

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: P230924

Luminaire Tested: **14CZ-LD5-39-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230924
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-39-S-UNV-L930-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3345.0 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

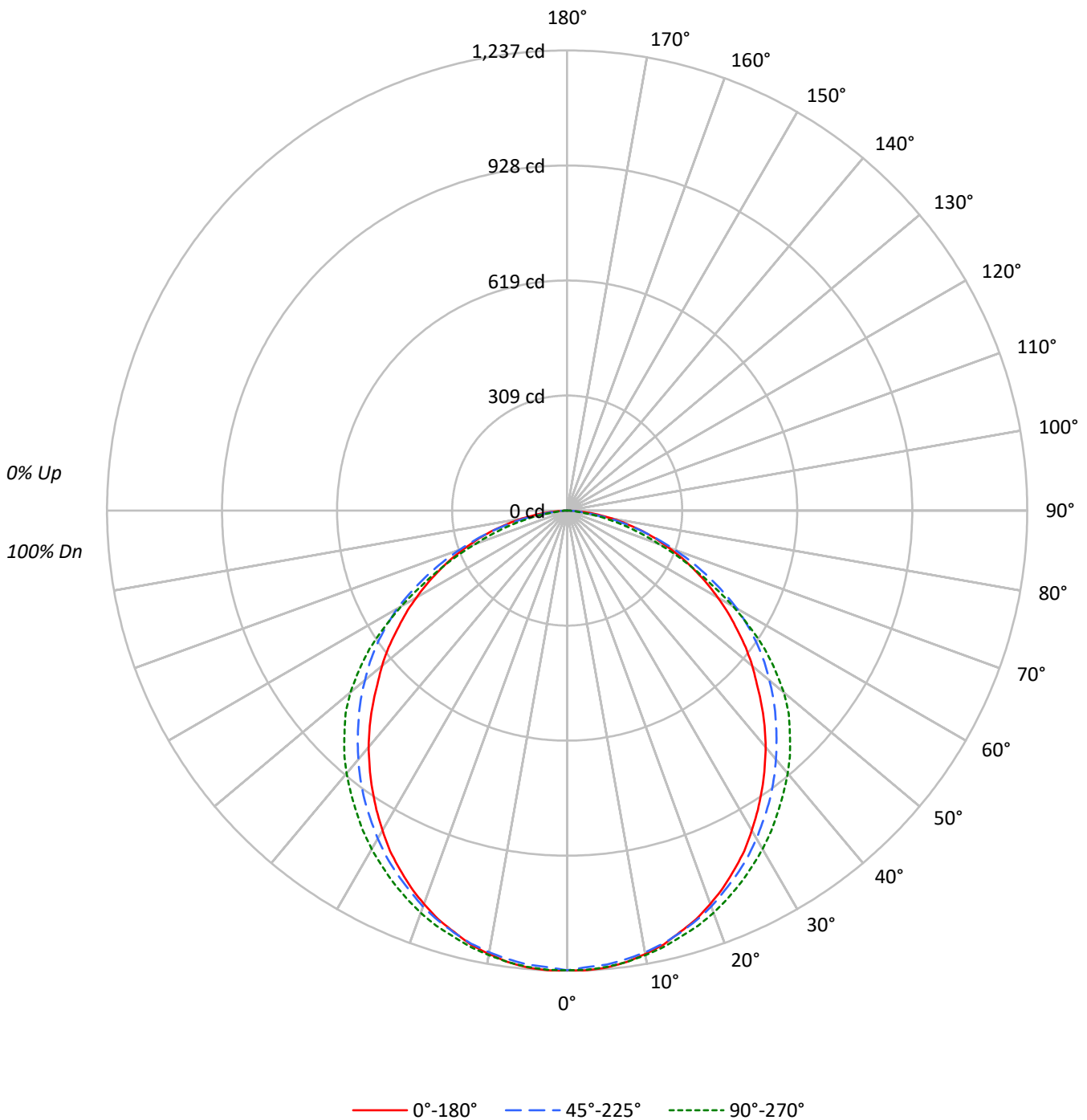
Input Watts (W): 35.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3325	3325	3325
5°	3330	3310	3326
10°	3307	3295	3315
15°	3268	3272	3301
20°	3222	3244	3295
25°	3160	3204	3279
30°	3085	3163	3265
35°	3002	3119	3246
40°	2916	3068	3241
45°	2813	3018	3222
50°	2721	2970	3183
55°	2616	2923	3042
60°	2519	2840	2775
65°	2411	2657	2439
70°	2275	2415	2064
75°	2123	2092	1705
80°	1870	1616	1247
85°	1473	781	692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	3.5
10°-20°	332.6	9.9
20°-30°	499.2	14.9
30°-40°	595.1	17.8
40°-50°	613.0	18.3
50°-60°	546.3	16.3
60°-70°	393.6	11.8
70°-80°	205.9	6.2
80°-90°	42.6	1.3
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°	948.6	28.4
0°-40°	1543.7	46.1
0°-60°	2702.9	80.8
0°-90°	3345.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3345.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1236	1236	1236	1236	1236	
5°	1233	1230	1225	1233	1231	117
15°	1173	1174	1174	1186	1185	331
25°	1064	1070	1079	1100	1104	490
35°	914	926	950	981	988	571
45°	739	756	793	838	847	570
55°	558	575	623	651	648	500
65°	379	392	417	398	383	375
