

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: P230903

Luminaire Tested: **14CZ-LD5-39-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230903
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-L950-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3800.0 lumens
Efficiency: N/A
Efficacy: 106.4 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

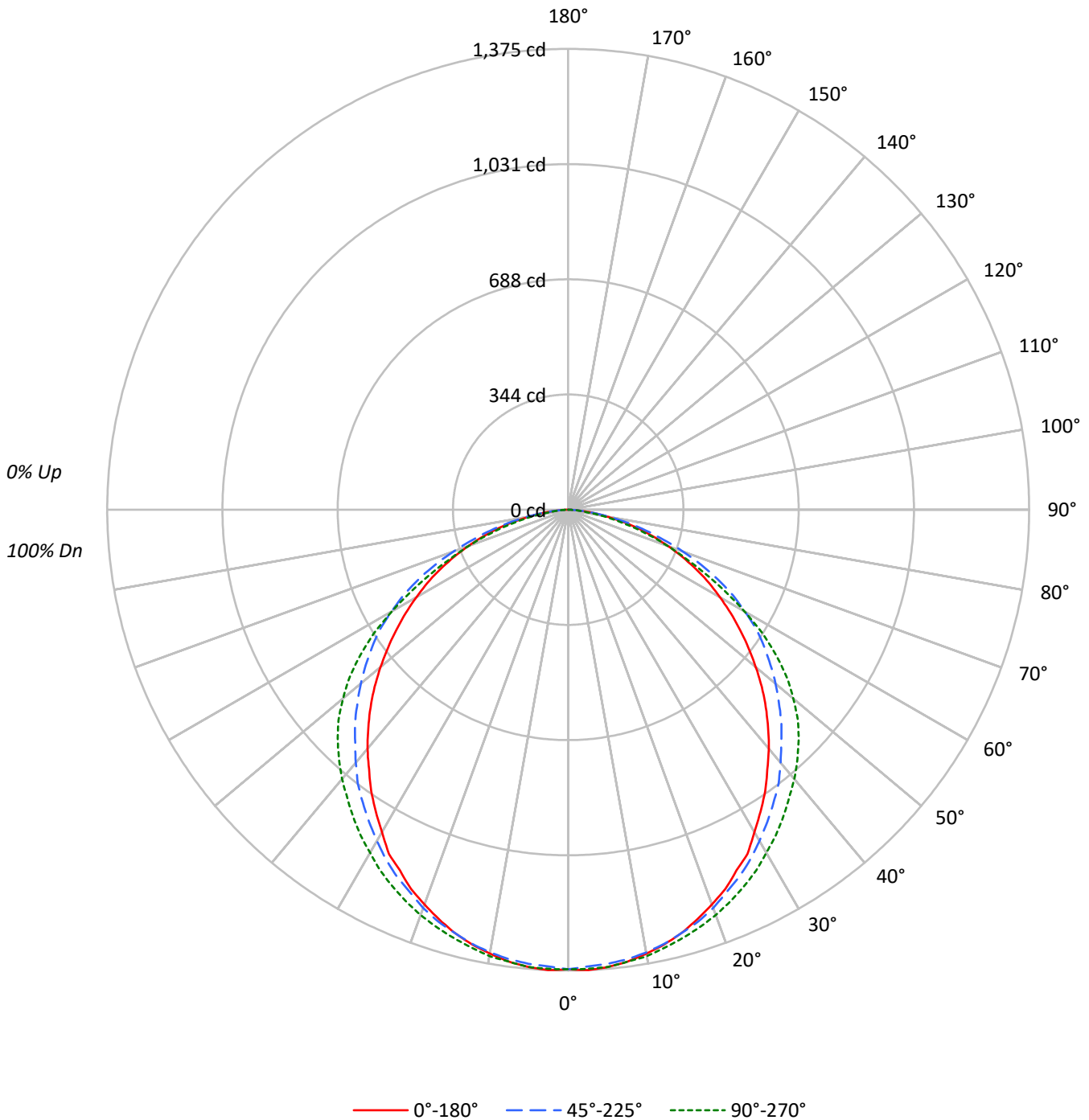
Input Watts (W): 35.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230903

