

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: P388560

Luminaire Tested: **22CZ2-95VHE-UNV-L935-CD1-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: P388560
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: 22CZ2-95VHE-UNV-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7927.5 lumens
Efficiency: N/A
Efficacy: 109.0 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

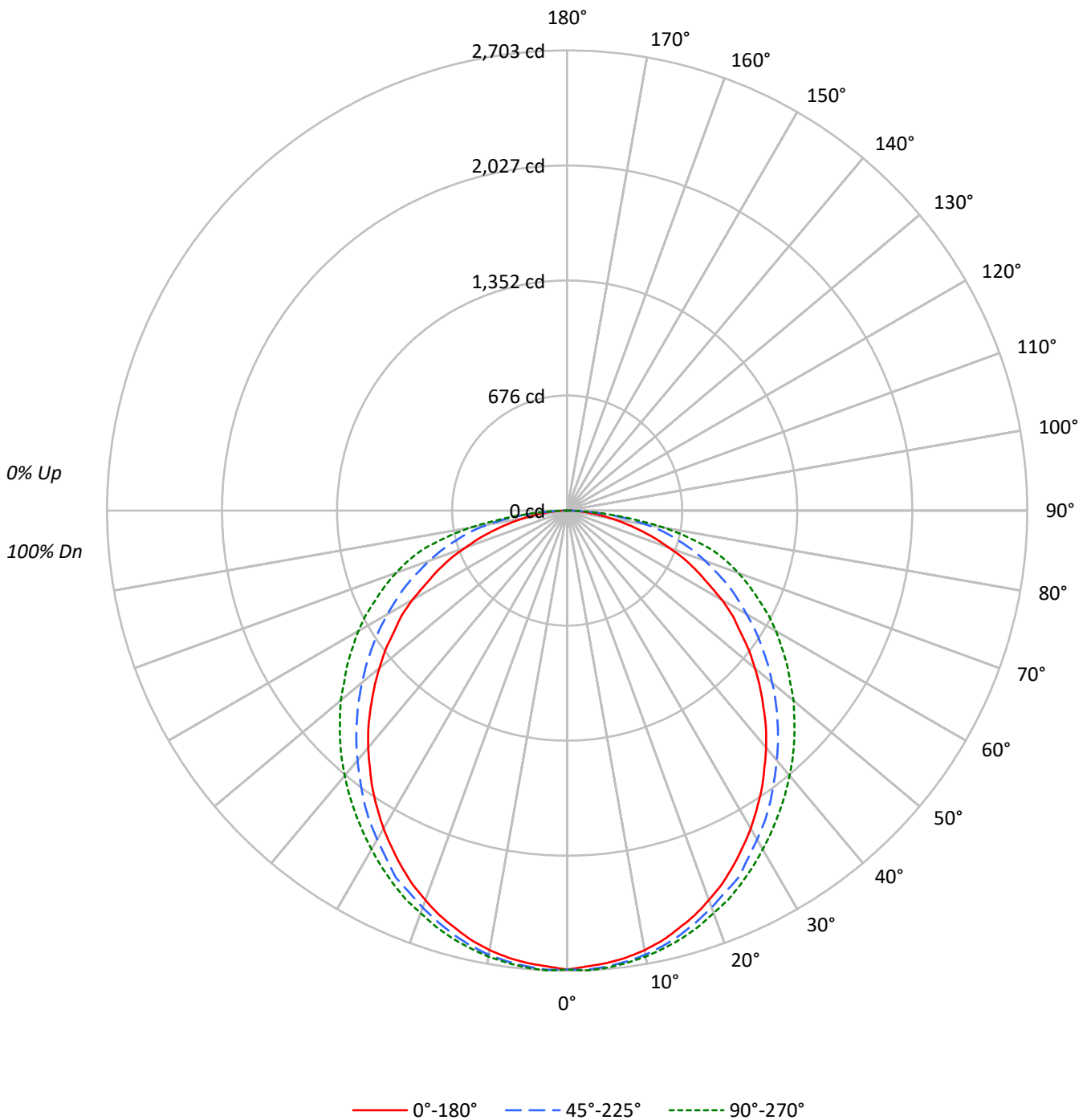
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7254	7254	7254
5°	7207	7260	7281
10°	7163	7238	7270
15°	7075	7183	7249
20°	6970	7105	7205
25°	6845	7065	7181
30°	6703	6933	7139
35°	6548	6843	7125
40°	6386	6728	7139
45°	6205	6651	7185
50°	6026	6581	7267
55°	5820	6552	7393
60°	5647	6550	7621
65°	5365	6656	7899
70°	5002	6783	8409
75°	4583	7016	9085
80°	3990	7314	8946
85°	3492	6502	7108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.9	3.2
10°-20°	726.1	9.2
20°-30°	1090.0	13.7
30°-40°	1302.5	16.4
40°-50°	1354.4	17.1
50°-60°	1255.3	15.8
60°-70°	1029.6	13.0
70°-80°	696.0	8.8
80°-90°	218.7	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°	2071.0	26.1
0°-40°	3373.5	42.6
0°-60°	5983.1	75.5
0°-90°	7927.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7927.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2696	2696	2696	2696	2696	
5°	2668	2672	2688	2692	2696	253
15°	2540	2551	2578	2594	2602	716
25°	2305	2325	2380	2407	2418	1062
35°	1993	2021	2083	2146	2169	1246
45°	1631	1662	1748	1849	1888	1259
55°	1240	1280	1396	1521	1576	1115
65°	843	889	1045	1182	1240	833
