

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: P390096

Luminaire Tested: **22CZ2-110VHE-RDP-UNV-L935-CD2-SDWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P390096
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-110VHE-RDP-UNV-L935-CD2-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6139.0 lumens
Efficiency: N/A
Efficacy: 70.0 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

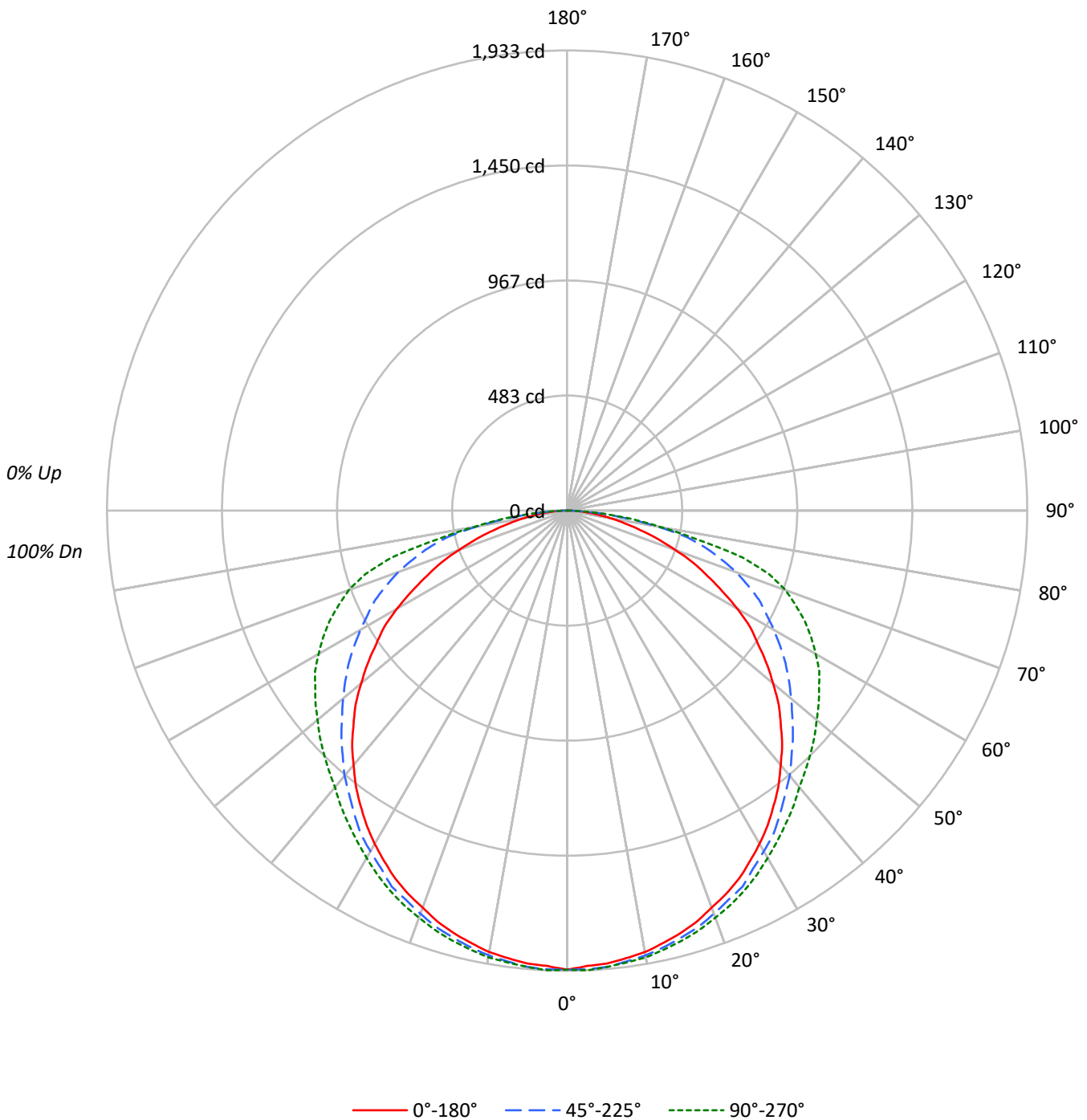
Input Watts (W): 87.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5189	5189	5189
5°	5160	5197	5197
10°	5146	5183	5208
15°	5120	5171	5209
20°	5082	5160	5212
25°	5069	5176	5230
30°	5024	5136	5234
35°	4970	5118	5267
40°	4902	5108	5330
45°	4829	5104	5499
50°	4726	5143	5729
55°	4598	5255	6060
60°	4448	5396	6490
65°	4141	5665	7016
70°	3802	5934	7675
75°	3333	6245	7935
80°	2870	5949	6228
85°	2510	4323	4739



