

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: P387561

Luminaire Tested: **14CZ2-48HE-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: P387561
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-SDWPD1-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: 4097.7 lumens
Efficiency: N/A
Efficacy: 111.0 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

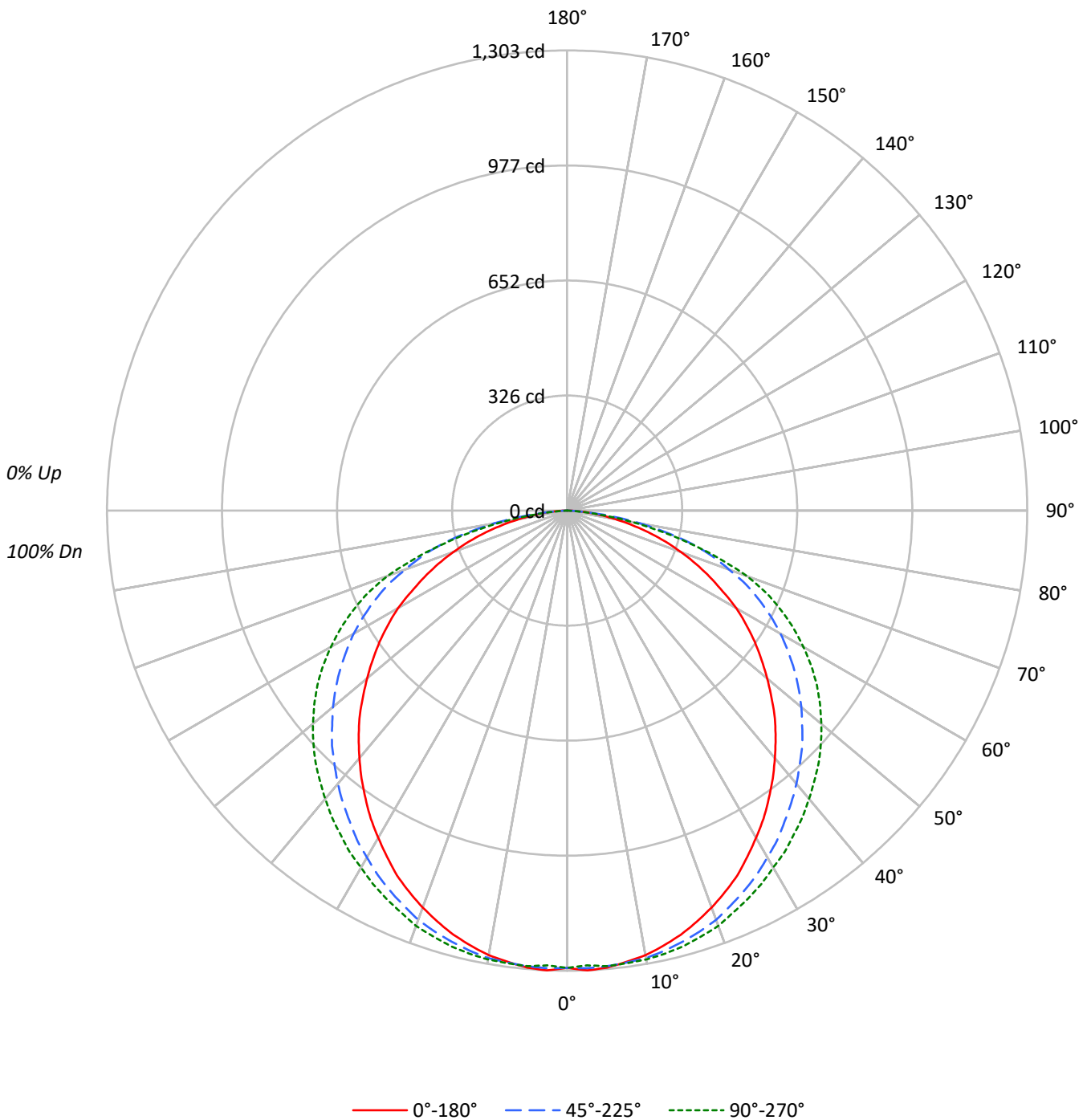
Input Watts (W): 36.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3485	3485	3485
5°	3509	3498	3498
10°	3493	3516	3527
15°	3464	3521	3556
20°	3424	3531	3584
25°	3385	3526	3600
30°	3324	3523	3626
35°	3270	3528	3677
40°	3214	3548	3744
45°	3167	3584	3835
50°	3095	3623	3934
55°	3042	3682	4050
60°	2979	3757	4157
65°	2840	3827	4260
70°	2697	3835	4257
75°	2469	3822	3758
80°	2112	3265	2912
85°	1658	1849	1084



