

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: P475104

Luminaire Tested: **22CZ2-90VHE-RDP-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475104
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-90VHE-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: 6137.9 lumens
Efficiency: N/A
Efficacy: 92.0 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

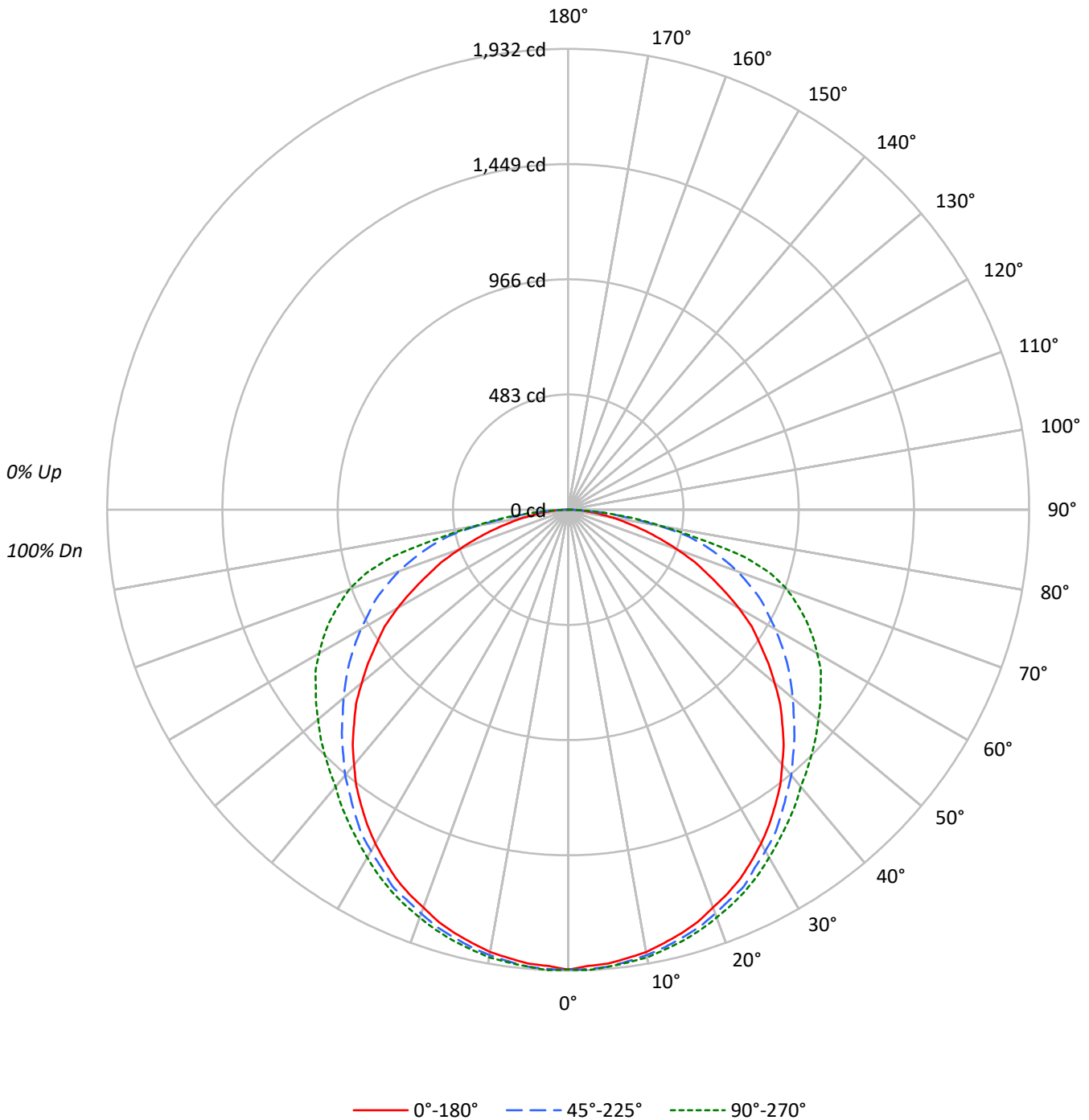
Input Watts (W): 66.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5188	5188	5188
5°	5159	5196	5196
10°	5144	5182	5207
15°	5120	5170	5207
20°	5082	5159	5211
25°	5067	5176	5229
30°	5023	5134	5234
35°	4969	5117	5266
40°	4901	5107	5329
45°	4829	5104	5498
50°	4726	5141	5727
55°	4597	5254	6058
60°	4448	5394	6488
65°	4139	5665	7016
70°	3802	5934	7674
75°	3335	6241	7935
80°	2872	5945	6230
85°	2507	4323	4736



