

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: P388160

Luminaire Tested: **22CZ2-100VHE-UNV-L950-CD1-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: P388160
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

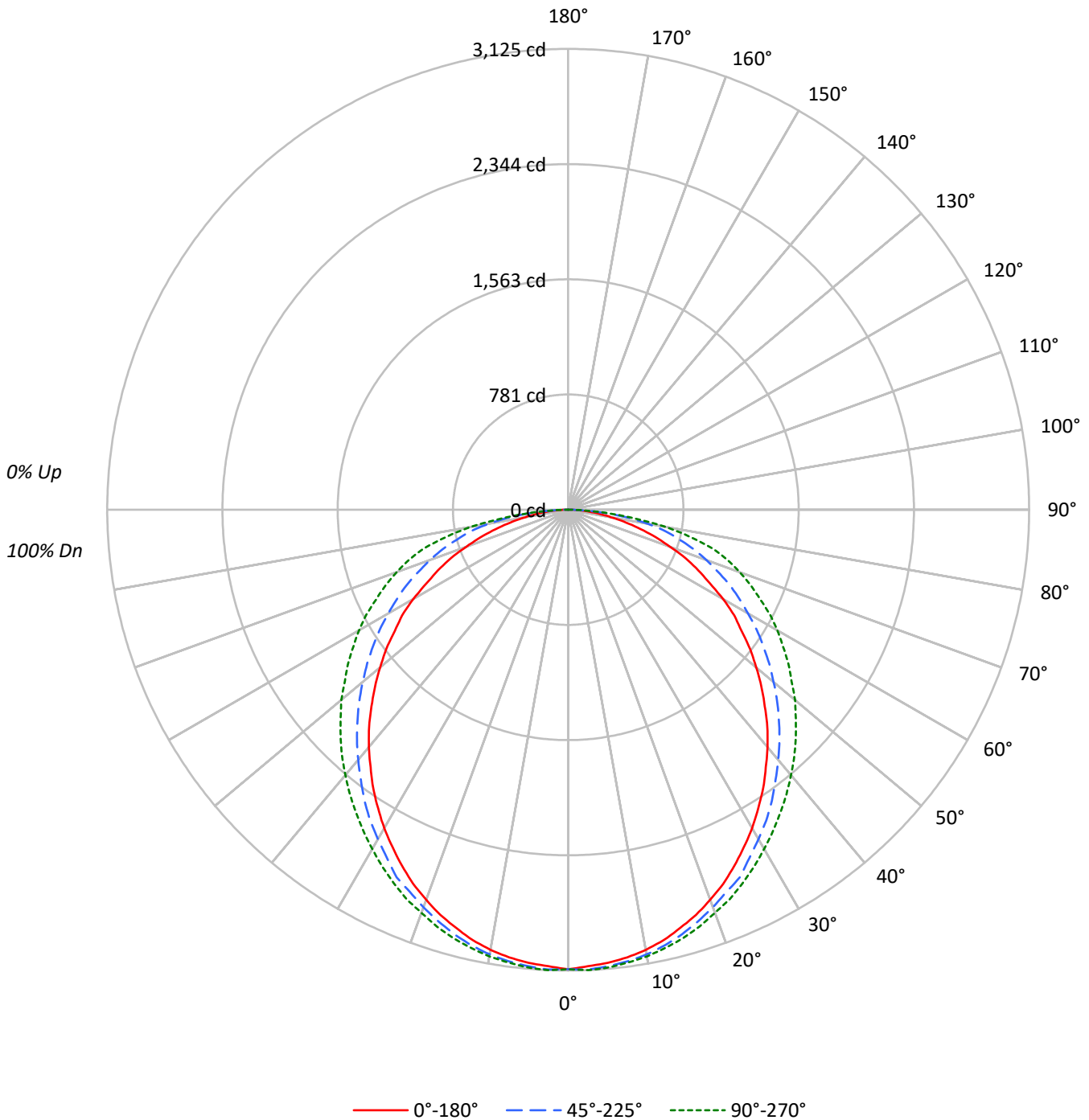
Lumens per Lamp: N/A
Luminaire Lumens: 9165.0 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 77.7
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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8386	8386	8386
5°	8333	8393	8418
10°	8281	8367	8404
15°	8179	8305	8380
20°	8059	8214	8330
25°	7914	8168	8302
30°	7749	8016	8254
35°	7570	7911	8237
40°	7383	7778	8254
45°	7174	7689	8307
50°	6967	7608	8402
55°	6728	7575	8548
60°	6529	7573	8811
65°	6202	7696	9131
70°	5784	7842	9722
75°	5298	8112	10503
80°	4612	8457	10343
85°	4039	7518	8216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.7	3.2
10°-20°	839.4	9.2
20°-30°	1260.2	13.7
30°-40°	1505.8	16.4
40°-50°	1565.8	17.1
50°-60°	1451.2	15.8
60°-70°	1190.4	13.0
70°-80°	804.7	8.8
80°-90°	252.9	2.8
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°	2394.3	26.1
0°-40°	3900.1	42.6
0°-60°	6917.1	75.5
0°-90°	9165.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9165.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3116	3116	3116	3116	3116	
5°	3085	3089	3107	3112	3116	293
15°	2936	2949	2981	2999	3008	828
25°	2665	2688	2751	2782	2796	1227
35°	2304	2336	2408	2480	2507	1440
45°	1885	1921	2020	2138	2183	1456
55°	1434	1479	1614	1759	1822	1289
65°	974	1028	1209	1366	1434	963
75°	510	595	780	938	1010	540