75°	204	215	201	174	164	216
85°	48	42	25	22	22	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1235.6	1235.6	1235.6	1235.6	1235.6
2.5°	1237.1	1234.2	1228.2	1235.6	1235.6
5°	1232.7	1229.7	1225.2	1232.7	1231.2
7.5°	1223.7	1220.7	1216.3	1225.2	1223.7
10°	1210.3	1208.8	1205.8	1214.8	1213.3
12.5°	1195.4	1193.9	1192.4	1201.4	1201.4
15°	1173.0	1174.5	1174.5	1186.5	1185.0
17.5°	1152.2	1153.7	1155.2	1170.1	1170.1
20°	1125.3	1126.8	1132.8	1149.2	1150.7
22.5°	1097.0	1098.5	1106.0	1125.3	1128.3
25°	1064.2	1070.2	1079.1	1100.0	1104.5
27.5°	1031.4	1035.9	1050.8	1074.7	1077.6
30°	992.7	1001.6	1018.0	1044.9	1050.8
32.5°	953.9	964.4	983.7	1013.6	1021.0
35°	913.7	925.6	949.5	980.8	988.2
37.5°	872.0	882.4	912.2	945.0	955.4
40°	830.2	840.7	873.4	910.7	922.6
42.5°	785.5	800.4	833.2	874.9	886.9
45°	739.3	755.7	793.0	837.7	846.6
47.5°	691.6	709.5	752.7	797.4	807.9
50°	649.9	666.3	709.5	752.7	760.2
52.5°	605.2	620.1	667.8	703.5	705.0
55°	557.5	575.3	623.0	651.4	648.4
57.5°	514.2	529.1	575.3	590.2	581.3
60°	468.0	481.4	527.6	529.1	515.7
62.5°	423.3	436.7	472.5	462.1	445.7
65°	378.6	392.0	417.3	398.0	383.1
67.5°	335.4	347.3	362.2	336.9	322.0
70°	289.2	305.6	307.0	277.2	262.3
72.5°	248.9	257.9	254.9	226.6	213.1
75°	204.2	214.6	201.2	174.4	164.0
77.5°	162.5	169.9	152.0	126.7	119.2
80°	120.7	125.2	104.3	85.0	80.5
82.5°	82.0	82.0	59.6	46.2	41.7
85°	47.7	41.7	25.3	22.4	22.4
87.5°	16.4	10.4	10.4	10.4	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)