

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: P870783

Luminaire Tested: **EMM2-HTN-SA1B-840-U-T3**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P870783  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA1B-840-U-T3  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 60W 80CRI 4000K  
FIXTURE w/ TYPE III DISTRIBUTION OPTIC  
Light Source: (10) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

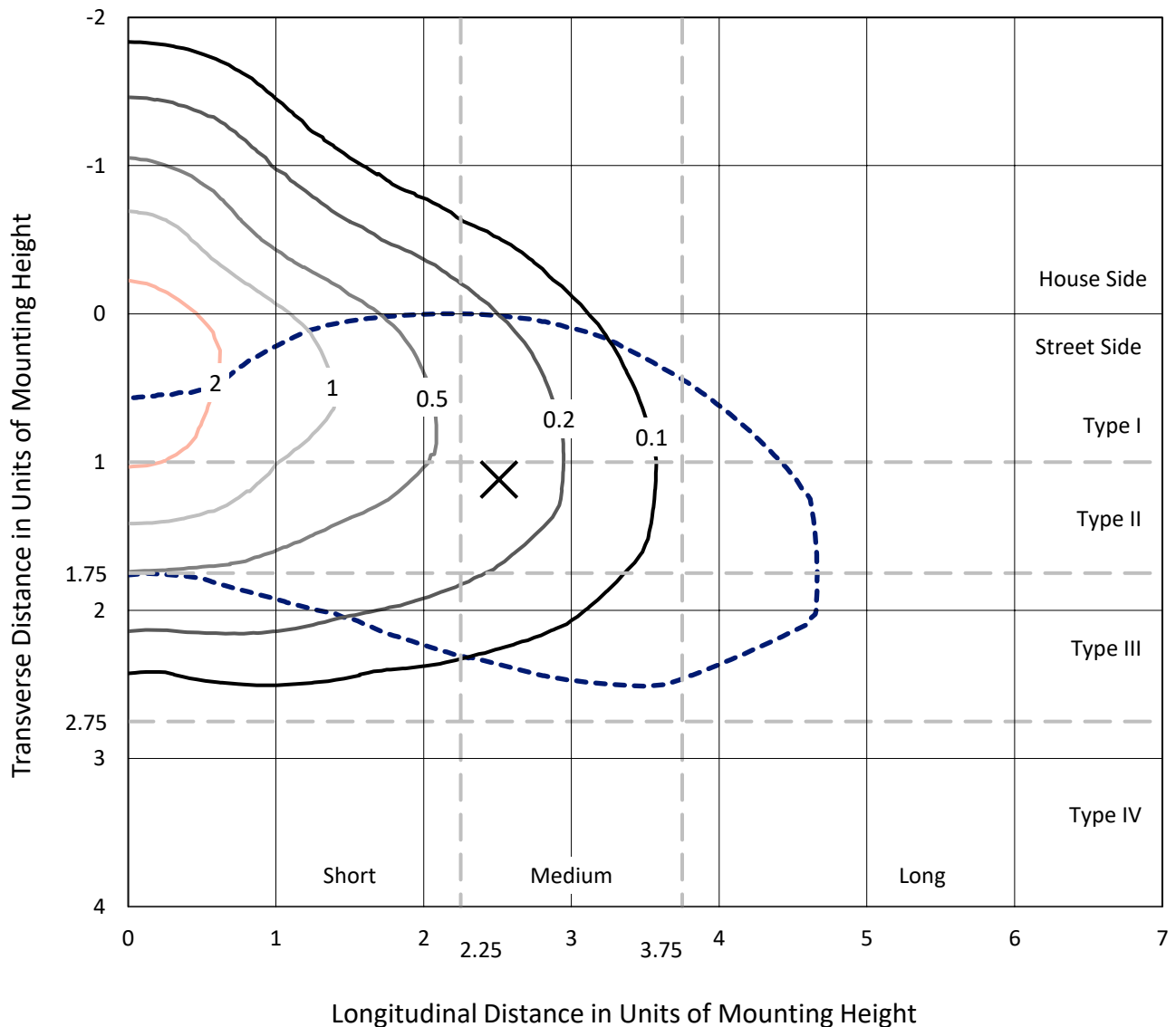
Lumens per Lamp: N/A  
Luminaire Lumens: 5959 lumens  
Efficiency: N/A  
Efficacy: 135.4 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