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.4	3.0
10°-20°	523.7	8.5
20°-30°	799.1	13.0
30°-40°	975.7	15.9
40°-50°	1043.2	17.0
50°-60°	1006.9	16.4
60°-70°	866.8	14.1
70°-80°	586.5	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°	1505.2	24.5
0°-40°	2480.9	40.4
0°-60°	4531.0	73.8
0°-90°	6139.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6139.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1928	1928	1928	1928	1928	
5°	1910	1915	1924	1924	1924	181
15°	1838	1843	1856	1865	1870	519
25°	1707	1716	1743	1752	1761	786
35°	1513	1526	1558	1590	1603	947
45°	1269	1292	1341	1409	1445	980
55°	980	1012	1120	1233	1292	878
65°	650	714	890	1030	1102	647
75°	321	424	601	723	763	344
85°	81	113	140	144	154	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1914.8	1919.3	1928.4	1928.4	1932.9
5°	1910.3	1914.8	1923.9	1923.9	1923.9
7.5°	1896.8	1901.3	1910.3	1914.8	1914.8
10°	1883.2	1887.7	1896.8	1901.3	1905.8
12.5°	1860.6	1865.1	1878.7	1887.7	1887.7
15°	1838.0	1842.6	1856.1	1865.1	1869.7
17.5°	1810.9	1820.0	1833.5	1842.6	1847.1
20°	1774.8	1783.9	1801.9	1815.5	1820.0
22.5°	1743.2	1752.2	1770.3	1783.9	1792.9
25°	1707.1	1716.1	1743.2	1752.2	1761.3
27.5°	1661.9	1671.0	1693.5	1711.6	1725.1
30°	1616.8	1625.8	1652.9	1675.5	1684.5
32.5°	1567.1	1580.6	1612.2	1630.3	1643.9
35°	1512.9	1526.4	1558.0	1589.7	1603.2
37.5°	1458.7	1472.2	1503.9	1544.5	1562.6
40°	1395.5	1413.5	1454.2	1508.4	1517.4
42.5°	1336.8	1359.3	1395.5	1458.7	1481.3
45°	1269.0	1291.6	1341.3	1409.0	1445.1
47.5°	1205.8	1228.4	1282.6	1363.9	1409.0
50°	1129.0	1160.6	1228.4	1323.2	1368.4
52.5°	1056.8	1083.9	1174.2	1278.1	1332.2
55°	980.0	1011.6	1120.0	1232.9	1291.6
57.5°	912.2	939.3	1061.3	1187.7	1255.5
60°	826.4	862.6	1002.6	1138.1	1205.8
62.5°	736.1	790.3	943.9	1083.9	1156.1
65°	650.3	713.5	889.7	1029.7	1101.9
67.5°	573.5	641.3	821.9	971.0	1038.7
70°	483.2	569.0	754.2	898.7	975.5
72.5°	401.9	496.8	677.4	821.9	889.7
75°	320.6	424.5	600.6	722.6	763.2
77.5°	248.4	347.7	514.8	551.0	555.5
80°	185.2	275.5	383.9	388.4	401.9
82.5°	126.5	194.2	248.4	271.0	275.5
85°	81.3	112.9	140.0	144.5	153.5
87.5°	36.1	40.6	49.7	45.2	45.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)