1065.5	1057.4	1008.6
7.5°	1465.7	1462.4	1436.4	1407.1	1359.9	1309.5	1244.4	1168.0	1111.1	1098.0	1023.2
10°	1608.8	1594.2	1579.6	1551.9	1501.5	1429.9	1345.3	1239.6	1159.9	1138.7	1037.9
12.5°	1695.0	1690.2	1677.2	1644.6	1595.8	1534.0	1433.1	1309.5	1207.0	1177.7	1052.5
15°	1758.5	1763.4	1750.4	1729.2	1678.8	1620.2	1522.6	1382.7	1257.5	1223.3	1068.8
17.5°	1818.7	1815.4	1813.8	1789.4	1743.9	1685.3	1586.1	1442.9	1307.9	1270.5	1085.0
20°	1852.8	1854.5	1851.2	1841.5	1797.5	1740.6	1647.9	1514.5	1363.2	1320.9	1106.2
22.5°	1870.7	1877.2	1883.7	1882.1	1846.3	1802.4	1706.4	1571.4	1420.1	1376.2	1132.2
25°	1882.1	1887.0	1901.6	1921.2	1888.6	1852.8	1771.5	1639.7	1486.8	1436.4	1163.1
27.5°	1891.9	1898.4	1916.3	1945.6	1919.5	1898.4	1828.4	1698.3	1543.8	1498.2	1198.9
30°	1955.3	1963.5	1963.5	1978.1	1948.8	1943.9	1891.9	1768.3	1615.3	1566.5	1244.4
32.5°	2122.9	2106.6	2077.3	2062.7	1992.7	1994.4	1953.7	1838.2	1691.8	1643.0	1301.4
35°	2267.7	2267.7	2231.9	2184.7	2072.4	2049.7	2025.3	1930.9	1774.8	1727.6	1376.2
37.5°	2407.6	2409.2	2371.8	2331.1	2202.6	2121.3	2108.2	2020.4	1877.2	1821.9	1454.3
40°	2495.4	2505.2	2495.4	2464.5	2340.9	2246.5	2189.6	2121.3	1974.8	1932.6	1543.8
42.5°	2510.0	2529.6	2565.3	2575.1	2441.7	2358.8	2293.7	2225.4	2092.0	2044.8	1646.2
45°	2472.6	2479.1	2558.8	2570.2	2516.5	2448.2	2404.3	2347.4	2231.9	2191.2	1760.1
47.5°	2370.1	2357.1	2384.8	2484.0	2505.2	2501.9	2513.3	2485.6	2394.5	2342.5	1885.4
50°	2150.5	2155.4	2244.9	2365.3	2438.5	2521.4	2594.6	2625.5	2558.8	2506.8	2020.4
52.5°	1750.4	1773.1	1943.9	2228.6	2355.5	2508.4	2653.2	2757.3	2729.6	2679.2	2153.8
55°	1438.0	1472.2	1643.0	2009.0	2241.6	2445.0	2687.4	2895.6	2900.5	2861.4	2275.8
57.5°	1125.7	1153.3	1333.9	1669.0	2079.0	2345.7	2692.2	3014.3	3069.6	3024.1	2383.2
60°	881.7	901.2	1006.9	1390.9	1878.9	2204.2	2656.4	3108.7	3212.8	3178.6	2475.9
62.5°	668.6	683.2	777.6	1099.7	1633.2	2038.3	2536.1	3142.8	3313.6	3281.1	2527.9
65°	541.7	554.7	616.5	863.8	1390.9	1846.3	2353.9	3064.8	3342.9	3313.6	2521.4
67.5°	442.5	447.3	497.8	673.5	1176.1	1630.0	2087.1	2861.4	3253.5	3251.8	2446.6
70°	357.9	370.9	413.2	536.8	977.7	1381.1	1776.4	2542.6	3059.9	3076.1	2296.9
72.5°	304.2	307.5	344.9	444.1	797.1	1120.8	1470.6	2174.9	2775.2	2788.2	2062.7
75°	257.0	261.9	289.6	359.5	647.4	889.8	1182.6	1756.9	2323.0	2378.3	1737.3
77.5°	221.2	222.9	242.4	296.1	460.4	668.6	867.0	1317.6	1818.7	1857.7	1364.8
80°	174.1	177.3	198.5	234.2	320.5	434.3	598.6	901.2	1215.2	1259.1	945.1
82.5°	81.3	91.1	96.0	128.5	167.6	214.7	283.1	375.8	549.8	548.2	440.8
85°	8.1	6.5	6.5	9.8	14.6	14.6	17.9	21.1	42.3	50.4	39.0
87.5°	0.0	0.0	0.0	1.6	3.3	3.3	3.3	4.9	4.9	4.9	4.9
