

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: P258705

Luminaire Tested: **14CZ-LD5-20-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258705
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-3500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2150.1 lumens
Efficiency: N/A
Efficacy: 140.1 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

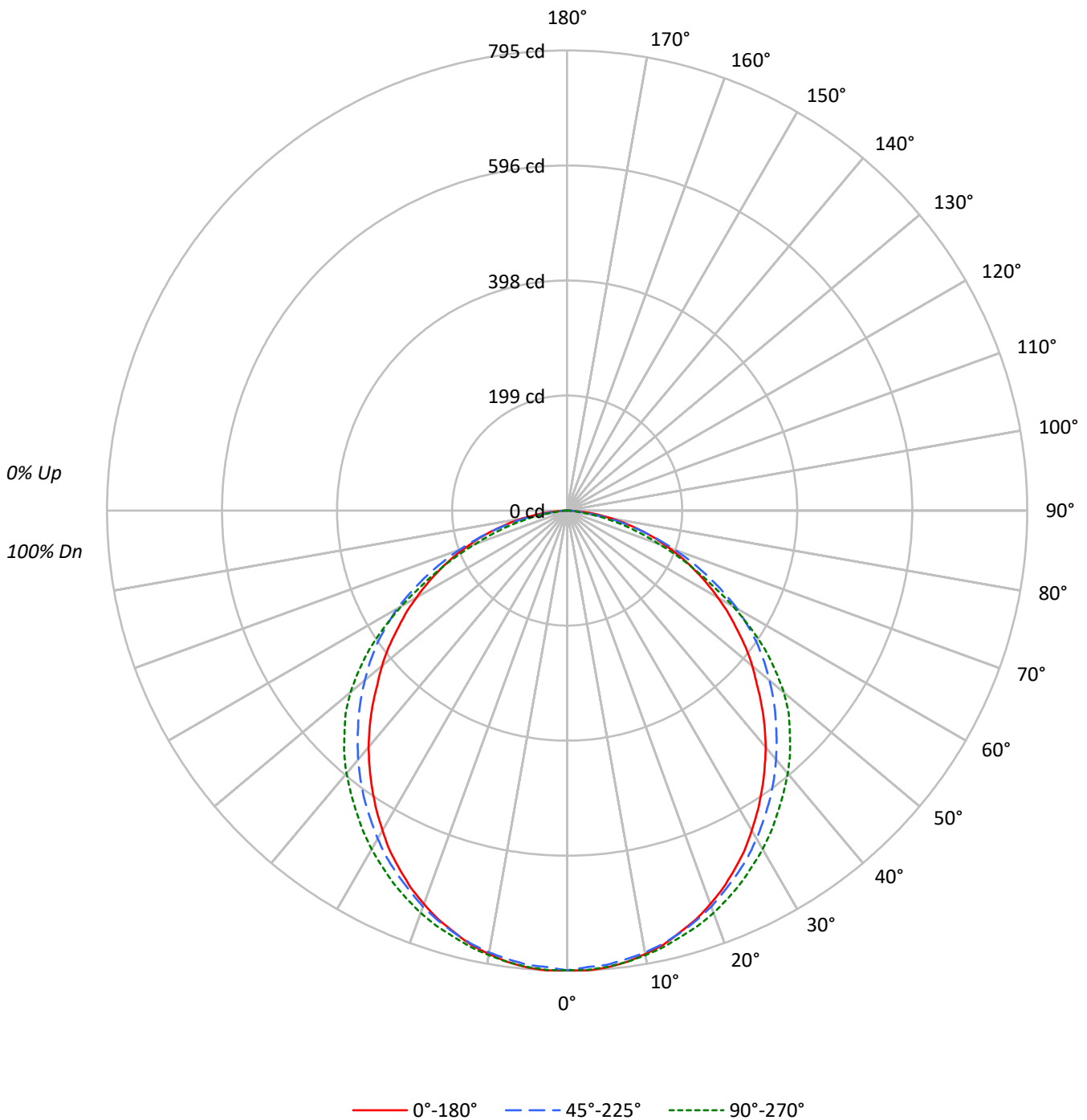
Input Watts (W): 15.345
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2137	2137	2137
5°	2140	2128	2138
10°	2126	2118	2131
15°	2101	2103	2122
20°	2072	2085	2118
25°	2031	2060	2108
30°	1983	2033	2099
35°	1929	2005	2087
40°	1875	1972	2083
45°	1808	1940	2071
50°	1749	1909	2045
55°	1681	1879	1955
60°	1619	1826	1784
65°	1550	1708	1568
70°	1463	1553	1327
75°	1365	1344	1096
80°	1203	1040	801
85°	948	503	445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.0	3.5
10°-20°	213.8	9.9
20°-30°	320.9	14.9
30°-40°	382.5	17.8
40°-50°	394.0	18.3
50°-60°	351.2	16.3
60°-70°	253.0	11.8
70°-80°	132.3	6.2
80°-90°	27.4	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°	609.7	28.4
0°-40°	992.3	46.1
0°-60°	1737.4	80.8
0°-90°	2150.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2150.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	794	794	794	794	794	
5°	792	790	788	792	791	75
15°	754	755	755	763	762	213
25°	684	688	694	707	710	315
35°	587	595	610	630	635	367
45°	475	486	510	538	544	367
55°	358	370	400	419	417	321
65°	243	252	268	256	246	241
75°	131	138	129	112	105	139
85°	31	27	16	14	14	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	794.3	794.3	794.3	794.3	794.3
2.5°	795.2	793.3	789.5	794.3	794.3
5°	792.4	790.4	787.6	792.4	791.4
7.5°	786.6	784.7	781.8	787.6	786.6
10°	778.0	777.0	775.1	780.9	779.9
12.5°	768.4	767.4	766.5	772.2	772.2
15°	754.0	755.0	755.0	762.7	761.7
17.5°	740.6	741.6	742.5	752.1	752.1
20°	723.4	724.3	728.2	738.7	739.7
22.5°	705.2	706.1	710.9	723.4	725.3
25°	684.1	687.9	693.7	707.1	710.0
27.5°	663.0	665.9	675.5	690.8	692.7
30°	638.1	643.8	654.4	671.6	675.5
32.5°	613.2	619.9	632.3	651.5	656.3
35°	587.3	595.0	610.3	630.4	635.2
37.5°	560.5	567.2	586.4	607.4	614.1
40°	533.7	540.4	561.5	585.4	593.1
42.5°	504.9	514.5	535.6	562.4	570.1
45°	475.2	485.8	509.7	538.5	544.2
47.5°	444.6	456.1	483.8	512.6	519.3
50°	417.7	428.3	456.1	483.8	488.6
52.5°	389.0	398.6	429.2	452.2	453.2
55°	358.3	369.8	400.5	418.7	416.8
57.5°	330.5	340.1	369.8	379.4	373.7
60°	300.8	309.5	339.2	340.1	331.5
62.5°	272.1	280.7	303.7	297.0	286.5
65°	243.4	252.0	268.3	255.8	246.2
67.5°	215.6	223.2	232.8	216.5	207.0
70°	185.9	196.4	197.4	178.2	168.6
72.5°	160.0	165.8	163.8	145.6	137.0
75°	131.3	138.0	129.3	112.1	105.4
77.5°	104.4	109.2	97.7	81.4	76.6
80°	77.6	80.5	67.1	54.6	51.7
82.5°	52.7	52.7	38.3	29.7	26.8
85°	30.7	26.8	16.3	14.4	14.4
87.5°	10.5	6.7	6.7	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)