Input Watts (W): 44  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6.91%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P870783  
 CATALOG NUMBER: EMM2-HTN-SA1B-840-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

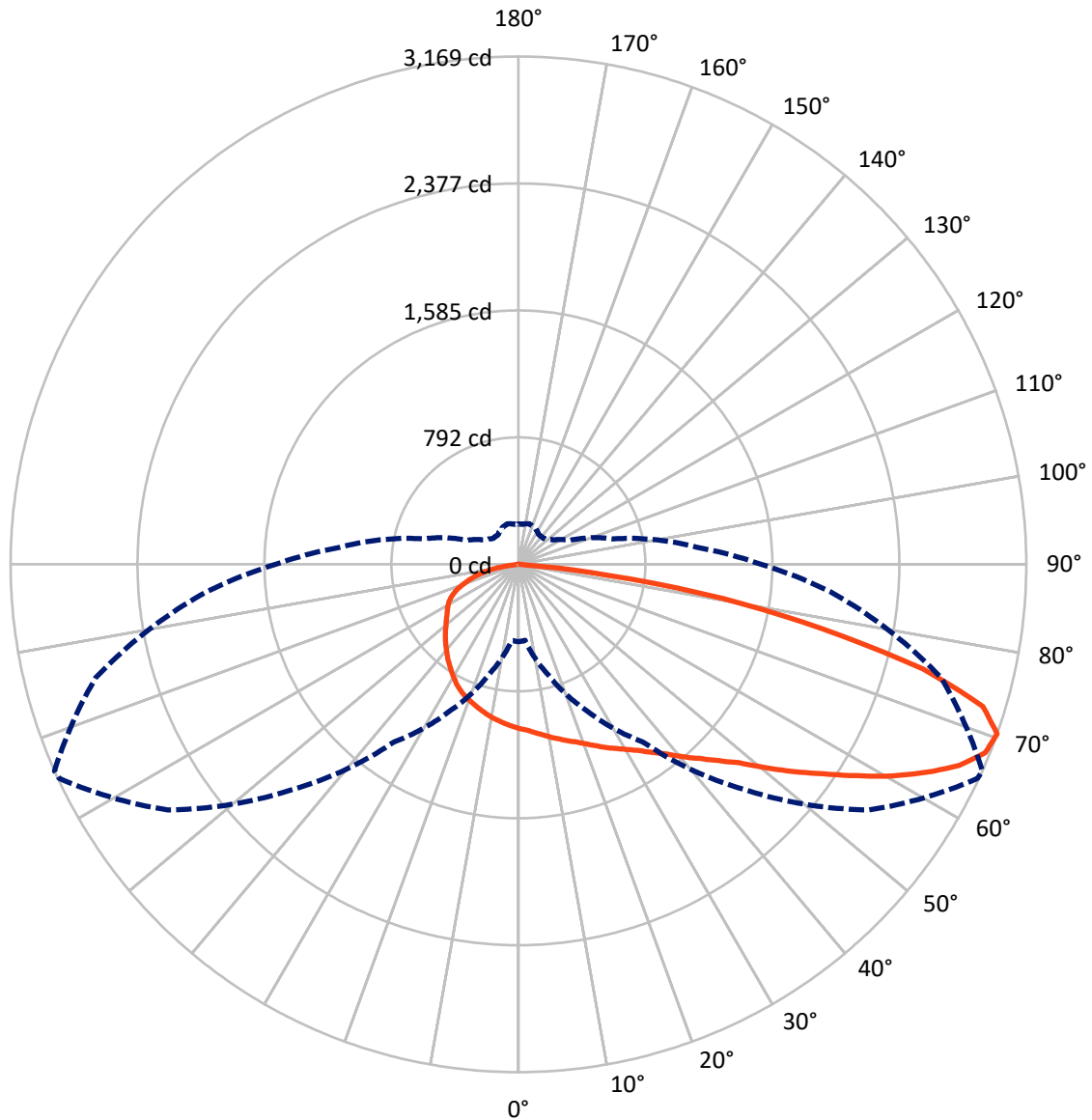
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.7 fc  
 Type III - Medium - N/A

