

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: P389118

Luminaire Tested: **22CZ2-110VHE-S-UNV-L950-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: P389118
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-110VHE-S-UNV-L950-CD2-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10285.4 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

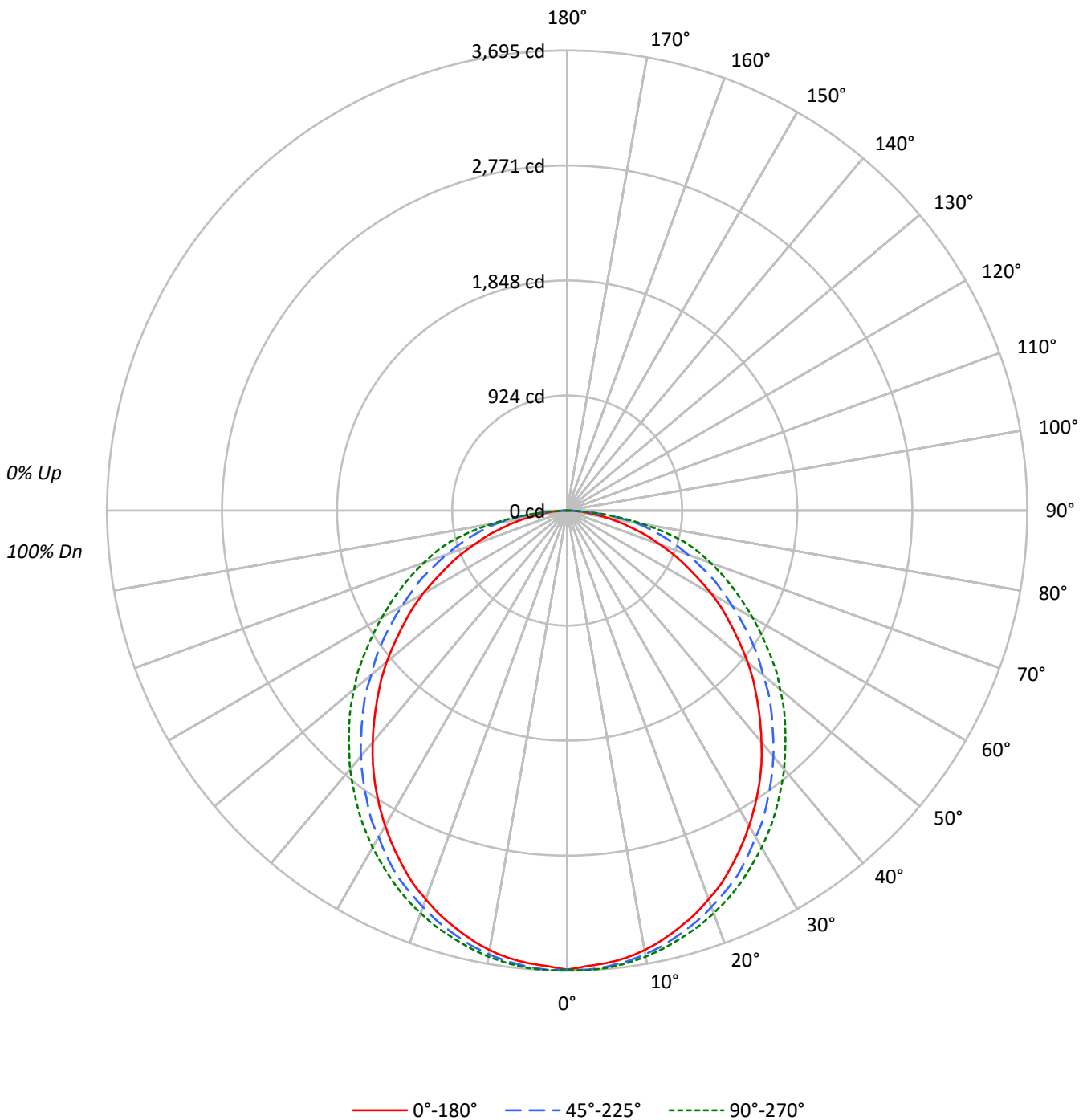
Input Watts (W): 87.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9918	9918	9918
5°	9852	9930	9956
10°	9795	9887	9940
15°	9666	9800	9893
20°	9510	9702	9853
25°	9319	9604	9789
30°	9081	9409	9707
35°	8828	9238	9616
40°	8530	9053	9525
45°	8218	8839	9423
50°	7916	8598	9342
55°	7542	8443	9276
60°	7206	8239	9246
65°	6723	8189	9351
70°	6192	8118	9628
75°	5588	8232	10129
80°	4833	8478	9520
85°	4001	7111	7111



