

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: P258593

Luminaire Tested: **14CZ-LD5-44-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258593
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-L93050-W2A1-U-4000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4003.0 lumens
Efficiency: N/A
Efficacy: 109.5 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

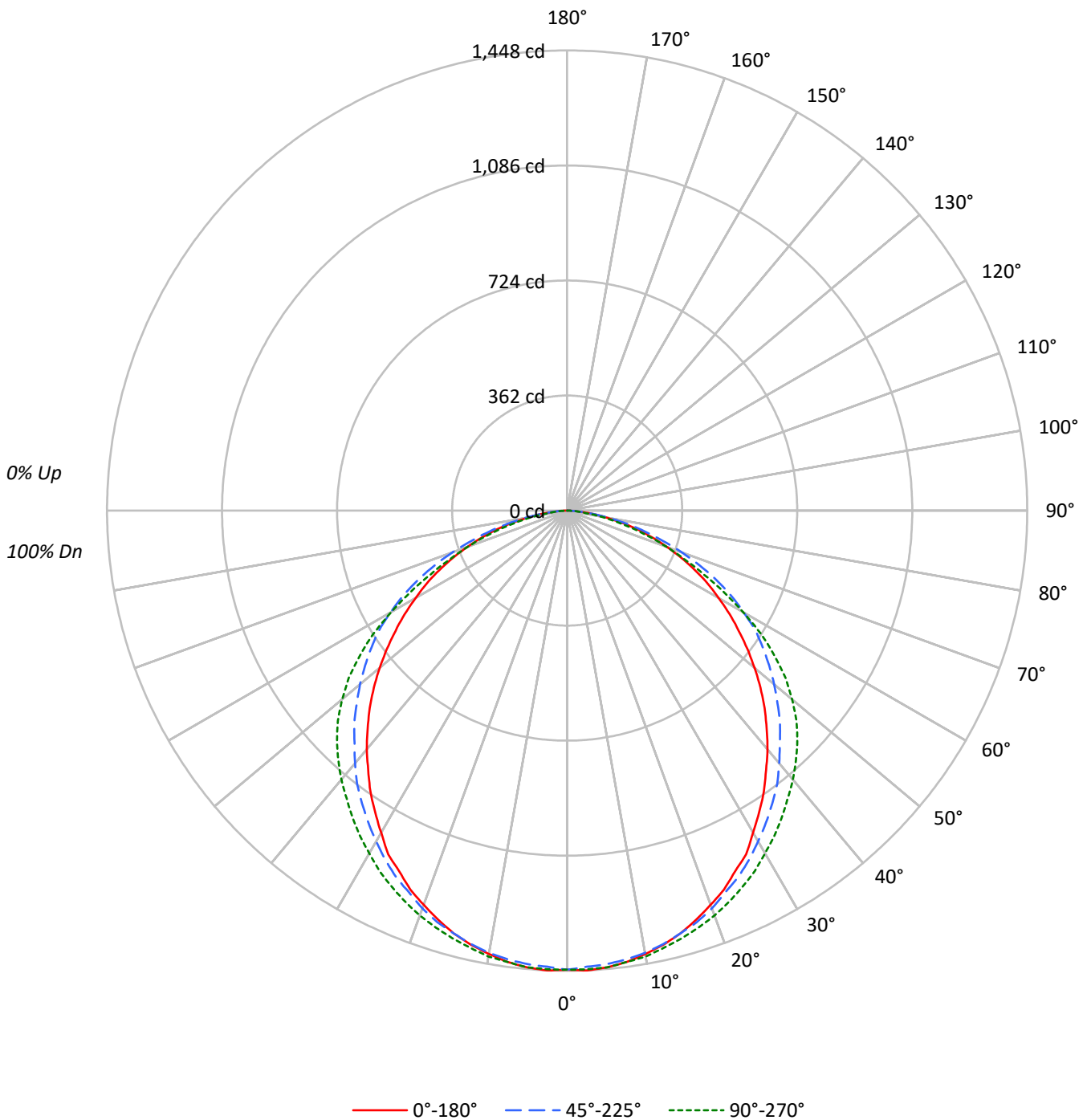
Input Watts (W): 36.549
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3887	3887	3887
5°	3897	3870	3897
10°	3872	3861	3893
15°	3838	3838	3882
20°	3781	3815	3883
25°	3715	3779	3879
30°	3636	3734	3869
35°	3546	3695	3870
40°	3445	3646	3882
45°	3342	3605	3898
50°	3222	3561	3867
55°	3092	3528	3741
60°	2963	3452	3441
65°	2827	3305	3016
70°	2624	3013	2608
75°	2380	2626	2154
80°	1897	2080	1590
85°	1340	1158	914



