

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: P388558

Luminaire Tested: **22CZ2-95VHE-UNV-L930-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: P388558
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-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7830.6 lumens
Efficiency: N/A
Efficacy: 107.7 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

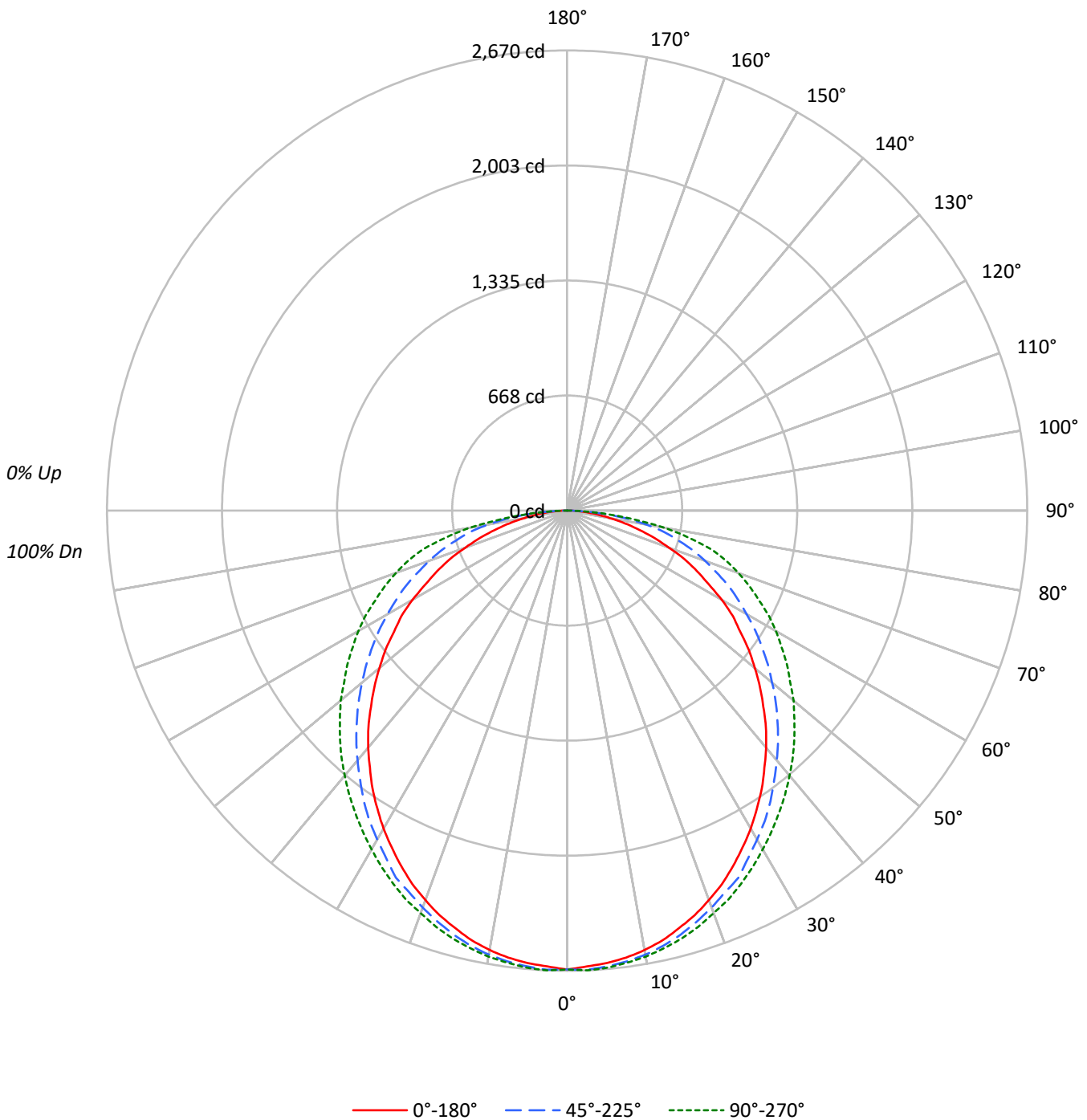
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7165	7165	7165
5°	7119	7171	7192
10°	7075	7149	7181
15°	6988	7096	7160
20°	6885	7018	7117
25°	6761	6979	7093
30°	6621	6848	7052
35°	6468	6759	7038
40°	6308	6646	7052
45°	6129	6569	7097
50°	5952	6501	7178
55°	5749	6472	7303
60°	5578	6470	7528
65°	5300	6576	7802
70°	4942	6700	8307
75°	4527	6931	8974
80°	3941	7225	8838
85°	3449	6425	7018



