

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: P258735

Luminaire Tested: **14CZ-LD5-20-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258735
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-3500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1828.0 lumens
Efficiency: N/A
Efficacy: 117.0 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

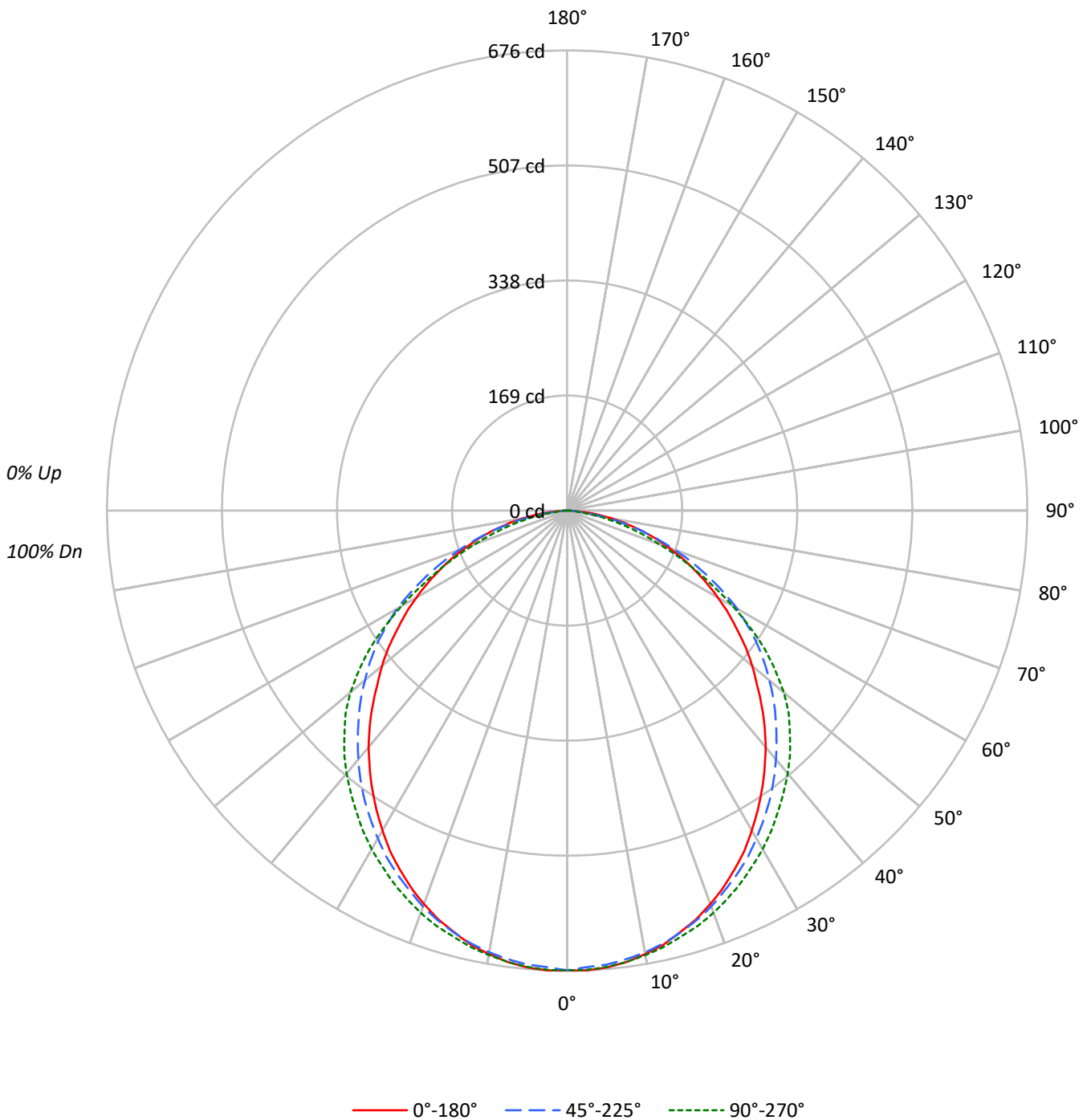
Input Watts (W): 15.624
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1817	1817	1817
5°	1820	1809	1817
10°	1807	1801	1812
15°	1786	1788	1804
20°	1761	1773	1801
25°	1727	1751	1792
30°	1686	1729	1785
35°	1640	1705	1774
40°	1594	1677	1771
45°	1537	1649	1761
50°	1487	1623	1739
55°	1429	1597	1662
60°	1377	1552	1517
65°	1317	1452	1333
70°	1243	1320	1128
75°	1160	1144	932
80°	1023	883	682
85°	806	426	377



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.8	3.5
10°-20°	181.8	9.9
20°-30°	272.8	14.9
30°-40°	325.2	17.8
40°-50°	335.0	18.3
50°-60°	298.5	16.3
60°-70°	215.1	11.8
70°-80°	112.5	6.2
80°-90°	23.3	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°	518.4	28.4
0°-40°	843.6	46.1
0°-60°	1477.1	80.8
0°-90°	1828.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1828.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	675	675	675	675	675	
5°	674	672	670	674	673	64
15°	641	642	642	648	648	181
25°	582	585	590	601	604	268
35°	499	506	519	536	540	312
45°	404	413	433	458	463	312
55°	305	314	340	356	354	273
65°	207	214	228	218	209	205
75°	112	117	110	95	90	118
85°	26	23	14	12	12	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	675.3	675.3	675.3	675.3	675.3
2.5°	676.1	674.4	671.2	675.3	675.3
5°	673.6	672.0	669.6	673.6	672.8
7.5°	668.7	667.1	664.7	669.6	668.7
10°	661.4	660.6	659.0	663.9	663.0
12.5°	653.3	652.5	651.6	656.5	656.5
15°	641.1	641.9	641.9	648.4	647.6
17.5°	629.6	630.5	631.3	639.4	639.4
20°	615.0	615.8	619.1	628.0	628.8
22.5°	599.5	600.3	604.4	615.0	616.6
25°	581.6	584.8	589.7	601.1	603.6
27.5°	563.7	566.1	574.3	587.3	588.9
30°	542.5	547.4	556.3	571.0	574.3
32.5°	521.3	527.0	537.6	553.9	558.0
35°	499.3	505.8	518.9	536.0	540.0
37.5°	476.5	482.2	498.5	516.4	522.1
40°	453.7	459.4	477.3	497.7	504.2
42.5°	429.3	437.4	455.3	478.1	484.7
45°	404.0	413.0	433.3	457.8	462.7
47.5°	378.0	387.7	411.3	435.8	441.5
50°	355.1	364.1	387.7	411.3	415.4
52.5°	330.7	338.9	364.9	384.5	385.3
55°	304.6	314.4	340.5	356.0	354.3
57.5°	281.0	289.2	314.4	322.6	317.7
60°	255.8	263.1	288.4	289.2	281.8
62.5°	231.3	238.7	258.2	252.5	243.6
65°	206.9	214.2	228.1	217.5	209.3
67.5°	183.3	189.8	197.9	184.1	175.9
70°	158.0	167.0	167.8	151.5	143.4
72.5°	136.0	140.9	139.3	123.8	116.5
75°	111.6	117.3	110.0	95.3	89.6
77.5°	88.8	92.9	83.1	69.2	65.2
80°	66.0	68.4	57.0	46.4	44.0
82.5°	44.8	44.8	32.6	25.3	22.8
85°	26.1	22.8	13.8	12.2	12.2
87.5°	9.0	5.7	5.7	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)