

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: P259088

Luminaire Tested: **14CZ-LD5-35-SQP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259088  
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-LD5-35-SQP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2130.0 lumens  
Efficiency: N/A  
Efficacy: 74.6 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

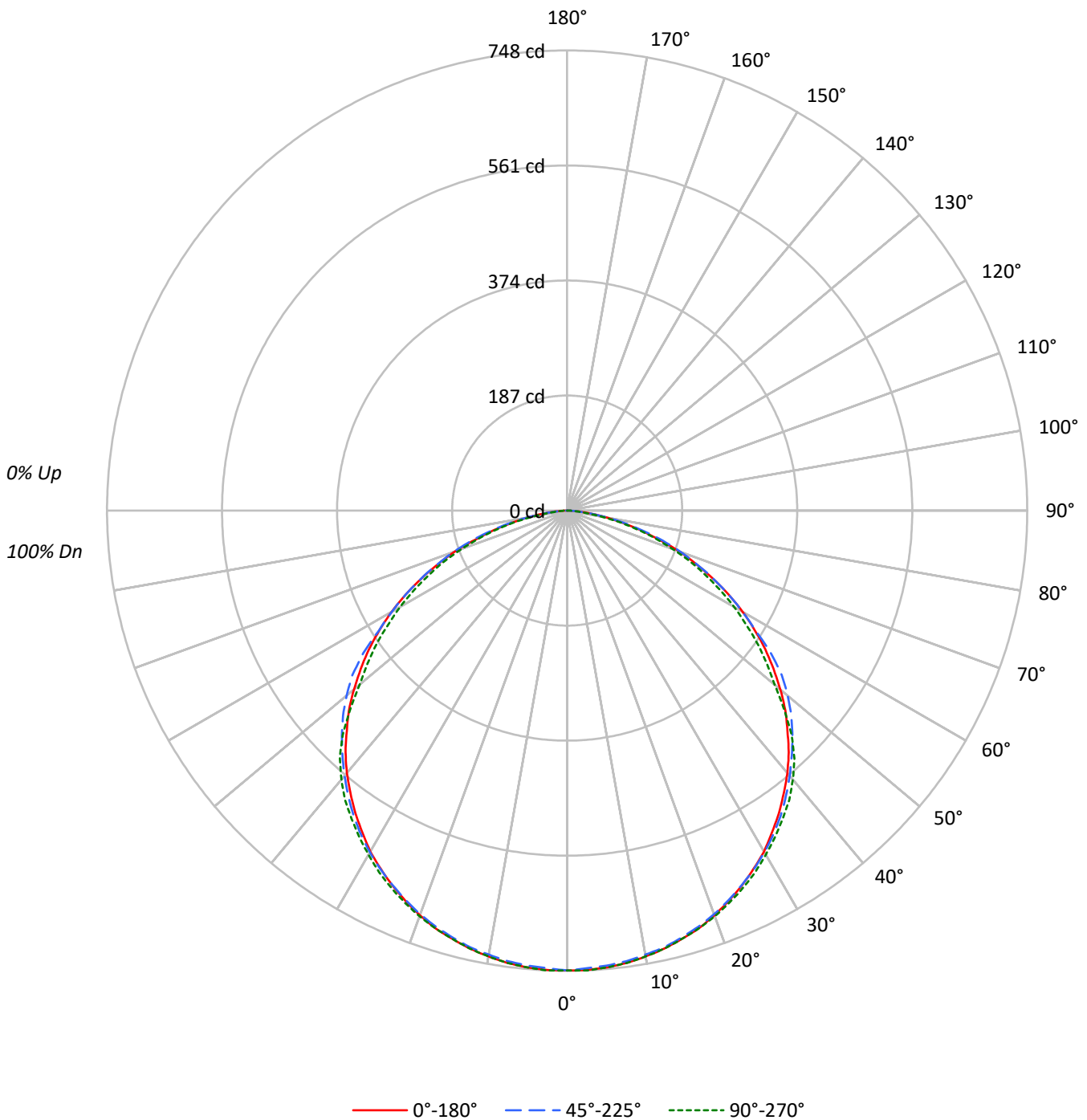
Input Watts (W): 28.551  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2012	2012	2012
5°	2013	2005	2013
10°	2011	2003	2011
15°	2008	2002	2008
20°	2004	2000	2010
25°	1996	1994	2009
30°	1989	1993	2006
35°	1972	1988	2008
40°	1957	1977	2005
45°	1928	1971	1963
50°	1894	1960	1842
55°	1845	1899	1774
60°	1774	1771	1689
65°	1663	1672	1580
70°	1527	1544	1430
75°	1283	1342	1223
80°	1018	1040	862
85°	667	580	491



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.8	3.3
10°-20°	203.5	9.6
20°-30°	310.7	14.6
30°-40°	379.0	17.8
40°-50°	396.4	18.6
50°-60°	350.9	16.5
60°-70°	258.4	12.1
70°-80°	133.8	6.3
80°-90°	26.6	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°	584.9	27.5
0°-40°	963.9	45.3
0°-60°	1711.2	80.3
0°-90°	2130.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2130.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	745	745	742	745	745	71
15°	721	721	719	722	721	204
25°	672	672	672	676	677	310
35°	600	602	605	611	611	375
45°	506	511	518	522	516	391
55°	393	401	405	384	378	351
65°	261	277	263	252	248	259
75°	123	132	129	121	118	132
85°	22	23	19	17	16	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	747.5	747.5	747.5	747.5	747.5
2.5°	747.5	747.5	744.6	747.5	748.2
5°	745.3	745.3	742.4	745.3	745.3
7.5°	741.7	741.0	738.8	741.7	741.7
10°	735.9	735.9	733.0	736.6	735.9
12.5°	729.4	728.7	727.3	730.1	729.4
15°	720.8	720.8	718.6	721.5	720.8
17.5°	712.1	711.4	709.2	712.1	712.1
20°	699.8	699.1	698.4	701.3	702.0
22.5°	686.8	686.1	685.4	689.7	689.7
25°	672.4	672.4	671.7	676.0	676.7
27.5°	656.5	656.5	657.3	663.0	662.3
30°	640.0	640.0	641.4	645.7	645.7
32.5°	619.8	621.2	624.1	629.1	629.1
35°	600.3	601.7	605.3	611.1	611.1
37.5°	578.6	580.8	584.4	591.6	593.1
40°	557.0	558.4	562.8	570.7	570.7
42.5°	533.2	534.6	540.4	548.3	546.9
45°	506.5	510.8	518.0	522.4	515.9
47.5°	481.2	484.1	494.2	489.2	478.3
50°	452.4	458.1	468.2	450.2	440.1
52.5°	422.8	429.3	440.1	414.9	409.1
55°	393.2	401.1	404.8	383.8	378.1
57.5°	361.5	370.1	362.9	350.6	344.9
60°	329.7	339.8	329.0	317.5	313.8
62.5°	296.5	308.1	295.8	285.7	280.7
65°	261.2	277.0	262.6	252.5	248.2
67.5°	226.5	243.1	228.0	219.3	216.4
70°	194.1	203.5	196.2	187.6	181.8
72.5°	155.1	164.5	163.1	153.7	150.1
75°	123.4	132.0	129.1	121.2	117.6
77.5°	91.6	101.0	98.1	88.7	87.3
80°	65.7	72.1	67.1	58.4	55.6
82.5°	41.1	46.2	39.7	33.2	31.7
85°	21.6	23.1	18.8	16.6	15.9
87.5°	7.2	7.9	7.9	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)