REPORT NUMBER: P870783  
CATALOG NUMBER: EMM2-HTN-SA1B-840-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P870783

CATALOG NUMBER: EMM2-HTN-SA1B-840-U-T3

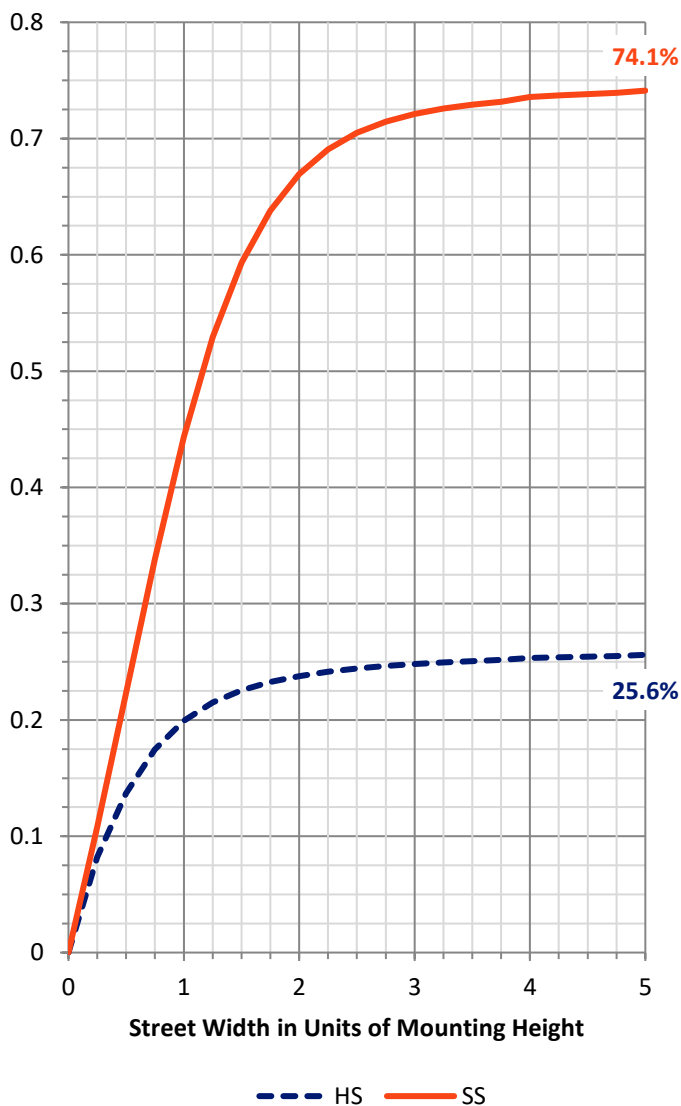
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1535.7	0.0	1535.7
	% Fixture	25.8	0.0	25.8
<b>Street Side</b>	Lumens	4423.3	0.0	4423.3
	% Fixture	74.2	0.0	74.2
<b>Total</b>	Lumens	5959.0	0.0	5959.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.1	1.6
10°-20°	292.3	4.9
20°-30°	490.9	8.2
30°-40°	739.6	12.4
40°-50°	1004.0	16.8
50°-60°	1193.1	20.0
60°-70°	1217.6	20.4
70°-80°	814.4	13.7
80°-90°	109.0	1.8
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°	5959.0	100.0
0°-180°	5959.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P870783