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.8	3.2
10°-20°	717.2	9.2
20°-30°	1076.7	13.7
30°-40°	1286.5	16.4
40°-50°	1337.8	17.1
50°-60°	1239.9	15.8
60°-70°	1017.1	13.0
70°-80°	687.5	8.8
80°-90°	216.0	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°	2045.7	26.1
0°-40°	3332.2	42.6
0°-60°	5910.0	75.5
0°-90°	7830.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7830.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2662	2662	2662	2662	2662	
5°	2636	2639	2655	2659	2662	250
15°	2508	2520	2547	2562	2570	708
25°	2277	2296	2350	2377	2389	1049
35°	1969	1996	2058	2119	2142	1231
45°	1611	1642	1726	1826	1865	1244
55°	1225	1264	1379	1503	1557	1101
65°	832	878	1033	1168	1225	823
75°	435	509	667	802	863	462
85°	112	154	208	231	227	127
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2662.5	2662.5	2662.5	2662.5	2662.5
2.5°	2647.1	2654.8	2666.4	2670.3	2670.3
5°	2635.6	2639.4	2654.8	2658.7	2662.5
7.5°	2616.3	2624.0	2639.4	2643.3	2647.1
10°	2589.3	2597.0	2616.3	2624.0	2627.9
12.5°	2554.7	2562.4	2585.5	2597.0	2600.9
15°	2508.4	2520.0	2547.0	2562.4	2570.1
17.5°	2462.2	2473.7	2500.7	2523.8	2531.5
20°	2404.4	2431.4	2450.6	2481.4	2485.3
22.5°	2346.6	2362.0	2396.7	2427.5	2442.9
25°	2277.2	2296.5	2350.4	2377.4	2389.0
27.5°	2204.0	2231.0	2273.4	2315.8	2331.2
30°	2130.8	2150.1	2204.0	2254.1	2269.5
32.5°	2049.9	2076.9	2134.7	2184.8	2207.9
35°	1969.0	1995.9	2057.6	2119.2	2142.4
37.5°	1880.4	1911.2	1972.8	2046.0	2076.9
40°	1795.6	1818.7	1891.9	1980.5	2007.5
42.5°	1707.0	1733.9	1811.0	1907.3	1938.2
45°	1610.6	1641.5	1726.2	1826.4	1864.9
47.5°	1518.2	1549.0	1641.5	1741.6	1787.9
50°	1421.8	1460.4	1552.8	1668.4	1714.7
52.5°	1329.3	1364.0	1468.1	1587.5	1629.9
55°	1225.3	1263.8	1379.4	1502.7	1556.7
57.5°	1140.5	1167.5	1294.7	1421.8	1475.8
60°	1036.5	1071.2	1202.2	1337.1	1398.7
62.5°	924.8	982.6	1117.4	1256.1	1317.8
65°	832.3	878.5	1032.7	1167.5	1225.3
67.5°	736.0	786.0	936.3	1078.9	1144.4
70°	628.1	693.6	851.6	994.1	1055.8
72.5°	531.7	601.1	762.9	901.6	967.1
75°	435.4	508.6	666.6	801.5	863.1
77.5°	342.9	423.8	578.0	682.0	720.5
80°	254.3	331.4	466.2	539.4	570.3
82.5°	177.2	242.8	342.9	381.5	389.2
85°	111.7	154.1	208.1	231.2	227.3
87.5°	50.1	61.7	77.1	84.8	80.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)