

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: P390094

Luminaire Tested: **22CZ2-110VHE-RDP-UNV-L930-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: P390094
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-L930-CD2-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6063.9 lumens
Efficiency: N/A
Efficacy: 69.1 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

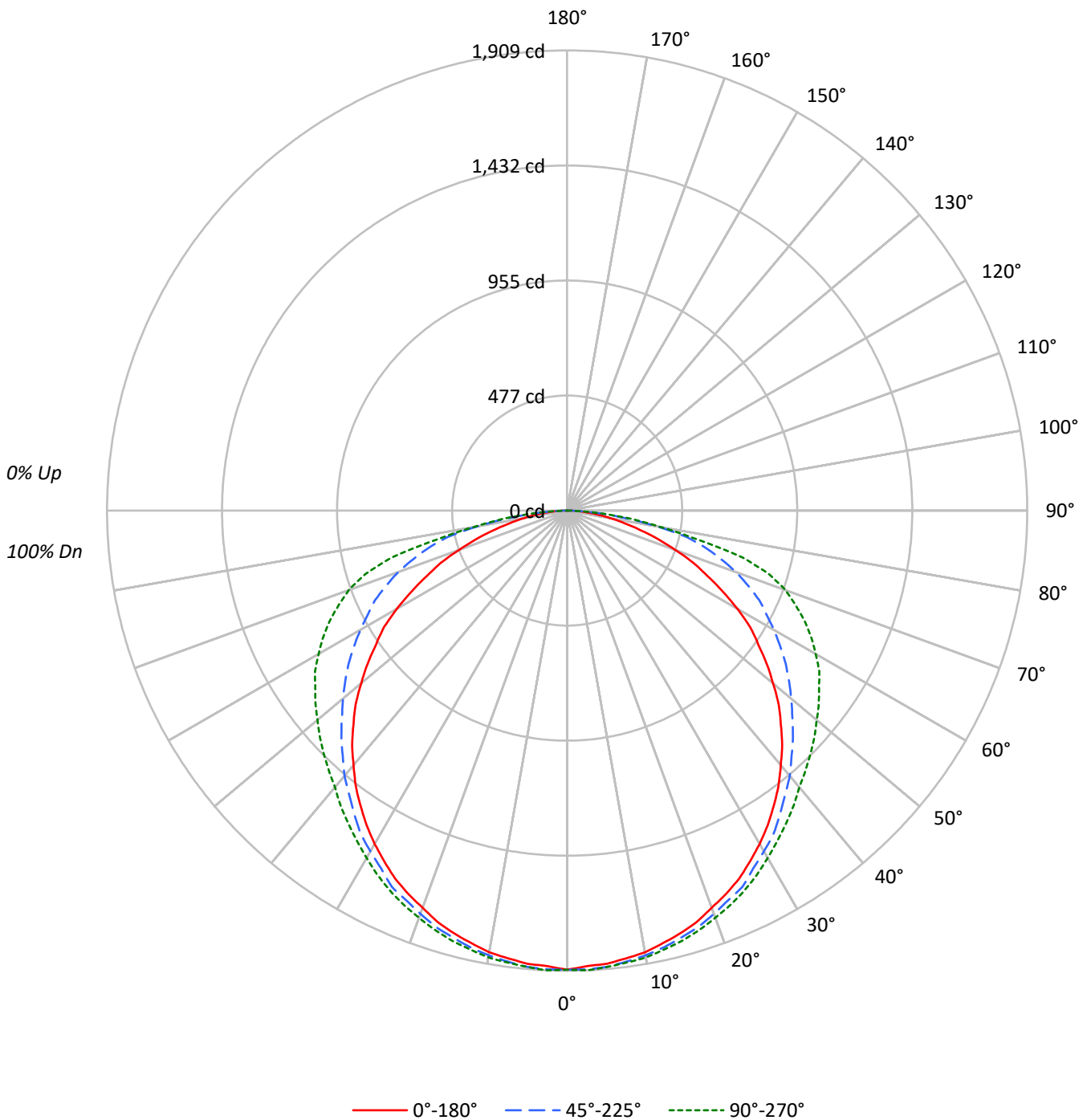
Input Watts (W): 87.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5126	5126	5126
5°	5097	5133	5133
10°	5083	5120	5144
15°	5058	5108	5145
20°	5020	5097	5148
25°	5007	5113	5165
30°	4962	5073	5170
35°	4909	5056	5202
40°	4842	5046	5265
45°	4770	5042	5433
50°	4669	5079	5658
55°	4541	5190	5986
60°	4393	5330	6410
65°	4090	5596	6930
70°	3755	5862	7581
75°	3293	6169	7838
80°	2834	5876	6152
85°	2479	4270	4684