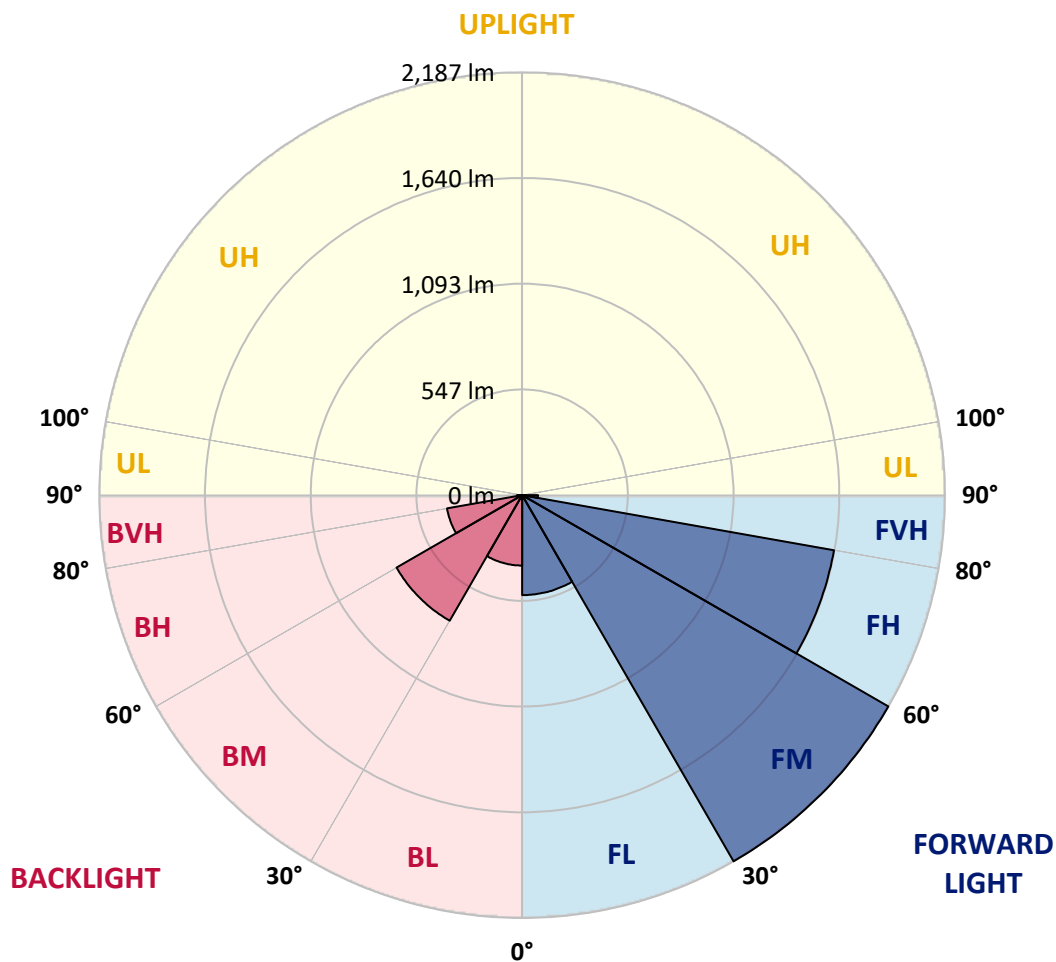
CATALOG NUMBER: EMM2-HTN-SA1B-840-U-T3

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	517.1	8.7			
FM	(30°-60°)	2186.8	36.7			
FH	(60°-80°)	1637.7	27.5			G1/1800
FVH	(80°-90°)	81.6	1.4			G1/100
BL	(0°-30°)	364.1	6.1	B1/500		
BM	(30°-60°)	749.9	12.6	B1/1000		
BH	(60°-80°)	394.3	6.6	B1/500		G1/500
BVH	(80°-90°)	27.4	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 III Medium





