

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: P387555

Luminaire Tested: **14CZ2-48HE-SQR-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: P387555
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-L935-CD1-SDWPD1-U
Description: 1x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3821.0 lumens
Efficiency: N/A
Efficacy: 103.6 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

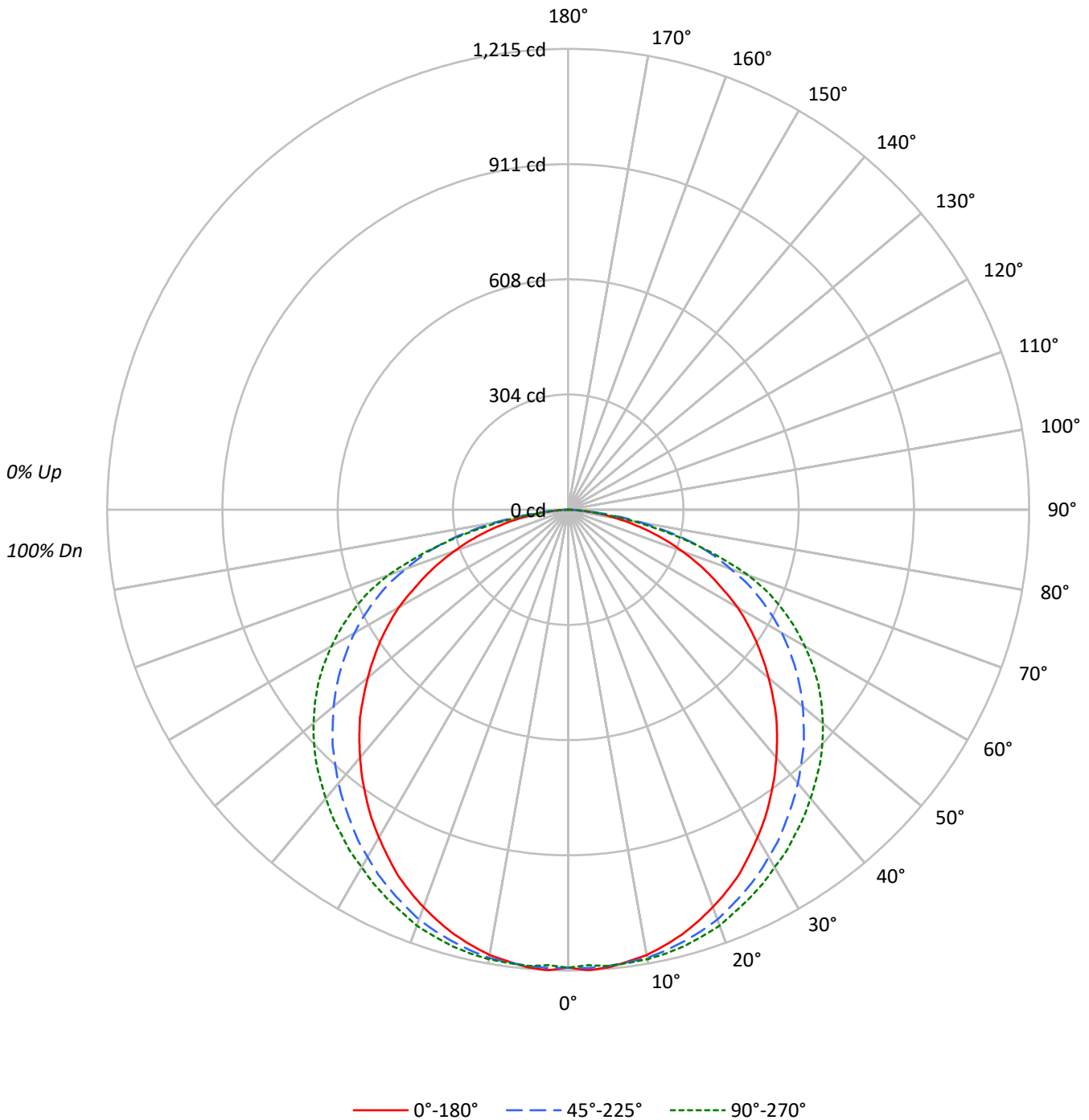
Input Watts (W): 36.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3249	3249	3249
5°	3272	3262	3262
10°	3257	3278	3289
15°	3230	3283	3316
20°	3193	3292	3342
25°	3156	3288	3356
30°	3100	3285	3381
35°	3049	3290	3429
40°	2997	3308	3491
45°	2954	3342	3577
50°	2886	3378	3668
55°	2837	3433	3777
60°	2778	3503	3876
65°	2649	3568	3973
70°	2515	3576	3970
75°	2303	3564	3504
80°	1970	3044	2715
85°	1547	1723	1010