75°	441	515	675	811	874	467
85°	113	156	211	234	230	128
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2695.5	2695.5	2695.5	2695.5	2695.5
2.5°	2679.9	2687.7	2699.4	2703.3	2703.3
5°	2668.2	2672.1	2687.7	2691.6	2695.5
7.5°	2648.7	2656.5	2672.1	2676.0	2679.9
10°	2621.4	2629.2	2648.7	2656.5	2660.4
12.5°	2586.3	2594.1	2617.5	2629.2	2633.1
15°	2539.5	2551.2	2578.5	2594.1	2601.9
17.5°	2492.7	2504.4	2531.7	2555.1	2562.9
20°	2434.1	2461.4	2480.9	2512.2	2516.1
22.5°	2375.6	2391.2	2426.3	2457.5	2473.1
25°	2305.4	2324.9	2379.5	2406.8	2418.5
27.5°	2231.3	2258.6	2301.5	2344.4	2360.0
30°	2157.2	2176.7	2231.3	2282.0	2297.6
32.5°	2075.3	2102.6	2161.1	2211.8	2235.2
35°	1993.3	2020.6	2083.1	2145.5	2168.9
37.5°	1903.6	1934.8	1997.2	2071.4	2102.6
40°	1817.8	1841.2	1915.3	2005.0	2032.3
42.5°	1728.1	1755.4	1833.4	1930.9	1962.1
45°	1630.6	1661.8	1747.6	1849.0	1888.0
47.5°	1536.9	1568.1	1661.8	1763.2	1810.0
50°	1439.4	1478.4	1572.0	1689.1	1735.9
52.5°	1345.8	1380.9	1486.2	1607.2	1650.1
55°	1240.5	1279.5	1396.5	1521.3	1575.9
57.5°	1154.7	1182.0	1310.7	1439.4	1494.0
60°	1049.3	1084.4	1217.1	1353.6	1416.0
62.5°	936.2	994.7	1131.3	1271.7	1334.1
65°	842.6	889.4	1045.4	1182.0	1240.5
67.5°	745.1	795.8	947.9	1092.2	1158.6
70°	635.8	702.2	862.1	1006.4	1068.8
72.5°	538.3	608.5	772.4	912.8	979.1
75°	440.8	514.9	674.8	811.4	873.8
77.5°	347.2	429.1	585.1	690.5	729.5
80°	257.5	335.5	472.0	546.1	577.3
82.5°	179.4	245.8	347.2	386.2	394.0
85°	113.1	156.0	210.6	234.1	230.2
87.5°	50.7	62.4	78.0	85.8	81.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)