REPORT NUMBER: P870783

CATALOG NUMBER: EMM2-HTN-SA1B-840-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3
2.5°	1062.0	1057.2	1053.7	1056.1	1048.9	1051.3	1043.0	1037.1	1035.9	1033.6	1031.2
5°	1095.1	1095.1	1089.2	1089.2	1080.9	1079.7	1067.9	1054.9	1054.9	1046.6	1037.1
7.5°	1130.6	1128.3	1121.2	1120.0	1110.5	1108.1	1095.1	1075.0	1073.8	1058.4	1044.2
10°	1155.5	1156.7	1151.9	1151.9	1144.8	1138.9	1120.0	1098.7	1096.3	1076.2	1053.7
12.5°	1174.4	1176.8	1175.6	1175.6	1169.7	1169.7	1148.4	1120.0	1117.6	1091.6	1059.6
15°	1194.6	1193.4	1196.9	1198.1	1195.8	1192.2	1176.8	1143.7	1142.5	1108.1	1067.9
17.5°	1212.3	1211.1	1212.3	1218.2	1219.4	1219.4	1204.0	1169.7	1165.0	1128.3	1075.0
20°	1223.0	1225.4	1230.1	1237.2	1240.7	1250.2	1237.2	1200.5	1195.8	1149.6	1090.4
22.5°	1263.2	1256.1	1259.7	1264.4	1269.2	1282.2	1270.3	1232.5	1228.9	1181.5	1108.1
25°	1331.9	1331.9	1323.6	1315.3	1309.4	1315.3	1305.9	1269.2	1266.8	1210.0	1128.3
27.5°	1451.5	1451.5	1433.7	1402.9	1363.9	1353.2	1346.1	1308.2	1301.1	1240.7	1141.3
30°	1603.0	1607.8	1575.8	1523.7	1451.5	1404.1	1386.4	1344.9	1341.4	1271.5	1161.4
32.5°	1765.2	1774.7	1751.0	1675.2	1556.8	1464.5	1436.1	1393.5	1385.2	1308.2	1187.5
35°	1910.8	1920.3	1888.3	1817.3	1665.8	1552.1	1495.3	1446.7	1442.0	1355.6	1226.5
37.5°	2029.2	2031.6	2011.5	1925.0	1756.9	1625.5	1568.7	1510.7	1501.2	1412.4	1268.0
40°	2154.7	2164.2	2144.1	2037.5	1839.8	1704.8	1642.1	1587.6	1579.3	1471.6	1307.0
42.5°	2286.1	2285.0	2285.0	2134.6	1922.7	1771.1	1721.4	1661.0	1656.3	1532.0	1349.7
45°	2366.6	2371.4	2358.4	2192.6	2044.6	1839.8	1798.4	1754.6	1746.3	1616.0	1405.3
47.5°	2386.8	2376.1	2316.9	2237.6	2182.0	1910.8	1895.4	1869.4	1850.5	1708.4	1474.0
50°	2359.5	2343.0	2308.6	2257.7	2232.9	1996.1	1993.7	2006.7	1993.7	1820.9	1553.3
52.5°	2257.7	2255.4	2249.4	2261.3	2221.0	2063.6	2105.0	2150.0	2147.6	1935.7	1636.2
55°	2043.4	2058.8	2129.9	2204.4	2176.0	2109.7	2229.3	2315.7	2306.3	2070.7	1721.4
57.5°	1824.4	1839.8	1931.0	2108.6	2132.2	2159.5	2369.0	2504.0	2488.6	2217.5	1799.5
60°	1633.8	1617.2	1708.4	1964.1	2070.7	2204.4	2507.5	2694.6	2681.6	2364.3	1880.1
62.5°	1331.9	1348.5	1494.1	1753.4	1984.2	2232.9	2621.2	2867.4	2859.2	2499.2	1945.2
65°	1053.7	1031.2	1250.2	1532.0	1835.1	2223.4	2719.5	3029.6	3023.7	2631.8	1994.9
67.5°	716.3	700.9	989.8	1311.8	1632.6	2147.6	2741.9	3138.6	3140.9	2710.0	2007.9
70°	483.0	475.9	711.5	1008.7	1352.0	1984.2	2672.1	3161.1	3169.3	2730.1	1949.9
72.5°	356.4	355.2	520.9	719.8	1006.3	1675.2	2481.5	3014.2	3029.6	2588.0	1779.4
75°	280.6	284.1	371.7	511.5	671.3	1239.6	2087.2	2584.5	2608.2	2235.2	1477.5
77.5°	229.7	229.7	260.5	367.0	448.7	769.5	1501.2	1891.9	1939.3	1725.0	1137.7
80°	185.9	189.4	193.0	255.7	297.2	439.2	873.7	1262.1	1296.4	1201.7	821.6
82.5°	101.8	108.9	105.4	132.6	149.2	203.6	346.9	510.3	562.4	500.8	372.9
85°	7.1	4.7	8.3	10.7	13.0	20.1	27.2	37.9	35.5	50.9	26.0
87.5°	1.2	1.2	1.2	2.4	2.4	3.6	4.7	4.7	4.7	4.7	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



