

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: P230926

Luminaire Tested: **14CZ-LD5-39-S-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230926
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-L940-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3563.0 lumens
Efficiency: N/A
Efficacy: 99.8 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

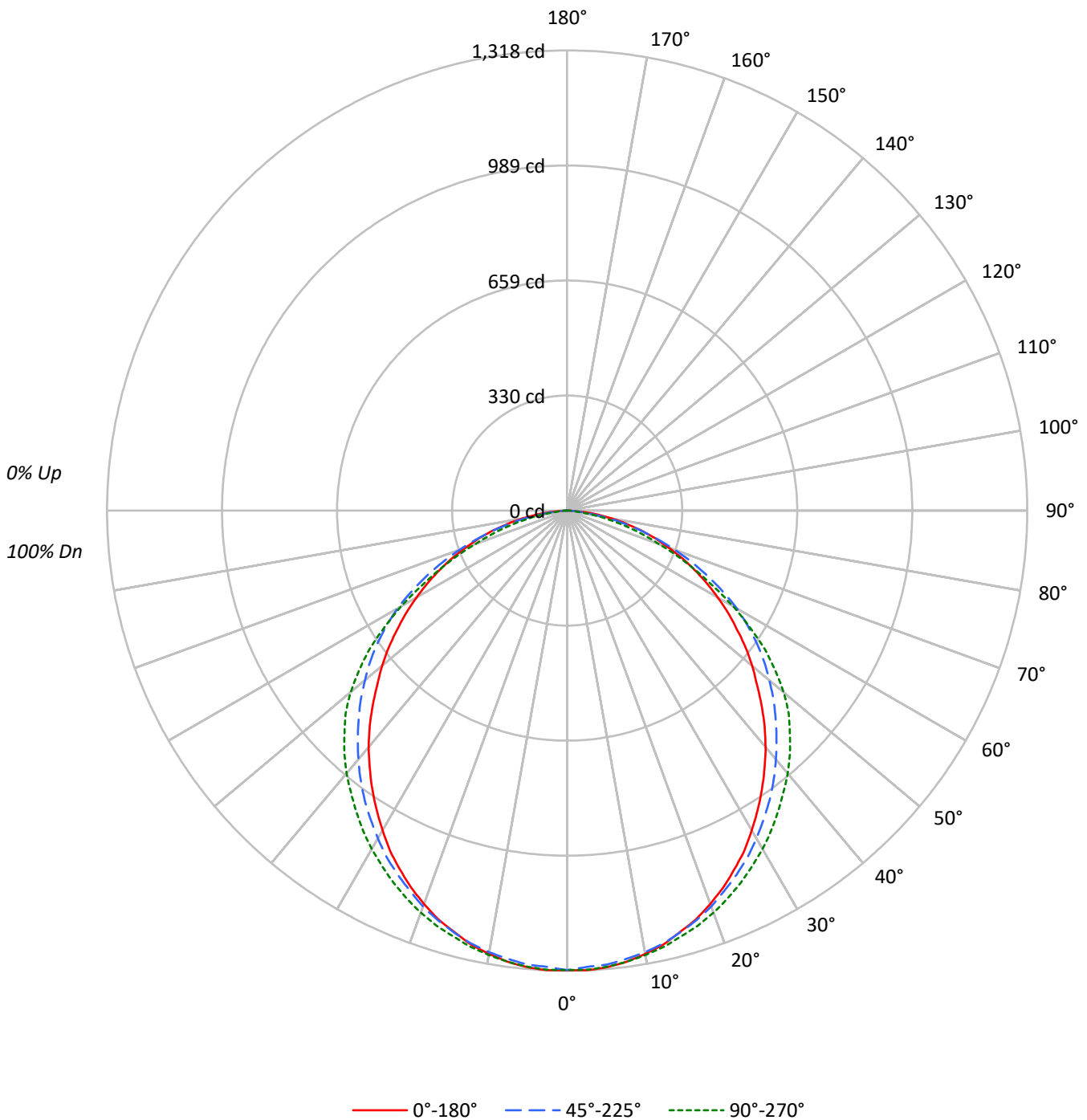
Input Watts (W): 35.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3542	3542	3542
5°	3547	3525	3542
10°	3523	3510	3531
15°	3481	3485	3516
20°	3433	3455	3510
25°	3366	3413	3493
30°	3286	3370	3478
35°	3197	3322	3458
40°	3106	3268	3452
45°	2997	3214	3432
50°	2898	3164	3390
55°	2786	3113	3240
60°	2683	3025	2956
65°	2568	2830	2598
70°	2423	2574	2198
75°	2261	2228	1815
80°	1993	1722	1328
85°	1568	834	735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.4	3.5
10°-20°	354.3	9.9
20°-30°	531.7	14.9
30°-40°	633.9	17.8
40°-50°	652.9	18.3
50°-60°	581.9	16.3
60°-70°	419.3	11.8
70°-80°	219.3	6.2
80°-90°	45.3	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°	1010.4	28.4
0°-40°	1644.3	46.1
0°-60°	2879.1	80.8
0°-90°	3563.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3563.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1316	1316	1316	1316	1316	
5°	1313	1310	1305	1313	1311	125
15°	1250	1251	1251	1264	1262	353
25°	1134	1140	1150	1172	1176	522
35°	973	986	1011	1045	1053	609
45°	788	805	845	892	902	608
55°	594	613	664	694	691	532
