

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: P259388

Luminaire Tested: **22CZ-LD5-29-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259388  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-29-S-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3052.0 lumens  
Efficiency: N/A  
Efficacy: 143.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

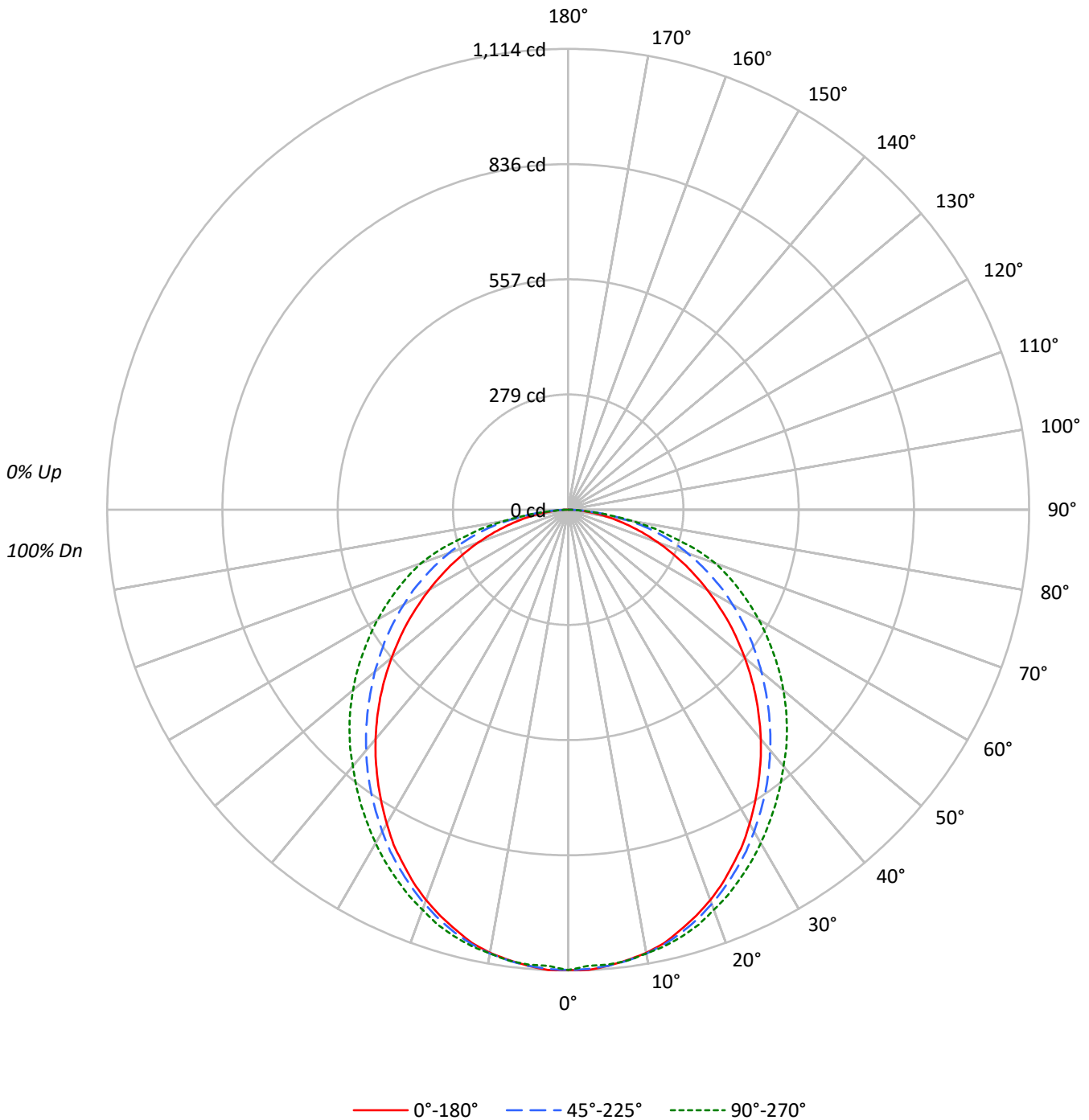
Input Watts (W): 21.297  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2994	2994	2994
5°	2990	2990	2982
10°	2972	2976	2976
15°	2928	2949	2973
20°	2876	2905	2947
25°	2803	2851	2920
30°	2724	2792	2893
35°	2634	2731	2865
40°	2544	2667	2843
45°	2444	2605	2845
50°	2332	2553	2841
55°	2221	2510	2840
60°	2091	2469	2864
65°	1960	2436	2903
70°	1810	2411	2976
75°	1631	2392	2758
80°	1432	2227	2408
85°	1176	1673	1494



