

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: P390099

Luminaire Tested: **22CZ2-110VHE-RDP-UNV-L940-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: P390099
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-L940-CD2-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6202.5 lumens
Efficiency: N/A
Efficacy: 70.7 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

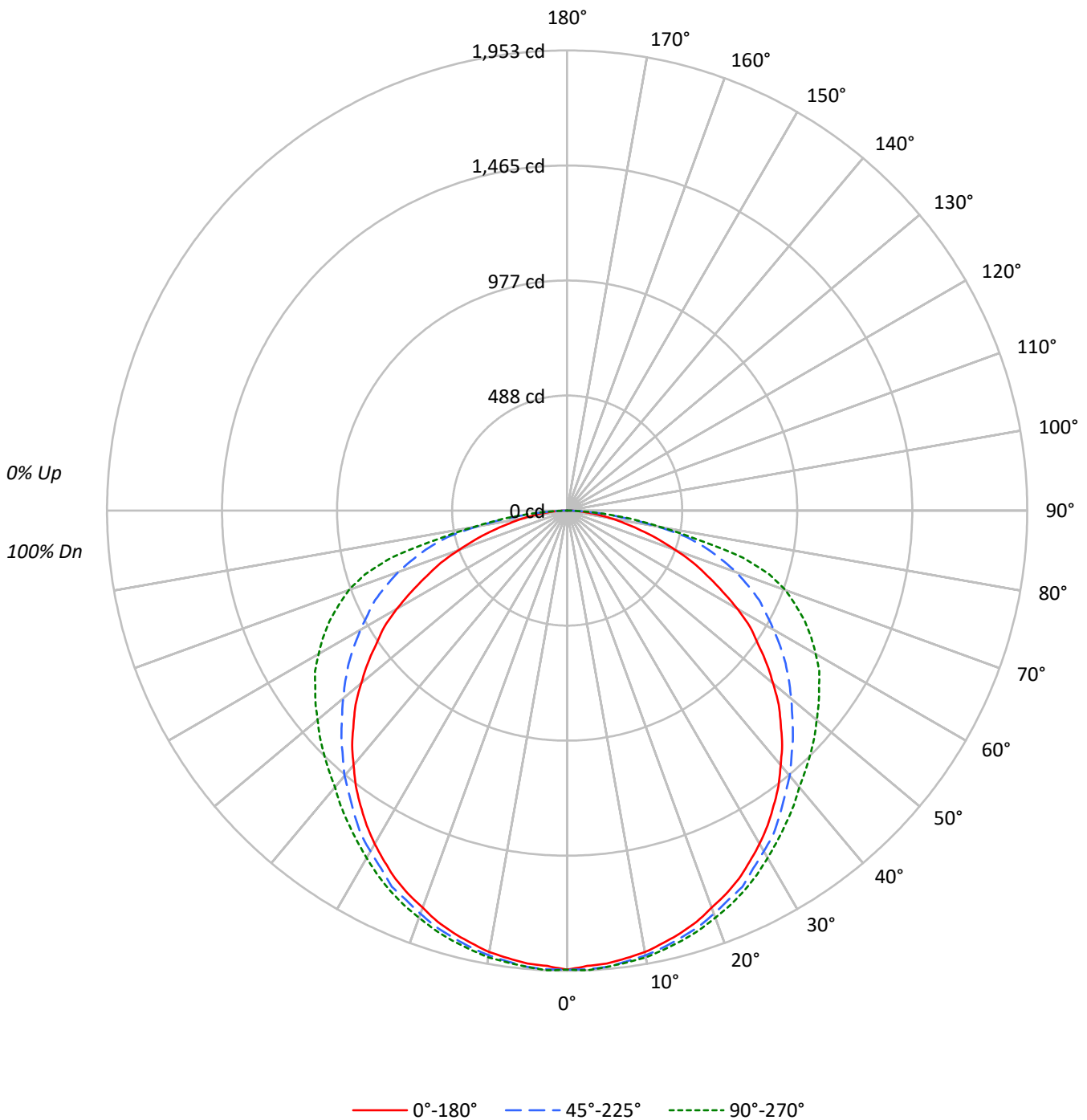
Input Watts (W): 87.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5243	5243	5243
5°	5214	5251	5251
10°	5199	5237	5261
15°	5174	5224	5263
20°	5135	5214	5266
25°	5121	5229	5284
30°	5076	5189	5288
35°	5021	5171	5321
40°	4953	5161	5386
45°	4879	5157	5557
50°	4775	5196	5788
55°	4645	5309	6123
60°	4494	5451	6557
65°	4183	5724	7089
70°	3841	5995	7755
75°	3369	6310	8017
80°	2899	6010	6293
85°	2535	4366	4789