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: EMM2-HTN-SA2A-830-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	980.9	980.9	980.9	980.9	980.9	980.9	980.9	980.9	980.9	980.9	980.9
2.5°	985.8	971.2	945.1	920.7	904.5	891.4	870.3	857.3	847.5	834.5	832.9
5°	982.5	956.5	904.5	860.5	818.2	782.5	745.0	722.3	697.9	686.5	696.2
7.5°	985.8	943.5	862.2	795.5	732.0	675.1	626.3	595.4	572.6	561.2	562.8
10°	987.4	932.1	826.4	733.7	652.3	585.6	530.3	488.0	460.4	453.9	445.7
12.5°	984.2	917.5	790.6	673.5	575.9	502.7	437.6	405.1	377.4	364.4	364.4
15°	987.4	906.1	753.2	618.2	507.5	422.9	367.6	331.9	315.6	304.2	305.8
17.5°	987.4	896.3	717.4	564.5	440.8	362.8	312.3	283.1	266.8	260.3	258.6
20°	998.8	888.2	683.2	514.0	382.3	309.1	268.4	245.6	232.6	226.1	222.9
22.5°	1006.9	881.7	652.3	465.2	333.5	270.0	235.9	214.7	205.0	201.7	201.7
25°	1021.6	880.1	624.7	418.1	294.4	240.8	209.8	193.6	185.4	182.2	182.2
27.5°	1042.7	883.3	598.6	377.4	265.2	211.5	188.7	175.7	170.8	169.2	167.6
30°	1073.6	898.0	582.4	346.5	237.5	193.6	172.4	164.3	161.0	159.4	159.4
32.5°	1114.3	924.0	575.9	330.2	221.2	178.9	161.0	154.5	151.3	151.3	149.7
35°	1164.7	953.3	571.0	315.6	209.8	169.2	152.9	146.4	144.8	144.8	144.8
37.5°	1224.9	984.2	562.8	305.8	203.3	161.0	146.4	139.9	139.9	139.9	139.9
40°	1291.6	1029.7	561.2	299.3	198.5	156.2	139.9	133.4	133.4	133.4	133.4
42.5°	1366.4	1078.5	559.6	294.4	195.2	152.9	133.4	126.9	126.9	126.9	126.9
45°	1457.5	1140.3	562.8	291.2	195.2	149.7	128.5	120.4	118.8	118.8	118.8
47.5°	1547.0	1198.9	566.1	287.9	192.0	144.8	122.0	113.9	112.2	110.6	110.6
50°	1643.0	1259.1	566.1	284.7	188.7	139.9	117.1	105.7	104.1	102.5	102.5
52.5°	1737.3	1309.5	567.7	279.8	180.6	131.8	109.0	99.2	96.0	94.4	92.7
55°	1828.4	1363.2	569.4	271.7	170.8	123.6	104.1	92.7	87.8	84.6	84.6
57.5°	1896.8	1407.1	561.2	255.4	157.8	115.5	96.0	84.6	78.1	74.8	74.8
60°	1961.8	1434.8	546.6	231.0	144.8	107.4	89.5	76.5	69.9	66.7	66.7
62.5°	1987.9	1439.7	512.4	188.7	128.5	99.2	81.3	69.9	65.1	63.4	63.4
65°	1973.2	1418.5	466.9	149.7	113.9	89.5	74.8	65.1	58.6	53.7	53.7
67.5°	1893.5	1345.3	405.1	118.8	99.2	81.3	68.3	58.6	52.1	47.2	47.2
70°	1742.2	1228.2	315.6	94.4	86.2	71.6	61.8	53.7	47.2	42.3	42.3
72.5°	1519.4	1065.5	229.4	79.7	74.8	63.4	55.3	48.8	42.3	39.0	39.0
75°	1252.6	821.5	162.7	68.3	66.7	56.9	50.4	43.9	39.0	35.8	35.8
77.5°	940.2	572.6	126.9	60.2	58.6	52.1	45.5	40.7	35.8	34.2	32.5
80°	626.3	354.6	96.0	45.5	43.9	40.7	37.4	34.2	29.3	26.0	26.0
82.5°	279.8	149.7	48.8	26.0	22.8	19.5	16.3	11.4	11.4	9.8	9.8
85°	29.3	19.5	9.8	6.5	6.5	4.9	4.9	4.9	3.3	3.3	3.3
87.5°	4.9	4.9	3.3	3.3	3.3	1.6	1.6	1.6	1.6	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-157-7

