

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: P259174

Luminaire Tested: **14CZ-LD5-29-SQP-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259174  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-29-SQP-UNV-L92765-W2A1-U-3500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1622.0 lumens  
Efficiency: N/A  
Efficacy: 73.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

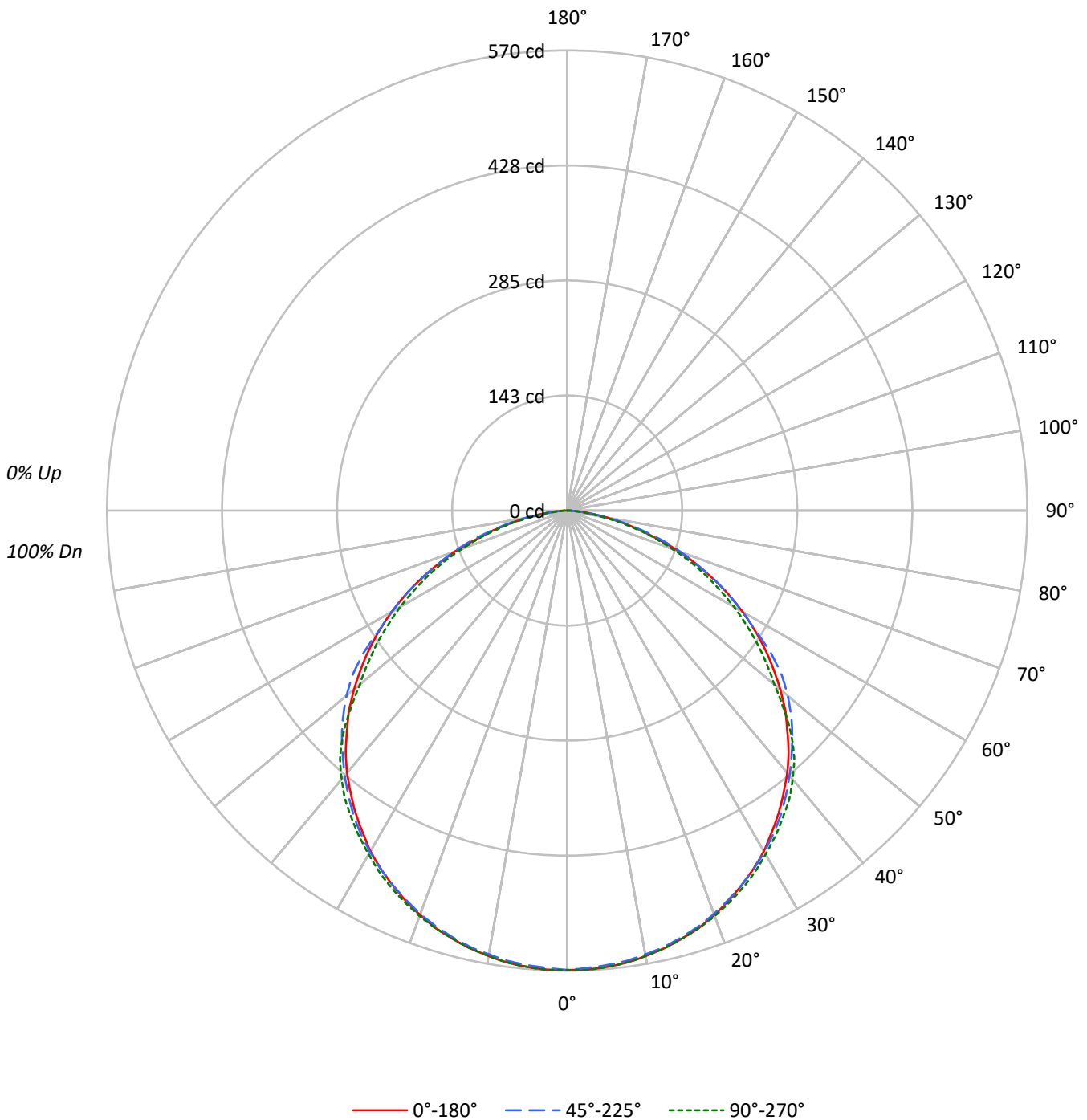
Input Watts (W): 22.227  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1532	1532	1532
5°	1533	1527	1533
10°	1531	1525	1531
15°	1529	1524	1529
20°	1526	1523	1531
25°	1520	1519	1530
30°	1514	1518	1528
35°	1502	1514	1529
40°	1490	1505	1527
45°	1468	1501	1495
50°	1442	1493	1403
55°	1405	1446	1351
60°	1351	1348	1286
65°	1266	1273	1203
70°	1163	1175	1090
75°	976	1022	932
80°	775	792	656
85°	509	442	374



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.9	3.3
10°-20°	154.9	9.6
20°-30°	236.6	14.6
30°-40°	288.6	17.8
40°-50°	301.8	18.6
50°-60°	267.2	16.5
60°-70°	196.8	12.1
70°-80°	101.9	6.3
80°-90°	20.3	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°	445.4	27.5
0°-40°	734.0	45.3
0°-60°	1303.1	80.3
0°-90°	1622.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1622.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	569	569	569	569	569	
5°	568	568	565	568	568	54
15°	549	549	547	549	549	155
25°	512	512	512	515	515	236
35°	457	458	461	465	465	286
45°	386	389	394	398	393	298
55°	299	306	308	292	288	267
65°	199	211	200	192	189	197
75°	94	100	98	92	90	100
85°	16	18	14	13	12	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	569.2	569.2	569.2	569.2	569.2
2.5°	569.2	569.2	567.0	569.2	569.7
5°	567.5	567.5	565.3	567.5	567.5
7.5°	564.8	564.2	562.6	564.8	564.8
10°	560.4	560.4	558.2	560.9	560.4
12.5°	555.5	554.9	553.8	556.0	555.5
15°	548.9	548.9	547.2	549.4	548.9
17.5°	542.3	541.7	540.1	542.3	542.3
20°	532.9	532.4	531.8	534.0	534.6
22.5°	523.0	522.5	521.9	525.2	525.2
25°	512.0	512.0	511.5	514.8	515.3
27.5°	500.0	500.0	500.5	504.9	504.4
30°	487.3	487.3	488.4	491.7	491.7
32.5°	471.9	473.0	475.2	479.1	479.1
35°	457.1	458.2	461.0	465.3	465.3
37.5°	440.6	442.3	445.0	450.5	451.6
40°	424.1	425.2	428.5	434.6	434.6
42.5°	406.0	407.1	411.5	417.6	416.5
45°	385.7	389.0	394.5	397.8	392.8
47.5°	366.5	368.7	376.3	372.5	364.3
50°	344.5	348.9	356.6	342.8	335.1
52.5°	322.0	326.9	335.1	315.9	311.5
55°	299.4	305.5	308.2	292.3	287.9
57.5°	275.3	281.8	276.4	267.0	262.6
60°	251.1	258.8	250.5	241.7	239.0
62.5°	225.8	234.6	225.3	217.6	213.7
65°	198.9	211.0	200.0	192.3	189.0
67.5°	172.5	185.2	173.6	167.0	164.8
70°	147.8	154.9	149.4	142.8	138.5
72.5°	118.1	125.3	124.2	117.0	114.3
75°	93.9	100.5	98.3	92.3	89.6
77.5°	69.8	76.9	74.7	67.6	66.5
80°	50.0	54.9	51.1	44.5	42.3
82.5°	31.3	35.2	30.2	25.3	24.2
85°	16.5	17.6	14.3	12.6	12.1
87.5°	5.5	6.0	6.0	5.5	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)