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.4	3.0
10°-20°	523.6	8.5
20°-30°	798.9	13.0
30°-40°	975.5	15.9
40°-50°	1043.0	17.0
50°-60°	1006.7	16.4
60°-70°	866.6	14.1
70°-80°	586.4	9.6
80°-90°	154.8	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°	1504.9	24.5
0°-40°	2480.4	40.4
0°-60°	4530.1	73.8
0°-90°	6137.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6137.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1928	1928	1928	1928	1928	
5°	1910	1914	1923	1923	1923	181
15°	1838	1842	1856	1865	1869	518
25°	1707	1716	1743	1752	1761	785
35°	1512	1526	1558	1589	1603	946
45°	1269	1291	1341	1409	1445	979
55°	980	1011	1120	1232	1291	878
65°	650	713	890	1029	1102	647
75°	321	424	600	722	763	344
85°	81	113	140	144	153	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1927.9	1927.9	1927.9	1927.9	1927.9
2.5°	1914.5	1918.9	1927.9	1927.9	1932.4
5°	1910.0	1914.5	1923.4	1923.4	1923.4
7.5°	1896.5	1901.0	1910.0	1914.5	1914.5
10°	1882.6	1887.5	1896.5	1901.0	1905.5
12.5°	1860.2	1864.7	1878.1	1887.5	1887.5
15°	1837.7	1842.2	1855.7	1864.7	1869.1
17.5°	1810.4	1819.8	1833.2	1842.2	1846.7
20°	1774.5	1783.4	1801.4	1815.3	1819.8
22.5°	1743.1	1752.0	1770.0	1783.4	1792.4
25°	1706.7	1715.7	1743.1	1752.0	1761.0
27.5°	1661.4	1670.8	1693.3	1711.2	1724.7
30°	1616.5	1625.5	1652.4	1675.3	1684.3
32.5°	1566.7	1580.2	1612.1	1630.0	1643.5
35°	1512.5	1525.9	1557.8	1589.2	1603.1
37.5°	1458.6	1472.1	1503.5	1544.3	1562.3
40°	1395.3	1413.3	1453.7	1508.0	1516.9
42.5°	1336.6	1359.0	1395.3	1458.6	1481.0
45°	1268.8	1291.3	1341.1	1408.8	1444.7
47.5°	1205.6	1228.0	1282.3	1363.5	1408.8
50°	1128.8	1160.2	1228.0	1323.1	1368.0
52.5°	1056.6	1083.5	1174.2	1277.8	1332.1
55°	979.9	1011.3	1119.9	1232.5	1291.3
57.5°	912.1	939.1	1061.1	1187.6	1255.4
60°	826.4	862.3	1002.3	1137.8	1205.6
62.5°	735.8	790.1	943.5	1083.5	1155.8
65°	650.1	713.4	889.7	1029.2	1101.9
67.5°	573.4	641.1	822.0	970.9	1038.7
70°	483.2	568.9	754.2	898.7	975.4
72.5°	402.0	496.7	677.5	822.0	889.7
75°	320.8	424.4	600.3	722.4	763.2
77.5°	248.1	347.7	514.6	551.0	555.4
80°	185.3	275.5	383.6	388.1	402.0
82.5°	126.5	194.3	248.1	271.0	275.5
85°	81.2	113.1	140.0	144.5	153.4
87.5°	36.3	40.8	49.8	45.3	45.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)