

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: METALUX

Report Number: P474136

Luminaire Tested: **24CZ2-55VHE-S-UNV-L850-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474136
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55VHE-S-UNV-L850-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5720.8 lumens
Efficiency: N/A
Efficacy: 154.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

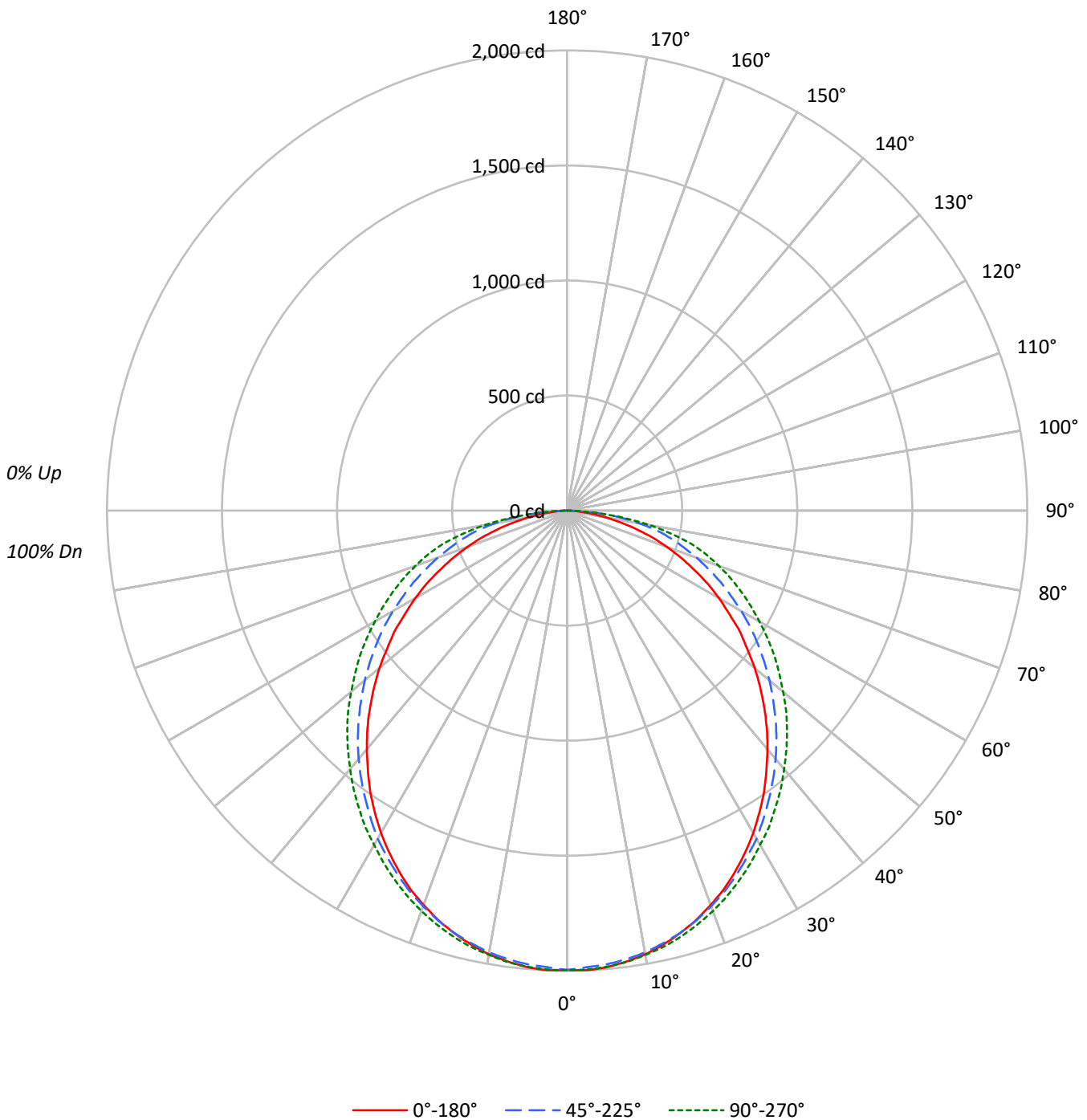
Input Watts (W): 37.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32					32			
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2687	2687	2687
5°	2691	2674	2688
10°	2676	2664	2679
15°	2648	2647	2669
20°	2612	2620	2652
25°	2568	2591	2631
30°	2514	2558	2606
35°	2451	2513	2591
40°	2378	2476	2576
45°	2307	2437	2571
50°	2229	2404	2565
55°	2149	2374	2579
60°	2051	2352	2597
65°	1941	2343	2660
70°	1811	2355	2754
75°	1612	2423	2902
80°	1318	2476	2832
85°	928	2161	2205



