

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: P390098

Luminaire Tested: **22CZ2-110VHE-RDP-UNV-L935-CD2-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: P390098
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-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: 6292.0 lumens
Efficiency: N/A
Efficacy: 71.7 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

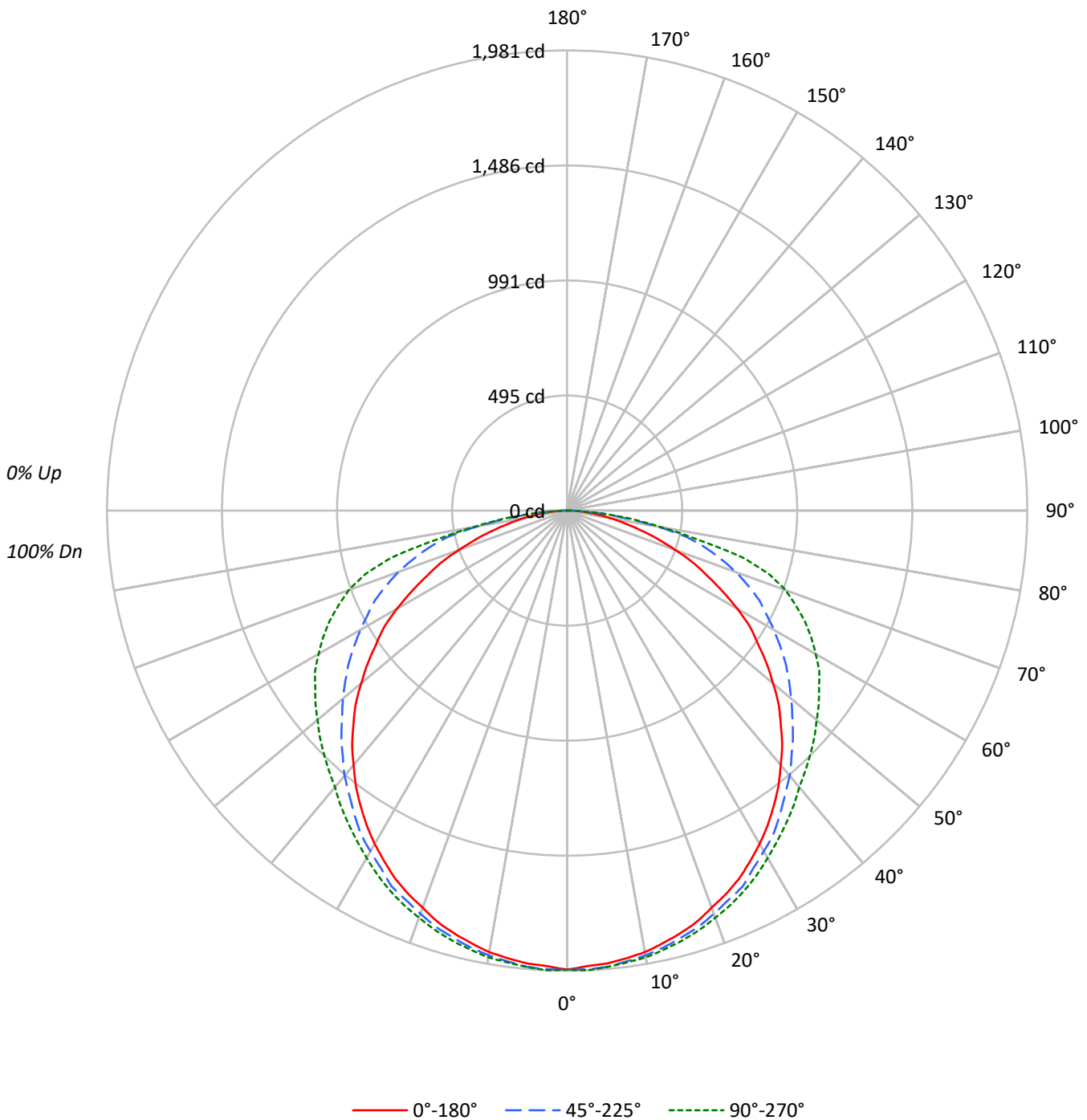
Input Watts (W): 87.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5318	5318	5318
5°	5289	5326	5326
10°	5274	5312	5337
15°	5248	5300	5339
20°	5209	5289	5342
25°	5195	5305	5360
30°	5149	5264	5365
35°	5094	5246	5398
40°	5024	5236	5463
45°	4950	5232	5637
50°	4845	5271	5871
55°	4712	5385	6211
60°	4559	5530	6651
65°	4244	5806	7191
70°	3897	6082	7866
75°	3417	6400	8133
80°	2941	6096	6383
85°	2572	4431	4860



