

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: P259052

Luminaire Tested: **14CZ-LD5-29-SQP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259052  
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-L83050-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1991.0 lumens  
Efficiency: N/A  
Efficacy: 88.1 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

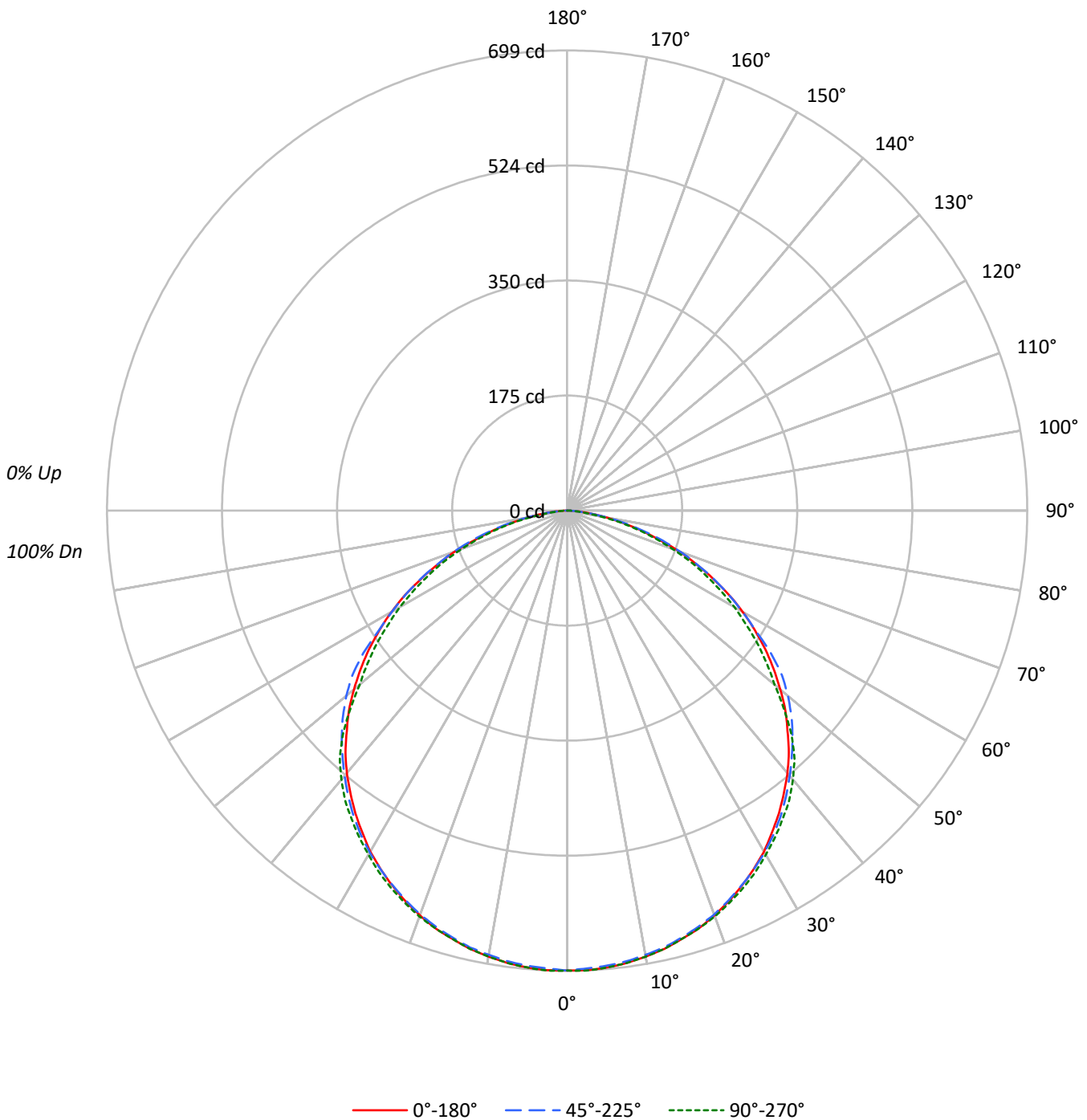
Input Watts (W): 22.599  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1880	1880	1880
5°	1882	1875	1882
10°	1880	1872	1880
15°	1877	1871	1877
20°	1873	1869	1879
25°	1866	1864	1878
30°	1859	1863	1876
35°	1843	1859	1876
40°	1829	1848	1874
45°	1802	1843	1835
50°	1770	1832	1722
55°	1724	1775	1658
60°	1659	1655	1579
65°	1554	1563	1477
70°	1427	1443	1337
75°	1199	1255	1143
80°	951	972	804
85°	624	540	457



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.2	3.3
10°-20°	190.2	9.6
20°-30°	290.4	14.6
30°-40°	354.3	17.8
40°-50°	370.5	18.6
50°-60°	328.0	16.5
60°-70°	241.5	12.1
70°-80°	125.0	6.3
80°-90°	24.9	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°	546.7	27.5
0°-40°	901.0	45.3
0°-60°	1599.5	80.3
0°-90°	1991.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1991.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	697	697	694	697	697	66
15°	674	674	672	674	674	190
25°	628	628	628	632	633	290
35°	561	562	566	571	571	351
45°	473	478	484	488	482	366
55°	368	375	378	359	353	328
65°	244	259	246	236	232	242
75°	115	123	121	113	110	123
85°	20	22	18	16	15	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	698.7	698.7	698.7	698.7	698.7
2.5°	698.7	698.7	696.0	698.7	699.4
5°	696.7	696.7	694.0	696.7	696.7
7.5°	693.3	692.6	690.6	693.3	693.3
10°	687.9	687.9	685.2	688.6	687.9
12.5°	681.8	681.1	679.8	682.5	681.8
15°	673.7	673.7	671.7	674.4	673.7
17.5°	665.6	665.0	662.9	665.6	665.6
20°	654.2	653.5	652.8	655.5	656.2
22.5°	642.0	641.4	640.7	644.7	644.7
25°	628.5	628.5	627.9	631.9	632.6
27.5°	613.7	613.7	614.4	619.8	619.1
30°	598.2	598.2	599.5	603.6	603.6
32.5°	579.3	580.7	583.4	588.1	588.1
35°	561.1	562.4	565.8	571.2	571.2
37.5°	540.9	542.9	546.3	553.0	554.4
40°	520.6	522.0	526.0	533.4	533.4
42.5°	498.4	499.7	505.1	512.5	511.2
45°	473.4	477.5	484.2	488.3	482.2
47.5°	449.8	452.5	462.0	457.2	447.1
50°	422.8	428.2	437.7	420.8	411.4
52.5°	395.2	401.3	411.4	387.8	382.4
55°	367.5	375.0	378.3	358.8	353.4
57.5°	337.9	346.0	339.2	327.8	322.4
60°	308.2	317.6	307.5	296.7	293.4
62.5°	277.2	288.0	276.5	267.1	262.3
65°	244.1	259.0	245.5	236.0	232.0
67.5°	211.8	227.3	213.1	205.0	202.3
70°	181.4	190.2	183.4	175.3	169.9
72.5°	145.0	153.8	152.4	143.6	140.3
75°	115.3	123.4	120.7	113.3	109.9
77.5°	85.6	94.4	91.7	83.0	81.6
80°	61.4	67.4	62.7	54.6	51.9
82.5°	38.4	43.2	37.1	31.0	29.7
85°	20.2	21.6	17.5	15.5	14.8
87.5°	6.7	7.4	7.4	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)