

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: P390100

Luminaire Tested: **22CZ2-110VHE-RDP-UNV-L940-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: P390100
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-SWPD1-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: 6278.2 lumens
Efficiency: N/A
Efficacy: 71.6 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

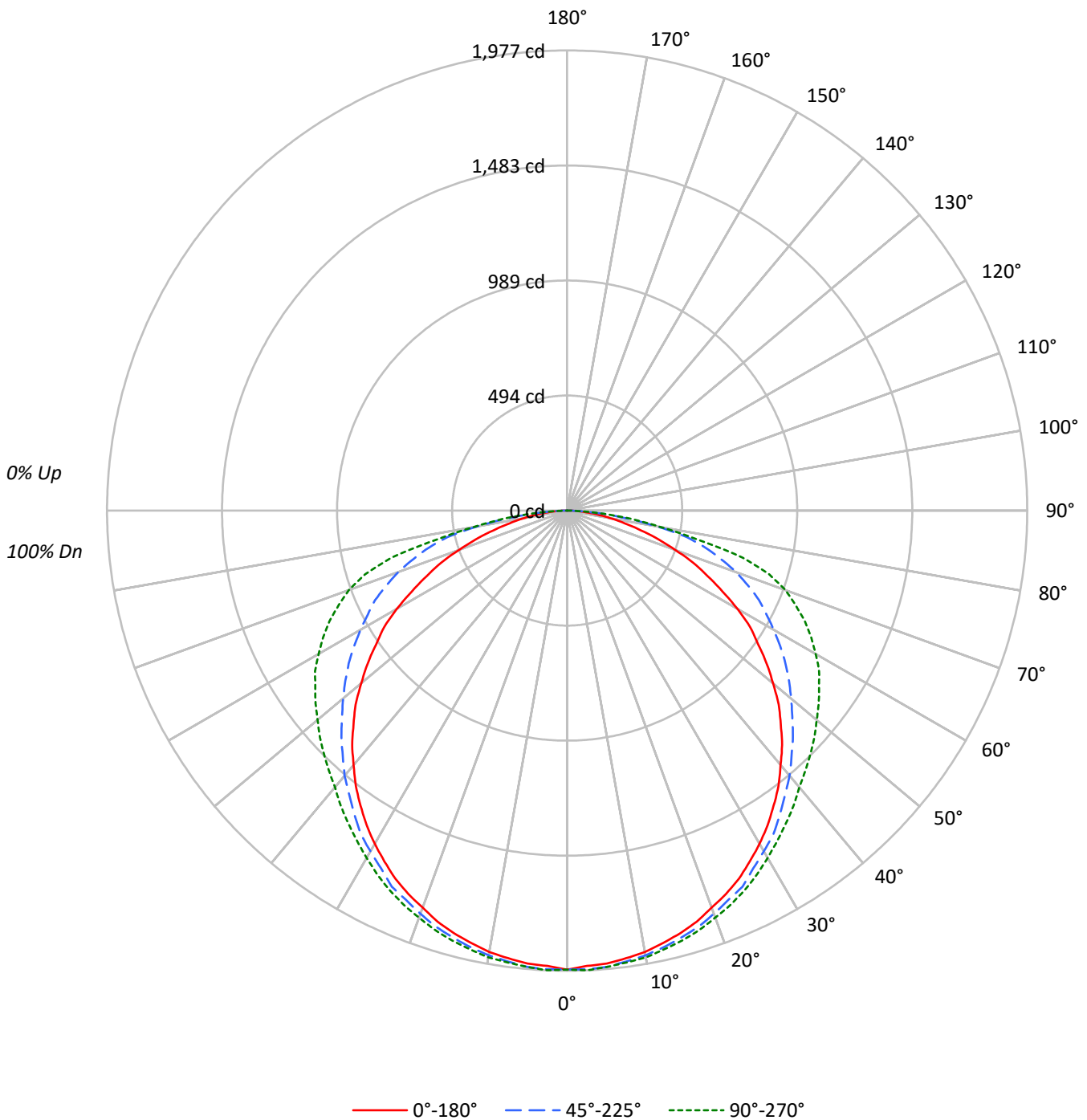
Input Watts (W): 87.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5307	5307	5307
5°	5277	5315	5315
10°	5263	5300	5326
15°	5237	5288	5327
20°	5198	5277	5330
25°	5184	5293	5348
30°	5138	5253	5353
35°	5083	5234	5386
40°	5013	5224	5451
45°	4939	5220	5624
50°	4834	5259	5858
55°	4702	5374	6197
60°	4549	5518	6636
65°	4235	5793	7175
70°	3888	6069	7849
75°	3409	6387	8115
80°	2935	6084	6369
85°	2566	4421	4847



