

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: P258704

Luminaire Tested: **14CZ-LD5-20-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258704
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-L83050-W2A1-U-3000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2031.9 lumens
Efficiency: N/A
Efficacy: 132.4 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

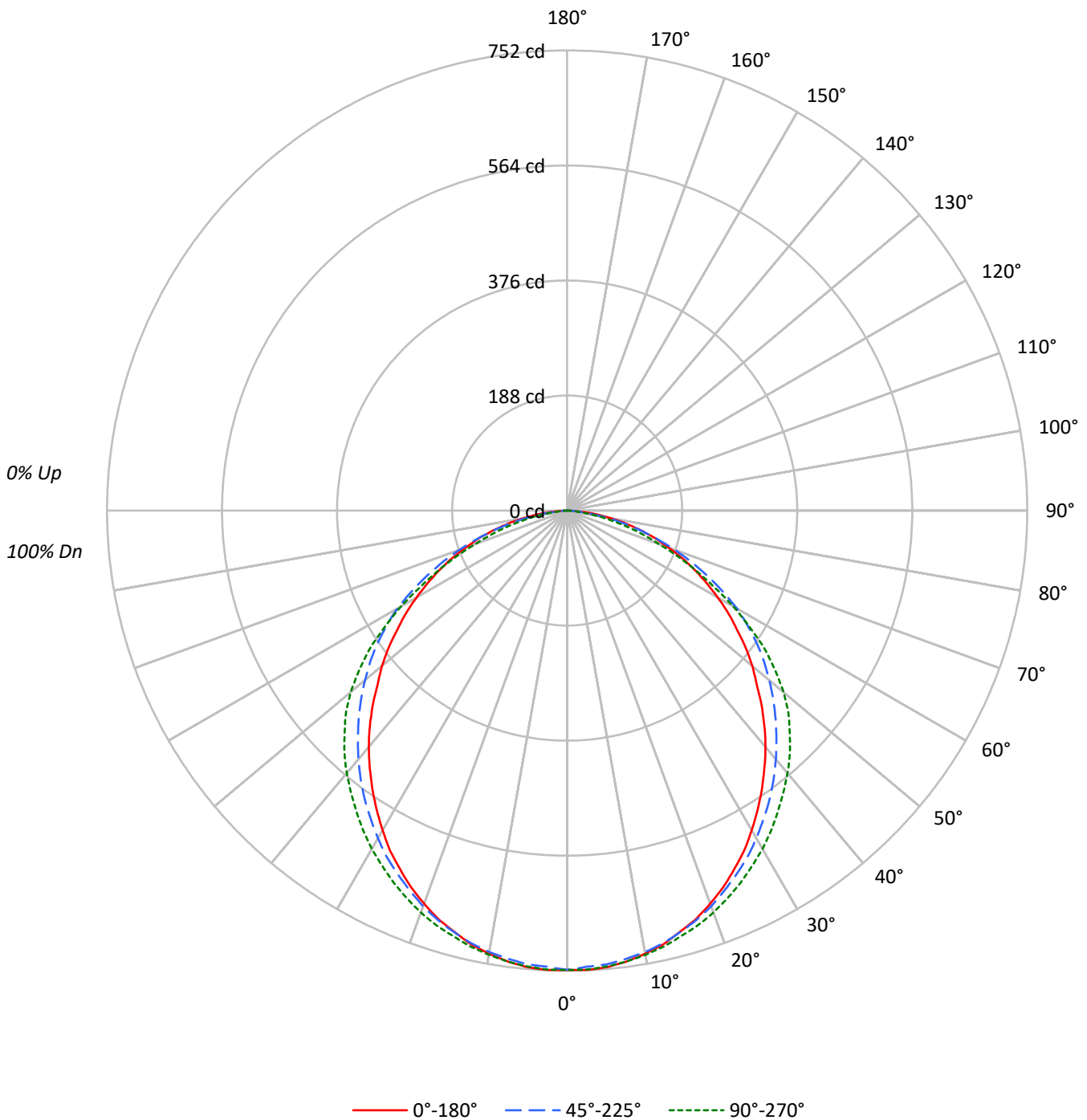
Input Watts (W): 15.345
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2020	2020	2020
5°	2023	2010	2020
10°	2009	2002	2014
15°	1985	1988	2005
20°	1958	1970	2002
25°	1920	1946	1992
30°	1874	1922	1983
35°	1823	1895	1972
40°	1772	1864	1969
45°	1709	1833	1957
50°	1653	1804	1933
55°	1589	1776	1848
60°	1530	1725	1686
65°	1465	1614	1482
70°	1382	1467	1254
75°	1289	1271	1036
80°	1136	982	758
85°	895	475	420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	3.5
10°-20°	202.1	9.9
20°-30°	303.2	14.9
30°-40°	361.5	17.8
40°-50°	372.4	18.3
50°-60°	331.8	16.3
60°-70°	239.1	11.8
70°-80°	125.0	6.2
80°-90°	25.9	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°	576.2	28.4
0°-40°	937.7	46.1
0°-60°	1641.9	80.8
0°-90°	2031.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2031.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	751	751	751	751	751	
5°	749	747	744	749	748	71
15°	713	714	714	721	720	201
25°	646	650	656	668	671	298
35°	555	562	577	596	600	347
45°	449	459	482	509	514	347
55°	339	350	378	396	394	304
65°	230	238	254	242	233	228
75°	124	130	122	106	100	131
85°	29	25	15	14	14	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	750.6	750.6	750.6	750.6	750.6
2.5°	751.5	749.7	746.1	750.6	750.6
5°	748.8	747.0	744.2	748.8	747.9
7.5°	743.3	741.5	738.8	744.2	743.3
10°	735.2	734.3	732.5	737.9	737.0
12.5°	726.1	725.2	724.3	729.8	729.8
15°	712.6	713.5	713.5	720.7	719.8
17.5°	699.9	700.8	701.7	710.7	710.7
20°	683.6	684.5	688.1	698.1	699.0
22.5°	666.4	667.3	671.8	683.6	685.4
25°	646.5	650.1	655.5	668.2	670.9
27.5°	626.5	629.3	638.3	652.8	654.6
30°	603.0	608.4	618.4	634.7	638.3
32.5°	579.5	585.8	597.6	615.7	620.2
35°	555.0	562.3	576.7	595.8	600.3
37.5°	529.7	536.0	554.1	574.0	580.4
40°	504.3	510.7	530.6	553.2	560.4
42.5°	477.2	486.2	506.1	531.5	538.7
45°	449.1	459.0	481.7	508.8	514.3
47.5°	420.1	431.0	457.2	484.4	490.7
50°	394.8	404.7	431.0	457.2	461.8
52.5°	367.6	376.7	405.6	427.4	428.3
55°	338.6	349.5	378.5	395.7	393.9
57.5°	312.4	321.4	349.5	358.5	353.1
60°	284.3	292.4	320.5	321.4	313.3
62.5°	257.1	265.3	287.0	280.7	270.7
65°	230.0	238.1	253.5	241.7	232.7
67.5°	203.7	211.0	220.0	204.6	195.6
70°	175.6	185.6	186.5	168.4	159.4
72.5°	151.2	156.6	154.8	137.6	129.5
75°	124.0	130.4	122.2	105.9	99.6
77.5°	98.7	103.2	92.4	77.0	72.4
80°	73.3	76.1	63.4	51.6	48.9
82.5°	49.8	49.8	36.2	28.1	25.4
85°	29.0	25.4	15.4	13.6	13.6
87.5°	10.0	6.3	6.3	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)