

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: P258746

Luminaire Tested: **14CZ-LD5-29-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258746
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-L93050-W2A1-U-4000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2753.0 lumens
Efficiency: N/A
Efficacy: 121.3 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

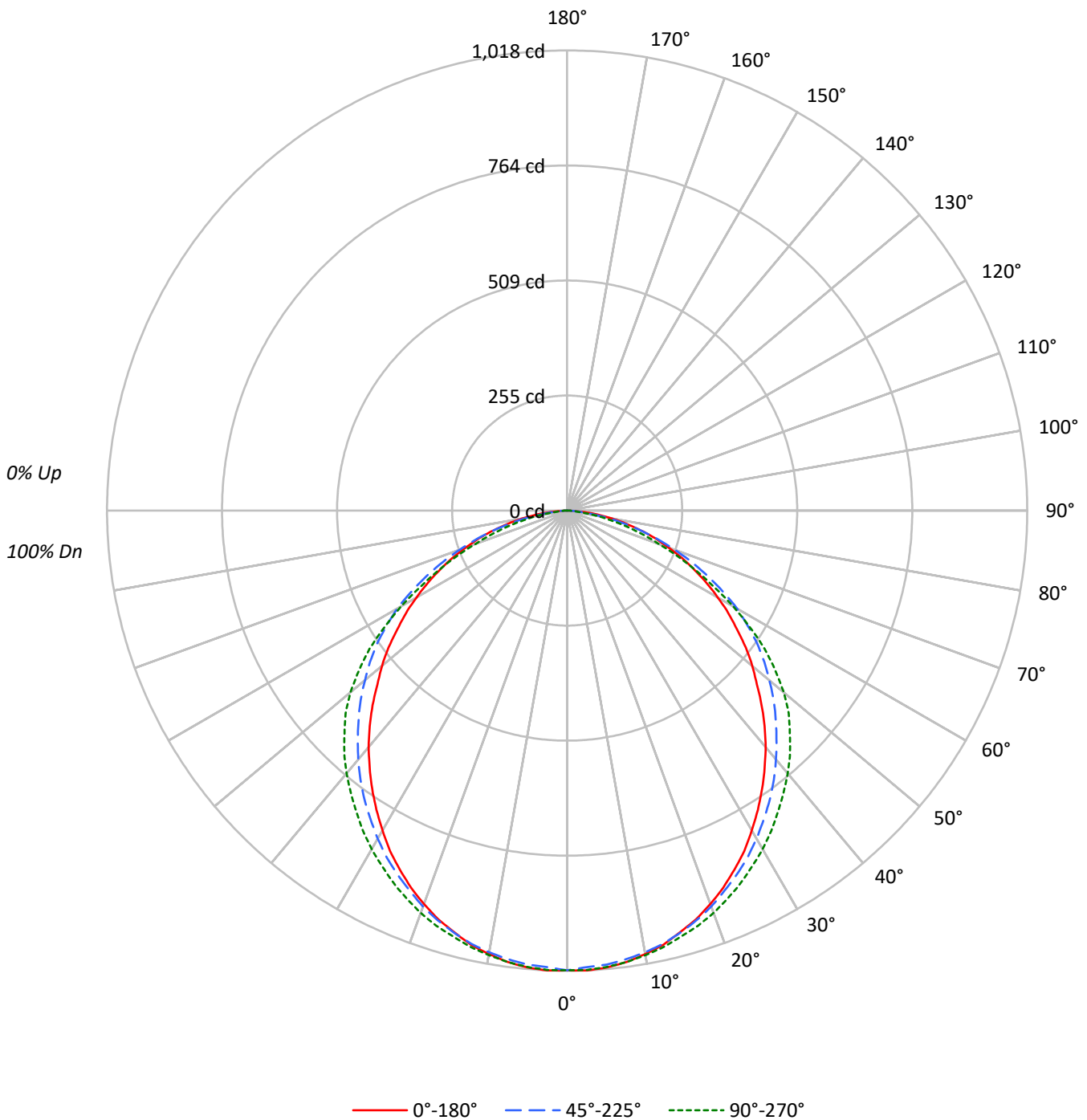
Input Watts (W): 22.692
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85					85			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2737	2737	2737
5°	2740	2724	2737
10°	2722	2712	2729
15°	2690	2693	2717
20°	2652	2670	2712
25°	2601	2637	2699
30°	2539	2604	2687
35°	2470	2567	2672
40°	2400	2525	2667
45°	2316	2484	2652
50°	2239	2444	2619
55°	2152	2406	2503
60°	2073	2337	2284
65°	1984	2187	2008
70°	1873	1988	1699
75°	1748	1722	1403
80°	1540	1331	1026
85°	1213	645	568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.1	3.5
10°-20°	273.8	9.9
20°-30°	410.8	14.9
30°-40°	489.8	17.8
40°-50°	504.5	18.3
50°-60°	449.6	16.3
60°-70°	324.0	11.8
70°-80°	169.4	6.2
80°-90°	35.0	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°	780.7	28.4
0°-40°	1270.5	46.1
0°-60°	2224.6	80.8
0°-90°	2753.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2753.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1017	1017	1017	1017	1017	
5°	1014	1012	1008	1014	1013	96
15°	965	967	967	976	975	272
25°	876	881	888	905	909	403
35°	752	762	781	807	813	470
