

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: P258747

Luminaire Tested: **14CZ-LD5-29-S-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258747
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-4500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2801.0 lumens
Efficiency: N/A
Efficacy: 121.4 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

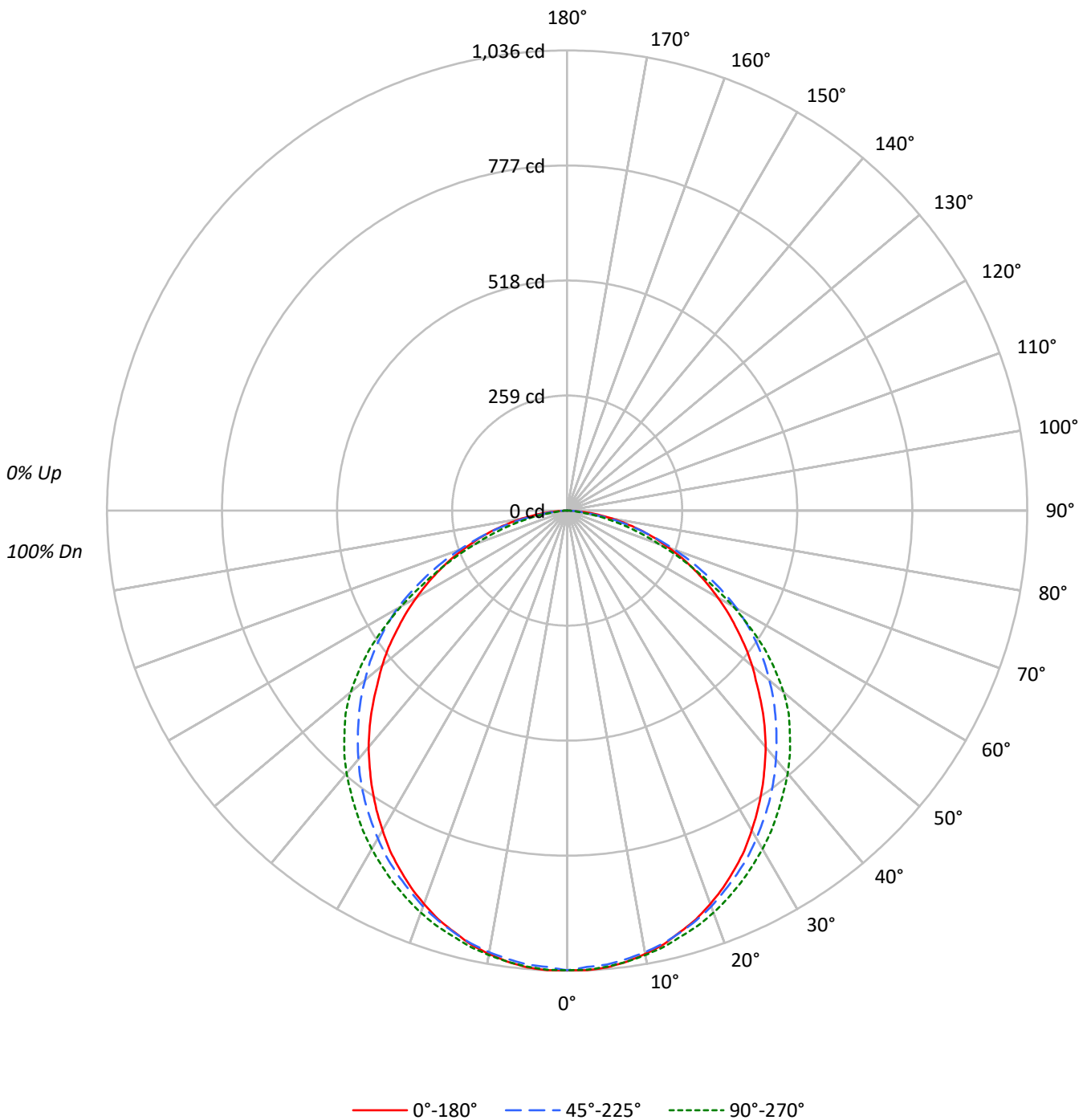
Input Watts (W): 23.064
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2784	2784	2784
5°	2788	2771	2785
10°	2769	2759	2776
15°	2737	2740	2764
20°	2698	2716	2759
25°	2646	2683	2746
30°	2583	2649	2734
35°	2513	2612	2718
40°	2442	2569	2714
45°	2356	2527	2698
50°	2278	2487	2665
55°	2190	2448	2547
60°	2109	2378	2324
65°	2018	2225	2043
70°	1905	2023	1729
75°	1778	1752	1428
80°	1567	1354	1044
85°	1232	655	577



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	3.5
10°-20°	278.5	9.9
20°-30°	418.0	14.9
30°-40°	498.3	17.8
40°-50°	513.3	18.3
50°-60°	457.5	16.3
60°-70°	329.6	11.8
70°-80°	172.4	6.2
80°-90°	35.6	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°	794.3	28.4
0°-40°	1292.6	46.1
0°-60°	2263.3	80.8
0°-90°	2801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2801.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1035	1035	1035	1035	1035	
5°	1032	1030	1026	1032	1031	98
15°	982	984	984	994	992	277
25°	891	896	904	921	925	410
35°	765	775	795	821	828	478
45°	619	633	664	701	709	478
55°	467	482	522	545	543	419
65°	317	328	350	333	321	314
75°	171	180	168	146	137	181
85°	40	35	21	19	19	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1034.7	1034.7	1034.7	1034.7	1034.7
2.5°	1035.9	1033.4	1028.4	1034.7	1034.7
5°	1032.2	1029.7	1026.0	1032.2	1030.9
7.5°	1024.7	1022.2	1018.5	1026.0	1024.7
10°	1013.5	1012.2	1009.7	1017.2	1016.0
12.5°	1001.0	999.7	998.5	1006.0	1006.0
15°	982.3	983.5	983.5	993.5	992.3
17.5°	964.8	966.0	967.3	979.8	979.8
20°	942.3	943.6	948.6	962.3	963.5
22.5°	918.6	919.9	926.1	942.3	944.8
25°	891.2	896.1	903.6	921.1	924.9
27.5°	863.7	867.4	879.9	899.9	902.4
30°	831.2	838.7	852.5	874.9	879.9
32.5°	798.8	807.5	823.8	848.7	855.0
35°	765.1	775.1	795.1	821.3	827.5
37.5°	730.1	738.9	763.8	791.3	800.0
40°	695.2	703.9	731.4	762.6	772.6
42.5°	657.8	670.2	697.7	732.6	742.6
45°	619.1	632.8	664.0	701.4	708.9
47.5°	579.1	594.1	630.3	667.7	676.5
50°	544.2	557.9	594.1	630.3	636.5
52.5°	506.7	519.2	559.2	589.1	590.4
55°	466.8	481.8	521.7	545.4	542.9
57.5°	430.6	443.1	481.8	494.3	486.8
60°	391.9	403.1	441.8	443.1	431.8
62.5°	354.5	365.7	395.7	386.9	373.2
65°	317.0	328.3	349.5	333.2	320.8
67.5°	280.8	290.8	303.3	282.1	269.6
70°	242.1	255.9	257.1	232.2	219.7
72.5°	208.4	215.9	213.4	189.7	178.5
75°	171.0	179.7	168.5	146.0	137.3
77.5°	136.0	142.3	127.3	106.1	99.8
80°	101.1	104.8	87.4	71.1	67.4
82.5°	68.6	68.6	49.9	38.7	34.9
85°	39.9	34.9	21.2	18.7	18.7
87.5°	13.7	8.7	8.7	8.7	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)