

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: P388251

Luminaire Tested: **22CZ2-90VHE-SQR-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: P388251
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-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7229.2 lumens
Efficiency: N/A
Efficacy: 106.0 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

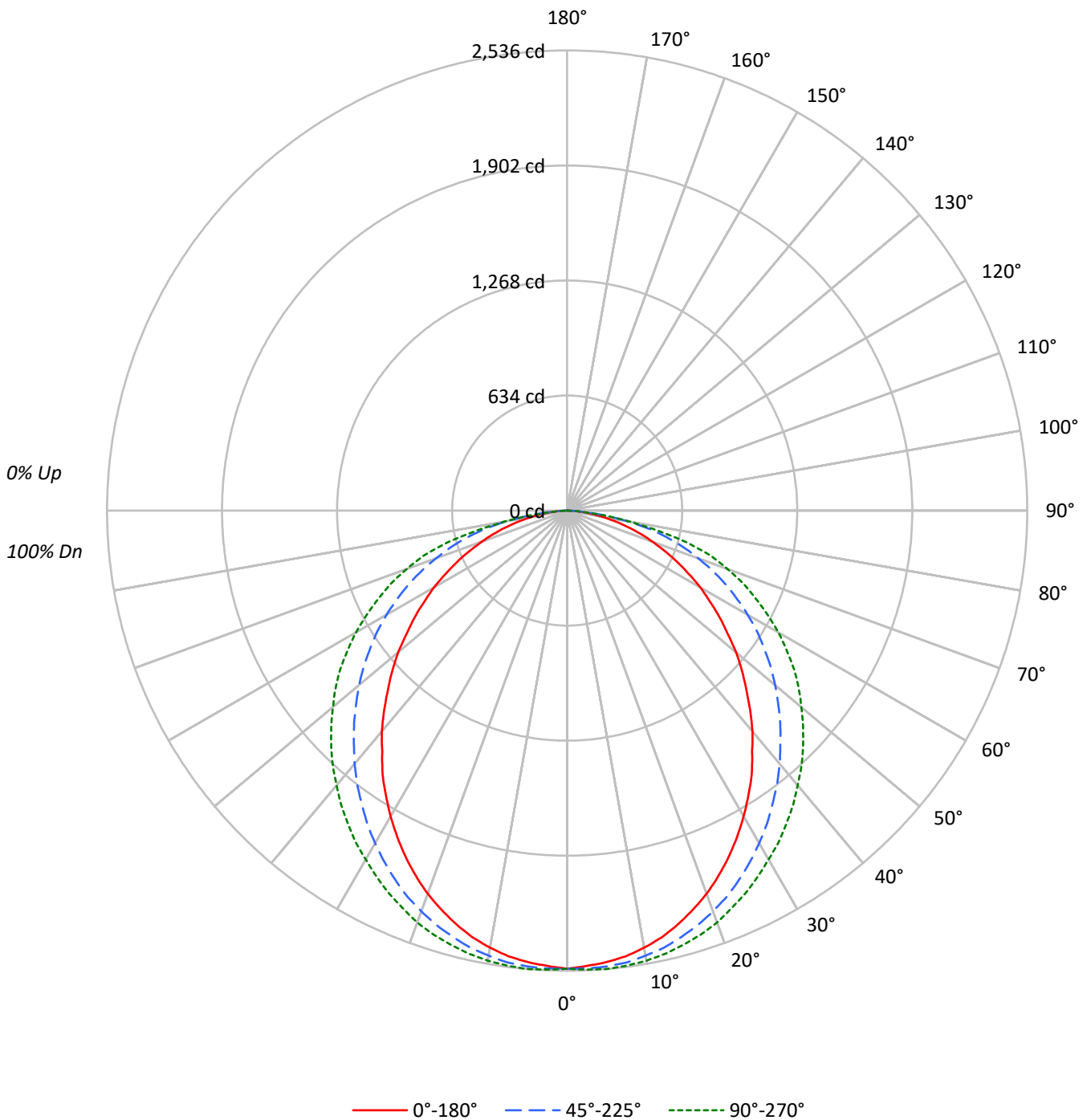
Input Watts (W): 68.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6796	6796	6796
5°	6747	6812	6849
10°	6685	6807	6882
15°	6576	6777	6902
20°	6436	6731	6917
25°	6255	6663	6907
30°	6045	6578	6898
35°	5827	6481	6921
40°	5580	6400	6942
45°	5315	6320	6999
50°	5085	6263	7053
55°	4813	6214	7164
60°	4561	6186	7239
65°	4260	6139	7297
70°	3914	6047	7397
75°	3532	5886	7135
80°	3031	5212	5370
85°	2436	3072	2436