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.0	3.0
10°-20°	536.8	8.5
20°-30°	819.0	13.0
30°-40°	1000.0	15.9
40°-50°	1069.2	17.0
50°-60°	1032.0	16.4
60°-70°	888.4	14.1
70°-80°	601.1	9.6
80°-90°	158.6	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°	1542.7	24.5
0°-40°	2542.7	40.4
0°-60°	4643.9	73.8
0°-90°	6292.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6292.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1976	1976	1976	1976	1976	
5°	1958	1962	1972	1972	1972	186
15°	1884	1888	1902	1912	1916	531
25°	1750	1759	1787	1796	1805	805
35°	1551	1564	1597	1629	1643	970
45°	1301	1324	1375	1444	1481	1004
55°	1004	1037	1148	1264	1324	900
65°	666	731	912	1055	1129	663
75°	329	435	616	741	782	353
85°	83	116	144	148	157	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1976.4	1976.4	1976.4	1976.4	1976.4
2.5°	1962.5	1967.2	1976.4	1976.4	1981.1
5°	1957.9	1962.5	1971.8	1971.8	1971.8
7.5°	1944.0	1948.7	1957.9	1962.5	1962.5
10°	1930.1	1934.8	1944.0	1948.7	1953.3
12.5°	1907.0	1911.6	1925.5	1934.8	1934.8
15°	1883.9	1888.5	1902.4	1911.6	1916.3
17.5°	1856.1	1865.3	1879.2	1888.5	1893.1
20°	1819.1	1828.3	1846.8	1860.7	1865.3
22.5°	1786.7	1795.9	1814.4	1828.3	1837.6
25°	1749.6	1758.9	1786.7	1795.9	1805.2
27.5°	1703.3	1712.6	1735.7	1754.3	1768.1
30°	1657.1	1666.3	1694.1	1717.2	1726.5
32.5°	1606.1	1620.0	1652.4	1670.9	1684.8
35°	1550.6	1564.5	1596.9	1629.3	1643.2
37.5°	1495.0	1508.9	1541.3	1583.0	1601.5
40°	1430.2	1448.8	1490.4	1546.0	1555.2
42.5°	1370.1	1393.2	1430.2	1495.0	1518.2
45°	1300.6	1323.8	1374.7	1444.1	1481.2
47.5°	1235.8	1259.0	1314.5	1397.8	1444.1
50°	1157.2	1189.6	1259.0	1356.2	1402.5
52.5°	1083.1	1110.9	1203.4	1309.9	1365.4
55°	1004.4	1036.8	1147.9	1263.6	1323.8
57.5°	935.0	962.8	1087.7	1217.3	1286.8
60°	847.0	884.1	1027.6	1166.4	1235.8
62.5°	754.5	810.0	967.4	1110.9	1184.9
65°	666.5	731.3	911.8	1055.3	1129.4
67.5°	587.8	657.3	842.4	995.2	1064.6
70°	495.3	583.2	773.0	921.1	999.8
72.5°	411.9	509.1	694.3	842.4	911.8
75°	328.6	435.1	615.6	740.6	782.2
77.5°	254.6	356.4	527.7	564.7	569.3
80°	189.8	282.3	393.4	398.1	411.9
82.5°	129.6	199.0	254.6	277.7	282.3
85°	83.3	115.7	143.5	148.1	157.4
87.5°	37.0	41.7	50.9	46.3	46.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)