

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: P258715

Luminaire Tested: **14CZ-LD5-29-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258715
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-LD5-29-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: 2998.8 lumens
Efficiency: N/A
Efficacy: 135.5 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

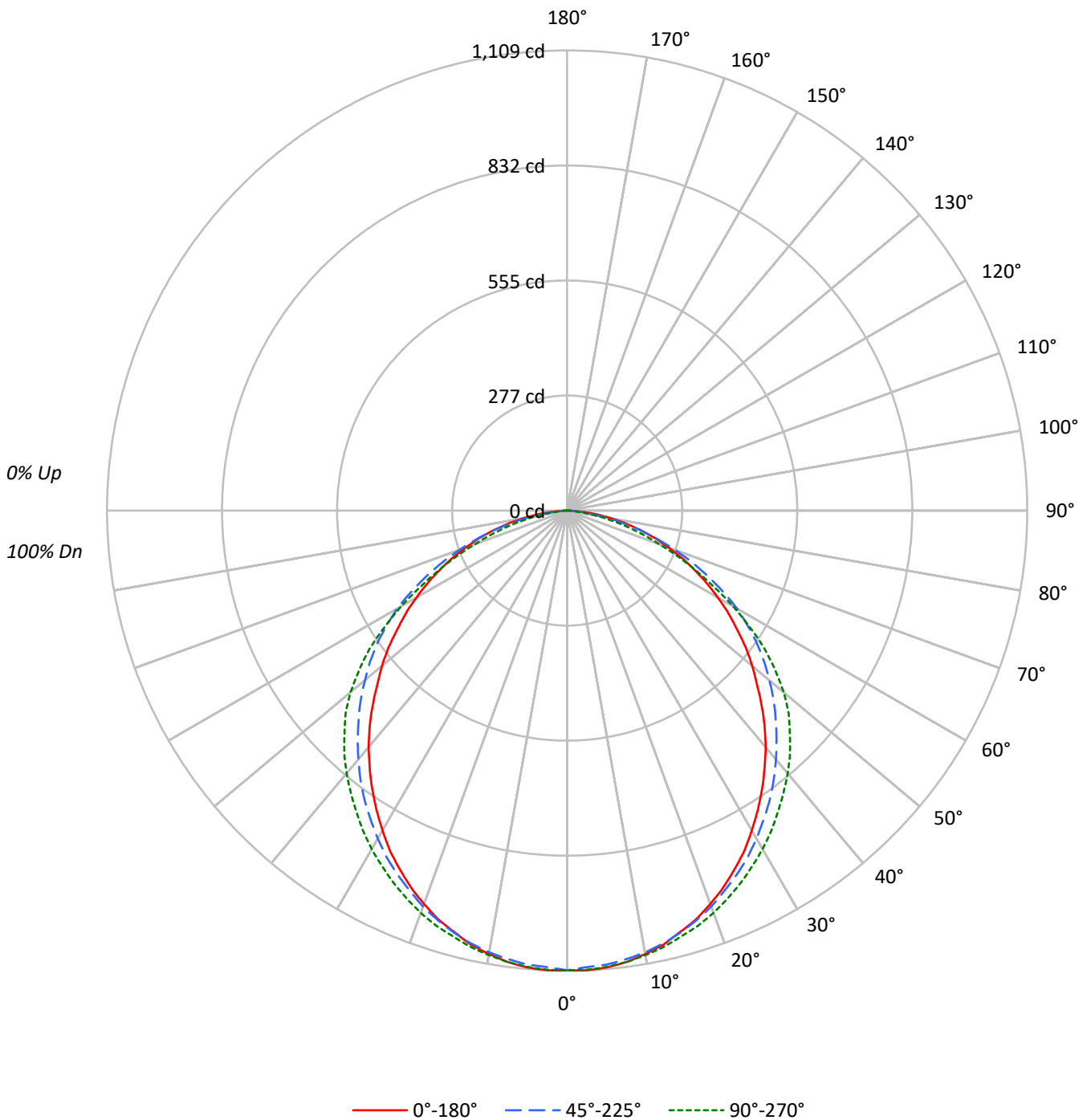
Input Watts (W): 22.134
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2981	2981	2981
5°	2985	2967	2981
10°	2965	2954	2972
15°	2930	2934	2959
20°	2889	2908	2954
25°	2833	2873	2940
30°	2765	2836	2927
35°	2691	2796	2910
40°	2615	2751	2905
45°	2522	2705	2888
50°	2439	2663	2853
55°	2345	2621	2727
60°	2258	2546	2488
65°	2161	2383	2187
70°	2039	2166	1851
75°	1904	1876	1528
80°	1677	1449	1119
85°	1321	701	618



