

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: P389497

Luminaire Tested: **22CZ2-95VHE-S-UNV-L935-CD1-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: P389497
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: 22CZ2-95VHE-S-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8431.4 lumens
Efficiency: N/A
Efficacy: 116.0 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

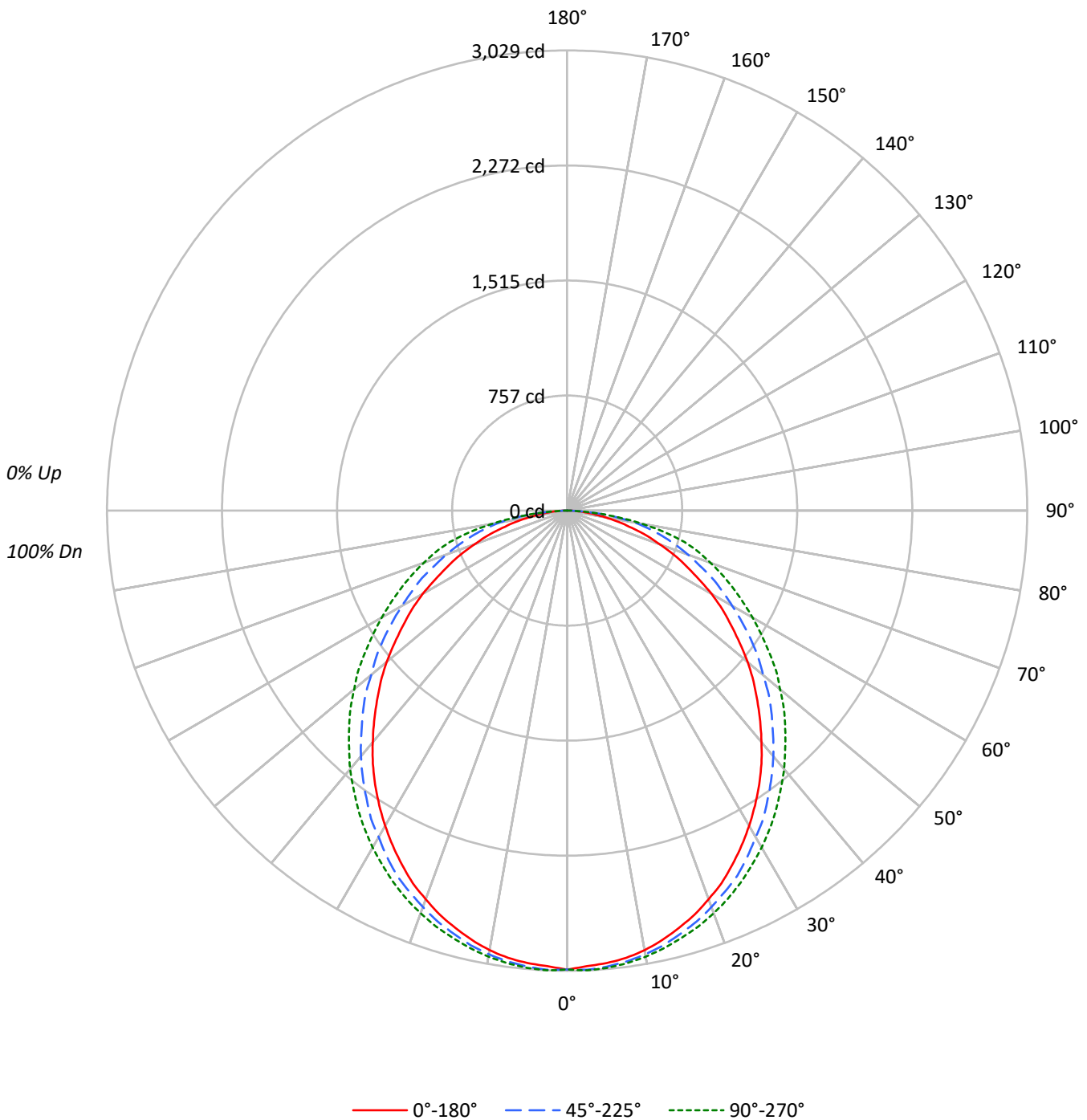
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	8130	8130	8130
5°	8076	8140	8161
10°	8030	8105	8148
15°	7924	8033	8110
20°	7796	7953	8077
25°	7639	7872	8024
30°	7444	7713	7958
35°	7237	7573	7883
40°	6993	7421	7808
45°	6737	7246	7725
50°	6489	7049	7658
55°	6183	6921	7604
60°	5907	6754	7579
65°	5511	6713	7665
70°	5076	6655	7892
75°	4581	6749	8303
80°	3963	6950	7803
85°	3279	5829	5829



