

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: P387562

Luminaire Tested: **14CZ2-48HE-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: P387562  
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: 14CZ2-48HE-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: 4147.7 lumens  
Efficiency: N/A  
Efficacy: 112.4 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

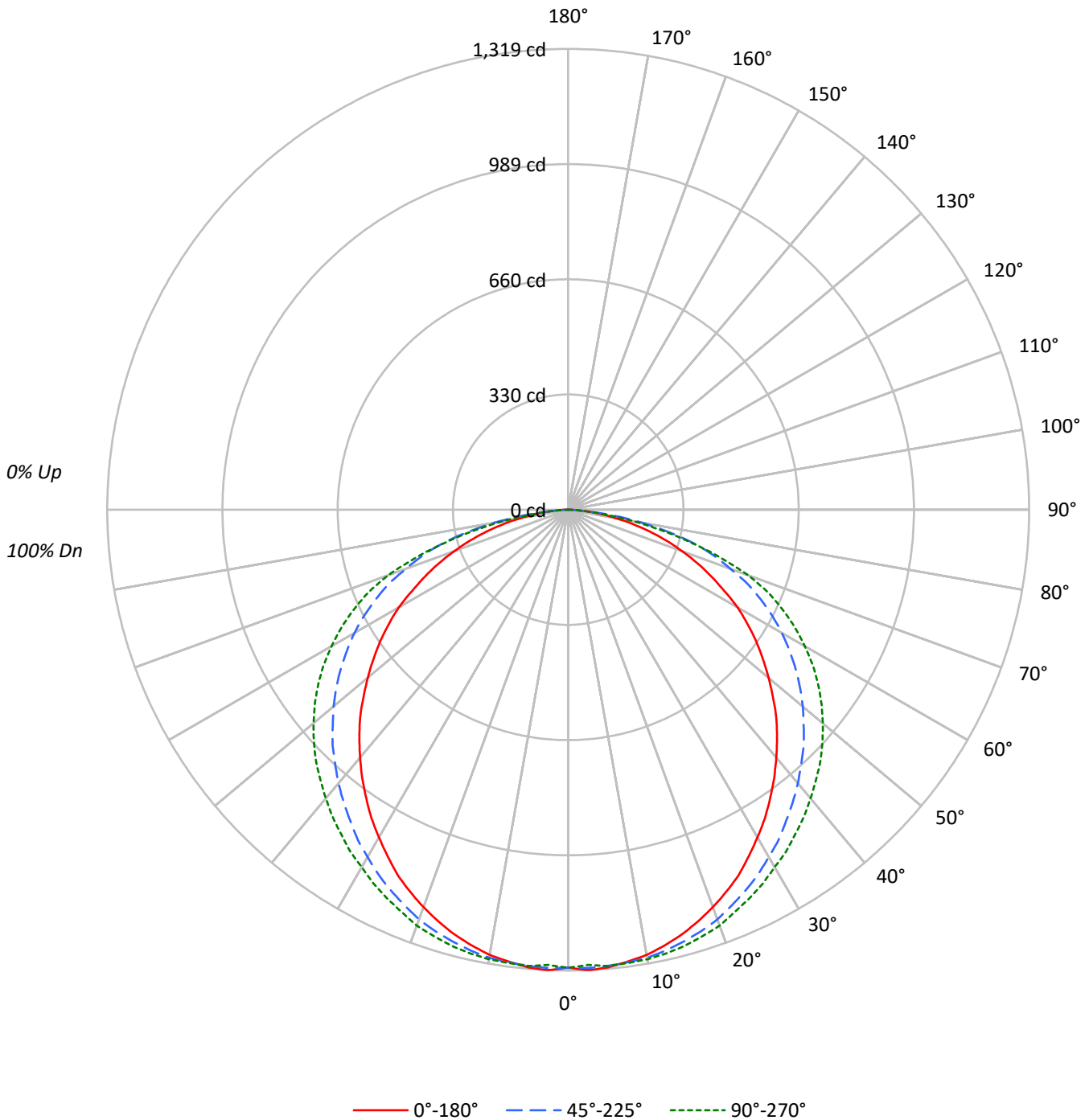
Input Watts (W): 36.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3527	3527	3527
5°	3552	3541	3541
10°	3536	3559	3570
15°	3506	3564	3599
20°	3466	3574	3628
25°	3426	3569	3643
30°	3365	3566	3670
35°	3310	3571	3722
40°	3253	3591	3789
45°	3206	3628	3882
50°	3133	3667	3982
55°	3080	3727	4100
60°	3015	3803	4208
65°	2875	3873	4313
70°	2730	3881	4309
75°	2499	3869	3803
80°	2139	3304	2947
85°	1680	1871	1096