REPORT NUMBER: P870783

CATALOG NUMBER: EMM2-HTN-SA1B-840-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3	1025.3
2.5°	1030.0	1024.1	1014.6	1012.2	1008.7	1004.0	999.2	992.1	989.8	992.1	994.5
5°	1031.2	1022.9	1007.5	998.0	988.6	980.3	970.8	961.3	955.4	956.6	961.3
7.5°	1034.7	1022.9	999.2	983.8	968.4	955.4	940.0	929.4	922.3	923.5	927.0
10°	1039.5	1022.9	994.5	968.4	947.1	928.2	912.8	899.8	892.7	891.5	892.7
12.5°	1040.7	1021.7	983.8	951.9	925.8	901.0	884.4	872.5	865.4	861.9	864.3
15°	1044.2	1018.2	973.2	934.1	902.1	876.1	856.0	841.8	837.0	834.7	833.5
17.5°	1048.9	1017.0	963.7	916.3	878.5	848.9	831.1	816.9	811.0	808.6	811.0
20°	1056.1	1018.2	953.1	898.6	857.2	827.6	807.4	793.2	788.5	787.3	786.1
22.5°	1065.5	1020.5	944.8	882.0	833.5	803.9	783.8	774.3	770.7	771.9	771.9
25°	1075.0	1022.9	932.9	859.5	808.6	777.8	763.6	756.5	758.9	763.6	763.6
27.5°	1083.3	1021.7	916.3	835.8	779.0	750.6	739.9	741.1	747.0	755.3	756.5
30°	1093.9	1021.7	898.6	806.2	745.9	718.6	716.3	725.7	735.2	743.5	743.5
32.5°	1110.5	1028.8	884.4	776.6	711.5	690.2	700.9	713.9	724.6	732.8	735.2
35°	1138.9	1044.2	874.9	747.0	678.4	663.0	683.1	704.4	711.5	717.5	718.6
37.5°	1166.2	1058.4	863.1	718.6	644.0	638.1	665.4	687.9	689.0	692.6	692.6
40°	1192.2	1069.1	847.7	687.9	610.9	610.9	642.9	661.8	659.4	655.9	657.1
42.5°	1220.6	1075.0	829.9	659.4	583.7	583.7	609.7	626.3	625.1	629.8	633.4
45°	1254.9	1086.8	806.2	633.4	555.3	550.5	571.8	586.0	603.8	625.1	631.0
47.5°	1302.3	1103.4	787.3	605.0	531.6	515.0	523.3	552.9	573.0	590.8	593.1
50°	1352.0	1127.1	770.7	575.4	503.2	473.6	480.7	513.8	525.7	532.8	536.3
52.5°	1405.3	1146.0	756.5	550.5	473.6	430.9	440.4	472.4	480.7	486.6	487.8
55°	1451.5	1161.4	738.8	526.8	441.6	390.7	402.5	433.3	441.6	448.7	448.7
57.5°	1500.0	1175.6	726.9	506.7	407.3	357.5	365.8	396.6	408.5	410.8	414.4
60°	1540.3	1188.6	716.3	487.8	375.3	327.9	333.9	361.1	375.3	376.5	378.9
62.5°	1568.7	1196.9	710.3	464.1	343.3	298.3	303.1	330.3	346.9	350.4	351.6
65°	1586.4	1201.7	699.7	433.3	316.1	273.5	273.5	300.7	317.3	325.6	327.9
67.5°	1578.2	1193.4	671.3	397.8	291.2	248.6	247.4	274.7	288.9	293.6	294.8
70°	1514.2	1144.8	613.3	354.0	265.2	226.1	223.8	248.6	261.6	251.0	252.2
72.5°	1384.0	1034.7	533.9	310.2	238.0	204.8	202.4	223.8	224.9	224.9	223.8
75°	1166.2	845.3	426.2	264.0	209.6	182.3	183.5	200.1	201.3	207.2	203.6
77.5°	893.9	626.3	332.7	210.7	177.6	162.2	168.1	174.0	182.3	190.6	182.3
80°	650.0	432.1	230.9	157.5	137.3	137.3	139.7	145.6	157.5	165.7	157.5
82.5°	278.2	190.6	106.6	78.1	67.5	66.3	67.5	67.5	82.9	85.2	74.6
85°	21.3	17.8	13.0	13.0	10.7	5.9	5.9	4.7	3.6	3.6	3.6
87.5°	4.7	3.6	3.6	3.6	2.4	2.4	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



