

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: P388249

Luminaire Tested: **22CZ2-90VHE-SQR-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: P388249
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-90VHE-SQR-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7140.8 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

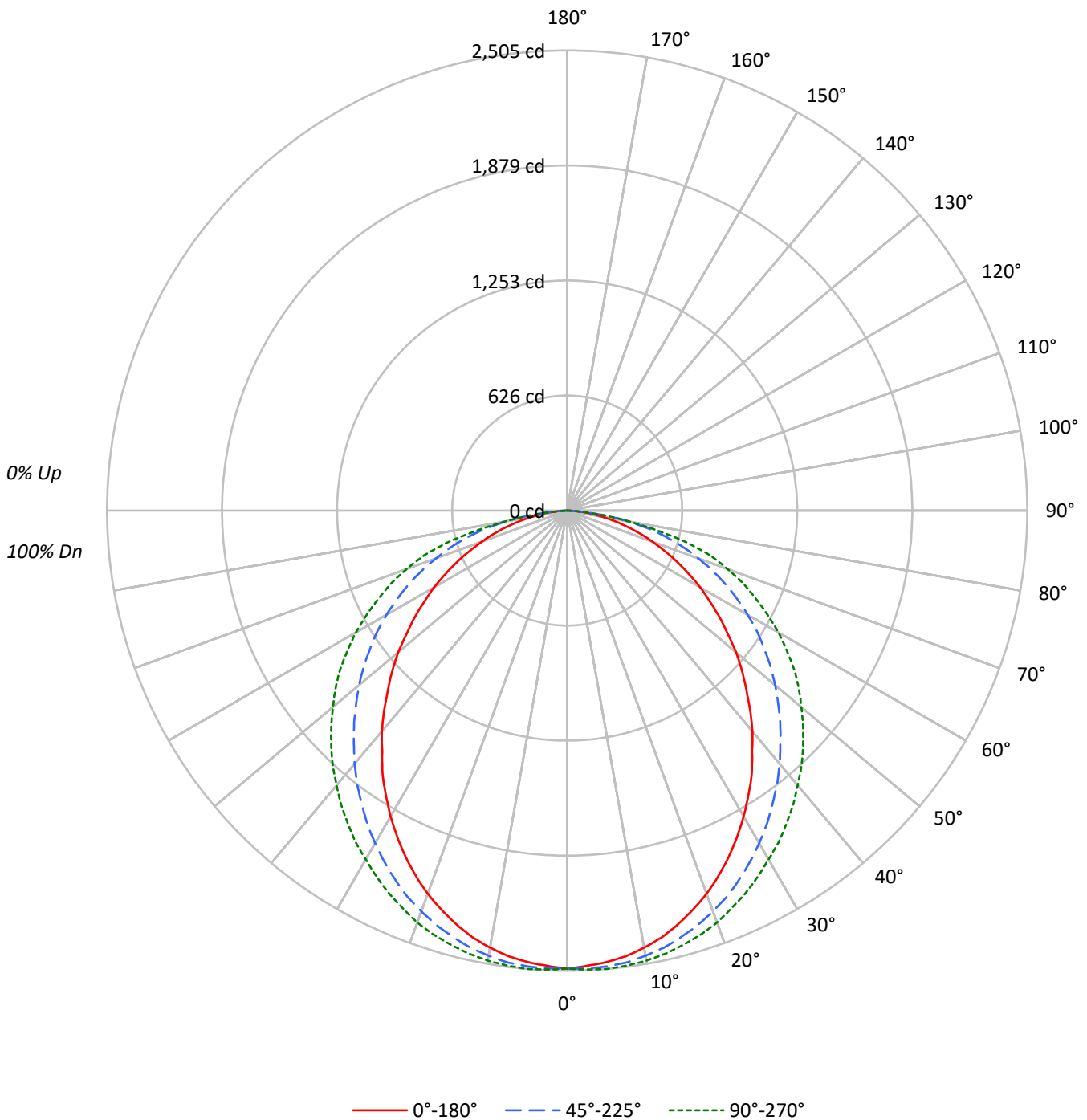
Input Watts (W): 68.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6713	6713	6713
5°	6665	6729	6766
10°	6603	6724	6798
15°	6496	6694	6817
20°	6357	6648	6833
25°	6179	6581	6823
30°	5971	6498	6814
35°	5756	6402	6836
40°	5512	6322	6858
45°	5249	6243	6913
50°	5023	6186	6967
55°	4754	6138	7076
60°	4505	6111	7150
65°	4208	6064	7208
70°	3866	5973	7306
75°	3488	5814	7047
80°	2994	5146	5305
85°	2408	3035	2408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.5	3.3
10°-20°	676.1	9.5
20°-30°	1015.5	14.2
30°-40°	1211.1	17.0
40°-50°	1252.2	17.5
50°-60°	1151.2	16.1
60°-70°	916.5	12.8
70°-80°	559.9	7.8
80°-90°	121.7	1.7
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°	1928.1	27.0
0°-40°	3139.2	44.0
0°-60°	5542.7	77.6
0°-90°	7140.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7140.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2494	2494	2494	2494	2494	
5°	2467	2474	2491	2501	2505	234
15°	2332	2359	2403	2437	2447	657
25°	2081	2132	2216	2278	2298	957
35°	1752	1827	1949	2050	2081	1093
45°	1379	1478	1640	1773	1817	1067
55°	1013	1125	1308	1457	1508	906
65°	661	773	952	1084	1132	655
75°	336	434	559	658	678	357