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-830-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-830-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-7  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 09/05/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-SA-40-830-U-5WQ**  
 Description: Epic Modern Light Square 40W 5WQ Optic

**Spectral Parameters**

CCT (K): 3126  
 CIE u': 0.2465  
 CIE v': 0.5182  
 Duv: -0.0004  
 CIE x: 0.4277  
 CIE y: 0.3997  
 CIE z: 0.1727  
 Peak Wavelength (nm): 601  
 Dominant Wavelength (nm): 582  
 Purity: 48.31913  
 Rf: 84.4  
 Rg: 94.7

CRI (Ra):	82.6		
R1:	81.4	R9:	5.1
R2:	92.2	R10:	82.2
R3:	94.9	R11:	79.8
R4:	80.1	R12:	70.4
R5:	81.8	R13:	84.2
R6:	90.5	R14:	97.9
R7:	81.8	R15:	73.6
R8:	58.0		



**Test Conditions**

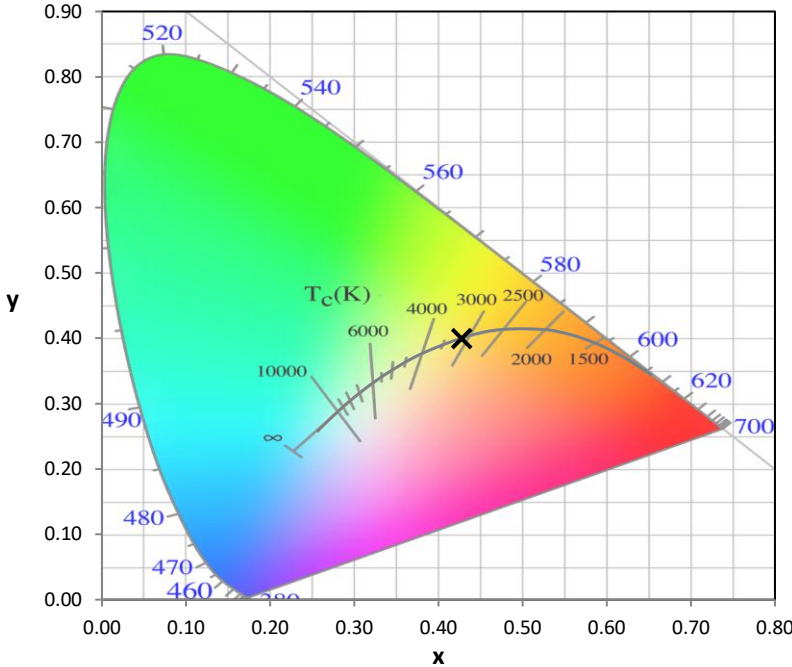
Stabilization Time: 22M  
 Operation Time: 1H 22M  
 Sphere Temperature (°C): 24.3

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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 3000K 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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR S/P: 1.42

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.79

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

**Summary**

$R_f = 84.4$   
 $R_g = 94.7$   
 $CIE R_a = 82.6$   
 $R_9 = 5.1$



**Color Vector Graphics**





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

CES01 = 86	CES26 = 86	CES51 = 93	CES76 = 82
CES02 = 63	CES27 = 92	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 94	CES53 = 89	CES78 = 81
CES04 = 70	CES29 = 92	CES54 = 89	CES79 = 90
CES05 = 49	CES30 = 91	CES55 = 86	CES80 = 89
CES06 = 51	CES31 = 93	CES56 = 85	CES81 = 72
CES07 = 42	CES32 = 85	CES57 = 83	CES82 = 95
CES08 = 41	CES33 = 97	CES58 = 84	CES83 = 94
CES09 = 29	CES34 = 92	CES59 = 91	CES84 = 91
CES10 = 76	CES35 = 96	CES60 = 90	CES85 = 74
CES11 = 59	CES36 = 81	CES61 = 87	CES86 = 68
CES12 = 65	CES37 = 96	CES62 = 83	CES87 = 84
CES13 = 43	CES38 = 86	CES63 = 87	CES88 = 88
CES14 = 74	CES39 = 98	CES64 = 79	CES89 = 75
CES15 = 71	CES40 = 96	CES65 = 78	CES90 = 89
CES16 = 47	CES41 = 96	CES66 = 77	CES91 = 73
CES17 = 50	CES42 = 97	CES67 = 76	CES92 = 63
CES18 = 56	CES43 = 91	CES68 = 80	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 85	CES94 = 61
CES20 = 66	CES45 = 93	CES70 = 78	CES95 = 73
CES21 = 87	CES46 = 90	CES71 = 74	CES96 = 84
CES22 = 79	CES47 = 94	CES72 = 91	CES97 = 88
CES23 = 92	CES48 = 83	CES73 = 74	CES98 = 85
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 76
CES25 = 72	CES50 = 93	CES75 = 78	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)