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.1	3.4
10°-20°	298.5	9.8
20°-30°	443.3	14.5
30°-40°	521.8	17.1
40°-50°	532.0	17.4
50°-60°	479.8	15.7
60°-70°	377.9	12.4
70°-80°	233.1	7.6
80°-90°	60.5	2.0
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°	846.9	27.7
0°-40°	1368.7	44.8
0°-60°	2380.4	78.0
0°-90°	3052.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3052.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1113	1113	1113	1113	1113	
5°	1107	1108	1107	1105	1104	105
15°	1051	1056	1058	1064	1067	296
25°	944	950	960	976	984	435
35°	802	811	831	858	872	502
45°	642	652	685	726	748	495
55°	474	490	535	583	605	423
65°	308	330	383	431	456	305
75°	157	183	230	256	265	167
85°	38	48	54	51	48	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1112.6	1112.6	1112.6	1112.6	1112.6
2.5°	1114.1	1114.1	1111.2	1108.2	1103.8
5°	1106.8	1108.2	1106.8	1105.3	1103.8
7.5°	1098.0	1099.4	1099.4	1099.4	1099.4
10°	1087.7	1089.2	1089.2	1089.2	1089.2
12.5°	1073.1	1074.5	1076.0	1077.5	1080.4
15°	1051.1	1055.5	1058.4	1064.3	1067.2
17.5°	1029.1	1033.5	1037.9	1045.2	1051.1
20°	1004.2	1007.1	1014.4	1023.2	1029.1
22.5°	976.3	980.7	988.0	999.8	1008.6
25°	944.1	949.9	960.2	976.3	983.6
27.5°	913.3	917.7	930.9	948.5	958.7
30°	876.6	882.5	898.6	920.6	930.9
32.5°	840.0	847.3	864.9	889.8	901.5
35°	801.9	810.7	831.2	857.6	872.2
37.5°	763.7	772.5	796.0	825.3	841.4
40°	724.2	733.0	759.3	791.6	809.2
42.5°	683.1	693.4	722.7	759.3	779.9
45°	642.1	652.3	684.6	725.6	747.6
47.5°	599.6	611.3	646.5	691.9	713.9
50°	557.1	570.2	609.8	656.7	678.7
52.5°	514.5	529.2	571.7	620.1	643.5
55°	473.5	489.6	535.1	583.4	605.4
57.5°	429.5	448.6	496.9	543.9	568.8
60°	388.5	409.0	458.8	505.7	532.1
62.5°	347.4	369.4	422.2	469.1	494.0
65°	307.8	329.8	382.6	431.0	455.9
67.5°	268.3	293.2	344.5	392.9	417.8
70°	230.1	256.5	306.4	353.3	378.2
72.5°	193.5	219.9	269.7	313.7	328.4
75°	156.9	183.2	230.1	256.5	265.3
77.5°	123.1	148.1	189.1	205.2	217.0
80°	92.4	114.3	143.7	153.9	155.4
82.5°	63.0	82.1	99.7	101.1	99.7
85°	38.1	48.4	54.2	51.3	48.4
87.5°	17.6	19.1	17.6	11.7	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)