

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: P387538

Luminaire Tested: **14CZ2-44-SQR-UNV-L950-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: P387538  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-44-SQR-UNV-L950-CD1-SWPD1-U  
Description: 1x4 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: 3879.4 lumens  
Efficiency: N/A  
Efficacy: 101.3 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

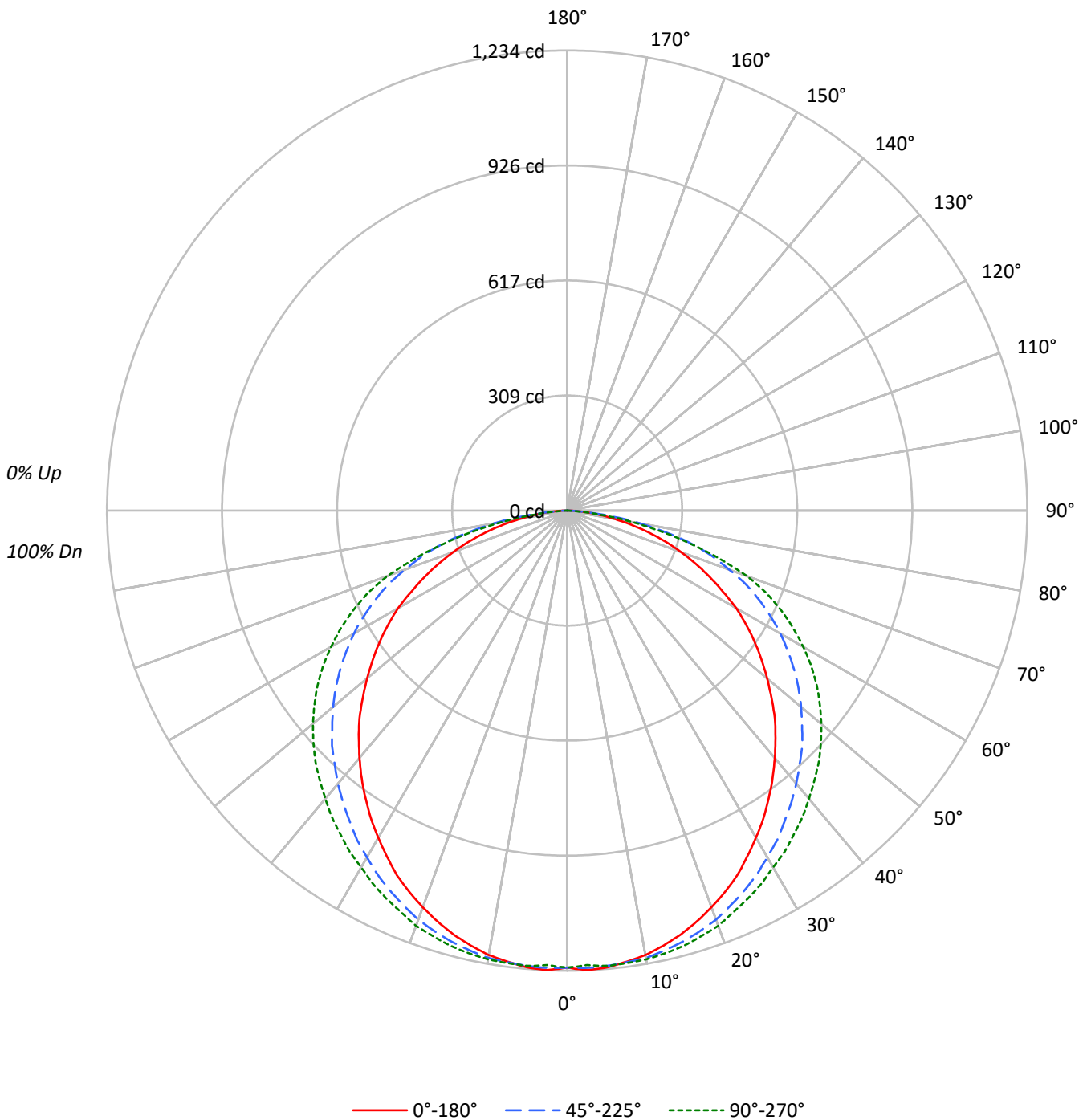
Input Watts (W): 38.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3299	3299	3299
5°	3322	3311	3311
10°	3307	3328	3339
15°	3279	3334	3366
20°	3242	3343	3393
25°	3205	3338	3408
30°	3147	3335	3433
35°	3096	3340	3481
40°	3043	3359	3544
45°	2999	3393	3631
50°	2930	3430	3724
55°	2880	3486	3834
60°	2820	3557	3936
65°	2689	3623	4034
70°	2554	3630	4031
75°	2338	3618	3558
80°	1999	3090	2757
85°	1568	1751	1025



