

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: P258736

Luminaire Tested: **14CZ-LD5-20-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258736
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-LD5-20-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: 1974.0 lumens
Efficiency: N/A
Efficacy: 125.6 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

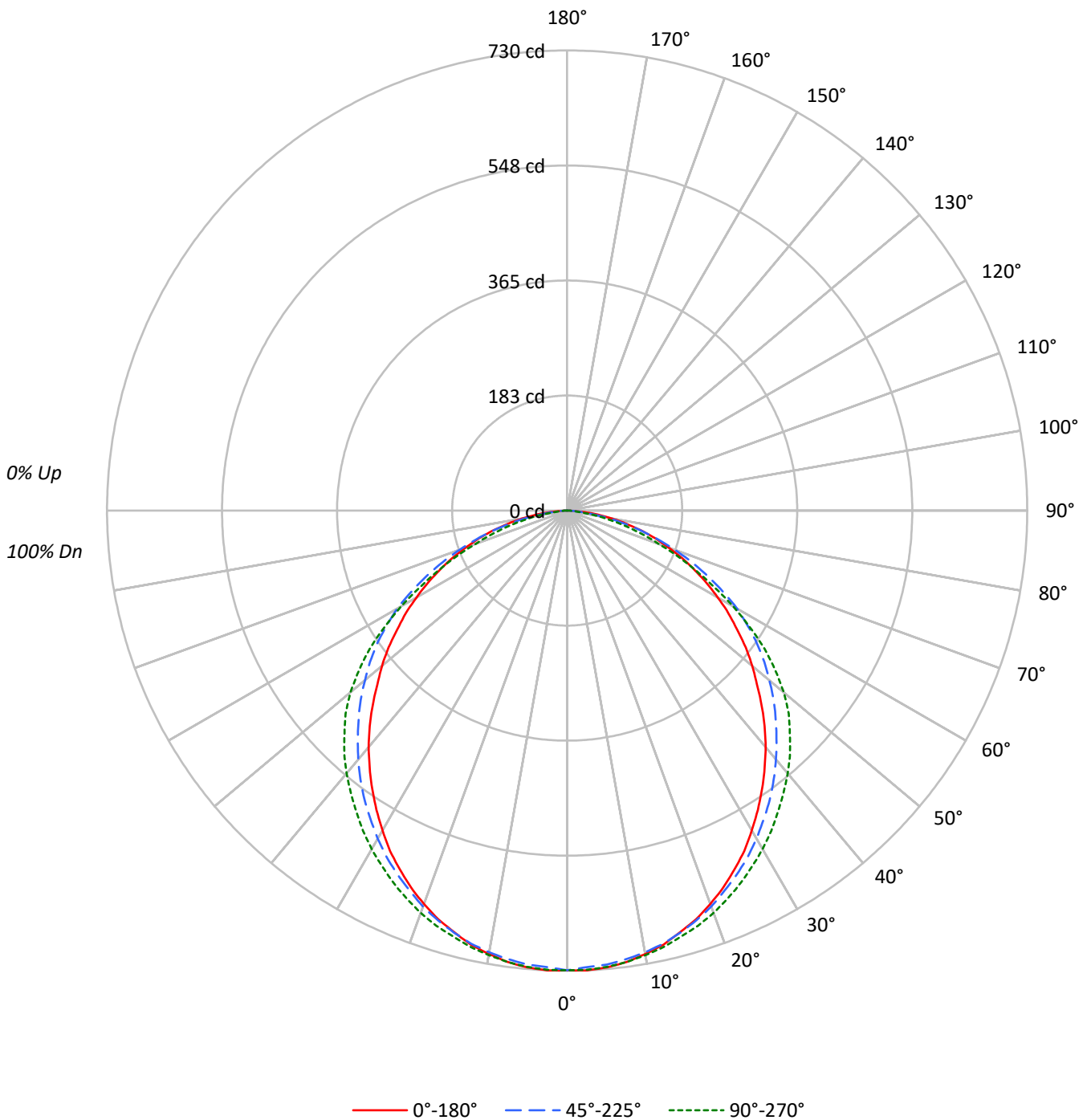
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1962	1962	1962
5°	1965	1953	1963
10°	1952	1944	1956
15°	1929	1931	1948
20°	1902	1914	1945
25°	1865	1891	1935
30°	1820	1867	1927
35°	1771	1841	1916
40°	1721	1811	1913
45°	1660	1781	1901
50°	1605	1753	1878
55°	1544	1725	1795
60°	1486	1676	1638
65°	1422	1568	1440
70°	1342	1426	1218
75°	1253	1234	1006
80°	1103	955	736
85°	868	463	408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	3.5
10°-20°	196.3	9.9
20°-30°	294.6	14.9
30°-40°	351.2	17.8
40°-50°	361.7	18.3
50°-60°	322.4	16.3
60°-70°	232.3	11.8
70°-80°	121.5	6.2
80°-90°	25.1	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°	559.8	28.4
0°-40°	911.0	46.1
0°-60°	1595.1	80.8
0°-90°	1974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1974.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	727	726	723	727	727	69
15°	692	693	693	700	699	195
25°	628	632	637	649	652	289
35°	539	546	560	579	583	337
45°	436	446	468	494	500	337
55°	329	340	368	384	383	295
65°	223	231	246	235	226	221
75°	120	127	119	103	97	128
85°	28	25	15	13	13	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	729.2	729.2	729.2	729.2	729.2
2.5°	730.1	728.3	724.8	729.2	729.2
5°	727.4	725.7	723.0	727.4	726.6
7.5°	722.2	720.4	717.8	723.0	722.2
10°	714.2	713.4	711.6	716.9	716.0
12.5°	705.4	704.6	703.7	709.0	709.0
15°	692.3	693.1	693.1	700.2	699.3
17.5°	679.9	680.8	681.7	690.5	690.5
20°	664.1	665.0	668.5	678.2	679.1
22.5°	647.4	648.3	652.7	664.1	665.9
25°	628.0	631.6	636.8	649.2	651.8
27.5°	608.7	611.3	620.1	634.2	636.0
30°	585.8	591.1	600.8	616.6	620.1
32.5°	563.0	569.1	580.5	598.1	602.5
35°	539.2	546.2	560.3	578.8	583.2
37.5°	514.6	520.7	538.3	557.7	563.8
40°	489.9	496.1	515.5	537.4	544.5
42.5°	463.6	472.4	491.7	516.3	523.4
45°	436.3	446.0	468.0	494.3	499.6
47.5°	408.1	418.7	444.2	470.6	476.7
50°	383.5	393.2	418.7	444.2	448.6
52.5°	357.1	365.9	394.1	415.2	416.1
55°	329.0	339.5	367.7	384.4	382.6
57.5°	303.5	312.3	339.5	348.3	343.0
60°	276.2	284.1	311.4	312.3	304.3
62.5°	249.8	257.7	278.8	272.7	263.0
65°	223.4	231.3	246.3	234.9	226.1
67.5°	197.9	204.9	213.7	198.8	190.0
70°	170.6	180.3	181.2	163.6	154.8
72.5°	146.9	152.2	150.4	133.7	125.8
75°	120.5	126.7	118.7	102.9	96.8
77.5°	95.9	100.3	89.7	74.8	70.4
80°	71.2	73.9	61.6	50.1	47.5
82.5°	48.4	48.4	35.2	27.3	24.6
85°	28.1	24.6	15.0	13.2	13.2
87.5°	9.7	6.2	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)