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.8	3.3
10°-20°	537.7	9.4
20°-30°	806.0	14.1
30°-40°	959.9	16.8
40°-50°	989.8	17.3
50°-60°	903.1	15.8
60°-70°	722.2	12.6
70°-80°	471.7	8.2
80°-90°	141.6	2.5
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°-30°	1532.4	26.8
0°-40°	2492.3	43.6
0°-60°	4385.2	76.7
0°-90°	5720.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5720.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1997	1997	1997	1997	1997	
5°	1992	1988	1980	1992	1990	189
15°	1901	1902	1900	1916	1916	536
25°	1730	1733	1745	1770	1772	796
35°	1492	1502	1530	1568	1578	932
45°	1212	1234	1281	1334	1351	935
55°	916	942	1012	1079	1099	816
65°	610	651	736	808	835	605
75°	310	362	466	541	558	330
85°	60	108	140	143	143	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1996.8	1996.8	1996.8	1996.8	1996.8
2.5°	1999.6	1996.8	1986.5	1998.7	1996.8
5°	1992.1	1988.4	1979.9	1992.1	1990.2
7.5°	1977.1	1975.2	1966.7	1980.8	1979.0
10°	1958.3	1956.4	1949.8	1963.9	1961.1
12.5°	1932.0	1931.0	1926.3	1943.2	1941.4
15°	1901.0	1901.9	1900.0	1916.0	1916.0
17.5°	1865.3	1864.3	1868.1	1887.8	1885.9
20°	1823.9	1824.9	1829.5	1852.1	1852.1
22.5°	1780.7	1779.7	1790.1	1812.6	1814.5
25°	1729.9	1732.8	1745.0	1770.3	1772.2
27.5°	1675.4	1680.1	1695.2	1724.3	1727.1
30°	1618.1	1623.8	1646.3	1673.6	1677.3
32.5°	1555.2	1567.4	1588.1	1622.8	1632.2
35°	1492.2	1502.5	1529.8	1568.3	1577.7
37.5°	1422.7	1439.6	1470.6	1512.9	1525.1
40°	1354.1	1371.0	1409.5	1453.7	1466.8
42.5°	1284.5	1302.4	1346.6	1396.4	1410.5
45°	1212.2	1233.8	1280.8	1334.3	1351.3
47.5°	1137.9	1163.3	1214.1	1272.3	1291.1
50°	1064.7	1090.0	1148.3	1208.4	1225.3
52.5°	985.7	1017.7	1079.7	1144.5	1161.4
55°	916.2	942.5	1012.0	1078.7	1099.4
57.5°	834.4	870.1	944.4	1012.0	1031.8
60°	762.1	795.0	873.9	942.5	965.0
62.5°	688.8	722.6	801.5	879.5	900.2
65°	609.8	651.2	735.8	808.1	835.4
67.5°	534.7	577.9	664.4	741.4	769.6
70°	460.4	504.6	598.6	677.5	700.1
72.5°	387.1	433.2	530.9	608.0	634.3
75°	310.1	361.8	466.1	541.3	558.2
77.5°	237.7	295.1	400.3	451.0	463.3
80°	170.1	233.0	319.5	356.1	365.5
82.5°	111.8	172.9	238.7	258.4	255.6
85°	60.1	108.1	140.0	142.8	142.8
87.5°	23.5	43.2	44.2	33.8	31.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)