

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: P230906

Luminaire Tested: **14CZ-LD5-44-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230906
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-LD5-44-UNV-L940-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3879.0 lumens
Efficiency: N/A
Efficacy: 94.4 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

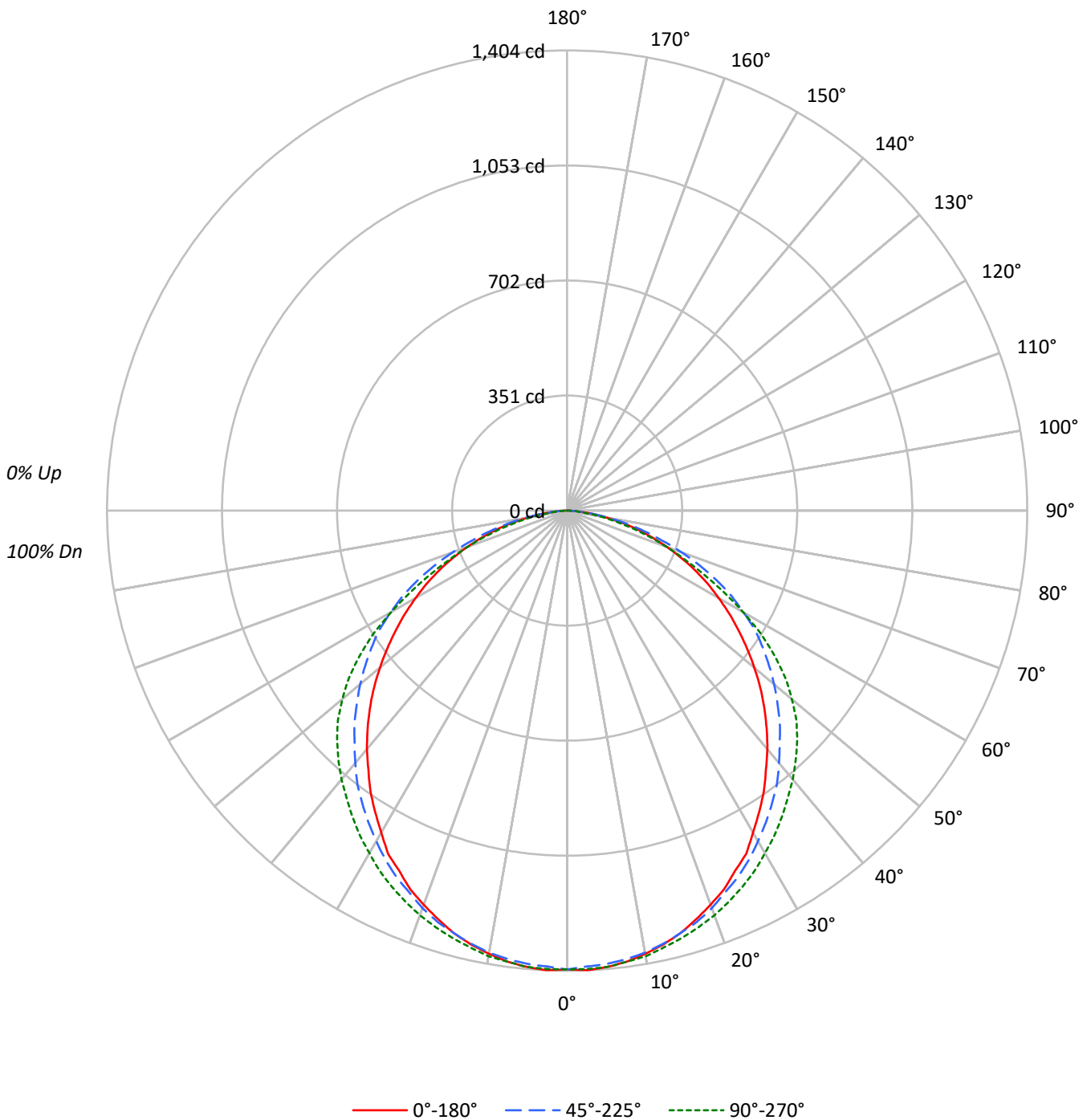
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230906

