

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: P388041

Luminaire Tested: **22CZ2-44VHE-SQR-UNV-L950-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: P388041  
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: 22CZ2-44VHE-SQR-UNV-L950-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3925.2 lumens  
Efficiency: N/A  
Efficacy: 120.4 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

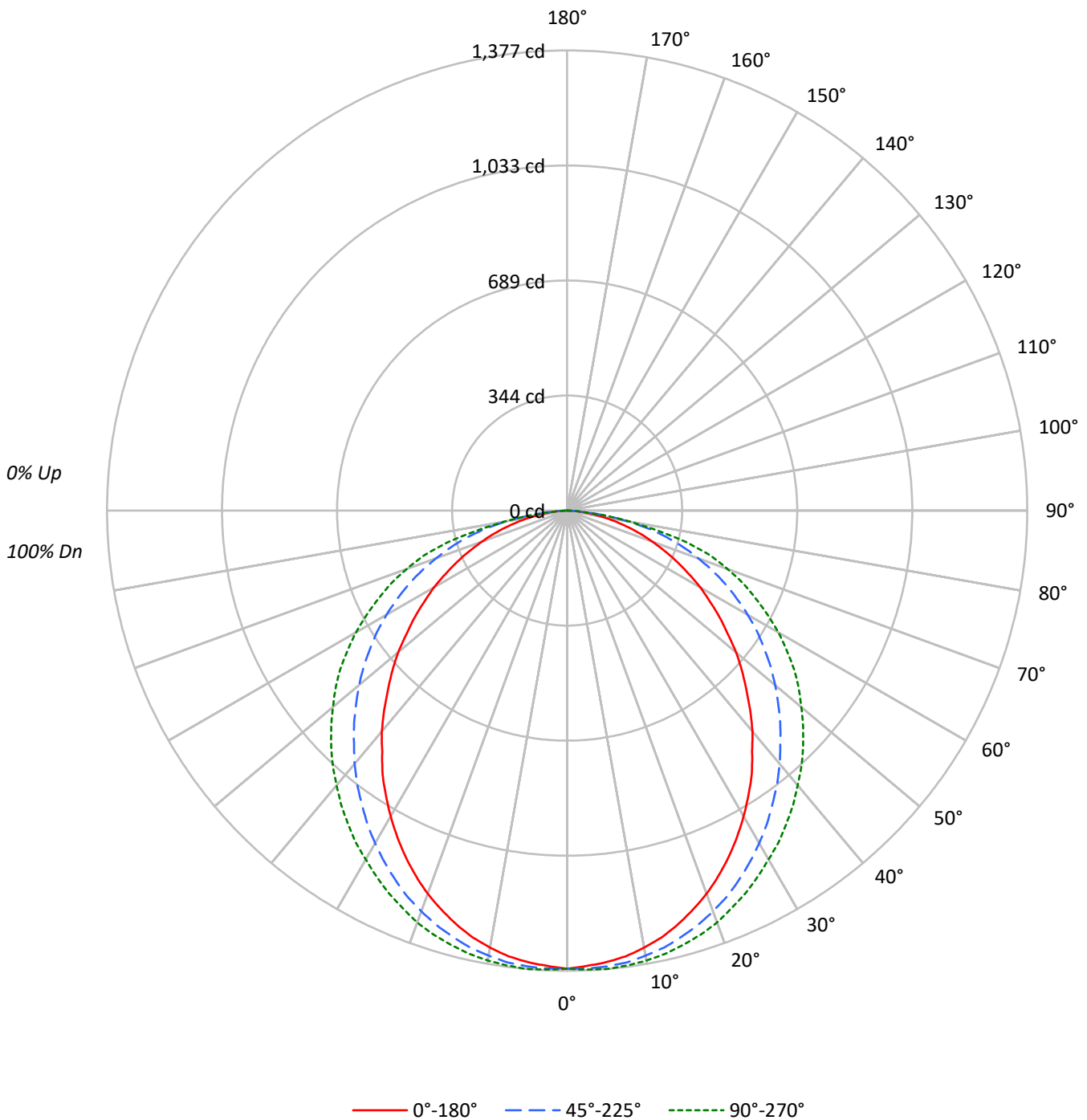
Input Watts (W): 32.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3690	3690	3690
5°	3664	3699	3719
10°	3630	3696	3736
15°	3571	3680	3747
20°	3495	3655	3756
25°	3396	3618	3750
30°	3282	3572	3746
35°	3164	3519	3758
40°	3030	3475	3770
45°	2885	3432	3800
50°	2761	3401	3829
55°	2613	3374	3889
60°	2477	3359	3930
65°	2313	3333	3962
70°	2125	3283	4017
75°	1917	3196	3874
80°	1646	2830	2916
85°	1321	1667	1321