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	3.0
10°-20°	331.5	8.7
20°-30°	506.9	13.3
30°-40°	621.4	16.3
40°-50°	668.3	17.5
50°-60°	642.2	16.8
60°-70°	534.7	14.0
70°-80°	328.2	8.6
80°-90°	73.1	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°	953.2	24.9
0°-40°	1574.5	41.2
0°-60°	2885.0	75.5
0°-90°	3821.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3821.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1211	1200	1208	1208	1208	115
15°	1159	1156	1179	1186	1190	327
25°	1063	1073	1107	1121	1130	489
35°	928	951	1001	1028	1044	581
45°	776	811	878	919	940	597
55°	605	657	732	782	805	540
65°	416	480	560	607	624	412
75°	222	289	343	341	337	235
85°	50	75	56	38	33	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1207.5	1207.5	1207.5	1207.5	1207.5
2.5°	1215.2	1203.6	1209.4	1207.5	1201.7
5°	1211.3	1199.8	1207.5	1207.5	1207.5
7.5°	1201.7	1192.1	1203.6	1205.5	1205.5
10°	1192.1	1184.4	1199.8	1201.7	1203.6
12.5°	1176.7	1170.9	1190.1	1194.0	1197.8
15°	1159.3	1155.5	1178.6	1186.3	1190.1
17.5°	1138.1	1140.1	1165.1	1174.7	1178.6
20°	1115.0	1120.8	1149.7	1159.3	1167.0
22.5°	1090.0	1097.7	1128.5	1140.1	1147.8
25°	1063.0	1072.7	1107.3	1120.8	1130.4
27.5°	1030.3	1045.7	1084.2	1101.6	1111.2
30°	997.6	1014.9	1057.3	1078.4	1088.1
32.5°	964.8	984.1	1032.2	1053.4	1068.8
35°	928.2	951.3	1001.4	1028.4	1043.8
37.5°	891.6	918.6	972.5	1003.3	1020.7
40°	853.1	882.0	941.7	976.4	993.7
42.5°	814.6	847.3	909.0	947.5	966.7
45°	776.1	810.8	878.2	918.6	939.8
47.5°	731.8	774.2	841.6	887.8	909.0
50°	689.4	735.7	806.9	855.0	876.2
52.5°	647.1	695.2	770.3	820.4	841.6
55°	604.7	656.7	731.8	781.9	805.0
57.5°	560.4	614.3	691.4	743.4	764.5
60°	516.1	572.0	650.9	699.1	720.2
62.5°	464.1	529.6	606.6	654.8	674.0
65°	416.0	479.5	560.4	606.6	624.0
67.5°	367.8	433.3	512.3	554.6	570.0
70°	319.7	385.2	454.5	494.9	504.6
72.5°	271.5	337.0	402.5	425.6	421.7
75°	221.5	288.9	342.8	340.9	337.0
77.5°	173.3	238.8	271.5	258.1	252.3
80°	127.1	190.7	196.4	182.9	175.2
82.5°	86.7	136.7	123.3	107.8	100.1
85°	50.1	75.1	55.8	38.5	32.7
87.5°	21.2	19.3	5.8	5.8	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)