

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: P230897

Luminaire Tested: **14CZ-LD5-35-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230897
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-LD5-35-UNV-L935-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3091.0 lumens
Efficiency: N/A
Efficacy: 98.1 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

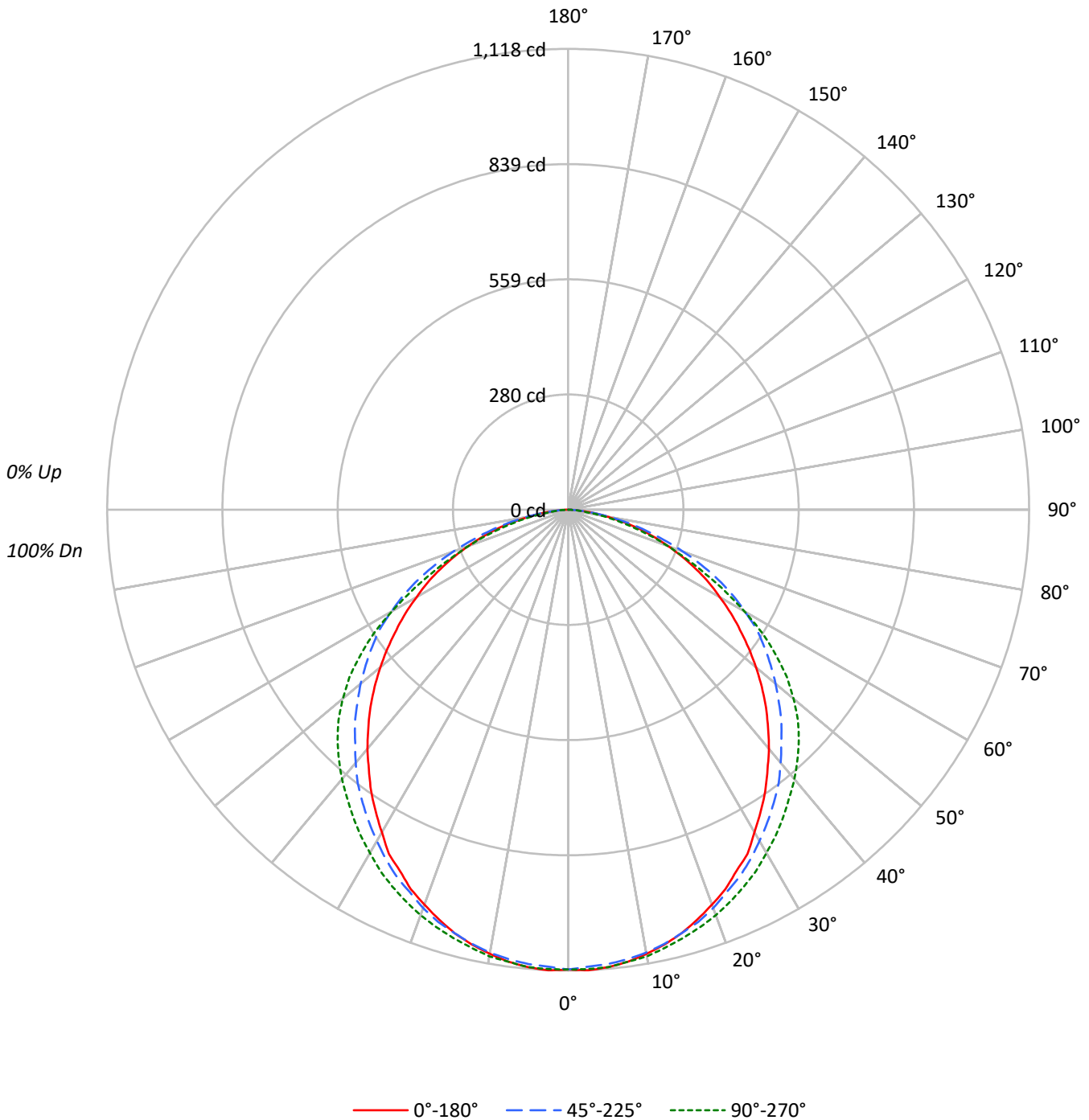
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3002	3002	3002
5°	3009	2988	3009
10°	2990	2981	3006
15°	2963	2963	2997
20°	2920	2946	2998
25°	2869	2918	2995
30°	2808	2884	2988
35°	2738	2853	2988
40°	2661	2816	2998
45°	2581	2783	3010
50°	2488	2750	2986
55°	2388	2724	2888
60°	2288	2665	2657
65°	2183	2552	2329
70°	2026	2326	2014
75°	1838	2028	1664
80°	1464	1605	1227
85°	1034	895	707