85°	131	180	244	271	266	148
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3116.3	3116.3	3116.3	3116.3	3116.3
2.5°	3098.2	3107.2	3120.8	3125.3	3125.3
5°	3084.7	3089.2	3107.2	3111.8	3116.3
7.5°	3062.2	3071.2	3089.2	3093.7	3098.2
10°	3030.6	3039.6	3062.2	3071.2	3075.7
12.5°	2990.0	2999.0	3026.1	3039.6	3044.1
15°	2935.9	2949.4	2981.0	2999.0	3008.0
17.5°	2881.8	2895.3	2926.9	2953.9	2962.9
20°	2814.1	2845.7	2868.2	2904.3	2908.8
22.5°	2746.5	2764.5	2805.1	2841.2	2859.2
25°	2665.3	2687.8	2751.0	2782.5	2796.1
27.5°	2579.6	2611.2	2660.8	2710.4	2728.4
30°	2493.9	2516.5	2579.6	2638.2	2656.3
32.5°	2399.2	2430.8	2498.4	2557.1	2584.1
35°	2304.5	2336.1	2408.2	2480.4	2507.4
37.5°	2200.8	2236.9	2309.0	2394.7	2430.8
40°	2101.6	2128.6	2214.3	2318.0	2349.6
42.5°	1997.8	2029.4	2119.6	2232.3	2268.4
45°	1885.1	1921.2	2020.4	2137.6	2182.7
47.5°	1776.9	1812.9	1921.2	2038.4	2092.5
50°	1664.1	1709.2	1817.4	1952.7	2006.9
52.5°	1555.9	1596.5	1718.2	1858.0	1907.6
55°	1434.1	1479.2	1614.5	1758.8	1822.0
57.5°	1334.9	1366.5	1515.3	1664.1	1727.3
60°	1213.1	1253.7	1407.1	1564.9	1637.1
62.5°	1082.4	1150.0	1307.8	1470.2	1542.4
65°	974.1	1028.2	1208.6	1366.5	1434.1
67.5°	861.4	920.0	1095.9	1262.7	1339.4
70°	735.1	811.8	996.7	1163.5	1235.7
72.5°	622.4	703.5	892.9	1055.3	1132.0
75°	509.6	595.3	780.2	938.0	1010.2
77.5°	401.4	496.1	676.5	798.2	843.3
80°	297.6	387.8	545.7	631.4	667.4
82.5°	207.5	284.1	401.4	446.5	455.5
85°	130.8	180.4	243.5	270.6	266.1
87.5°	58.6	72.2	90.2	99.2	94.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)