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: SP1-2407-157-8

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-840-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-840-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-8  
 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-40-840-U-5WQ**  
 Description: Epic Modern Light Square 40W 5WQ Optic

**Spectral Parameters**

CCT (K): 3996  
 CIE u': 0.2245  
 CIE v': 0.5031  
 Duv: 0.0012  
 CIE x: 0.3815  
 CIE y: 0.3799  
 CIE z: 0.2386  
 Peak Wavelength (nm): 449  
 Dominant Wavelength (nm): 578  
 Purity: 28.49233  
 Rf: 82.6  
 Rg: 95.1

CRI (Ra):	80.6		
R1:	78.1	R9:	-5.8
R2:	87.1	R10:	70.3
R3:	94.5	R11:	78.7
R4:	79.7	R12:	60.5
R5:	78.7	R13:	80.2
R6:	82.7	R14:	97.2
R7:	84.3	R15:	70.6
R8:	59.5		



**Test Conditions**

Stabilization Time: 29M  
 Operation Time: 1H 29M  
 Sphere Temperature (°C): 24.3

REPORT NUMBER: SP1-2407-157-8

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

REPORT NUMBER: SP1-2407-157-8

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-8

**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	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

REPORT NUMBER: SP1-2407-157-8

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.66**

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	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

REPORT NUMBER: SP1-2407-157-8

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.37

