

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: P390097

Luminaire Tested: **22CZ2-110VHE-RDP-UNV-L935-CD2-SWPD1-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: P390097
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-SWPD1-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: 6213.9 lumens
Efficiency: N/A
Efficacy: 70.9 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

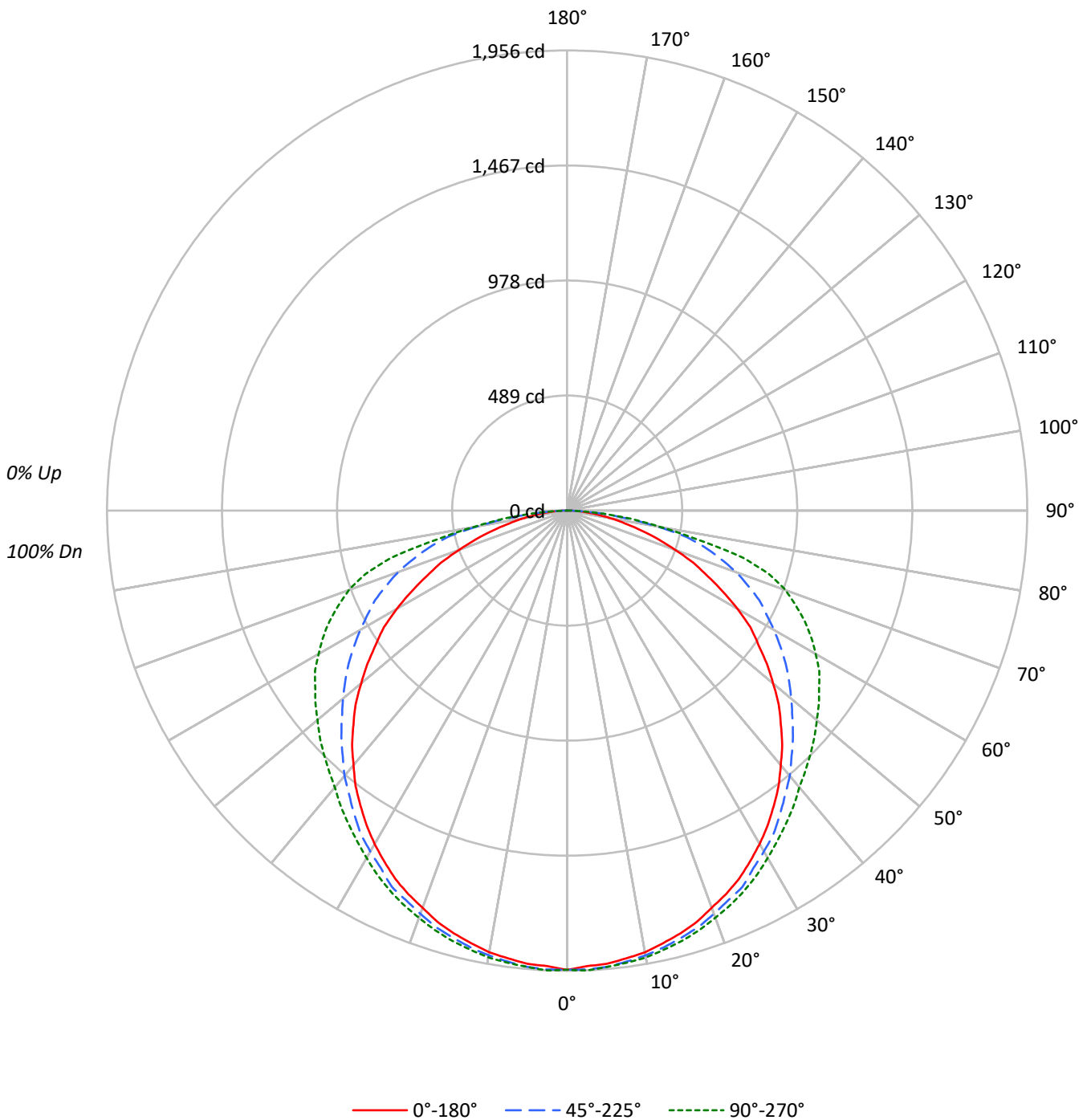
Input Watts (W): 87.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5253	5253	5253
5°	5223	5260	5260
10°	5209	5246	5271
15°	5183	5234	5272
20°	5145	5223	5275
25°	5130	5239	5293
30°	5085	5199	5298
35°	5030	5181	5331
40°	4962	5171	5395
45°	4888	5167	5567
50°	4784	5205	5799
55°	4654	5319	6134
60°	4502	5462	6569
65°	4192	5734	7102
70°	3848	6006	7769
75°	3375	6321	8032
80°	2904	6022	6304
85°	2541	4375	4798