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.6	3.0
10°-20°	359.8	8.7
20°-30°	550.3	13.3
30°-40°	674.5	16.3
40°-50°	725.4	17.5
50°-60°	697.1	16.8
60°-70°	580.4	14.0
70°-80°	356.2	8.6
80°-90°	79.4	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°	1034.7	24.9
0°-40°	1709.2	41.2
0°-60°	3131.7	75.5
0°-90°	4147.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4147.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1311	1311	1311	1311	1311	
5°	1315	1302	1311	1311	1311	125
15°	1258	1254	1279	1288	1292	355
25°	1154	1164	1202	1217	1227	531
35°	1008	1033	1087	1116	1133	631
45°	842	880	953	997	1020	648
55°	656	713	794	849	874	586
65°	452	520	608	658	677	447
75°	240	314	372	370	366	255
85°	54	82	61	42	36	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1310.7	1310.7	1310.7	1310.7	1310.7
2.5°	1319.1	1306.5	1312.8	1310.7	1304.4
5°	1314.9	1302.3	1310.7	1310.7	1310.7
7.5°	1304.4	1294.0	1306.5	1308.6	1308.6
10°	1294.0	1285.6	1302.3	1304.4	1306.5
12.5°	1277.3	1271.0	1291.9	1296.1	1300.3
15°	1258.4	1254.3	1279.4	1287.7	1291.9
17.5°	1235.5	1237.5	1264.7	1275.2	1279.4
20°	1210.4	1216.6	1248.0	1258.4	1266.8
22.5°	1183.2	1191.6	1225.0	1237.5	1245.9
25°	1153.9	1164.4	1202.0	1216.6	1227.1
27.5°	1118.4	1135.1	1176.9	1195.7	1206.2
30°	1082.9	1101.7	1147.7	1170.6	1181.1
32.5°	1047.3	1068.2	1120.5	1143.5	1160.2
35°	1007.6	1032.7	1087.0	1116.3	1133.0
37.5°	967.9	997.1	1055.7	1089.1	1107.9
40°	926.1	957.4	1022.2	1059.9	1078.7
42.5°	884.3	919.8	986.7	1028.5	1049.4
45°	842.4	880.1	953.2	997.1	1020.1
47.5°	794.4	840.4	913.5	963.7	986.7
50°	748.4	798.6	875.9	928.2	951.2
52.5°	702.4	754.7	836.2	890.5	913.5
55°	656.4	712.8	794.4	848.7	873.8
57.5°	608.3	666.9	750.5	806.9	829.9
60°	560.2	620.9	706.6	758.8	781.8
62.5°	503.8	574.9	658.5	710.8	731.7
65°	451.5	520.5	608.3	658.5	677.3
67.5°	399.3	470.4	556.1	602.0	618.8
70°	347.0	418.1	493.3	537.2	547.7
72.5°	294.8	365.8	436.9	462.0	457.8
75°	240.4	313.6	372.1	370.0	365.8
77.5°	188.1	259.2	294.8	280.1	273.8
80°	138.0	207.0	213.2	198.6	190.2
82.5°	94.1	148.4	133.8	117.1	108.7
85°	54.4	81.5	60.6	41.8	35.5
87.5°	23.0	20.9	6.3	6.3	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)