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	3.0
10°-20°	355.5	8.7
20°-30°	543.6	13.3
30°-40°	666.4	16.3
40°-50°	716.7	17.5
50°-60°	688.7	16.8
60°-70°	573.4	14.0
70°-80°	351.9	8.6
80°-90°	78.4	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°	1022.2	24.9
0°-40°	1688.5	41.2
0°-60°	3093.9	75.5
0°-90°	4097.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4097.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1295	1295	1295	1295	1295	
5°	1299	1287	1295	1295	1295	123
15°	1243	1239	1264	1272	1276	351
25°	1140	1150	1188	1202	1212	524
35°	995	1020	1074	1103	1119	623
45°	832	870	942	985	1008	641
55°	648	704	785	838	863	579
65°	446	514	601	651	669	442
75°	238	310	368	366	361	252
85°	54	80	60	41	35	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1294.9	1294.9	1294.9	1294.9	1294.9
2.5°	1303.2	1290.8	1297.0	1294.9	1288.7
5°	1299.0	1286.6	1294.9	1294.9	1294.9
7.5°	1288.7	1278.4	1290.8	1292.8	1292.8
10°	1278.4	1270.1	1286.6	1288.7	1290.8
12.5°	1261.9	1255.7	1276.3	1280.5	1284.6
15°	1243.3	1239.1	1263.9	1272.2	1276.3
17.5°	1220.6	1222.6	1249.5	1259.8	1263.9
20°	1195.8	1202.0	1233.0	1243.3	1251.5
22.5°	1168.9	1177.2	1210.2	1222.6	1230.9
25°	1140.0	1150.3	1187.5	1202.0	1212.3
27.5°	1104.9	1121.4	1162.7	1181.3	1191.6
30°	1069.8	1088.4	1133.8	1156.5	1166.9
32.5°	1034.7	1055.3	1107.0	1129.7	1146.2
35°	995.4	1020.2	1073.9	1102.8	1119.4
37.5°	956.2	985.1	1042.9	1076.0	1094.6
40°	914.9	945.9	1009.9	1047.1	1065.7
42.5°	873.6	908.7	974.8	1016.1	1036.8
45°	832.3	869.5	941.8	985.1	1007.8
47.5°	784.8	830.2	902.5	952.1	974.8
50°	739.4	788.9	865.3	917.0	939.7
52.5°	693.9	745.6	826.1	879.8	902.5
55°	648.5	704.2	784.8	838.5	863.3
57.5°	601.0	658.8	741.4	797.2	819.9
60°	553.5	613.4	698.1	749.7	772.4
62.5°	497.7	567.9	650.6	702.2	722.8
65°	446.1	514.2	601.0	650.6	669.1
67.5°	394.5	464.7	549.4	594.8	611.3
70°	342.8	413.0	487.4	530.8	541.1
72.5°	291.2	361.4	431.6	456.4	452.3
75°	237.5	309.8	367.6	365.5	361.4
77.5°	185.9	256.1	291.2	276.7	270.5
80°	136.3	204.5	210.7	196.2	187.9
82.5°	92.9	146.6	132.2	115.7	107.4
85°	53.7	80.5	59.9	41.3	35.1
87.5°	22.7	20.7	6.2	6.2	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)