45°	608	622	653	689	697	470
55°	459	474	513	536	534	411
65°	312	323	344	328	315	309
75°	168	177	166	144	135	178
85°	39	34	21	18	18	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1017.0	1017.0	1017.0	1017.0	1017.0
2.5°	1018.2	1015.7	1010.8	1017.0	1017.0
5°	1014.5	1012.1	1008.4	1014.5	1013.3
7.5°	1007.1	1004.7	1001.0	1008.4	1007.1
10°	996.1	994.9	992.4	999.8	998.6
12.5°	983.8	982.6	981.4	988.7	988.7
15°	965.4	966.7	966.7	976.5	975.3
17.5°	948.3	949.5	950.7	963.0	963.0
20°	926.2	927.4	932.3	945.8	947.0
22.5°	902.9	904.1	910.2	926.2	928.6
25°	875.9	880.8	888.2	905.3	909.0
27.5°	848.9	852.6	864.8	884.5	886.9
30°	817.0	824.4	837.9	859.9	864.8
32.5°	785.1	793.7	809.6	834.2	840.3
35°	752.0	761.8	781.4	807.2	813.3
37.5°	717.6	726.2	750.8	777.7	786.3
40°	683.3	691.9	718.9	749.5	759.3
42.5°	646.5	658.8	685.7	720.1	729.9
45°	608.5	622.0	652.6	689.4	696.8
47.5°	569.2	583.9	619.5	656.3	664.9
50°	534.9	548.3	583.9	619.5	625.6
52.5°	498.1	510.3	549.6	579.0	580.2
55°	458.8	473.5	512.8	536.1	533.6
57.5°	423.2	435.5	473.5	485.8	478.4
60°	385.2	396.2	434.3	435.5	424.4
62.5°	348.4	359.4	388.9	380.3	366.8
65°	311.6	322.6	343.5	327.5	315.3
67.5°	276.0	285.8	298.1	277.2	265.0
70°	238.0	251.5	252.7	228.2	215.9
72.5°	204.9	212.2	209.8	186.5	175.4
75°	168.1	176.6	165.6	143.5	134.9
77.5°	133.7	139.8	125.1	104.3	98.1
80°	99.4	103.0	85.9	69.9	66.2
82.5°	67.5	67.5	49.1	38.0	34.3
85°	39.3	34.3	20.9	18.4	18.4
87.5°	13.5	8.6	8.6	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)