

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: P230900

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230900
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-39-UNV-L930-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3280.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

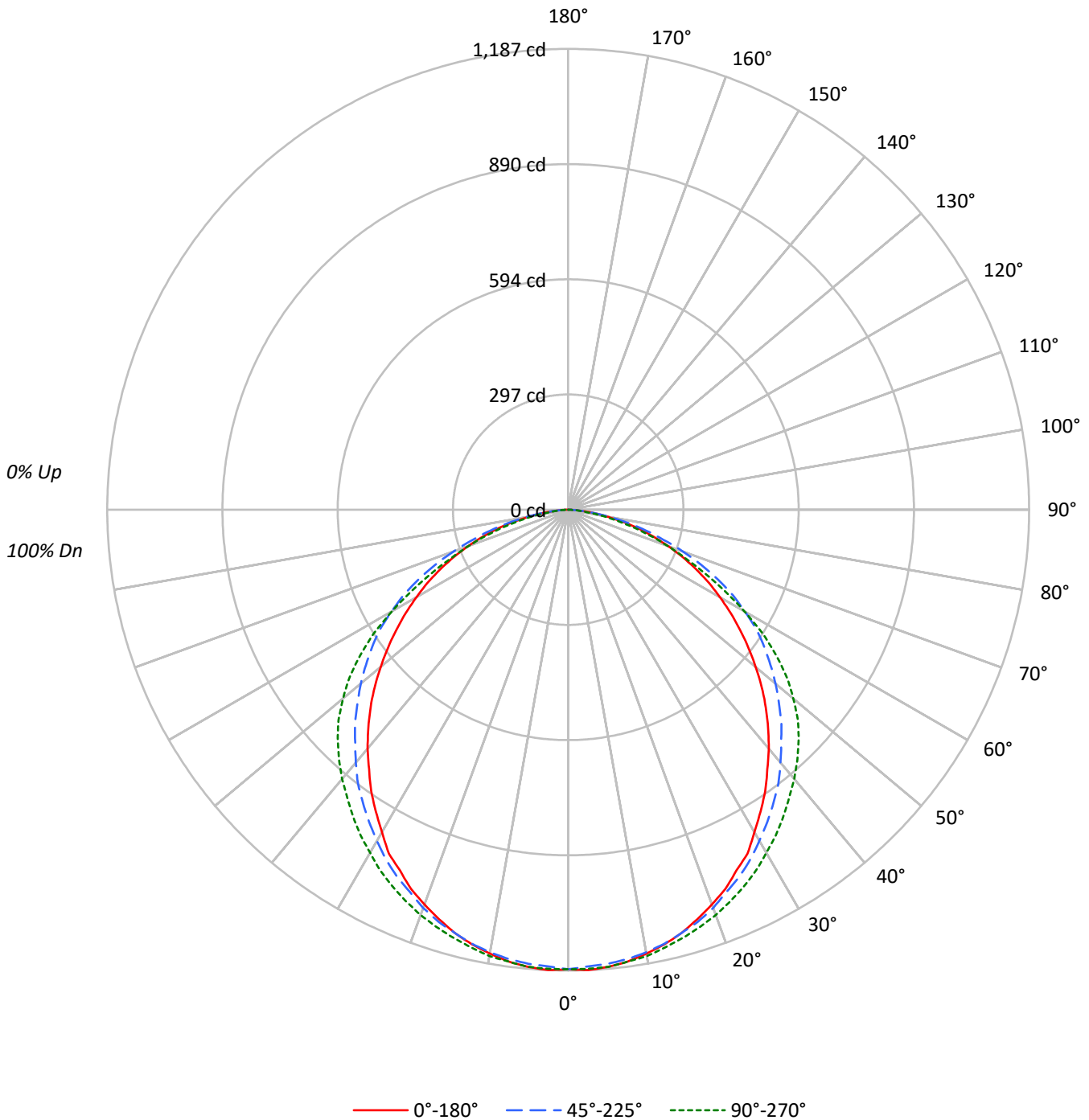
Input Watts (W): 35.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3185	3185	3185
5°	3193	3171	3193
10°	3172	3164	3190
15°	3144	3144	3180
20°	3098	3126	3181
25°	3044	3097	3178
30°	2980	3060	3170
35°	2906	3028	3171
40°	2823	2988	3181
45°	2739	2954	3194
50°	2640	2918	3168
55°	2534	2890	3065
60°	2428	2828	2820
65°	2316	2708	2471
70°	2150	2468	2138
75°	1951	2152	1765
80°	1554	1705	1303
85°	1099	948	750



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	3.4
10°-20°	319.9	9.8
20°-30°	482.4	14.7
30°-40°	578.2	17.6
40°-50°	600.1	18.3
50°-60°	541.2	16.5
60°-70°	394.8	12.0
70°-80°	207.1	6.3
80°-90°	44.2	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°	914.3	27.9
0°-40°	1492.6	45.5
0°-60°	2633.9	80.3
0°-90°	3280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3280.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1182	1179	1174	1182	1182	112
15°	1129	1129	1129	1142	1142	318
25°	1025	1030	1043	1066	1070	473
35°	884	894	922	956	965	552
45°	720	734	776	823	839	555
55°	540	560	616	656	653	484
65°	364	385	425	409	388	360
75°	188	213	207	180	170	197
85°	36	44	31	26	24	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1183.7	1183.7	1183.7	1183.7	1183.7
2.5°	1186.9	1183.7	1177.2	1183.7	1183.7
5°	1182.0	1178.8	1174.0	1182.0	1182.0
7.5°	1174.0	1170.7	1167.5	1175.6	1174.0
10°	1161.0	1159.4	1157.8	1167.5	1167.5
12.5°	1146.5	1146.5	1144.9	1156.2	1154.6
15°	1128.7	1128.7	1128.7	1141.6	1141.6
17.5°	1106.0	1109.3	1112.5	1127.1	1127.1
20°	1081.8	1085.0	1091.5	1109.3	1110.9
22.5°	1057.5	1059.1	1065.6	1086.6	1091.5
25°	1025.2	1030.0	1043.0	1065.6	1070.5
27.5°	999.3	1000.9	1015.5	1041.4	1047.8
30°	958.9	970.2	984.8	1013.9	1020.3
32.5°	921.7	931.4	954.0	984.8	994.5
35°	884.5	894.2	921.7	955.7	965.4
37.5°	842.5	857.0	889.4	923.3	934.6
40°	803.7	816.6	850.6	892.6	905.5
42.5°	761.6	774.6	811.7	858.6	873.2
45°	719.6	734.1	776.2	823.1	839.2
47.5°	675.9	692.1	735.7	787.5	802.0
50°	630.6	648.4	696.9	750.3	756.8
52.5°	585.4	604.8	656.5	703.4	709.9
55°	540.1	559.5	616.1	656.5	653.3
57.5°	496.4	517.4	575.7	596.7	593.4
60°	451.1	473.8	525.5	535.2	523.9
62.5°	409.1	430.1	478.6	470.6	456.0
65°	363.8	384.9	425.3	409.1	388.1
67.5°	318.6	344.4	370.3	342.8	326.6
70°	273.3	302.4	313.7	286.2	271.7
72.5°	229.6	260.3	257.1	229.6	219.9
75°	187.6	213.4	207.0	179.5	169.8
77.5°	142.3	171.4	156.9	134.2	126.1
80°	100.3	126.1	110.0	90.6	84.1
82.5°	66.3	84.1	67.9	53.4	48.5
85°	35.6	43.7	30.7	25.9	24.3
87.5°	14.6	12.9	11.3	11.3	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)