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.7	3.5
10°-20°	298.2	9.9
20°-30°	447.5	14.9
30°-40°	533.5	17.8
40°-50°	549.6	18.3
50°-60°	489.8	16.3
60°-70°	352.9	11.8
70°-80°	184.6	6.2
80°-90°	38.2	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°	850.4	28.4
0°-40°	1383.9	46.1
0°-60°	2423.2	80.8
0°-90°	2998.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2998.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1105	1102	1098	1105	1104	105
15°	1052	1053	1053	1064	1062	297
25°	954	959	968	986	990	439
35°	819	830	851	879	886	512
45°	663	678	711	751	759	511
55°	500	516	559	584	581	448
65°	339	351	374	357	343	336
75°	183	192	180	156	147	194
85°	43	37	23	20	20	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1107.8	1107.8	1107.8	1107.8	1107.8
2.5°	1109.1	1106.4	1101.1	1107.8	1107.8
5°	1105.1	1102.4	1098.4	1105.1	1103.7
7.5°	1097.1	1094.4	1090.4	1098.4	1097.1
10°	1085.0	1083.7	1081.0	1089.1	1087.7
12.5°	1071.7	1070.3	1069.0	1077.0	1077.0
15°	1051.6	1053.0	1053.0	1063.7	1062.3
17.5°	1032.9	1034.3	1035.6	1049.0	1049.0
20°	1008.9	1010.2	1015.6	1030.3	1031.6
22.5°	983.5	984.8	991.5	1008.9	1011.5
25°	954.1	959.4	967.5	986.2	990.2
27.5°	924.7	928.7	942.1	963.4	966.1
30°	889.9	898.0	912.7	936.7	942.1
32.5°	855.2	864.6	881.9	908.7	915.3
35°	819.1	829.8	851.2	879.3	885.9
37.5°	781.7	791.1	817.8	847.2	856.5
40°	744.3	753.6	783.0	816.5	827.1
42.5°	704.2	717.6	747.0	784.4	795.1
45°	662.8	677.5	710.9	751.0	759.0
47.5°	620.0	636.1	674.8	714.9	724.3
50°	582.6	597.3	636.1	674.8	681.5
52.5°	542.5	555.9	598.6	630.7	632.0
55°	499.8	515.8	558.6	583.9	581.3
57.5°	461.0	474.4	515.8	529.2	521.1
60°	419.6	431.6	473.0	474.4	462.3
62.5°	379.5	391.5	423.6	414.2	399.5
65°	339.4	351.4	374.2	356.8	343.4
67.5°	300.7	311.3	324.7	302.0	288.6
70°	259.2	273.9	275.3	248.5	235.2
72.5°	223.2	231.2	228.5	203.1	191.1
75°	183.1	192.4	180.4	156.3	147.0
77.5°	145.7	152.3	136.3	113.6	106.9
80°	108.2	112.2	93.5	76.2	72.2
82.5°	73.5	73.5	53.5	41.4	37.4
85°	42.8	37.4	22.7	20.0	20.0
87.5°	14.7	9.4	9.4	9.4	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)