

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: P389448

Luminaire Tested: **22CZ2-85VHE-S-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: P389448
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: 22CZ2-85VHE-S-UNV-L935-CD1-SDWPD1-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: 7467.2 lumens
Efficiency: N/A
Efficacy: 117.4 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

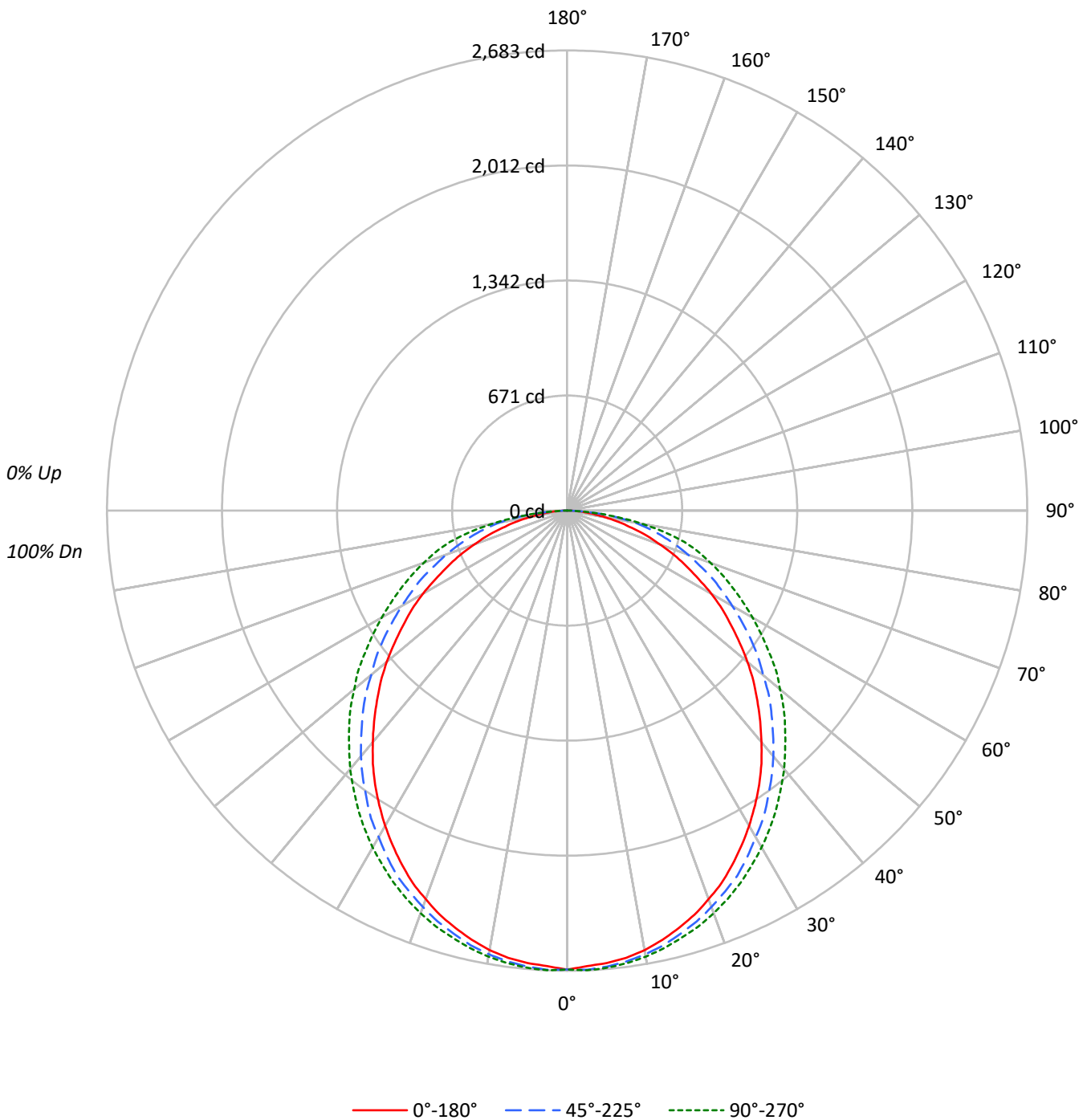
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7200	7200	7200
5°	7153	7209	7228
10°	7112	7178	7216
15°	7017	7115	7183
20°	6904	7044	7153
25°	6766	6972	7107
30°	6593	6831	7048
35°	6410	6707	6982
40°	6193	6572	6915
45°	5966	6417	6842
50°	5747	6243	6782
55°	5476	6130	6734
60°	5231	5982	6713
65°	4881	5945	6788
70°	4496	5894	6990
75°	4057	5977	7354
80°	3510	6155	6912
85°	2905	5162	5162



