

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: P230901

Luminaire Tested: **14CZ-LD5-39-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230901
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-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: 3409.0 lumens
Efficiency: N/A
Efficacy: 95.5 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

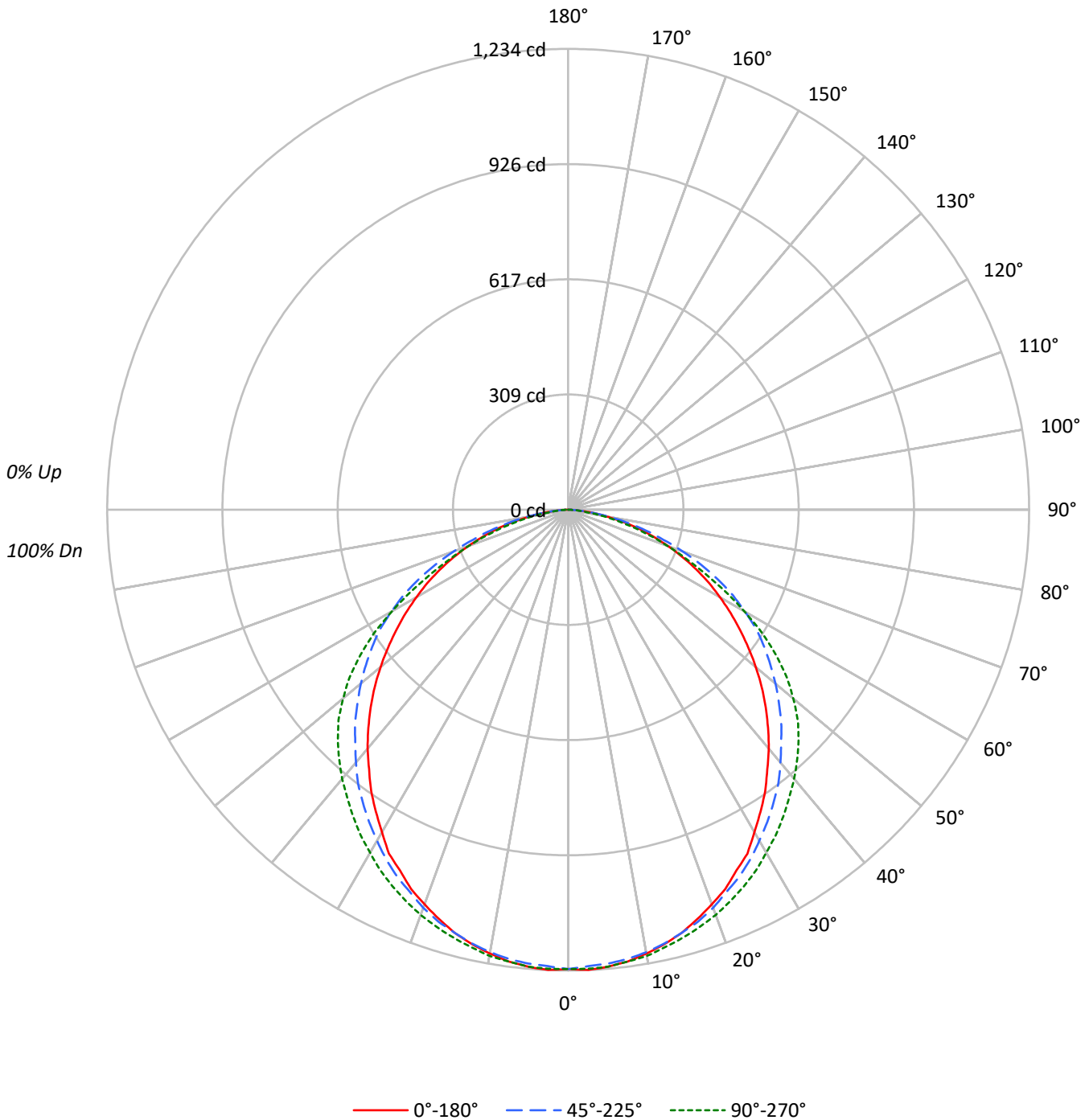
Input Watts (W): 35.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3310	3310	3310
5°	3318	3296	3318
10°	3297	3288	3316
15°	3268	3268	3305
20°	3220	3249	3306
25°	3164	3219	3303
30°	3097	3180	3295
35°	3020	3147	3296
40°	2934	3105	3306
45°	2846	3070	3319
50°	2744	3032	3293
55°	2633	3004	3186
60°	2524	2940	2930
65°	2408	2814	2568
70°	2234	2565	2221
75°	2027	2236	1835
80°	1615	1771	1354
85°	1142	985	778