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.5	3.0
10°-20°	535.6	8.5
20°-30°	817.2	13.0
30°-40°	997.8	15.9
40°-50°	1066.9	17.0
50°-60°	1029.7	16.4
60°-70°	886.4	14.1
70°-80°	599.8	9.6
80°-90°	158.3	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°	1539.3	24.5
0°-40°	2537.1	40.4
0°-60°	4633.7	73.8
0°-90°	6278.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6278.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1972	1972	1972	1972	1972	
5°	1954	1958	1968	1968	1968	186
15°	1880	1884	1898	1907	1912	530
25°	1746	1755	1783	1792	1801	803
35°	1547	1561	1593	1626	1640	968
45°	1298	1321	1372	1441	1478	1002
55°	1002	1034	1145	1261	1321	898
65°	665	730	910	1053	1127	661
75°	328	434	614	739	780	352
85°	83	116	143	148	157	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1972.1	1972.1	1972.1	1972.1	1972.1
2.5°	1958.2	1962.9	1972.1	1972.1	1976.7
5°	1953.6	1958.2	1967.5	1967.5	1967.5
7.5°	1939.8	1944.4	1953.6	1958.2	1958.2
10°	1925.9	1930.5	1939.8	1944.4	1949.0
12.5°	1902.8	1907.4	1921.3	1930.5	1930.5
15°	1879.7	1884.3	1898.2	1907.4	1912.1
17.5°	1852.0	1861.2	1875.1	1884.3	1889.0
20°	1815.1	1824.3	1842.8	1856.6	1861.2
22.5°	1782.7	1792.0	1810.4	1824.3	1833.5
25°	1745.8	1755.0	1782.7	1792.0	1801.2
27.5°	1699.6	1708.8	1731.9	1750.4	1764.3
30°	1653.4	1662.7	1690.4	1713.5	1722.7
32.5°	1602.6	1616.5	1648.8	1667.3	1681.1
35°	1547.2	1561.0	1593.4	1625.7	1639.6
37.5°	1491.8	1505.6	1538.0	1579.5	1598.0
40°	1427.1	1445.6	1487.2	1542.6	1551.8
42.5°	1367.1	1390.2	1427.1	1491.8	1514.9
45°	1297.8	1320.9	1371.7	1441.0	1477.9
47.5°	1233.1	1256.2	1311.6	1394.8	1441.0
50°	1154.6	1186.9	1256.2	1353.2	1399.4
52.5°	1080.7	1108.4	1200.8	1307.0	1362.5
55°	1002.2	1034.5	1145.4	1260.8	1320.9
57.5°	932.9	960.6	1085.3	1214.7	1283.9
60°	845.2	882.1	1025.3	1163.9	1233.1
62.5°	752.8	808.2	965.3	1108.4	1182.3
65°	665.1	729.7	909.8	1053.0	1126.9
67.5°	586.5	655.8	840.6	993.0	1062.3
70°	494.2	581.9	771.3	919.1	997.6
72.5°	411.0	508.0	692.8	840.6	909.8
75°	327.9	434.1	614.3	739.0	780.5
77.5°	254.0	355.6	526.5	563.5	568.1
80°	189.4	281.7	392.6	397.2	411.0
82.5°	129.3	198.6	254.0	277.1	281.7
85°	83.1	115.5	143.2	147.8	157.0
87.5°	36.9	41.6	50.8	46.2	46.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)