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	3.4
10°-20°	390.5	9.8
20°-30°	588.7	14.7
30°-40°	705.7	17.6
40°-50°	732.3	18.3
50°-60°	660.5	16.5
60°-70°	481.8	12.0
70°-80°	252.8	6.3
80°-90°	53.9	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°	1115.9	27.9
0°-40°	1821.6	45.5
0°-60°	3214.4	80.3
0°-90°	4003.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4003.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1445	1445	1445	1445	1445	
5°	1443	1439	1433	1443	1443	137
15°	1378	1378	1378	1393	1393	388
25°	1251	1257	1273	1300	1306	577
35°	1080	1091	1125	1166	1178	674
45°	878	896	947	1004	1024	677
55°	659	683	752	801	797	590
65°	444	470	519	499	474	439
75°	229	260	253	219	207	240
85°	43	53	38	32	30	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1444.6	1444.6	1444.6	1444.6	1444.6
2.5°	1448.5	1444.6	1436.7	1444.6	1444.6
5°	1442.6	1438.6	1432.7	1442.6	1442.6
7.5°	1432.7	1428.8	1424.8	1434.7	1432.7
10°	1416.9	1415.0	1413.0	1424.8	1424.8
12.5°	1399.2	1399.2	1397.2	1411.0	1409.0
15°	1377.5	1377.5	1377.5	1393.3	1393.3
17.5°	1349.8	1353.8	1357.7	1375.5	1375.5
20°	1320.2	1324.2	1332.1	1353.8	1355.8
22.5°	1290.6	1292.6	1300.5	1326.2	1332.1
25°	1251.2	1257.1	1272.9	1300.5	1306.4
27.5°	1219.6	1221.6	1239.3	1270.9	1278.8
30°	1170.3	1184.1	1201.8	1237.4	1245.3
32.5°	1124.9	1136.7	1164.3	1201.8	1213.7
35°	1079.5	1091.3	1124.9	1166.3	1178.2
37.5°	1028.2	1045.9	1085.4	1126.8	1140.7
40°	980.8	996.6	1038.0	1089.3	1105.1
42.5°	929.5	945.3	990.7	1047.9	1065.7
45°	878.2	895.9	947.3	1004.5	1024.2
47.5°	824.9	844.6	897.9	961.1	978.8
50°	769.6	791.4	850.6	915.7	923.6
52.5°	714.4	738.1	801.2	858.5	866.3
55°	659.1	682.8	751.9	801.2	797.3
57.5°	605.9	631.5	702.6	728.2	724.3
60°	550.6	578.2	641.4	653.2	639.4
62.5°	499.3	524.9	584.1	574.3	556.5
65°	444.0	469.7	519.0	499.3	473.6
67.5°	388.8	420.3	451.9	418.4	398.6
70°	333.5	369.0	382.9	349.3	331.5
72.5°	280.2	317.7	313.8	280.2	268.4
75°	228.9	260.5	252.6	219.1	207.2
77.5°	173.7	209.2	191.4	163.8	153.9
80°	122.4	153.9	134.2	110.5	102.6
82.5°	80.9	102.6	82.9	65.1	59.2
85°	43.4	53.3	37.5	31.6	29.6
87.5°	17.8	15.8	13.8	13.8	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)