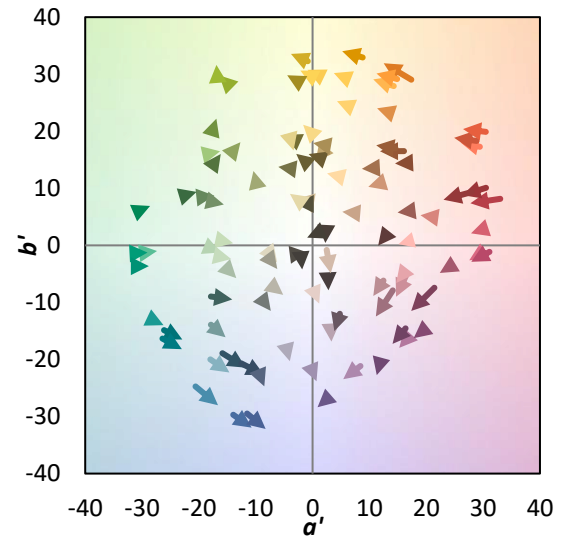
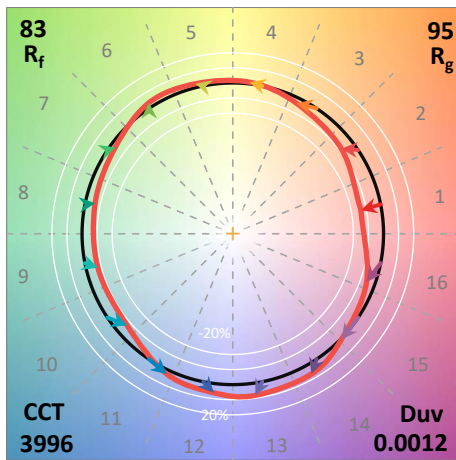
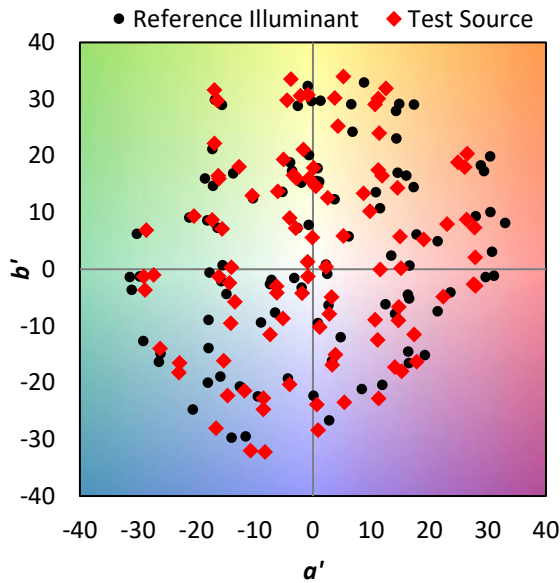
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

**Summary**

$R_f = 82.6$   
 $R_g = 95.1$   
 CIE  $R_a = 80.6$   
 $R_9 = -5.8$



**Color Vector Graphics**





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

CES01 = 85	CES26 = 79	CES51 = 94	CES76 = 72
CES02 = 61	CES27 = 93	CES52 = 94	CES77 = 82
CES03 = 31	CES28 = 90	CES53 = 88	CES78 = 71
CES04 = 69	CES29 = 83	CES54 = 89	CES79 = 91
CES05 = 48	CES30 = 95	CES55 = 88	CES80 = 88
CES06 = 50	CES31 = 86	CES56 = 84	CES81 = 80
CES07 = 40	CES32 = 78	CES57 = 84	CES82 = 95
CES08 = 39	CES33 = 90	CES58 = 84	CES83 = 95
CES09 = 29	CES34 = 85	CES59 = 90	CES84 = 90
CES10 = 74	CES35 = 92	CES60 = 91	CES85 = 78
CES11 = 57	CES36 = 85	CES61 = 87	CES86 = 73
CES12 = 63	CES37 = 91	CES62 = 87	CES87 = 83
CES13 = 42	CES38 = 95	CES63 = 84	CES88 = 86
CES14 = 74	CES39 = 98	CES64 = 78	CES89 = 76
CES15 = 71	CES40 = 94	CES65 = 75	CES90 = 87
CES16 = 46	CES41 = 98	CES66 = 75	CES91 = 72
CES17 = 49	CES42 = 92	CES67 = 73	CES92 = 62
CES18 = 56	CES43 = 88	CES68 = 77	CES93 = 78
CES19 = 71	CES44 = 99	CES69 = 82	CES94 = 60
CES20 = 65	CES45 = 93	CES70 = 72	CES95 = 70
CES21 = 86	CES46 = 90	CES71 = 67	CES96 = 82
CES22 = 78	CES47 = 95	CES72 = 89	CES97 = 90
CES23 = 91	CES48 = 84	CES73 = 65	CES98 = 84
CES24 = 90	CES49 = 89	CES74 = 93	CES99 = 73
CES25 = 71	CES50 = 94	CES75 = 69	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)