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	348.5	3.4
10°-20°	991.9	9.6
20°-30°	1484.1	14.4
30°-40°	1757.6	17.1
40°-50°	1791.2	17.4
50°-60°	1605.4	15.6
60°-70°	1256.9	12.2
70°-80°	810.5	7.9
80°-90°	239.4	2.3
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°	2824.5	27.5
0°-40°	4582.1	44.5
0°-60°	7978.6	77.6
0°-90°	10285.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10285.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3686	3686	3686	3686	3686	
5°	3647	3657	3676	3681	3686	346
15°	3470	3489	3518	3546	3551	978
25°	3138	3167	3234	3278	3297	1445
35°	2687	2721	2812	2899	2927	1680
45°	2160	2208	2323	2443	2476	1668
55°	1608	1660	1800	1924	1977	1441
65°	1056	1118	1286	1411	1468	1049
75°	538	619	792	926	974	576
85°	130	178	230	230	230	152
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3685.6	3685.6	3685.6	3685.6	3685.6
2.5°	3661.6	3671.2	3690.4	3695.2	3695.2
5°	3647.2	3656.8	3676.0	3680.8	3685.6
7.5°	3623.2	3628.0	3652.0	3661.6	3666.4
10°	3584.8	3594.4	3618.4	3632.8	3637.6
12.5°	3532.0	3546.4	3575.2	3594.4	3599.2
15°	3469.6	3488.8	3517.6	3546.4	3551.2
17.5°	3402.4	3421.6	3460.0	3493.6	3503.2
20°	3320.9	3344.9	3388.0	3426.4	3440.8
22.5°	3239.3	3258.5	3311.3	3359.3	3373.6
25°	3138.5	3167.3	3234.5	3277.7	3296.9
27.5°	3032.9	3066.5	3133.7	3191.3	3210.5
30°	2922.5	2956.1	3028.1	3100.1	3124.1
32.5°	2807.4	2845.8	2932.1	3004.1	3028.1
35°	2687.4	2721.0	2812.2	2898.6	2927.3
37.5°	2562.6	2591.4	2697.0	2788.2	2817.0
40°	2428.3	2466.7	2577.0	2682.6	2711.4
42.5°	2293.9	2337.1	2447.5	2562.6	2591.4
45°	2159.5	2207.5	2322.7	2442.7	2476.2
47.5°	2029.9	2068.3	2197.9	2313.1	2361.1
50°	1890.8	1929.2	2053.9	2183.5	2231.5
52.5°	1746.8	1799.6	1934.0	2058.7	2116.3
55°	1607.6	1660.4	1799.6	1924.4	1977.2
57.5°	1478.1	1521.3	1665.2	1794.8	1847.6
60°	1338.9	1377.3	1530.9	1670.0	1718.0
62.5°	1190.1	1247.7	1406.1	1535.7	1593.2
65°	1055.8	1118.2	1286.1	1410.9	1468.5
67.5°	931.0	988.6	1151.7	1286.1	1348.5
70°	787.0	863.8	1031.8	1166.1	1223.7
72.5°	671.9	739.0	911.8	1046.2	1108.6
75°	537.5	619.1	791.8	926.2	974.2
77.5°	427.1	508.7	671.9	777.4	801.4
80°	311.9	393.5	547.1	599.9	614.3
82.5°	211.2	287.9	393.5	407.9	412.7
85°	129.6	177.6	230.3	230.3	230.3
87.5°	62.4	72.0	81.6	76.8	76.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)