

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: P388512

Luminaire Tested: **22CZ2-85VHE-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: P388512
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: 22CZ2-85VHE-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: 7106.7 lumens
Efficiency: N/A
Efficacy: 111.7 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

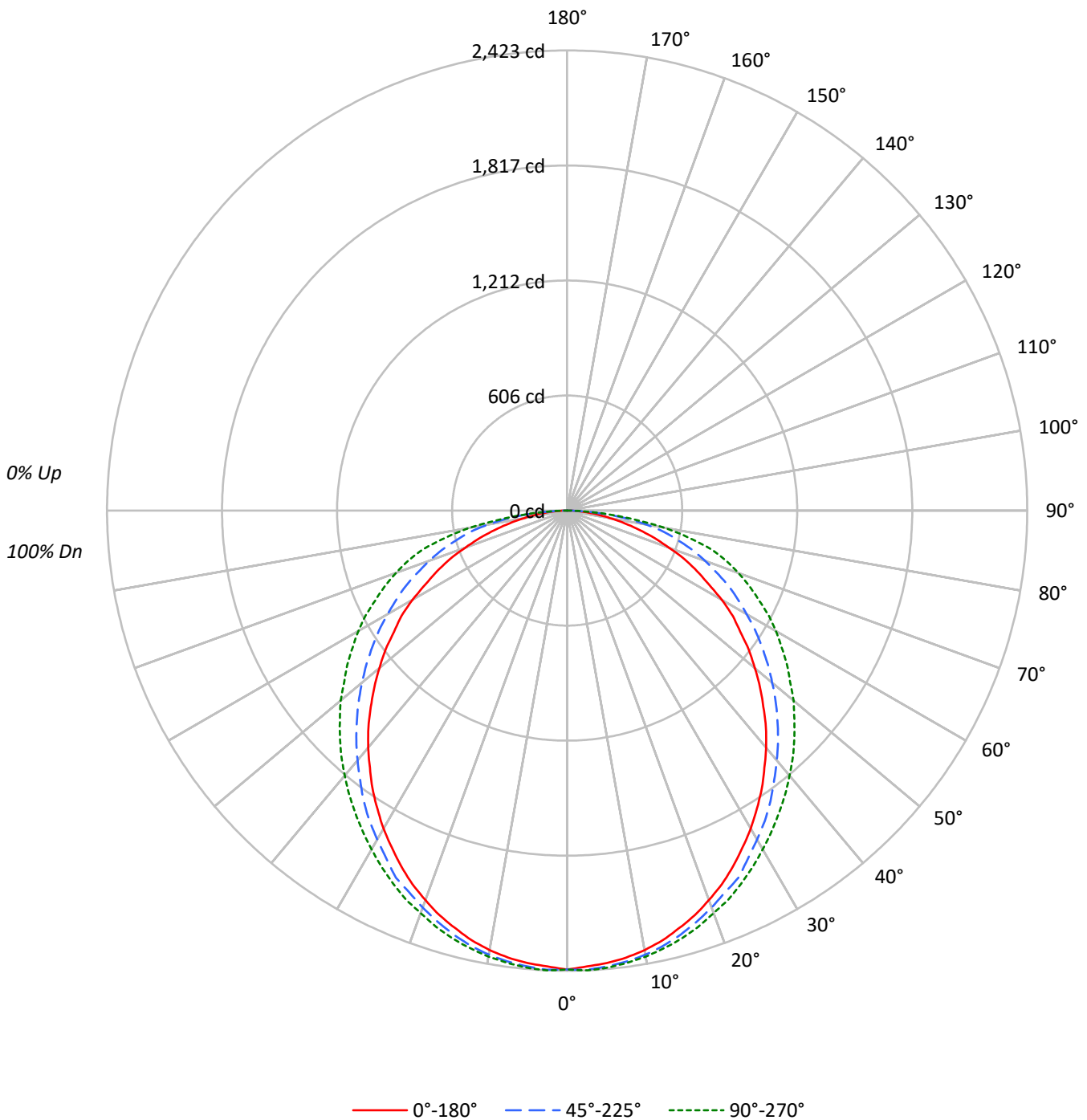
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	6502	6502	6502
5°	6461	6508	6527
10°	6421	6488	6517
15°	6342	6440	6498
20°	6249	6369	6459
25°	6136	6334	6437
30°	6009	6215	6400
35°	5870	6135	6387
40°	5724	6032	6400
45°	5563	5962	6441
50°	5402	5900	6515
55°	5217	5873	6628
60°	5063	5872	6832
65°	4809	5968	7081
70°	4485	6080	7539
75°	4109	6290	8144
80°	3577	6557	8021
85°	3131	5829	6370



