

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: P259124

Luminaire Tested: **14CZ-LD5-29-SQP-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259124  
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-L82765-W2A1-U-5500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1972.0 lumens  
Efficiency: N/A  
Efficacy: 86.5 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

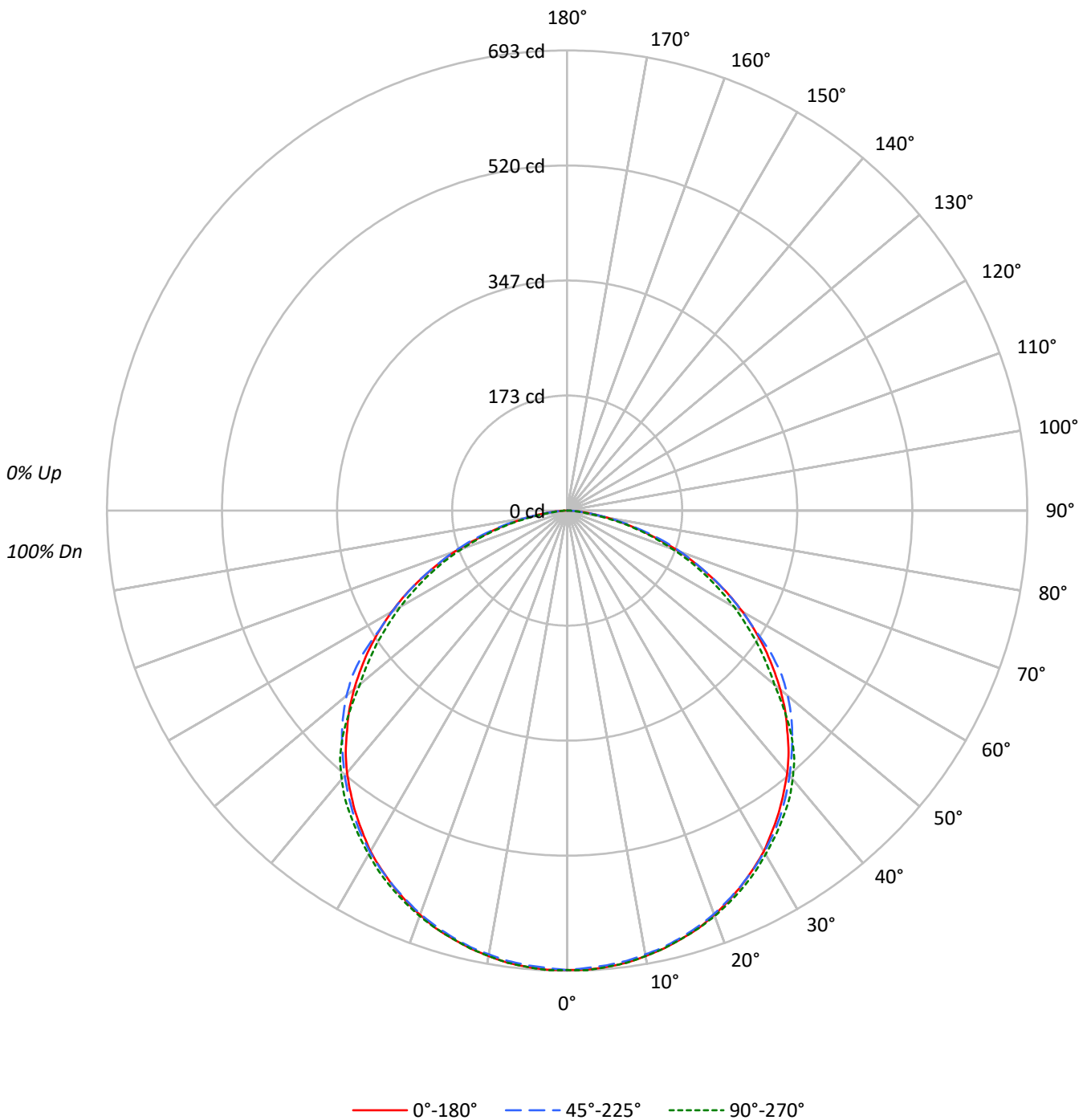
Input Watts (W): 22.785  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1862	1862	1862
5°	1864	1857	1864
10°	1862	1855	1862
15°	1859	1853	1859
20°	1855	1852	1861
25°	1848	1847	1860
30°	1841	1845	1858
35°	1826	1841	1859
40°	1812	1830	1856
45°	1784	1825	1818
50°	1753	1815	1706
55°	1708	1758	1642
60°	1643	1639	1564
65°	1540	1548	1463
70°	1414	1430	1324
75°	1187	1243	1132
80°	942	962	797
85°	618	537	454



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.5	3.3
10°-20°	188.4	9.6
20°-30°	287.6	14.6
30°-40°	350.9	17.8
40°-50°	367.0	18.6
50°-60°	324.9	16.5
60°-70°	239.2	12.1
70°-80°	123.9	6.3
80°-90°	24.7	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°	541.5	27.5
0°-40°	892.4	45.3
0°-60°	1584.3	80.3
0°-90°	1972.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1972.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	692	692	692	692	692	
5°	690	690	687	690	690	66
15°	667	667	665	668	667	188
25°	622	622	622	626	626	287
35°	556	557	560	566	566	348
45°	469	473	480	484	478	362
55°	364	371	375	355	350	325
65°	242	256	243	234	230	240
75°	114	122	120	112	109	122
85°	20	21	17	15	15	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	692.0	692.0	692.0	692.0	692.0
2.5°	692.0	692.0	689.3	692.0	692.7
5°	690.0	690.0	687.3	690.0	690.0
7.5°	686.7	686.0	684.0	686.7	686.7
10°	681.3	681.3	678.7	682.0	681.3
12.5°	675.3	674.6	673.3	676.0	675.3
15°	667.3	667.3	665.3	668.0	667.3
17.5°	659.3	658.6	656.6	659.3	659.3
20°	647.9	647.3	646.6	649.3	649.9
22.5°	635.9	635.2	634.6	638.6	638.6
25°	622.5	622.5	621.9	625.9	626.5
27.5°	607.8	607.8	608.5	613.9	613.2
30°	592.5	592.5	593.8	597.8	597.8
32.5°	573.8	575.1	577.8	582.5	582.5
35°	555.7	557.1	560.4	565.8	565.8
37.5°	535.7	537.7	541.0	547.7	549.1
40°	515.7	517.0	521.0	528.4	528.4
42.5°	493.6	495.0	500.3	507.7	506.3
45°	468.9	472.9	479.6	483.6	477.6
47.5°	445.5	448.2	457.6	452.9	442.9
50°	418.8	424.2	433.5	416.8	407.5
52.5°	391.4	397.4	407.5	384.1	378.7
55°	364.0	371.4	374.7	355.4	350.0
57.5°	334.6	342.7	336.0	324.6	319.3
60°	305.3	314.6	304.6	293.9	290.6
62.5°	274.5	285.2	273.9	264.5	259.8
65°	241.8	256.5	243.1	233.8	229.8
67.5°	209.7	225.1	211.1	203.1	200.4
70°	179.7	188.4	181.7	173.7	168.3
72.5°	143.6	152.3	151.0	142.3	138.9
75°	114.2	122.2	119.6	112.2	108.9
77.5°	84.8	93.5	90.8	82.2	80.8
80°	60.8	66.8	62.1	54.1	51.4
82.5°	38.1	42.7	36.7	30.7	29.4
85°	20.0	21.4	17.4	15.4	14.7
87.5°	6.7	7.3	7.3	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)