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.3	3.0
10°-20°	529.2	8.5
20°-30°	807.3	13.0
30°-40°	985.8	15.9
40°-50°	1054.0	17.0
50°-60°	1017.4	16.4
60°-70°	875.7	14.1
70°-80°	592.5	9.6
80°-90°	156.3	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°	1520.8	24.5
0°-40°	2506.5	40.4
0°-60°	4577.9	73.8
0°-90°	6202.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6202.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1948	1948	1948	1948	1948	
5°	1930	1935	1944	1944	1944	183
15°	1857	1862	1875	1884	1889	524
25°	1725	1734	1761	1770	1780	794
35°	1528	1542	1574	1606	1620	956
45°	1282	1305	1355	1424	1460	990
55°	990	1022	1132	1246	1305	887
65°	657	721	899	1040	1113	653
75°	324	429	607	730	771	348
85°	82	114	141	146	155	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1948.3	1948.3	1948.3	1948.3	1948.3
2.5°	1934.6	1939.2	1948.3	1948.3	1952.9
5°	1930.1	1934.6	1943.8	1943.8	1943.8
7.5°	1916.4	1920.9	1930.1	1934.6	1934.6
10°	1902.7	1907.2	1916.4	1920.9	1925.5
12.5°	1879.9	1884.4	1898.1	1907.2	1907.2
15°	1857.1	1861.6	1875.3	1884.4	1889.0
17.5°	1829.7	1838.8	1852.5	1861.6	1866.2
20°	1793.2	1802.3	1820.6	1834.2	1838.8
22.5°	1761.2	1770.4	1788.6	1802.3	1811.4
25°	1724.7	1733.9	1761.2	1770.4	1779.5
27.5°	1679.1	1688.2	1711.0	1729.3	1743.0
30°	1633.5	1642.6	1670.0	1692.8	1701.9
32.5°	1583.3	1597.0	1628.9	1647.2	1660.9
35°	1528.5	1542.2	1574.2	1606.1	1619.8
37.5°	1473.8	1487.5	1519.4	1560.5	1578.7
40°	1409.9	1428.2	1469.2	1524.0	1533.1
42.5°	1350.6	1373.4	1409.9	1473.8	1496.6
45°	1282.1	1305.0	1355.1	1423.6	1460.1
47.5°	1218.3	1241.1	1295.8	1378.0	1423.6
50°	1140.7	1172.6	1241.1	1336.9	1382.5
52.5°	1067.7	1095.1	1186.3	1291.3	1346.0
55°	990.1	1022.1	1131.6	1245.6	1305.0
57.5°	921.7	949.1	1072.3	1200.0	1268.5
60°	835.0	871.5	1012.9	1149.8	1218.3
62.5°	743.7	798.5	953.6	1095.1	1168.1
65°	657.0	720.9	898.9	1040.3	1113.3
67.5°	579.5	647.9	830.4	981.0	1049.4
70°	488.2	574.9	762.0	908.0	985.6
72.5°	406.1	501.9	684.4	830.4	898.9
75°	324.0	428.9	606.9	730.0	771.1
77.5°	251.0	351.3	520.2	556.7	561.2
80°	187.1	278.3	387.8	392.4	406.1
82.5°	127.8	196.2	251.0	273.8	278.3
85°	82.1	114.1	141.4	146.0	155.1
87.5°	36.5	41.1	50.2	45.6	45.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)