

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: P230925

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230925
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-L935-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3477.0 lumens
Efficiency: N/A
Efficacy: 97.4 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

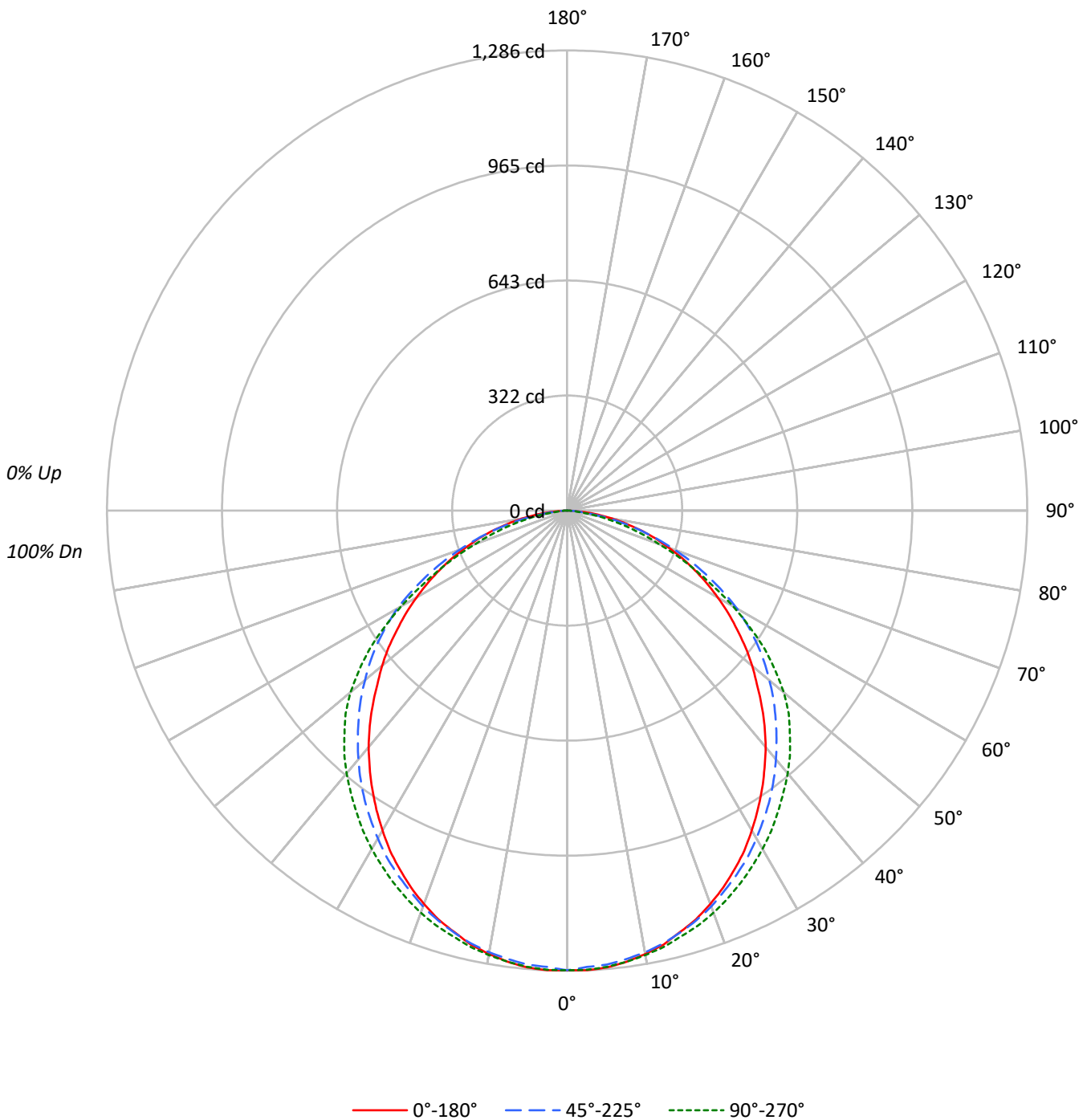
Input Watts (W): 35.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3456	3456	3456
5°	3461	3440	3457
10°	3438	3425	3446
15°	3397	3401	3431
20°	3350	3372	3425
25°	3284	3331	3409
30°	3206	3288	3394
35°	3120	3242	3374
40°	3032	3189	3369
45°	2925	3137	3349
50°	2828	3087	3308
55°	2719	3038	3162
60°	2618	2952	2885
65°	2506	2762	2535
70°	2365	2511	2146
75°	2207	2175	1772
80°	1945	1681	1297
85°	1531	812	716