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.4	3.3
10°-20°	684.5	9.5
20°-30°	1028.1	14.2
30°-40°	1226.1	17.0
40°-50°	1267.7	17.5
50°-60°	1165.5	16.1
60°-70°	927.8	12.8
70°-80°	566.9	7.8
80°-90°	123.2	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°	1952.0	27.0
0°-40°	3178.1	44.0
0°-60°	5611.3	77.6
0°-90°	7229.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7229.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2525	2525	2525	2525	2525	
5°	2498	2505	2522	2532	2536	237
15°	2361	2388	2433	2467	2477	665
25°	2107	2158	2244	2306	2326	969
35°	1774	1849	1973	2076	2107	1107
45°	1396	1496	1661	1794	1839	1080
55°	1026	1139	1324	1475	1527	918
65°	669	782	964	1098	1146	663
75°	340	439	566	666	686	362
85°	79	96	100	86	79	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2525.3	2525.3	2525.3	2525.3	2525.3
2.5°	2511.6	2515.0	2525.3	2532.2	2532.2
5°	2497.9	2504.7	2521.9	2532.2	2535.6
7.5°	2477.3	2487.6	2511.6	2525.3	2528.8
10°	2446.4	2460.1	2491.0	2511.6	2518.5
12.5°	2408.7	2429.3	2467.0	2494.5	2501.3
15°	2360.6	2388.1	2432.7	2467.0	2477.3
17.5°	2305.7	2340.1	2394.9	2436.1	2449.8
20°	2247.4	2281.7	2350.3	2398.4	2415.5
22.5°	2178.8	2223.4	2302.3	2357.2	2370.9
25°	2106.7	2158.2	2244.0	2305.7	2326.3
27.5°	2027.8	2089.6	2182.2	2257.7	2274.9
30°	1945.5	2010.7	2117.0	2199.4	2220.0
32.5°	1859.7	1935.2	2048.4	2141.0	2168.5
35°	1773.9	1849.4	1972.9	2075.9	2106.7
37.5°	1674.4	1763.6	1900.9	2007.2	2045.0
40°	1588.6	1674.4	1821.9	1938.6	1976.3
42.5°	1492.6	1585.2	1739.6	1866.6	1911.2
45°	1396.5	1496.0	1660.7	1794.5	1839.1
47.5°	1307.3	1406.8	1578.3	1719.0	1763.6
50°	1214.6	1317.6	1496.0	1640.1	1684.7
52.5°	1115.1	1228.4	1413.6	1557.7	1609.2
55°	1025.9	1139.1	1324.4	1475.4	1526.9
57.5°	933.3	1049.9	1242.1	1386.2	1434.2
60°	847.5	960.7	1149.4	1290.1	1345.0
62.5°	754.9	871.5	1056.8	1194.0	1245.5
65°	669.1	782.3	964.2	1098.0	1146.0
67.5°	583.3	696.5	868.1	995.0	1049.9
70°	497.5	610.7	768.6	892.1	940.1
72.5°	422.0	521.5	672.5	785.7	830.3
75°	339.7	439.2	566.1	665.6	686.2
77.5°	264.2	353.4	459.8	504.4	511.2
80°	195.6	264.2	336.3	346.5	346.5
82.5°	130.4	181.9	209.3	212.7	209.3
85°	78.9	96.1	99.5	85.8	78.9
87.5°	27.4	27.4	17.2	10.3	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)