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.5	3.4
10°-20°	301.5	9.8
20°-30°	454.6	14.7
30°-40°	544.9	17.6
40°-50°	565.5	18.3
50°-60°	510.1	16.5
60°-70°	372.1	12.0
70°-80°	195.2	6.3
80°-90°	41.6	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°	861.7	27.9
0°-40°	1406.6	45.5
0°-60°	2482.1	80.3
0°-90°	3091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3091.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1114	1111	1106	1114	1114	106
15°	1064	1064	1064	1076	1076	300
25°	966	971	983	1004	1009	446
35°	834	843	869	901	910	521
45°	678	692	731	776	791	523
55°	509	527	581	619	616	456
65°	343	363	401	386	366	339
75°	177	201	195	169	160	185
85°	34	41	29	24	23	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1115.5	1115.5	1115.5	1115.5	1115.5
2.5°	1118.5	1115.5	1109.4	1115.5	1115.5
5°	1113.9	1110.9	1106.3	1113.9	1113.9
7.5°	1106.3	1103.3	1100.2	1107.8	1106.3
10°	1094.1	1092.6	1091.1	1100.2	1100.2
12.5°	1080.4	1080.4	1078.9	1089.5	1088.0
15°	1063.6	1063.6	1063.6	1075.8	1075.8
17.5°	1042.3	1045.4	1048.4	1062.1	1062.1
20°	1019.5	1022.5	1028.6	1045.4	1046.9
22.5°	996.6	998.1	1004.2	1024.0	1028.6
25°	966.1	970.7	982.9	1004.2	1008.8
27.5°	941.7	943.3	957.0	981.4	987.5
30°	903.6	914.3	928.0	955.5	961.5
32.5°	868.6	877.7	899.1	928.0	937.2
35°	833.5	842.7	868.6	900.6	909.7
37.5°	793.9	807.6	838.1	870.1	880.8
40°	757.4	769.5	801.5	841.2	853.4
42.5°	717.7	729.9	765.0	809.2	822.9
45°	678.1	691.8	731.4	775.6	790.9
47.5°	637.0	652.2	693.3	742.1	755.8
50°	594.3	611.1	656.8	707.1	713.2
52.5°	551.6	569.9	618.7	662.9	669.0
55°	509.0	527.3	580.6	618.7	615.6
57.5°	467.8	487.6	542.5	562.3	559.3
60°	425.2	446.5	495.2	504.4	493.7
62.5°	385.5	405.3	451.1	443.4	429.7
65°	342.9	362.7	400.8	385.5	365.7
67.5°	300.2	324.6	349.0	323.1	307.8
70°	257.5	285.0	295.6	269.7	256.0
72.5°	216.4	245.3	242.3	216.4	207.2
75°	176.8	201.1	195.1	169.1	160.0
77.5°	134.1	161.5	147.8	126.5	118.9
80°	94.5	118.9	103.6	85.3	79.2
82.5°	62.5	79.2	64.0	50.3	45.7
85°	33.5	41.1	29.0	24.4	22.9
87.5°	13.7	12.2	10.7	10.7	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)