

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: P259082

Luminaire Tested: **14CZ-LD5-29-SQP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259082  
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-L93050-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1741.0 lumens  
Efficiency: N/A  
Efficacy: 76.7 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

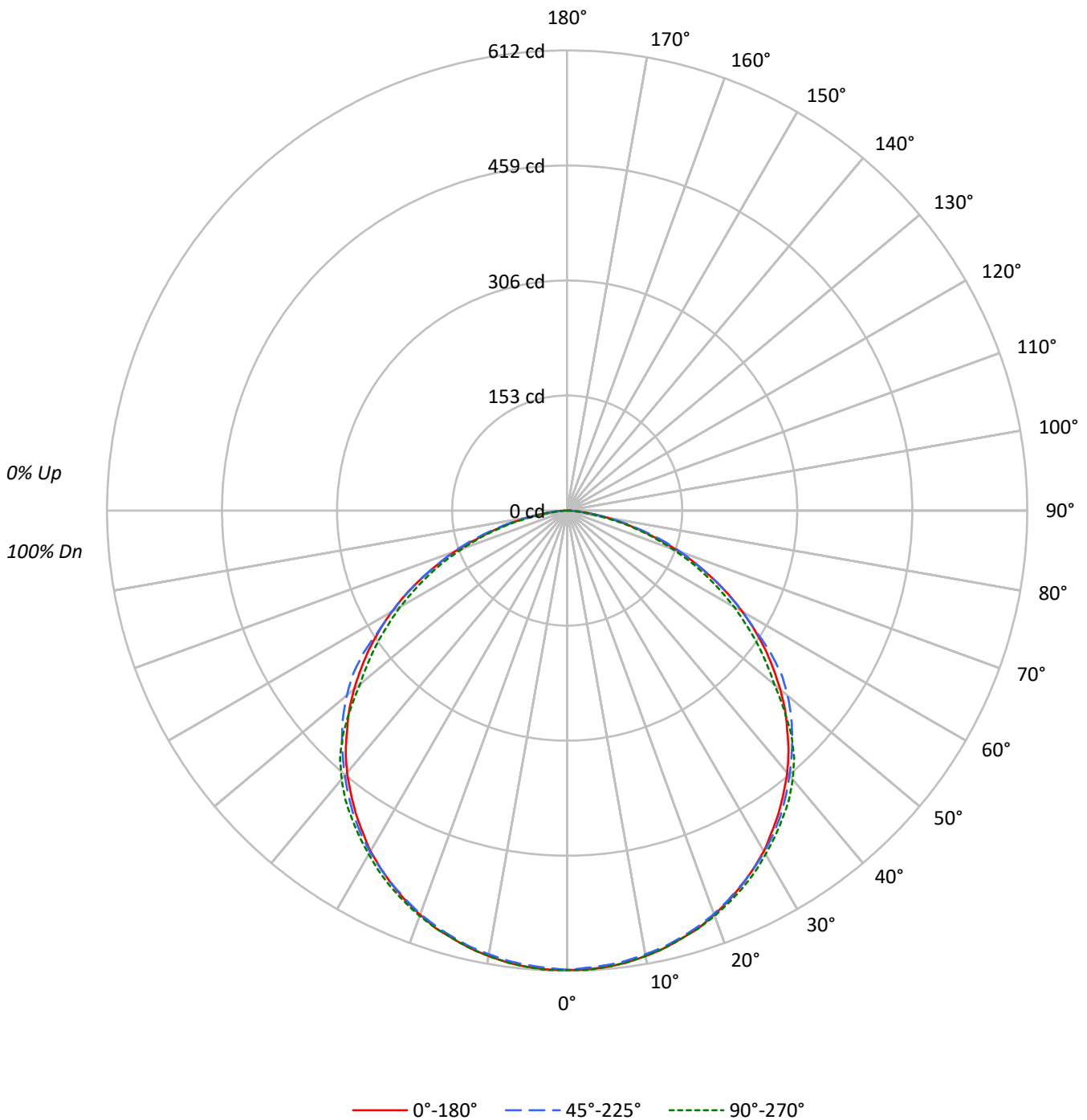
Input Watts (W): 22.692  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1644	1644	1644
5°	1646	1639	1646
10°	1644	1637	1644
15°	1641	1636	1641
20°	1638	1635	1643
25°	1632	1630	1643
30°	1625	1629	1640
35°	1612	1625	1641
40°	1599	1616	1639
45°	1576	1611	1604
50°	1548	1602	1506
55°	1508	1552	1450
60°	1450	1447	1380
65°	1359	1367	1292
70°	1248	1262	1169
75°	1048	1098	999
80°	832	849	704
85°	546	472	401



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.9	3.3
10°-20°	166.3	9.6
20°-30°	253.9	14.6
30°-40°	309.8	17.8
40°-50°	324.0	18.6
50°-60°	286.8	16.5
60°-70°	211.2	12.1
70°-80°	109.4	6.3
80°-90°	21.8	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°	478.1	27.5
0°-40°	787.9	45.3
0°-60°	1398.7	80.3
0°-90°	1741.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1741.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	611	611	611	611	611	
5°	609	609	607	609	609	58
15°	589	589	587	590	589	166
25°	550	550	549	553	553	253
35°	491	492	495	500	500	307
45°	414	418	423	427	422	320
55°	321	328	331	314	309	287
65°	214	226	215	206	203	211
75°	101	108	106	99	96	108
85°	18	19	15	14	13	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	610.9	610.9	610.9	610.9	610.9
2.5°	610.9	610.9	608.6	610.9	611.5
5°	609.2	609.2	606.8	609.2	609.2
7.5°	606.2	605.6	603.9	606.2	606.2
10°	601.5	601.5	599.2	602.1	601.5
12.5°	596.2	595.6	594.4	596.8	596.2
15°	589.1	589.1	587.4	589.7	589.1
17.5°	582.1	581.5	579.7	582.1	582.1
20°	572.0	571.4	570.8	573.2	573.8
22.5°	561.4	560.8	560.2	563.8	563.8
25°	549.6	549.6	549.0	552.6	553.2
27.5°	536.6	536.6	537.2	542.0	541.4
30°	523.1	523.1	524.3	527.8	527.8
32.5°	506.6	507.7	510.1	514.2	514.2
35°	490.6	491.8	494.8	499.5	499.5
37.5°	473.0	474.7	477.7	483.6	484.7
40°	455.3	456.4	460.0	466.5	466.5
42.5°	435.8	437.0	441.7	448.2	447.0
45°	414.0	417.5	423.4	427.0	421.6
47.5°	393.3	395.7	404.0	399.8	391.0
50°	369.8	374.5	382.7	368.0	359.7
52.5°	345.6	350.9	359.7	339.1	334.4
55°	321.4	327.9	330.8	313.7	309.0
57.5°	295.4	302.5	296.6	286.6	281.9
60°	269.5	277.8	268.9	259.5	256.5
62.5°	242.4	251.8	241.8	233.5	229.4
65°	213.5	226.5	214.7	206.4	202.9
67.5°	185.2	198.7	186.4	179.3	176.9
70°	158.6	166.3	160.4	153.3	148.6
72.5°	126.8	134.5	133.3	125.6	122.7
75°	100.8	107.9	105.6	99.1	96.1
77.5°	74.9	82.6	80.2	72.5	71.4
80°	53.7	59.0	54.8	47.8	45.4
82.5°	33.6	37.7	32.4	27.1	25.9
85°	17.7	18.9	15.3	13.6	13.0
87.5°	5.9	6.5	6.5	5.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)