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.0	3.3
10°-20°	371.7	9.5
20°-30°	558.2	14.2
30°-40°	665.7	17.0
40°-50°	688.3	17.5
50°-60°	632.8	16.1
60°-70°	503.8	12.8
70°-80°	307.8	7.8
80°-90°	66.9	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°	1059.9	27.0
0°-40°	1725.6	44.0
0°-60°	3046.7	77.6
0°-90°	3925.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3925.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1371	1371	1371	1371	1371	
5°	1356	1360	1369	1375	1377	129
15°	1282	1297	1321	1340	1345	361
25°	1144	1172	1218	1252	1263	526
35°	963	1004	1071	1127	1144	601
45°	758	812	902	974	999	586
55°	557	618	719	801	829	498
65°	363	425	524	596	622	360
75°	184	238	307	361	373	196
85°	43	52	54	47	43	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1371.2	1371.2	1371.2	1371.2	1371.2
2.5°	1363.7	1365.6	1371.2	1374.9	1374.9
5°	1356.3	1360.0	1369.3	1374.9	1376.8
7.5°	1345.1	1350.7	1363.7	1371.2	1373.0
10°	1328.3	1335.8	1352.5	1363.7	1367.4
12.5°	1307.8	1319.0	1339.5	1354.4	1358.1
15°	1281.7	1296.6	1320.9	1339.5	1345.1
17.5°	1251.9	1270.6	1300.4	1322.7	1330.2
20°	1220.3	1238.9	1276.2	1302.2	1311.6
22.5°	1183.0	1207.2	1250.1	1279.9	1287.3
25°	1143.9	1171.8	1218.4	1251.9	1263.1
27.5°	1101.0	1134.6	1184.9	1225.9	1235.2
30°	1056.3	1091.7	1149.5	1194.2	1205.4
32.5°	1009.7	1050.7	1112.2	1162.5	1177.4
35°	963.2	1004.2	1071.2	1127.1	1143.9
37.5°	909.1	957.6	1032.1	1089.9	1110.3
40°	862.6	909.1	989.3	1052.6	1073.1
42.5°	810.4	860.7	944.5	1013.5	1037.7
45°	758.2	812.3	901.7	974.3	998.6
47.5°	709.8	763.8	857.0	933.4	957.6
50°	659.5	715.4	812.3	890.5	914.7
52.5°	605.5	667.0	767.6	845.8	873.7
55°	557.0	618.5	719.1	801.1	829.0
57.5°	506.7	570.1	674.4	752.7	778.7
60°	460.2	521.6	624.1	700.5	730.3
62.5°	409.9	473.2	573.8	648.3	676.3
65°	363.3	424.8	523.5	596.2	622.2
67.5°	316.7	378.2	471.3	540.3	570.1
70°	270.1	331.6	417.3	484.4	510.5
72.5°	229.1	283.2	365.1	426.6	450.8
75°	184.4	238.5	307.4	361.4	372.6
77.5°	143.5	191.9	249.6	273.9	277.6
80°	106.2	143.5	182.6	188.2	188.2
82.5°	70.8	98.7	113.6	115.5	113.6
85°	42.8	52.2	54.0	46.6	42.8
87.5°	14.9	14.9	9.3	5.6	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)