

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: P258843

Luminaire Tested: **14CZ-LD5-29-S-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258843  
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-L92765-W2A1-U-5700K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2827.0 lumens  
Efficiency: N/A  
Efficacy: 124.1 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

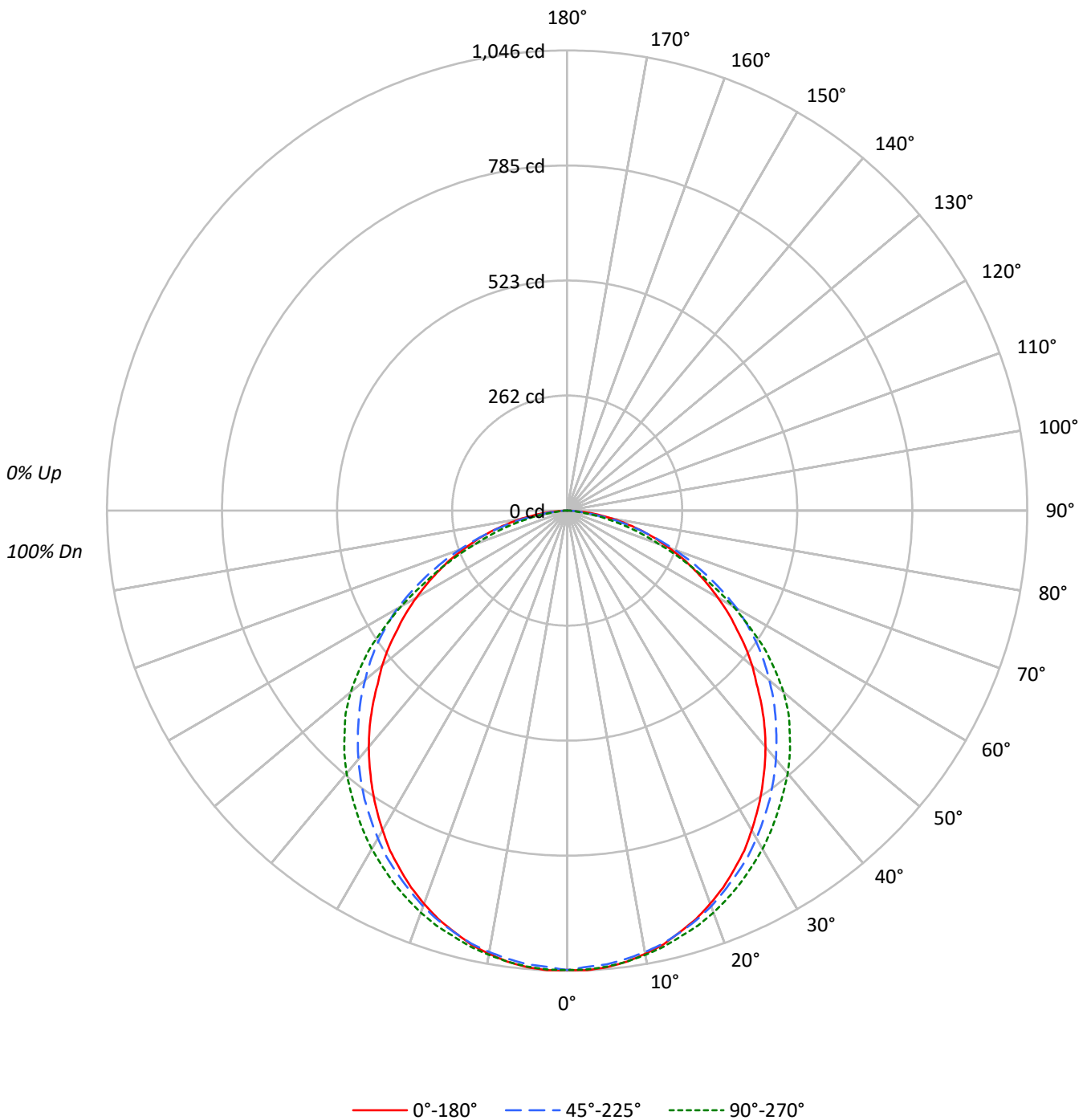
Input Watts (W): 22.785  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2810	2810	2810
5°	2814	2797	2811
10°	2795	2785	2802
15°	2762	2765	2790
20°	2724	2742	2785
25°	2670	2708	2771
30°	2607	2673	2760
35°	2537	2636	2744
40°	2465	2593	2739
45°	2378	2551	2723
50°	2299	2510	2689
55°	2210	2471	2571
60°	2129	2400	2346
65°	2038	2246	2061
70°	1923	2042	1744
75°	1795	1769	1441
80°	1581	1367	1054
85°	1244	661	584



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.7	3.5
10°-20°	281.1	9.9
20°-30°	421.9	14.9
30°-40°	503.0	17.8
40°-50°	518.1	18.3
50°-60°	461.7	16.3
60°-70°	332.7	11.8
70°-80°	174.0	6.2
80°-90°	36.0	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°	801.7	28.4
0°-40°	1304.6	46.1
0°-60°	2284.4	80.8
0°-90°	2827.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2827.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1042	1039	1036	1042	1040	99
15°	991	993	993	1003	1002	280
25°	899	904	912	930	933	414
35°	772	782	802	829	835	483
45°	625	639	670	708	716	482
55°	471	486	527	550	548	422
65°	320	331	353	336	324	317
75°	173	181	170	147	139	183
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°	1044.3	1044.3	1044.3	1044.3	1044.3
2.5°	1045.6	1043.0	1038.0	1044.3	1044.3
5°	1041.8	1039.3	1035.5	1041.8	1040.5
7.5°	1034.2	1031.7	1027.9	1035.5	1034.2
10°	1022.9	1021.6	1019.1	1026.7	1025.4
12.5°	1010.3	1009.0	1007.8	1015.3	1015.3
15°	991.4	992.6	992.6	1002.7	1001.5
17.5°	973.8	975.0	976.3	988.9	988.9
20°	951.1	952.3	957.4	971.2	972.5
22.5°	927.1	928.4	934.7	951.1	953.6
25°	899.4	904.5	912.0	929.7	933.4
27.5°	871.7	875.5	888.1	908.2	910.8
30°	839.0	846.5	860.4	883.1	888.1
32.5°	806.2	815.0	831.4	856.6	862.9
35°	772.2	782.3	802.4	828.9	835.2
37.5°	736.9	745.7	770.9	798.7	807.5
40°	701.7	710.5	738.2	769.7	779.8
42.5°	663.9	676.5	704.2	739.4	749.5
45°	624.8	638.7	670.2	708.0	715.5
47.5°	584.5	599.6	636.2	673.9	682.8
50°	549.2	563.1	599.6	636.2	642.4
52.5°	511.4	524.0	564.3	594.6	595.8
55°	471.1	486.2	526.6	550.5	548.0
57.5°	434.6	447.2	486.2	498.8	491.3
60°	395.5	406.9	445.9	447.2	435.9
62.5°	357.8	369.1	399.3	390.5	376.7
65°	320.0	331.3	352.7	336.3	323.7
67.5°	283.4	293.5	306.1	284.7	272.1
70°	244.4	258.2	259.5	234.3	221.7
72.5°	210.4	217.9	215.4	191.5	180.1
75°	172.6	181.4	170.1	147.4	138.6
77.5°	137.3	143.6	128.5	107.1	100.8
80°	102.0	105.8	88.2	71.8	68.0
82.5°	69.3	69.3	50.4	39.1	35.3
85°	40.3	35.3	21.4	18.9	18.9
87.5°	13.9	8.8	8.8	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)