

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: P388324

Luminaire Tested: **22CZ2-44VHE-UNV-L940-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: P388324
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: 22CZ2-44VHE-UNV-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3897.6 lumens
Efficiency: N/A
Efficacy: 119.6 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

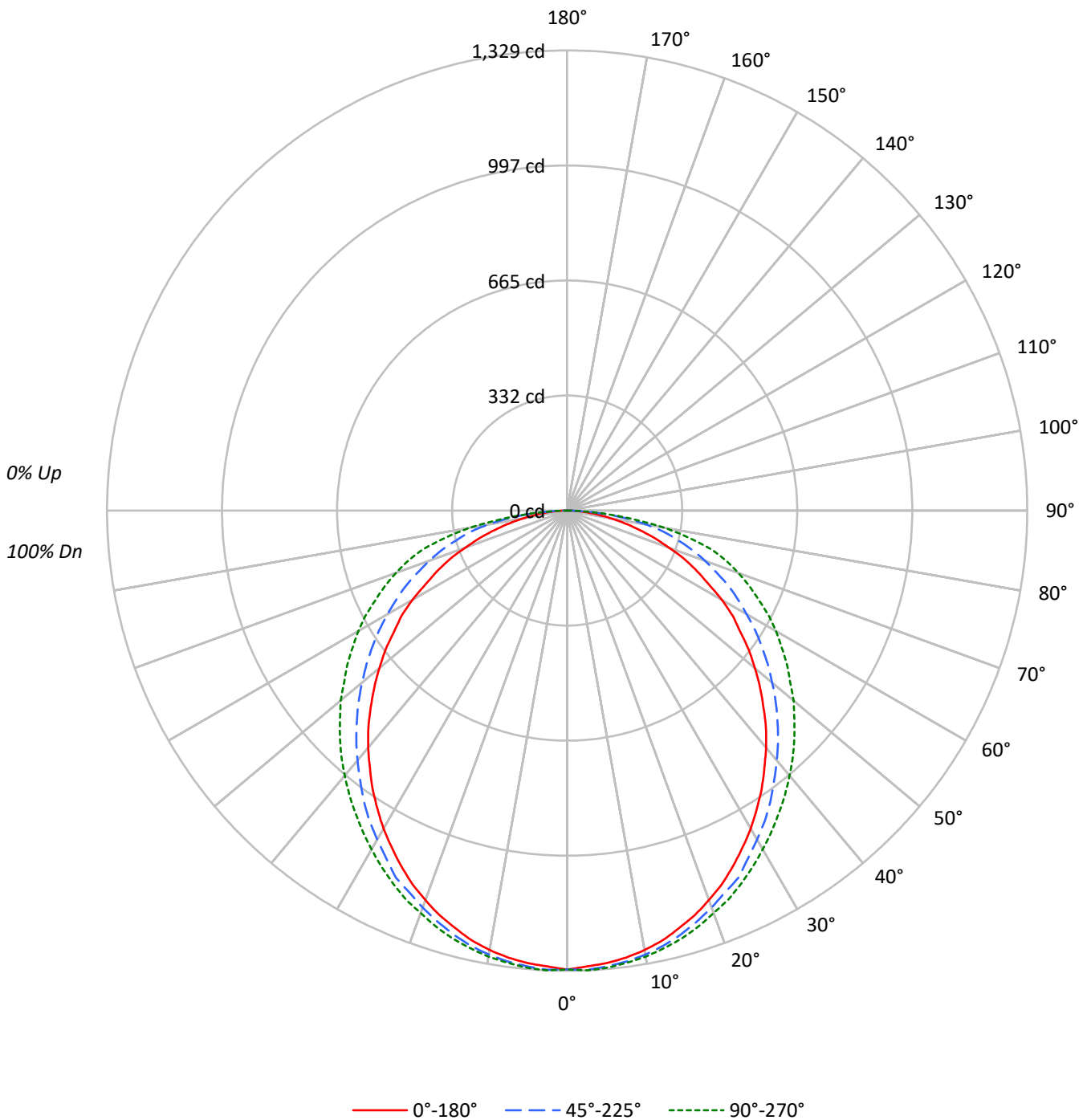
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3566	3566	3566
5°	3544	3569	3580
10°	3522	3558	3574
15°	3478	3532	3564
20°	3427	3493	3542
25°	3366	3474	3531
30°	3296	3409	3510
35°	3219	3364	3503
40°	3139	3308	3510
45°	3051	3270	3533
50°	2963	3236	3573
55°	2861	3221	3635
60°	2777	3221	3747
65°	2638	3273	3883
70°	2460	3335	4135
75°	2253	3450	4467
80°	1962	3597	4398
85°	1717	3199	3495