CATALOG NUMBER: 14CZ-LD5-39-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230903

CATALOG NUMBER: 14CZ-LD5-39-UNV-L950-CD1-U

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°	3690	3690	3690
5°	3699	3674	3699
10°	3675	3665	3696
15°	3643	3643	3685
20°	3589	3621	3686
25°	3526	3588	3682
30°	3452	3545	3673
35°	3366	3508	3674
40°	3271	3462	3685
45°	3173	3422	3700
50°	3059	3380	3670
55°	2936	3349	3551
60°	2813	3277	3267
65°	2684	3137	2863
70°	2491	2859	2476
75°	2259	2493	2045
80°	1799	1974	1509
85°	1272	1099	868



TEST NUMBER: P230903

CATALOG NUMBER: 14CZ-LD5-39-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.8	3.4
10°-20°	370.7	9.8
20°-30°	558.9	14.7
30°-40°	669.9	17.6
40°-50°	695.2	18.3
50°-60°	627.0	16.5
60°-70°	457.4	12.0
70°-80°	240.0	6.3
80°-90°	51.2	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°	1059.3	27.9
0°-40°	1729.2	45.5
0°-60°	3051.4	80.3
0°-90°	3800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3800.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1371	1371	1371	1371	1371	
5°	1369	1366	1360	1369	1369	130
15°	1308	1308	1308	1323	1323	368
25°	1188	1193	1208	1235	1240	548
35°	1025	1036	1068	1107	1118	640
45°	834	850	899	954	972	643
55°	626	648	714	761	757	560
65°	422	446	493	474	450	417
75°	217	247	240	208	197	228
85°	41	51	36	30	28	52
90°	0	0	0	0	0	



TEST NUMBER: P230903

CATALOG NUMBER: 14CZ-LD5-39-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1371.3	1371.3	1371.3	1371.3	1371.3
2.5°	1375.1	1371.3	1363.8	1371.3	1371.3
5°	1369.4	1365.7	1360.1	1369.4	1369.4
7.5°	1360.1	1356.3	1352.6	1361.9	1360.1
10°	1345.1	1343.2	1341.3	1352.6	1352.6
12.5°	1328.2	1328.2	1326.4	1339.5	1337.6
15°	1307.6	1307.6	1307.6	1322.6	1322.6
17.5°	1281.4	1285.1	1288.9	1305.7	1305.7
20°	1253.3	1257.0	1264.5	1285.1	1287.0
22.5°	1225.2	1227.1	1234.6	1258.9	1264.5
25°	1187.7	1193.3	1208.3	1234.6	1240.2
27.5°	1157.7	1159.6	1176.5	1206.5	1213.9
30°	1110.9	1124.0	1140.9	1174.6	1182.1
32.5°	1067.8	1079.1	1105.3	1140.9	1152.1
35°	1024.7	1036.0	1067.8	1107.2	1118.4
37.5°	976.0	992.9	1030.4	1069.7	1082.8
40°	931.1	946.1	985.4	1034.1	1049.1
42.5°	882.4	897.3	940.4	994.8	1011.6
45°	833.7	850.5	899.2	953.5	972.3
47.5°	783.1	801.8	852.4	912.3	929.2
50°	730.6	751.2	807.4	869.2	876.7
52.5°	678.2	700.6	760.6	814.9	822.4
55°	625.7	648.2	713.8	760.6	756.8
57.5°	575.1	599.5	666.9	691.3	687.5
60°	522.7	548.9	608.8	620.1	607.0
62.5°	474.0	498.3	554.5	545.2	528.3
65°	421.5	445.9	492.7	474.0	449.6
67.5°	369.1	399.0	429.0	397.2	378.4
70°	316.6	350.3	363.4	331.6	314.7
72.5°	266.0	301.6	297.9	266.0	254.8
75°	217.3	247.3	239.8	207.9	196.7
77.5°	164.9	198.6	181.7	155.5	146.1
80°	116.1	146.1	127.4	104.9	97.4
82.5°	76.8	97.4	78.7	61.8	56.2
85°	41.2	50.6	35.6	30.0	28.1
87.5°	16.9	15.0	13.1	13.1	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)