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.5	3.2
10°-20°	650.9	9.2
20°-30°	977.1	13.7
30°-40°	1167.6	16.4
40°-50°	1214.1	17.1
50°-60°	1125.3	15.8
60°-70°	923.0	13.0
70°-80°	624.0	8.8
80°-90°	196.1	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°	1856.6	26.1
0°-40°	3024.2	42.6
0°-60°	5363.6	75.5
0°-90°	7106.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7106.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2416	2416	2416	2416	2416	
5°	2392	2395	2409	2413	2416	227
15°	2276	2287	2312	2326	2332	642
25°	2067	2084	2133	2158	2168	952
35°	1787	1811	1867	1923	1944	1117
45°	1462	1490	1567	1658	1692	1129
55°	1112	1147	1252	1364	1413	999
65°	755	797	937	1060	1112	747
75°	395	462	605	727	783	419
85°	101	140	189	210	206	115
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2416.4	2416.4	2416.4	2416.4	2416.4
2.5°	2402.4	2409.4	2419.9	2423.4	2423.4
5°	2391.9	2395.4	2409.4	2412.9	2416.4
7.5°	2374.4	2381.4	2395.4	2398.9	2402.4
10°	2350.0	2357.0	2374.4	2381.4	2384.9
12.5°	2318.5	2325.5	2346.5	2357.0	2360.5
15°	2276.5	2287.0	2311.5	2325.5	2332.5
17.5°	2234.6	2245.1	2269.5	2290.5	2297.5
20°	2182.1	2206.6	2224.1	2252.1	2255.5
22.5°	2129.7	2143.6	2175.1	2203.1	2217.1
25°	2066.7	2084.2	2133.2	2157.6	2168.1
27.5°	2000.3	2024.7	2063.2	2101.7	2115.7
30°	1933.8	1951.3	2000.3	2045.7	2059.7
32.5°	1860.4	1884.9	1937.3	1982.8	2003.8
35°	1787.0	1811.4	1867.4	1923.3	1944.3
37.5°	1706.5	1734.5	1790.5	1856.9	1884.9
40°	1629.6	1650.6	1717.0	1797.4	1821.9
42.5°	1549.2	1573.6	1643.6	1731.0	1759.0
45°	1461.7	1489.7	1566.6	1657.6	1692.5
47.5°	1377.8	1405.8	1489.7	1580.6	1622.6
50°	1290.4	1325.4	1409.3	1514.2	1556.2
52.5°	1206.5	1237.9	1332.3	1440.8	1479.2
55°	1112.0	1147.0	1251.9	1363.8	1412.8
57.5°	1035.1	1059.6	1175.0	1290.4	1339.3
60°	940.7	972.2	1091.1	1213.4	1269.4
62.5°	839.3	891.7	1014.1	1140.0	1196.0
65°	755.3	797.3	937.2	1059.6	1112.0
67.5°	667.9	713.4	849.8	979.2	1038.6
70°	570.0	629.5	772.8	902.2	958.2
72.5°	482.6	545.5	692.4	818.3	877.7
75°	395.2	461.6	605.0	727.4	783.3
77.5°	311.2	384.7	524.5	619.0	653.9
80°	230.8	300.7	423.1	489.6	517.6
82.5°	160.9	220.3	311.2	346.2	353.2
85°	101.4	139.9	188.8	209.8	206.3
87.5°	45.5	56.0	69.9	76.9	73.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)