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.3	3.2
10°-20°	357.0	9.2
20°-30°	535.9	13.7
30°-40°	640.4	16.4
40°-50°	665.9	17.1
50°-60°	617.2	15.8
60°-70°	506.2	13.0
70°-80°	342.2	8.8
80°-90°	107.5	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°	1018.2	26.1
0°-40°	1658.6	42.6
0°-60°	2941.6	75.5
0°-90°	3897.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3897.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1325	1325	1325	1325	1325	
5°	1312	1314	1321	1323	1325	125
15°	1248	1254	1268	1275	1279	352
25°	1134	1143	1170	1183	1189	522
35°	980	994	1024	1055	1066	613
45°	802	817	859	909	928	619
55°	610	629	687	748	775	548
65°	414	437	514	581	610	409
75°	217	253	332	399	430	230
85°	56	77	104	115	113	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1325.3	1325.3	1325.3	1325.3	1325.3
2.5°	1317.6	1321.4	1327.2	1329.1	1329.1
5°	1311.8	1313.7	1321.4	1323.3	1325.3
7.5°	1302.2	1306.1	1313.7	1315.7	1317.6
10°	1288.8	1292.7	1302.2	1306.1	1308.0
12.5°	1271.6	1275.4	1286.9	1292.7	1294.6
15°	1248.5	1254.3	1267.7	1275.4	1279.2
17.5°	1225.5	1231.3	1244.7	1256.2	1260.0
20°	1196.8	1210.2	1219.8	1235.1	1237.0
22.5°	1168.0	1175.7	1192.9	1208.3	1215.9
25°	1133.5	1143.1	1169.9	1183.3	1189.1
27.5°	1097.0	1110.5	1131.5	1152.6	1160.3
30°	1060.6	1070.2	1097.0	1122.0	1129.6
32.5°	1020.3	1033.7	1062.5	1087.4	1098.9
35°	980.0	993.5	1024.1	1054.8	1066.3
37.5°	935.9	951.3	982.0	1018.4	1033.7
40°	893.7	905.2	941.7	985.8	999.2
42.5°	849.6	863.0	901.4	949.4	964.7
45°	801.7	817.0	859.2	909.1	928.3
47.5°	755.6	771.0	817.0	866.9	889.9
50°	707.7	726.9	772.9	830.4	853.5
52.5°	661.7	678.9	730.7	790.2	811.3
55°	609.9	629.1	686.6	748.0	774.8
57.5°	567.7	581.1	644.4	707.7	734.5
60°	515.9	533.2	598.4	665.5	696.2
62.5°	460.3	489.1	556.2	625.2	655.9
65°	414.3	437.3	514.0	581.1	609.9
67.5°	366.3	391.2	466.0	537.0	569.6
70°	312.6	345.2	423.9	494.8	525.5
72.5°	264.7	299.2	379.7	448.8	481.4
75°	216.7	253.2	331.8	398.9	429.6
77.5°	170.7	211.0	287.7	339.5	358.6
80°	126.6	164.9	232.1	268.5	283.8
82.5°	88.2	120.8	170.7	189.9	193.7
85°	55.6	76.7	103.6	115.1	113.2
87.5°	24.9	30.7	38.4	42.2	40.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)