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	3.5
10°-20°	345.8	9.9
20°-30°	518.9	14.9
30°-40°	618.6	17.8
40°-50°	637.2	18.3
50°-60°	567.8	16.3
60°-70°	409.2	11.8
70°-80°	214.0	6.2
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°	986.0	28.4
0°-40°	1604.6	46.1
0°-60°	2809.6	80.8
0°-90°	3477.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3477.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1284	1284	1284	1284	1284	
5°	1281	1278	1274	1281	1280	122
15°	1219	1221	1221	1233	1232	344
25°	1106	1112	1122	1143	1148	510
35°	950	962	987	1020	1027	594
45°	768	786	824	871	880	593
55°	580	598	648	677	674	520
65°	394	408	434	414	398	390
75°	212	223	209	181	170	225
85°	50	43	26	23	23	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1284.4	1284.4	1284.4	1284.4	1284.4
2.5°	1286.0	1282.9	1276.7	1284.4	1284.4
5°	1281.3	1278.2	1273.6	1281.3	1279.8
7.5°	1272.0	1268.9	1264.3	1273.6	1272.0
10°	1258.1	1256.5	1253.4	1262.7	1261.2
12.5°	1242.6	1241.0	1239.5	1248.8	1248.8
15°	1219.3	1220.9	1220.9	1233.3	1231.7
17.5°	1197.6	1199.2	1200.7	1216.2	1216.2
20°	1169.8	1171.3	1177.5	1194.5	1196.1
22.5°	1140.3	1141.9	1149.6	1169.8	1172.9
25°	1106.2	1112.4	1121.7	1143.4	1148.1
27.5°	1072.1	1076.8	1092.3	1117.1	1120.2
30°	1031.9	1041.2	1058.2	1086.1	1092.3
32.5°	991.6	1002.4	1022.6	1053.6	1061.3
35°	949.7	962.1	986.9	1019.5	1027.2
37.5°	906.4	917.2	948.2	982.3	993.1
40°	863.0	873.8	907.9	946.6	959.0
42.5°	816.5	832.0	866.1	909.5	921.9
45°	768.5	785.5	824.3	870.7	880.0
47.5°	718.9	737.5	782.4	828.9	839.7
50°	675.5	692.6	737.5	782.4	790.2
52.5°	629.0	644.5	694.1	731.3	732.8
55°	579.5	598.0	647.6	677.1	674.0
57.5°	534.5	550.0	598.0	613.5	604.2
60°	486.5	500.4	548.5	550.0	536.1
62.5°	440.0	454.0	491.1	480.3	463.3
65°	393.5	407.5	433.8	413.7	398.2
67.5°	348.6	361.0	376.5	350.2	334.7
70°	300.6	317.6	319.2	288.2	272.7
72.5°	258.7	268.0	264.9	235.5	221.6
75°	212.3	223.1	209.2	181.3	170.4
77.5°	168.9	176.6	158.0	131.7	123.9
80°	125.5	130.1	108.5	88.3	83.7
82.5°	85.2	85.2	62.0	48.0	43.4
85°	49.6	43.4	26.3	23.2	23.2
87.5°	17.0	10.8	10.8	10.8	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)