85°	78	95	98	85	78	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2494.5	2494.5	2494.5	2494.5	2494.5
2.5°	2480.9	2484.3	2494.5	2501.2	2501.2
5°	2467.3	2474.1	2491.1	2501.2	2504.6
7.5°	2447.0	2457.2	2480.9	2494.5	2497.8
10°	2416.5	2430.1	2460.6	2480.9	2487.7
12.5°	2379.2	2399.6	2436.8	2464.0	2470.7
15°	2331.8	2358.9	2402.9	2436.8	2447.0
17.5°	2277.5	2311.4	2365.7	2406.3	2419.9
20°	2219.9	2253.8	2321.6	2369.1	2386.0
22.5°	2152.1	2196.2	2274.2	2328.4	2341.9
25°	2081.0	2131.8	2216.5	2277.5	2297.9
27.5°	2003.0	2064.0	2155.5	2230.1	2247.0
30°	1921.7	1986.1	2091.1	2172.5	2192.8
32.5°	1836.9	1911.5	2023.4	2114.9	2142.0
35°	1752.2	1826.8	1948.8	2050.5	2081.0
37.5°	1653.9	1742.1	1877.6	1982.7	2020.0
40°	1569.2	1653.9	1799.7	1914.9	1952.2
42.5°	1474.3	1565.8	1718.3	1843.7	1887.8
45°	1379.4	1477.7	1640.4	1772.6	1816.6
47.5°	1291.3	1389.6	1559.0	1698.0	1742.1
50°	1199.8	1301.5	1477.7	1620.0	1664.1
52.5°	1101.5	1213.3	1396.4	1538.7	1589.5
55°	1013.4	1125.2	1308.2	1457.4	1508.2
57.5°	921.9	1037.1	1226.9	1369.2	1416.7
60°	837.1	949.0	1135.4	1274.3	1328.6
62.5°	745.6	860.9	1043.9	1179.4	1230.3
65°	660.9	772.7	952.4	1084.5	1132.0
67.5°	576.2	688.0	857.5	982.9	1037.1
70°	491.4	603.3	759.2	881.2	928.6
72.5°	416.9	515.2	664.3	776.1	820.2
75°	335.5	433.8	559.2	657.5	677.8
77.5°	261.0	349.1	454.2	498.2	505.0
80°	193.2	261.0	332.1	342.3	342.3
82.5°	128.8	179.6	206.7	210.1	206.7
85°	78.0	94.9	98.3	84.7	78.0
87.5°	27.1	27.1	16.9	10.2	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)