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.4	3.4
10°-20°	332.5	9.8
20°-30°	501.4	14.7
30°-40°	601.0	17.6
40°-50°	623.7	18.3
50°-60°	562.5	16.5
60°-70°	410.3	12.0
70°-80°	215.3	6.3
80°-90°	45.9	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°	950.3	27.9
0°-40°	1551.3	45.5
0°-60°	2737.4	80.3
0°-90°	3409.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3409.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1230	1230	1230	1230	1230	
5°	1228	1225	1220	1228	1228	117
15°	1173	1173	1173	1186	1186	330
25°	1066	1071	1084	1108	1113	492
35°	919	929	958	993	1003	574
45°	748	763	807	855	872	576
55°	561	582	640	682	679	503
65°	378	400	442	425	403	374
75°	195	222	215	186	176	204
85°	37	45	32	27	25	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1230.2	1230.2	1230.2	1230.2	1230.2
2.5°	1233.6	1230.2	1223.5	1230.2	1230.2
5°	1228.5	1225.2	1220.1	1228.5	1228.5
7.5°	1220.1	1216.8	1213.4	1221.8	1220.1
10°	1206.7	1205.0	1203.3	1213.4	1213.4
12.5°	1191.6	1191.6	1189.9	1201.6	1200.0
15°	1173.1	1173.1	1173.1	1186.5	1186.5
17.5°	1149.5	1152.9	1156.3	1171.4	1171.4
20°	1124.3	1127.7	1134.4	1152.9	1154.6
22.5°	1099.1	1100.8	1107.5	1129.4	1134.4
25°	1065.5	1070.6	1084.0	1107.5	1112.6
27.5°	1038.6	1040.3	1055.4	1082.3	1089.0
30°	996.6	1008.4	1023.5	1053.7	1060.5
32.5°	958.0	968.0	991.6	1023.5	1033.6
35°	919.3	929.4	958.0	993.2	1003.3
37.5°	875.6	890.7	924.3	959.6	971.4
40°	835.3	848.7	884.0	927.7	941.1
42.5°	791.6	805.0	843.7	892.4	907.5
45°	747.9	763.0	806.7	855.4	872.2
47.5°	702.5	719.3	764.7	818.5	833.6
50°	655.4	673.9	724.3	779.8	786.5
52.5°	608.4	628.6	682.3	731.1	737.8
55°	561.3	581.5	640.3	682.3	679.0
57.5°	515.9	537.8	598.3	620.1	616.8
60°	468.9	492.4	546.2	556.3	544.5
62.5°	425.2	447.0	497.5	489.1	473.9
65°	378.1	400.0	442.0	425.2	403.3
67.5°	331.1	358.0	384.9	356.3	339.5
70°	284.0	314.3	326.0	297.5	282.3
72.5°	238.6	270.6	267.2	238.6	228.6
75°	195.0	221.8	215.1	186.5	176.5
77.5°	147.9	178.1	163.0	139.5	131.1
80°	104.2	131.1	114.3	94.1	87.4
82.5°	68.9	87.4	70.6	55.5	50.4
85°	37.0	45.4	31.9	26.9	25.2
87.5°	15.1	13.4	11.8	11.8	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)