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.0	3.4
10°-20°	720.1	9.6
20°-30°	1077.5	14.4
30°-40°	1276.0	17.1
40°-50°	1300.4	17.4
50°-60°	1165.5	15.6
60°-70°	912.5	12.2
70°-80°	588.4	7.9
80°-90°	173.8	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°	2050.6	27.5
0°-40°	3326.6	44.5
0°-60°	5792.5	77.6
0°-90°	7467.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7467.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2676	2676	2676	2676	2676	
5°	2648	2655	2669	2672	2676	251
15°	2519	2533	2554	2575	2578	710
25°	2279	2300	2348	2380	2394	1049
35°	1951	1975	2042	2104	2125	1219
45°	1568	1603	1686	1773	1798	1211
55°	1167	1206	1306	1397	1435	1046
65°	766	812	934	1024	1066	761
75°	390	449	575	672	707	418
85°	94	129	167	167	167	110
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2675.7	2675.7	2675.7	2675.7	2675.7
2.5°	2658.3	2665.3	2679.2	2682.7	2682.7
5°	2647.9	2654.8	2668.8	2672.2	2675.7
7.5°	2630.4	2633.9	2651.3	2658.3	2661.8
10°	2602.6	2609.5	2627.0	2637.4	2640.9
12.5°	2564.2	2574.7	2595.6	2609.5	2613.0
15°	2518.9	2532.9	2553.8	2574.7	2578.2
17.5°	2470.2	2484.1	2512.0	2536.4	2543.3
20°	2410.9	2428.4	2459.7	2487.6	2498.0
22.5°	2351.7	2365.7	2404.0	2438.8	2449.3
25°	2278.6	2299.5	2348.2	2379.6	2393.5
27.5°	2201.9	2226.3	2275.1	2316.9	2330.8
30°	2121.8	2146.2	2198.4	2250.7	2268.1
32.5°	2038.2	2066.0	2128.7	2181.0	2198.4
35°	1951.1	1975.4	2041.6	2104.4	2125.3
37.5°	1860.5	1881.4	1958.0	2024.2	2045.1
40°	1762.9	1790.8	1870.9	1947.6	1968.5
42.5°	1665.4	1696.7	1776.9	1860.5	1881.4
45°	1567.8	1602.7	1686.3	1773.4	1797.8
47.5°	1473.7	1501.6	1595.7	1679.3	1714.1
50°	1372.7	1400.6	1491.2	1585.2	1620.1
52.5°	1268.2	1306.5	1404.1	1494.6	1536.5
55°	1167.1	1205.5	1306.5	1397.1	1435.4
57.5°	1073.1	1104.4	1209.0	1303.0	1341.3
60°	972.0	999.9	1111.4	1212.4	1247.3
62.5°	864.0	905.8	1020.8	1114.9	1156.7
65°	766.5	811.8	933.7	1024.3	1066.1
67.5°	675.9	717.7	836.2	933.7	979.0
70°	571.4	627.1	749.1	846.6	888.4
72.5°	487.8	536.5	662.0	759.5	804.8
75°	390.2	449.4	574.9	672.4	707.3
77.5°	310.1	369.3	487.8	564.4	581.8
80°	226.5	285.7	397.2	435.5	446.0
82.5°	153.3	209.0	285.7	296.1	299.6
85°	94.1	128.9	167.2	167.2	167.2
87.5°	45.3	52.3	59.2	55.7	55.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)