

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: P258761

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258761
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-LD5-44-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4083.0 lumens
Efficiency: N/A
Efficacy: 111.7 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

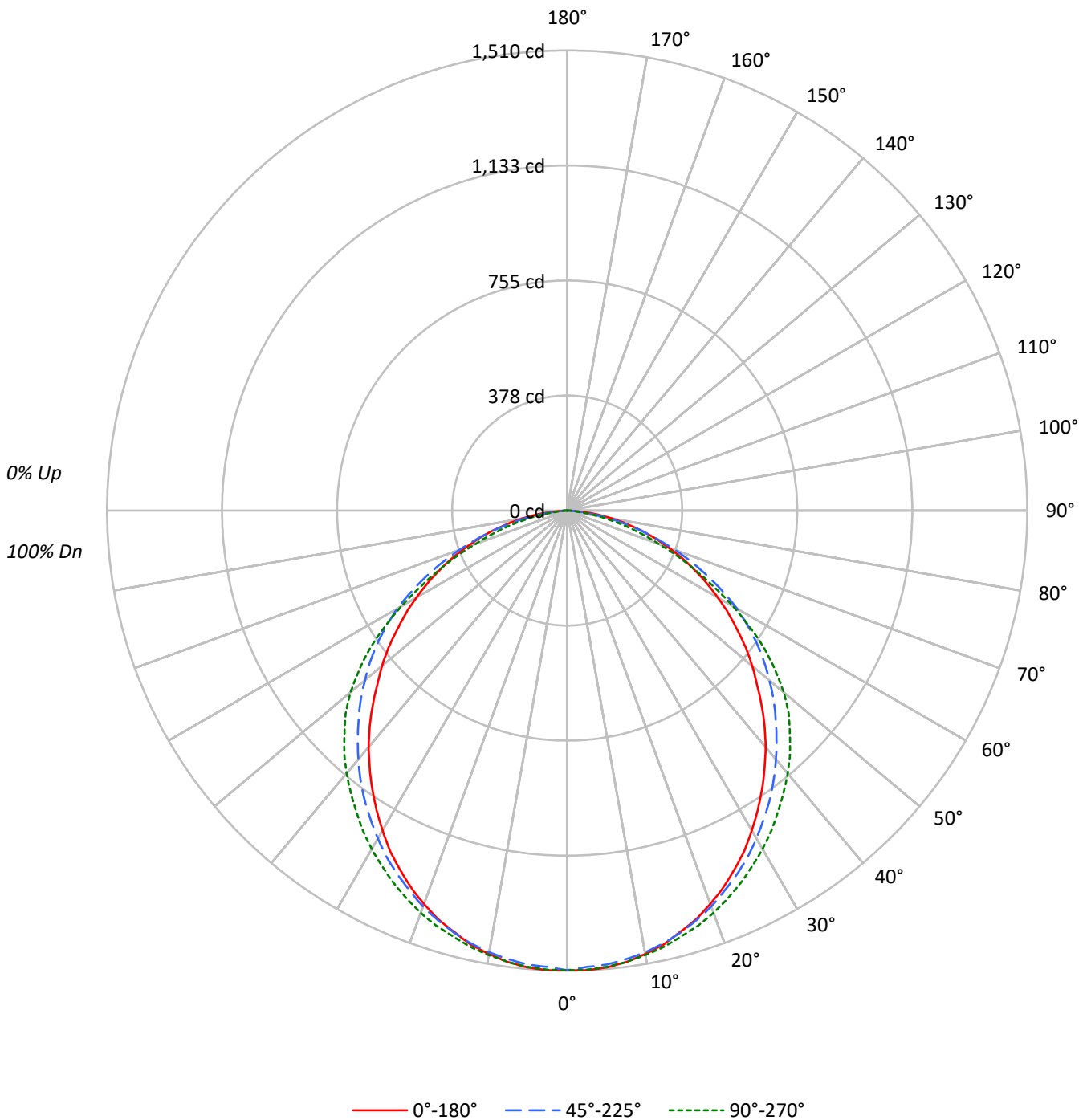
Input Watts (W): 36.549
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85					85			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4059	4059	4059
5°	4064	4040	4059
10°	4037	4022	4047
15°	3989	3994	4030
20°	3934	3960	4022
25°	3857	3911	4003
30°	3765	3861	3986
35°	3664	3807	3962
40°	3560	3745	3956
45°	3434	3683	3933
50°	3321	3625	3885
55°	3192	3568	3713
60°	3075	3467	3388
65°	2942	3244	2977
70°	2777	2949	2519
75°	2592	2554	2080
80°	2284	1974	1522
85°	1797	954	843