65°	403	418	444	424	408	399
75°	218	229	214	186	175	230
85°	51	44	27	24	24	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1316.2	1316.2	1316.2	1316.2	1316.2
2.5°	1317.8	1314.6	1308.2	1316.2	1316.2
5°	1313.0	1309.8	1305.1	1313.0	1311.4
7.5°	1303.5	1300.3	1295.5	1305.1	1303.5
10°	1289.2	1287.6	1284.4	1293.9	1292.4
12.5°	1273.3	1271.7	1270.1	1279.7	1279.7
15°	1249.5	1251.1	1251.1	1263.8	1262.2
17.5°	1227.3	1228.9	1230.4	1246.3	1246.3
20°	1198.7	1200.3	1206.6	1224.1	1225.7
22.5°	1168.5	1170.1	1178.0	1198.7	1201.9
25°	1133.6	1139.9	1149.5	1171.7	1176.5
27.5°	1098.7	1103.4	1119.3	1144.7	1147.9
30°	1057.4	1066.9	1084.4	1113.0	1119.3
32.5°	1016.1	1027.2	1047.9	1079.6	1087.5
35°	973.2	985.9	1011.3	1044.7	1052.6
37.5°	928.8	939.9	971.7	1006.6	1017.7
40°	884.3	895.4	930.4	970.1	982.8
42.5°	836.7	852.6	887.5	932.0	944.7
45°	787.5	804.9	844.6	892.3	901.8
47.5°	736.7	755.7	801.8	849.4	860.5
50°	692.2	709.7	755.7	801.8	809.7
52.5°	644.6	660.5	711.3	749.4	751.0
55°	593.8	612.8	663.6	693.8	690.6
57.5°	547.7	563.6	612.8	628.7	619.2
60°	498.5	512.8	562.0	563.6	549.3
62.5°	450.9	465.2	503.3	492.2	474.7
65°	403.3	417.6	444.5	423.9	408.0
67.5°	357.2	369.9	385.8	358.8	342.9
70°	308.0	325.5	327.1	295.3	279.4
72.5°	265.1	274.7	271.5	241.3	227.0
75°	217.5	228.6	214.3	185.8	174.6
77.5°	173.1	181.0	161.9	135.0	127.0
80°	128.6	133.4	111.1	90.5	85.7
82.5°	87.3	87.3	63.5	49.2	44.5
85°	50.8	44.5	27.0	23.8	23.8
87.5°	17.5	11.1	11.1	11.1	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)