

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: P388320

Luminaire Tested: **22CZ2-44VHE-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: P388320  
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-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: 3811.1 lumens  
Efficiency: N/A  
Efficacy: 116.9 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

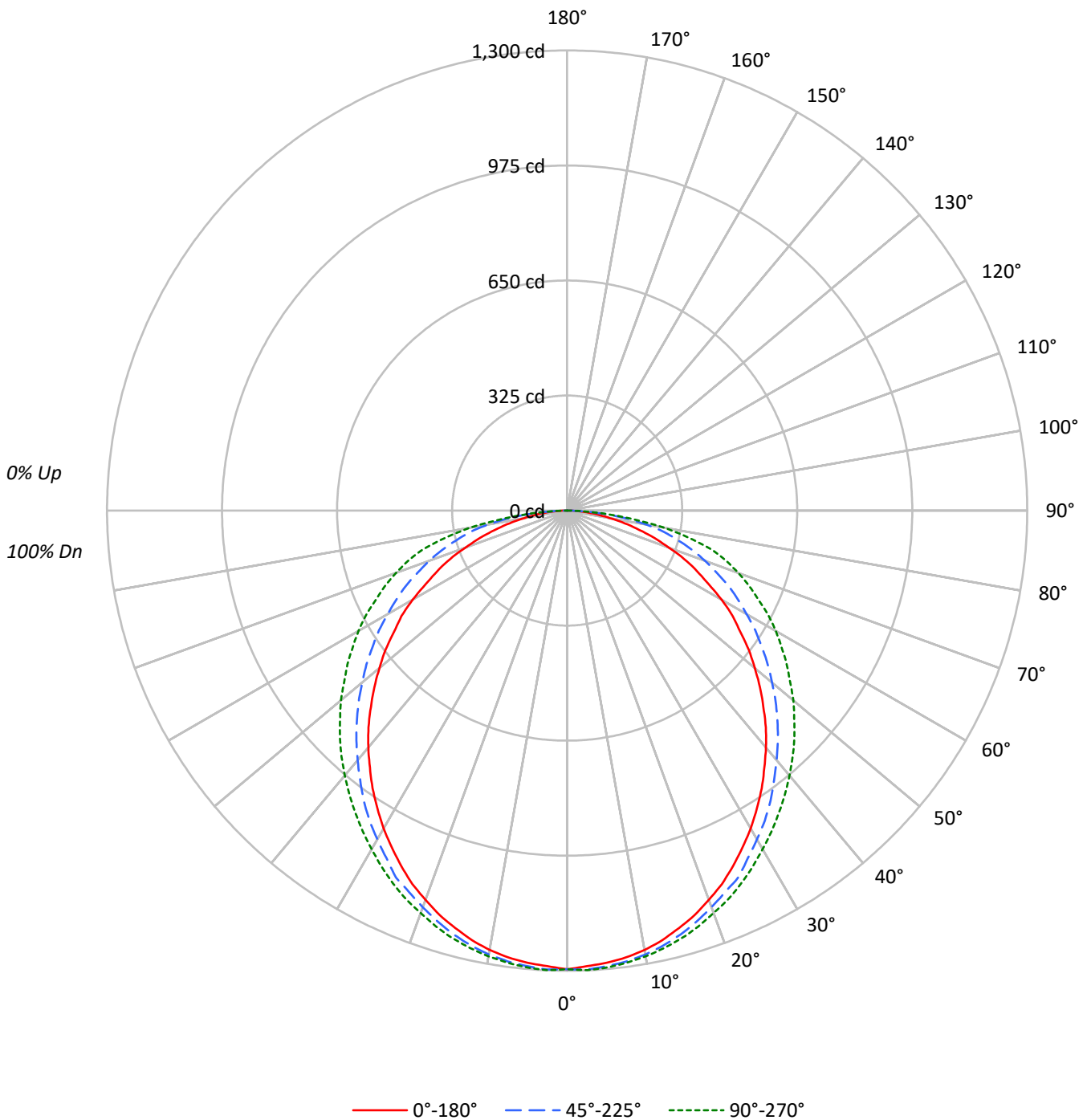
Input Watts (W): 32.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3487	3487	3487
5°	3465	3490	3500
10°	3443	3479	3495
15°	3401	3453	3485
20°	3351	3416	3464
25°	3291	3396	3452
30°	3223	3333	3432
35°	3148	3290	3425
40°	3070	3235	3432
45°	2983	3197	3454
50°	2897	3164	3494
55°	2798	3150	3554
60°	2715	3149	3663
65°	2579	3200	3798
70°	2405	3260	4043
75°	2203	3373	4368
80°	1918	3516	4300
85°	1680	3128	3415



