

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: P475106

Luminaire Tested: **22CZ2-100VHE-RDP-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475106  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-100VHE-RDP-UNV-L850-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP  
INSERT  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6841.8 lumens  
Efficiency: N/A  
Efficacy: 90.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

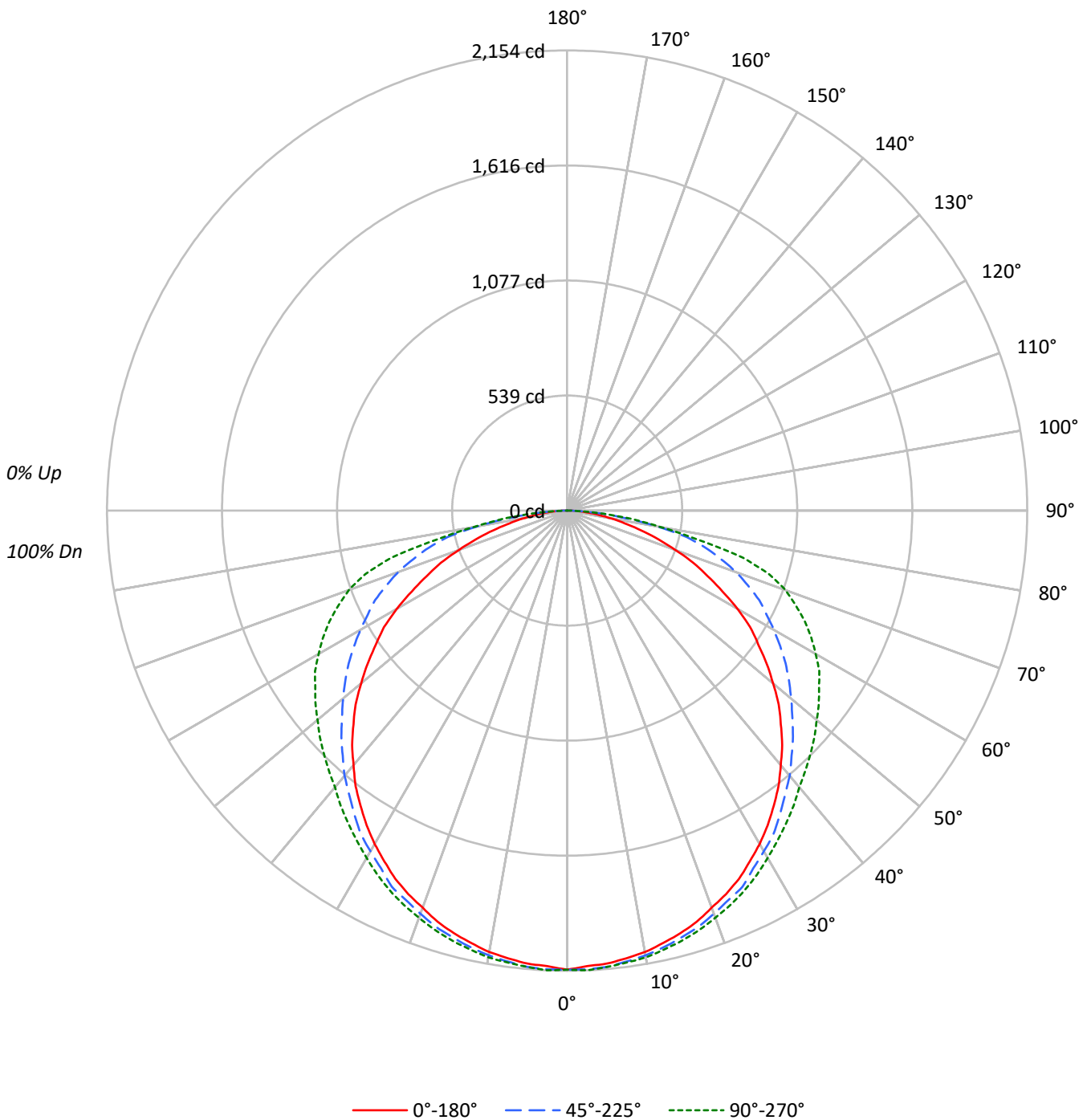
Input Watts (W): 75.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5783	5783	5783
5°	5751	5791	5791
10°	5734	5776	5804
15°	5707	5763	5804
20°	5664	5750	5809
25°	5649	5769	5828
30°	5599	5723	5834
35°	5538	5704	5870
40°	5464	5692	5940
45°	5382	5689	6129
50°	5268	5730	6384
55°	5125	5856	6753
60°	4958	6013	7232
65°	4614	6315	7821
70°	4238	6615	8555
75°	3718	6958	8845
80°	3200	6626	6944
85°	2794	4817	5280