CATALOG NUMBER: 14CZ-LD5-44-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230906

CATALOG NUMBER: 14CZ-LD5-44-UNV-L940-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°	3767	3767	3767
5°	3776	3750	3776
10°	3752	3741	3773
15°	3719	3719	3761
20°	3664	3696	3762
25°	3600	3662	3759
30°	3524	3619	3750
35°	3436	3581	3751
40°	3339	3534	3762
45°	3239	3493	3777
50°	3122	3450	3747
55°	2997	3418	3625
60°	2871	3345	3335
65°	2740	3202	2923
70°	2543	2919	2528
75°	2306	2545	2088
80°	1838	2015	1540
85°	1300	1121	886



TEST NUMBER: P230906

CATALOG NUMBER: 14CZ-LD5-44-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.5	3.4
10°-20°	378.4	9.8
20°-30°	570.5	14.7
30°-40°	683.8	17.6
40°-50°	709.7	18.3
50°-60°	640.1	16.5
60°-70°	466.9	12.0
70°-80°	245.0	6.3
80°-90°	52.2	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°	1081.3	27.9
0°-40°	1765.1	45.5
0°-60°	3114.9	80.3
0°-90°	3879.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3879.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1400	1400	1400	1400	1400	
5°	1398	1394	1388	1398	1398	133
15°	1335	1335	1335	1350	1350	376
25°	1212	1218	1233	1260	1266	559
35°	1046	1058	1090	1130	1142	653
45°	851	868	918	973	992	656
55°	639	662	729	776	773	572
65°	430	455	503	484	459	425
75°	222	252	245	212	201	233
85°	42	52	36	31	29	54
90°	0	0	0	0	0	



TEST NUMBER: P230906

CATALOG NUMBER: 14CZ-LD5-44-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1399.8	1399.8	1399.8	1399.8	1399.8
2.5°	1403.6	1399.8	1392.2	1399.8	1399.8
5°	1397.9	1394.1	1388.3	1397.9	1397.9
7.5°	1388.3	1384.5	1380.7	1390.3	1388.3
10°	1373.0	1371.1	1369.2	1380.7	1380.7
12.5°	1355.8	1355.8	1353.9	1367.3	1365.4
15°	1334.8	1334.8	1334.8	1350.1	1350.1
17.5°	1308.0	1311.9	1315.7	1332.9	1332.9
20°	1279.3	1283.2	1290.8	1311.9	1313.8
22.5°	1250.7	1252.6	1260.2	1285.1	1290.8
25°	1212.4	1218.2	1233.4	1260.2	1266.0
27.5°	1181.8	1183.7	1200.9	1231.5	1239.2
30°	1134.0	1147.4	1164.6	1199.0	1206.7
32.5°	1090.0	1101.5	1128.3	1164.6	1176.1
35°	1046.0	1057.5	1090.0	1130.2	1141.7
37.5°	996.3	1013.5	1051.8	1091.9	1105.3
40°	950.4	965.7	1005.9	1055.6	1070.9
42.5°	900.7	916.0	960.0	1015.4	1032.7
45°	851.0	868.2	917.9	973.4	992.5
47.5°	799.4	818.5	870.1	931.3	948.5
50°	745.8	766.8	824.2	887.3	895.0
52.5°	692.3	715.2	776.4	831.9	839.5
55°	638.7	661.7	728.6	776.4	772.6
57.5°	587.1	611.9	680.8	705.6	701.8
60°	533.5	560.3	621.5	633.0	619.6
62.5°	483.8	508.7	566.0	556.5	539.3
65°	430.3	455.1	502.9	483.8	459.0
67.5°	376.7	407.3	437.9	405.4	386.3
70°	323.2	357.6	371.0	338.5	321.3
72.5°	271.6	307.9	304.1	271.6	260.1
75°	221.8	252.4	244.8	212.3	200.8
77.5°	168.3	202.7	185.5	158.7	149.2
80°	118.6	149.2	130.0	107.1	99.4
82.5°	78.4	99.4	80.3	63.1	57.4
85°	42.1	51.6	36.3	30.6	28.7
87.5°	17.2	15.3	13.4	13.4	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)