

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: P258820

Luminaire Tested: **14CZ-LD5-20-S-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258820
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-L92765-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: 1840.0 lumens
Efficiency: N/A
Efficacy: 119.9 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

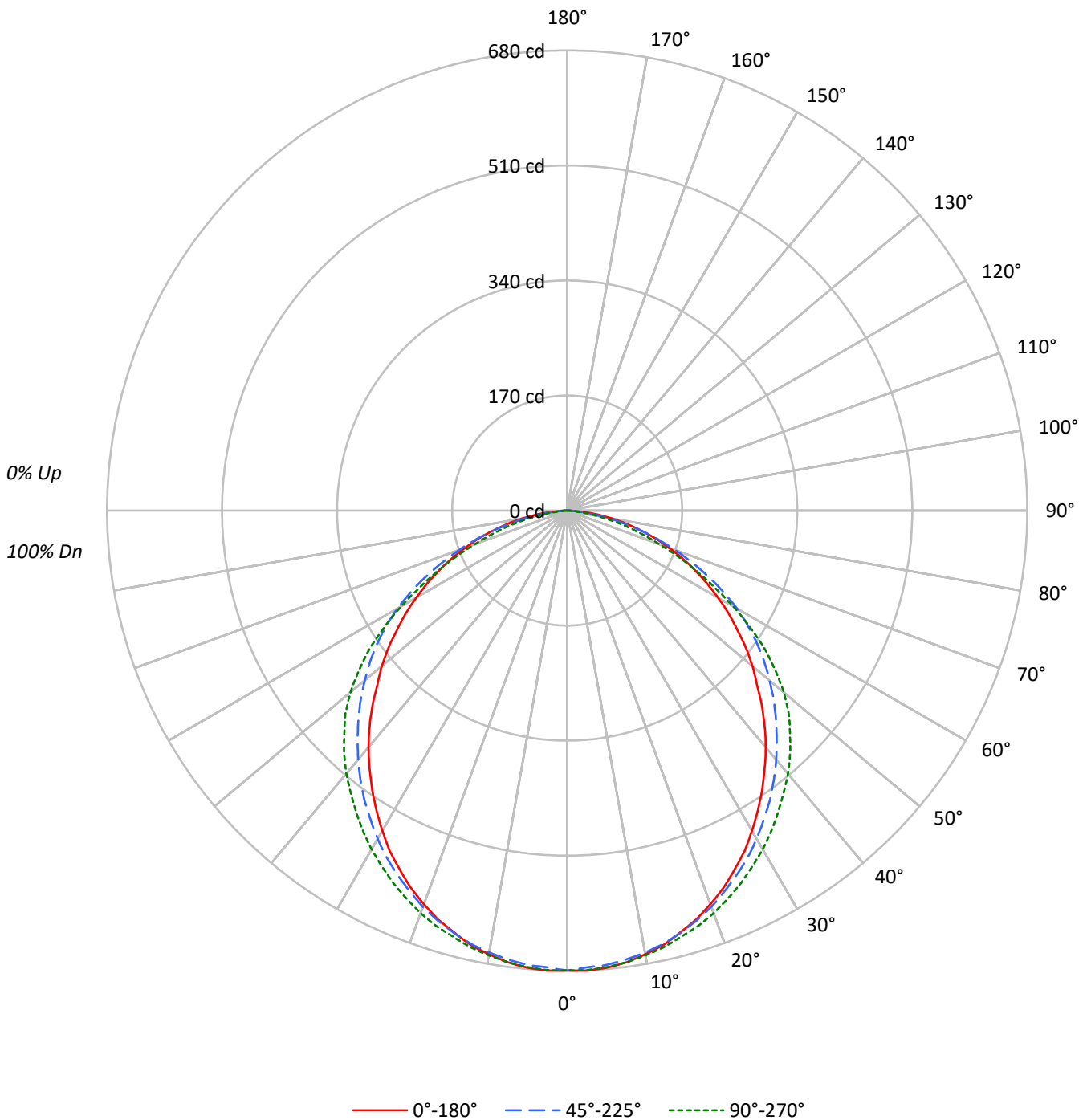
Input Watts (W): 15.345
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1829	1829	1829
5°	1832	1821	1829
10°	1819	1812	1824
15°	1798	1800	1816
20°	1773	1784	1813
25°	1738	1762	1804
30°	1697	1740	1796
35°	1651	1716	1786
40°	1604	1688	1783
45°	1548	1660	1772
50°	1497	1634	1750
55°	1438	1608	1673
60°	1385	1562	1527
65°	1326	1462	1342
70°	1252	1329	1135
75°	1168	1151	938
80°	1029	890	687
85°	809	429	380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.2	3.5
10°-20°	183.0	9.9
20°-30°	274.6	14.9
30°-40°	327.4	17.8
40°-50°	337.2	18.3
50°-60°	300.5	16.3
60°-70°	216.5	11.8
70°-80°	113.2	6.2
80°-90°	23.4	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°	521.8	28.4
0°-40°	849.1	46.1
0°-60°	1486.8	80.8
0°-90°	1840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1840.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	680	680	680	680	680	
5°	678	676	674	678	677	64
15°	645	646	646	653	652	182
25°	585	589	594	605	608	270
35°	503	509	522	540	544	314
45°	407	416	436	461	466	314
55°	307	316	343	358	357	275
65°	208	216	230	219	211	206
75°	112	118	111	96	90	119
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°	679.7	679.7	679.7	679.7	679.7
2.5°	680.5	678.9	675.6	679.7	679.7
5°	678.1	676.4	674.0	678.1	677.2
7.5°	673.1	671.5	669.0	674.0	673.1
10°	665.8	664.9	663.3	668.2	667.4
12.5°	657.6	656.7	655.9	660.8	660.8
15°	645.3	646.1	646.1	652.6	651.8
17.5°	633.8	634.6	635.4	643.6	643.6
20°	619.0	619.8	623.1	632.1	633.0
22.5°	603.4	604.3	608.4	619.0	620.7
25°	585.4	588.7	593.6	605.1	607.5
27.5°	567.4	569.8	578.0	591.1	592.8
30°	546.1	551.0	560.0	574.7	578.0
32.5°	524.7	530.5	541.1	557.5	561.6
35°	502.6	509.2	522.3	539.5	543.6
37.5°	479.6	485.4	501.8	519.8	525.6
40°	456.7	462.4	480.5	501.0	507.5
42.5°	432.1	440.3	458.3	481.3	487.8
45°	406.7	415.7	436.2	460.8	465.7
47.5°	380.4	390.3	414.0	438.6	444.4
50°	357.5	366.5	390.3	414.0	418.1
52.5°	332.9	341.1	367.3	387.0	387.8
55°	306.6	316.5	342.7	358.3	356.7
57.5°	282.9	291.1	316.5	324.7	319.8
60°	257.4	264.8	290.2	291.1	283.7
62.5°	232.9	240.2	259.9	254.2	245.1
65°	208.3	215.6	229.6	218.9	210.7
67.5°	184.5	191.0	199.2	185.3	177.1
70°	159.1	168.1	168.9	152.5	144.3
72.5°	136.9	141.8	140.2	124.6	117.2
75°	112.3	118.1	110.7	95.9	90.2
77.5°	89.4	93.5	83.6	69.7	65.6
80°	66.4	68.9	57.4	46.7	44.3
82.5°	45.1	45.1	32.8	25.4	23.0
85°	26.2	23.0	13.9	12.3	12.3
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)