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.7	3.4
10°-20°	813.1	9.6
20°-30°	1216.6	14.4
30°-40°	1440.8	17.1
40°-50°	1468.3	17.4
50°-60°	1316.0	15.6
60°-70°	1030.3	12.2
70°-80°	664.4	7.9
80°-90°	196.3	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°	2315.4	27.5
0°-40°	3756.1	44.5
0°-60°	6540.4	77.6
0°-90°	8431.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8431.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3021	3021	3021	3021	3021	
5°	2990	2998	3013	3017	3021	284
15°	2844	2860	2884	2907	2911	802
25°	2573	2596	2651	2687	2703	1184
35°	2203	2230	2305	2376	2400	1377
45°	1770	1810	1904	2002	2030	1367
55°	1318	1361	1475	1578	1621	1182
65°	866	917	1054	1157	1204	860
75°	441	508	649	759	799	472
85°	106	146	189	189	189	125
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3021.2	3021.2	3021.2	3021.2	3021.2
2.5°	3001.6	3009.4	3025.2	3029.1	3029.1
5°	2989.8	2997.6	3013.4	3017.3	3021.2
7.5°	2970.1	2974.0	2993.7	3001.6	3005.5
10°	2938.6	2946.5	2966.2	2978.0	2981.9
12.5°	2895.3	2907.2	2930.8	2946.5	2950.4
15°	2844.2	2859.9	2883.5	2907.2	2911.1
17.5°	2789.1	2804.9	2836.3	2863.9	2871.7
20°	2722.3	2741.9	2777.3	2808.8	2820.6
22.5°	2655.4	2671.1	2714.4	2753.7	2765.5
25°	2572.8	2596.4	2651.4	2686.9	2702.6
27.5°	2486.2	2513.8	2568.8	2616.0	2631.8
30°	2395.7	2423.3	2482.3	2541.3	2561.0
32.5°	2301.3	2332.8	2403.6	2462.6	2482.3
35°	2203.0	2230.5	2305.3	2376.1	2399.7
37.5°	2100.7	2124.3	2210.9	2285.6	2309.2
40°	1990.6	2022.0	2112.5	2199.0	2222.7
42.5°	1880.4	1915.8	2006.3	2100.7	2124.3
45°	1770.3	1809.6	1904.0	2002.4	2029.9
47.5°	1664.0	1695.5	1801.7	1896.1	1935.5
50°	1550.0	1581.4	1683.7	1789.9	1829.3
52.5°	1431.9	1475.2	1585.4	1687.6	1734.8
55°	1317.9	1361.1	1475.2	1577.5	1620.8
57.5°	1211.6	1247.0	1365.1	1471.3	1514.6
60°	1097.6	1129.0	1254.9	1369.0	1408.3
62.5°	975.6	1022.8	1152.6	1258.8	1306.1
65°	865.5	916.6	1054.3	1156.6	1203.8
67.5°	763.2	810.4	944.1	1054.3	1105.4
70°	645.2	708.1	845.8	955.9	1003.1
72.5°	550.7	605.8	747.4	857.6	908.7
75°	440.6	507.5	649.1	759.2	798.6
77.5°	350.1	417.0	550.7	637.3	657.0
80°	255.7	322.6	448.5	491.7	503.5
82.5°	173.1	236.0	322.6	334.4	338.3
85°	106.2	145.6	188.8	188.8	188.8
87.5°	51.1	59.0	66.9	62.9	62.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)