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.2	3.0
10°-20°	517.3	8.5
20°-30°	789.3	13.0
30°-40°	963.7	15.9
40°-50°	1030.4	17.0
50°-60°	994.6	16.4
60°-70°	856.2	14.1
70°-80°	579.3	9.6
80°-90°	152.8	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°	1486.8	24.5
0°-40°	2450.5	40.4
0°-60°	4475.6	73.8
0°-90°	6063.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6063.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1905	1905	1905	1905	1905	
5°	1887	1891	1900	1900	1900	179
15°	1816	1820	1833	1842	1847	512
25°	1686	1695	1722	1731	1740	776
35°	1494	1508	1539	1570	1584	935
45°	1254	1276	1325	1392	1428	968
55°	968	999	1106	1218	1276	867
65°	642	705	879	1017	1088	639
75°	317	419	593	714	754	340
85°	80	112	138	143	152	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1904.8	1904.8	1904.8	1904.8	1904.8
2.5°	1891.4	1895.9	1904.8	1904.8	1909.2
5°	1886.9	1891.4	1900.3	1900.3	1900.3
7.5°	1873.6	1878.0	1886.9	1891.4	1891.4
10°	1860.2	1864.6	1873.6	1878.0	1882.5
12.5°	1837.9	1842.3	1855.7	1864.6	1864.6
15°	1815.6	1820.0	1833.4	1842.3	1846.8
17.5°	1788.8	1797.7	1811.1	1820.0	1824.5
20°	1753.1	1762.0	1779.9	1793.3	1797.7
22.5°	1721.9	1730.8	1748.6	1762.0	1771.0
25°	1686.2	1695.1	1721.9	1730.8	1739.7
27.5°	1641.6	1650.5	1672.8	1690.7	1704.0
30°	1597.0	1605.9	1632.7	1655.0	1663.9
32.5°	1547.9	1561.3	1592.5	1610.4	1623.7
35°	1494.4	1507.8	1539.0	1570.2	1583.6
37.5°	1440.8	1454.2	1485.5	1525.6	1543.4
40°	1378.4	1396.2	1436.4	1489.9	1498.8
42.5°	1320.4	1342.7	1378.4	1440.8	1463.2
45°	1253.5	1275.8	1324.9	1391.8	1427.5
47.5°	1191.0	1213.3	1266.9	1347.2	1391.8
50°	1115.2	1146.4	1213.3	1307.0	1351.6
52.5°	1043.8	1070.6	1159.8	1262.4	1315.9
55°	968.0	999.2	1106.3	1217.8	1275.8
57.5°	901.1	927.9	1048.3	1173.2	1240.1
60°	816.3	852.0	990.3	1124.1	1191.0
62.5°	727.1	780.6	932.3	1070.6	1142.0
65°	642.4	704.8	878.8	1017.1	1088.4
67.5°	566.5	633.4	811.9	959.1	1026.0
70°	477.3	562.1	745.0	887.7	963.5
72.5°	397.0	490.7	669.1	811.9	878.8
75°	316.7	419.3	593.3	713.7	753.9
77.5°	245.3	343.5	508.5	544.2	548.7
80°	182.9	272.1	379.2	383.6	397.0
82.5°	124.9	191.8	245.3	267.7	272.1
85°	80.3	111.5	138.3	142.7	151.7
87.5°	35.7	40.1	49.1	44.6	44.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)