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.5	3.5
10°-20°	406.0	9.9
20°-30°	609.3	14.9
30°-40°	726.4	17.8
40°-50°	748.2	18.3
50°-60°	666.8	16.3
60°-70°	480.5	11.8
70°-80°	251.3	6.2
80°-90°	52.0	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°	1157.8	28.4
0°-40°	1884.2	46.1
0°-60°	3299.3	80.8
0°-90°	4083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4083.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1505	1501	1496	1505	1503	143
15°	1432	1434	1434	1448	1446	404
25°	1299	1306	1317	1343	1348	598
35°	1115	1130	1159	1197	1206	697
45°	902	922	968	1022	1033	696
55°	680	702	760	795	791	610
65°	462	478	509	486	468	458
75°	249	262	246	213	200	264
85°	58	51	31	27	27	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1508.3	1508.3	1508.3	1508.3	1508.3
2.5°	1510.1	1506.4	1499.2	1508.3	1508.3
5°	1504.6	1501.0	1495.5	1504.6	1502.8
7.5°	1493.7	1490.1	1484.6	1495.5	1493.7
10°	1477.3	1475.5	1471.9	1482.8	1481.0
12.5°	1459.1	1457.3	1455.5	1466.4	1466.4
15°	1431.8	1433.7	1433.7	1448.2	1446.4
17.5°	1406.4	1408.2	1410.0	1428.2	1428.2
20°	1373.6	1375.4	1382.7	1402.7	1404.6
22.5°	1339.1	1340.9	1350.0	1373.6	1377.3
25°	1299.0	1306.3	1317.2	1342.7	1348.2
27.5°	1259.0	1264.5	1282.7	1311.8	1315.4
30°	1211.7	1222.6	1242.6	1275.4	1282.7
32.5°	1164.4	1177.1	1200.8	1237.2	1246.3
35°	1115.3	1129.8	1158.9	1197.1	1206.2
37.5°	1064.3	1077.1	1113.5	1153.5	1166.2
40°	1013.4	1026.1	1066.2	1111.6	1126.2
42.5°	958.8	977.0	1017.0	1068.0	1082.5
45°	902.4	922.4	967.9	1022.5	1033.4
47.5°	844.2	866.0	918.8	973.4	986.1
50°	793.2	813.3	866.0	918.8	927.9
52.5°	738.7	756.9	815.1	858.7	860.6
55°	680.4	702.3	760.5	795.1	791.4
57.5°	627.7	645.9	702.3	720.5	709.6
60°	571.3	587.7	644.1	645.9	629.5
62.5°	516.7	533.1	576.7	564.0	544.0
65°	462.1	478.5	509.4	485.8	467.6
67.5°	409.4	423.9	442.1	411.2	393.0
70°	353.0	373.0	374.8	338.4	320.2
72.5°	303.8	314.8	311.1	276.5	260.2
75°	249.3	262.0	245.6	212.9	200.1
77.5°	198.3	207.4	185.6	154.6	145.5
80°	147.4	152.8	127.4	103.7	98.2
82.5°	100.1	100.1	72.8	56.4	50.9
85°	58.2	50.9	30.9	27.3	27.3
87.5°	20.0	12.7	12.7	12.7	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)