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.6	3.2
10°-20°	349.1	9.2
20°-30°	524.0	13.7
30°-40°	626.2	16.4
40°-50°	651.1	17.1
50°-60°	603.5	15.8
60°-70°	495.0	13.0
70°-80°	334.6	8.8
80°-90°	105.1	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°	995.6	26.1
0°-40°	1621.8	42.6
0°-60°	2876.4	75.5
0°-90°	3811.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3811.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1283	1285	1292	1294	1296	122
15°	1221	1226	1240	1247	1251	344
25°	1108	1118	1144	1157	1163	510
35°	958	971	1001	1031	1043	599
45°	784	799	840	889	908	605
55°	596	615	671	731	758	536
65°	405	428	503	568	596	400
75°	212	248	324	390	420	225
85°	54	75	101	112	111	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1295.8	1295.8	1295.8	1295.8	1295.8
2.5°	1288.3	1292.1	1297.7	1299.6	1299.6
5°	1282.7	1284.6	1292.1	1294.0	1295.8
7.5°	1273.3	1277.1	1284.6	1286.5	1288.3
10°	1260.2	1264.0	1273.3	1277.1	1279.0
12.5°	1243.3	1247.1	1258.3	1264.0	1265.8
15°	1220.8	1226.5	1239.6	1247.1	1250.8
17.5°	1198.3	1204.0	1217.1	1228.3	1232.1
20°	1170.2	1183.3	1192.7	1207.7	1209.6
22.5°	1142.1	1149.6	1166.4	1181.4	1189.0
25°	1108.3	1117.7	1143.9	1157.1	1162.7
27.5°	1072.7	1085.8	1106.4	1127.1	1134.6
30°	1037.1	1046.4	1072.7	1097.1	1104.6
32.5°	997.7	1010.8	1038.9	1063.3	1074.6
35°	958.3	971.4	1001.4	1031.4	1042.7
37.5°	915.2	930.2	960.2	995.8	1010.8
40°	873.9	885.1	920.8	963.9	977.0
42.5°	830.8	843.9	881.4	928.3	943.3
45°	783.9	798.9	840.1	888.9	907.7
47.5°	738.9	753.9	798.9	847.6	870.1
50°	692.0	710.7	755.8	812.0	834.5
52.5°	647.0	663.9	714.5	772.6	793.3
55°	596.4	615.1	671.4	731.4	757.6
57.5°	555.1	568.2	630.1	692.0	718.2
60°	504.5	521.3	585.1	650.7	680.7
62.5°	450.1	478.2	543.8	611.4	641.4
65°	405.1	427.6	502.6	568.2	596.4
67.5°	358.2	382.6	455.7	525.1	557.0
70°	305.7	337.6	414.4	483.8	513.8
72.5°	258.8	292.5	371.3	438.8	470.7
75°	211.9	247.5	324.4	390.1	420.1
77.5°	166.9	206.3	281.3	331.9	350.7
80°	123.8	161.3	226.9	262.5	277.5
82.5°	86.3	118.1	166.9	185.7	189.4
85°	54.4	75.0	101.3	112.5	110.6
87.5°	24.4	30.0	37.5	41.3	39.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)