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.6	3.0
10°-20°	530.1	8.5
20°-30°	808.8	13.0
30°-40°	987.6	15.9
40°-50°	1055.9	17.0
50°-60°	1019.2	16.4
60°-70°	877.4	14.1
70°-80°	593.6	9.6
80°-90°	156.6	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°	1523.6	24.5
0°-40°	2511.1	40.4
0°-60°	4586.3	73.8
0°-90°	6213.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6213.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1952	1952	1952	1952	1952	
5°	1934	1938	1947	1947	1947	184
15°	1860	1865	1879	1888	1892	525
25°	1728	1737	1764	1774	1783	795
35°	1531	1545	1577	1609	1623	958
45°	1284	1307	1358	1426	1463	992
55°	992	1024	1134	1248	1307	889
65°	658	722	900	1042	1115	655
75°	325	430	608	731	772	348
85°	82	114	142	146	155	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1951.9	1951.9	1951.9	1951.9	1951.9
2.5°	1938.2	1942.8	1951.9	1951.9	1956.5
5°	1933.6	1938.2	1947.3	1947.3	1947.3
7.5°	1919.9	1924.5	1933.6	1938.2	1938.2
10°	1906.2	1910.8	1919.9	1924.5	1929.0
12.5°	1883.3	1887.9	1901.6	1910.8	1910.8
15°	1860.5	1865.0	1878.8	1887.9	1892.5
17.5°	1833.0	1842.2	1855.9	1865.0	1869.6
20°	1796.5	1805.6	1823.9	1837.6	1842.2
22.5°	1764.5	1773.6	1791.9	1805.6	1814.8
25°	1727.9	1737.0	1764.5	1773.6	1782.8
27.5°	1682.2	1691.3	1714.2	1732.5	1746.2
30°	1636.5	1645.6	1673.1	1695.9	1705.1
32.5°	1586.2	1599.9	1631.9	1650.2	1663.9
35°	1531.3	1545.1	1577.1	1609.1	1622.8
37.5°	1476.5	1490.2	1522.2	1563.3	1581.6
40°	1412.5	1430.8	1471.9	1526.8	1535.9
42.5°	1353.1	1375.9	1412.5	1476.5	1499.3
45°	1284.5	1307.4	1357.6	1426.2	1462.8
47.5°	1220.5	1243.4	1298.2	1380.5	1426.2
50°	1142.8	1174.8	1243.4	1339.4	1385.1
52.5°	1069.7	1097.1	1188.5	1293.6	1348.5
55°	991.9	1023.9	1133.7	1247.9	1307.4
57.5°	923.4	950.8	1074.2	1202.2	1270.8
60°	836.5	873.1	1014.8	1151.9	1220.5
62.5°	745.1	800.0	955.4	1097.1	1170.2
65°	658.3	722.2	900.5	1042.2	1115.4
67.5°	580.5	649.1	832.0	982.8	1051.4
70°	489.1	576.0	763.4	909.7	987.4
72.5°	406.8	502.8	685.7	832.0	900.5
75°	324.6	429.7	608.0	731.4	772.5
77.5°	251.4	352.0	521.1	557.7	562.3
80°	187.4	278.8	388.6	393.1	406.8
82.5°	128.0	196.6	251.4	274.3	278.8
85°	82.3	114.3	141.7	146.3	155.4
87.5°	36.6	41.1	50.3	45.7	45.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)