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.5	3.0
10°-20°	336.5	8.7
20°-30°	514.7	13.3
30°-40°	630.9	16.3
40°-50°	678.5	17.5
50°-60°	652.0	16.8
60°-70°	542.9	14.0
70°-80°	333.2	8.6
80°-90°	74.2	1.9
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°	967.7	24.9
0°-40°	1598.6	41.2
0°-60°	2929.1	75.5
0°-90°	3879.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3879.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1230	1218	1226	1226	1226	117
15°	1177	1173	1197	1204	1208	332
25°	1079	1089	1124	1138	1148	496
35°	942	966	1017	1044	1060	590
45°	788	823	892	933	954	606
55°	614	667	743	794	817	548
65°	422	487	569	616	634	418
75°	225	293	348	346	342	238
85°	51	76	57	39	33	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1225.9	1225.9	1225.9	1225.9	1225.9
2.5°	1233.7	1222.0	1227.9	1225.9	1220.1
5°	1229.8	1218.1	1225.9	1225.9	1225.9
7.5°	1220.1	1210.3	1222.0	1224.0	1224.0
10°	1210.3	1202.5	1218.1	1220.1	1222.0
12.5°	1194.6	1188.8	1208.3	1212.2	1216.1
15°	1177.0	1173.1	1196.6	1204.4	1208.3
17.5°	1155.5	1157.5	1182.9	1192.7	1196.6
20°	1132.1	1137.9	1167.3	1177.0	1184.9
22.5°	1106.7	1114.5	1145.8	1157.5	1165.3
25°	1079.3	1089.1	1124.3	1137.9	1147.7
27.5°	1046.0	1061.7	1100.8	1118.4	1128.2
30°	1012.8	1030.4	1073.4	1094.9	1104.7
32.5°	979.6	999.1	1048.0	1069.5	1085.1
35°	942.4	965.9	1016.7	1044.1	1059.7
37.5°	905.3	932.6	987.4	1018.7	1036.3
40°	866.2	895.5	956.1	991.3	1008.9
42.5°	827.1	860.3	922.9	962.0	981.5
45°	788.0	823.1	891.6	932.6	954.1
47.5°	743.0	786.0	854.4	901.4	922.9
50°	700.0	746.9	819.2	868.1	889.6
52.5°	657.0	705.8	782.1	832.9	854.4
55°	613.9	666.7	743.0	793.8	817.3
57.5°	569.0	623.7	701.9	754.7	776.2
60°	524.0	580.7	660.9	709.7	731.3
62.5°	471.2	537.7	615.9	664.8	684.3
65°	422.3	486.9	569.0	615.9	633.5
67.5°	373.4	439.9	520.1	563.1	578.7
70°	324.6	391.0	461.4	502.5	512.3
72.5°	275.7	342.2	408.6	432.1	428.2
75°	224.9	293.3	348.0	346.1	342.2
77.5°	176.0	242.4	275.7	262.0	256.1
80°	129.0	193.6	199.4	185.7	177.9
82.5°	88.0	138.8	125.1	109.5	101.7
85°	50.8	76.3	56.7	39.1	33.2
87.5°	21.5	19.6	5.9	5.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)