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.3	3.0
10°-20°	583.7	8.5
20°-30°	890.5	13.0
30°-40°	1087.3	15.9
40°-50°	1162.6	17.0
50°-60°	1122.2	16.4
60°-70°	966.0	14.1
70°-80°	653.6	9.6
80°-90°	172.5	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°	1677.5	24.5
0°-40°	2764.9	40.4
0°-60°	5049.7	73.8
0°-90°	6841.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6841.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2149	2149	2149	2149	2149	
5°	2129	2134	2144	2144	2144	202
15°	2048	2054	2068	2078	2084	578
25°	1902	1912	1943	1953	1963	876
35°	1686	1701	1736	1771	1787	1055
45°	1414	1439	1495	1570	1610	1092
55°	1092	1127	1248	1374	1439	979
65°	725	795	992	1147	1228	721
75°	358	473	669	805	851	383
85°	90	126	156	161	171	102
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2149.0	2149.0	2149.0	2149.0	2149.0
2.5°	2134.0	2139.0	2149.0	2149.0	2154.0
5°	2129.0	2134.0	2144.0	2144.0	2144.0
7.5°	2114.0	2119.0	2129.0	2134.0	2134.0
10°	2098.5	2104.0	2114.0	2119.0	2124.0
12.5°	2073.5	2078.5	2093.5	2104.0	2104.0
15°	2048.5	2053.5	2068.5	2078.5	2083.5
17.5°	2018.0	2028.5	2043.5	2053.5	2058.5
20°	1978.0	1988.0	2008.0	2023.5	2028.5
22.5°	1943.0	1953.0	1973.0	1988.0	1998.0
25°	1902.5	1912.5	1943.0	1953.0	1963.0
27.5°	1851.9	1862.4	1887.5	1907.5	1922.5
30°	1801.9	1811.9	1841.9	1867.4	1877.4
32.5°	1746.4	1761.4	1796.9	1816.9	1831.9
35°	1685.9	1700.9	1736.4	1771.4	1786.9
37.5°	1625.9	1640.9	1675.9	1721.4	1741.4
40°	1555.4	1575.4	1620.4	1680.9	1690.9
42.5°	1489.9	1514.9	1555.4	1625.9	1650.9
45°	1414.3	1439.3	1494.9	1570.4	1610.4
47.5°	1343.8	1368.8	1429.3	1519.9	1570.4
50°	1258.3	1293.3	1368.8	1474.9	1524.9
52.5°	1177.8	1207.8	1308.8	1424.3	1484.9
55°	1092.3	1127.3	1248.3	1373.8	1439.3
57.5°	1016.7	1046.8	1182.8	1323.8	1399.3
60°	921.2	961.2	1117.3	1268.3	1343.8
62.5°	820.2	880.7	1051.8	1207.8	1288.3
65°	724.7	795.2	991.7	1147.3	1228.3
67.5°	639.2	714.7	916.2	1082.3	1157.8
70°	538.6	634.2	840.7	1001.7	1087.3
72.5°	448.1	553.6	755.2	916.2	991.7
75°	357.6	473.1	669.2	805.2	850.7
77.5°	276.6	387.6	573.6	614.1	619.1
80°	206.5	307.1	427.6	432.6	448.1
82.5°	141.0	216.6	276.6	302.1	307.1
85°	90.5	126.0	156.0	161.0	171.0
87.5°	40.5	45.5	55.5	50.5	50.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)