

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: P259118

Luminaire Tested: **14CZ-LD5-29-SQP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259118  
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-2700K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1740.0 lumens  
Efficiency: N/A  
Efficacy: 78.6 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

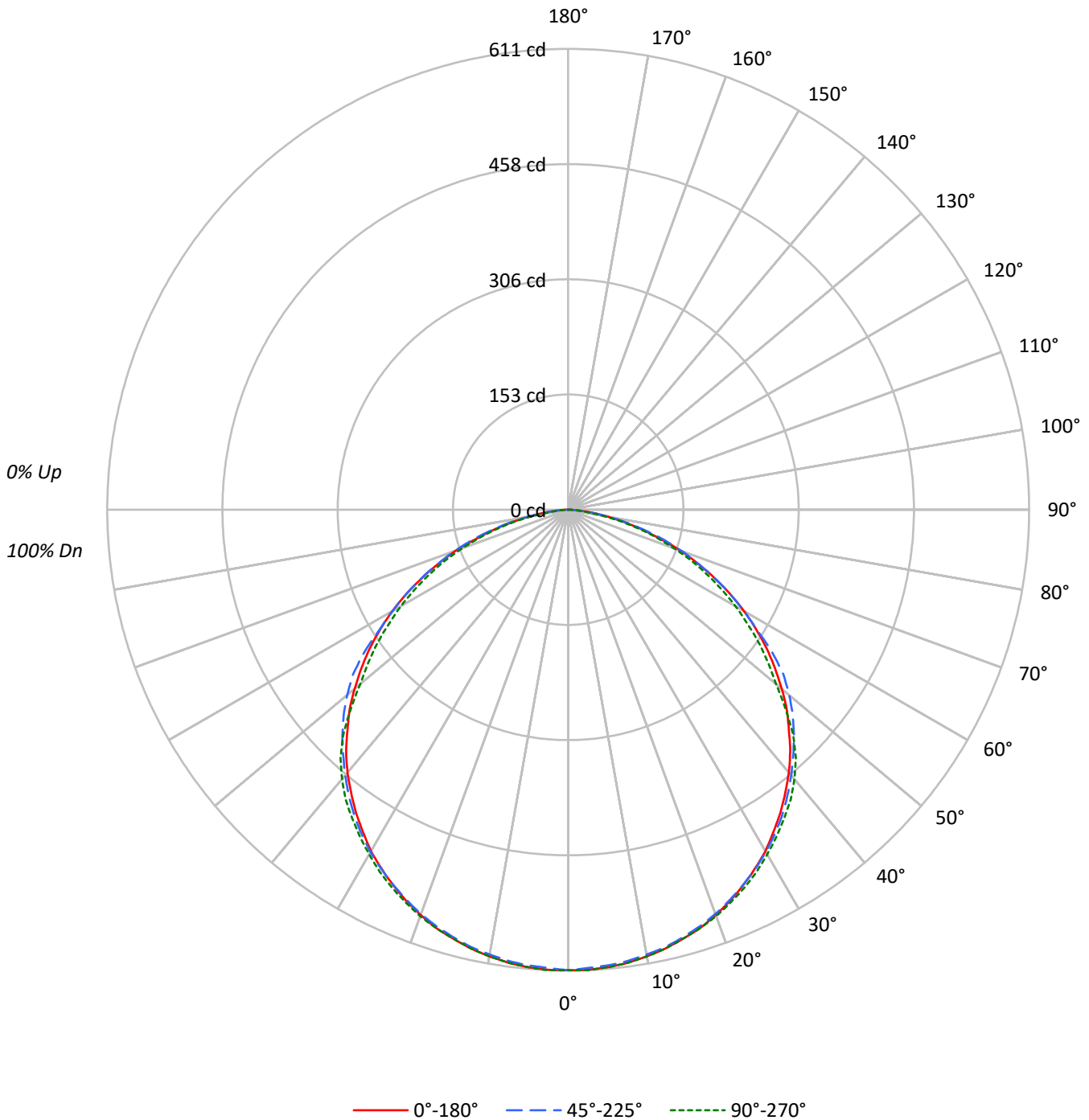
Input Watts (W): 22.134  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1643	1643	1643
5°	1645	1638	1645
10°	1643	1636	1643
15°	1640	1635	1640
20°	1637	1634	1642
25°	1631	1629	1641
30°	1624	1628	1639
35°	1611	1624	1640
40°	1598	1615	1638
45°	1574	1611	1604
50°	1547	1601	1505
55°	1507	1551	1449
60°	1449	1447	1380
65°	1359	1366	1291
70°	1247	1261	1168
75°	1048	1097	999
80°	831	849	704
85°	546	472	401



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.8	3.3
10°-20°	166.2	9.6
20°-30°	253.8	14.6
30°-40°	309.6	17.8
40°-50°	323.8	18.6
50°-60°	286.6	16.5
60°-70°	211.1	12.1
70°-80°	109.3	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°	477.8	27.5
0°-40°	787.4	45.3
0°-60°	1397.9	80.3
0°-90°	1740.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1740.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	611	611	611	611	611	
5°	609	609	606	609	609	58
15°	589	589	587	589	589	166
25°	549	549	549	552	553	253
35°	490	492	494	499	499	307
45°	414	417	423	427	421	319
55°	321	328	331	314	309	287
65°	213	226	214	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°	610.6	610.6	610.6	610.6	610.6
2.5°	610.6	610.6	608.2	610.6	611.2
5°	608.8	608.8	606.5	608.8	608.8
7.5°	605.9	605.3	603.5	605.9	605.9
10°	601.2	601.2	598.8	601.8	601.2
12.5°	595.9	595.3	594.1	596.5	595.9
15°	588.8	588.8	587.0	589.4	588.8
17.5°	581.7	581.1	579.4	581.7	581.7
20°	571.7	571.1	570.5	572.9	573.5
22.5°	561.1	560.5	559.9	563.4	563.4
25°	549.3	549.3	548.7	552.2	552.8
27.5°	536.3	536.3	536.9	541.6	541.0
30°	522.8	522.8	524.0	527.5	527.5
32.5°	506.3	507.5	509.8	513.9	513.9
35°	490.4	491.5	494.5	499.2	499.2
37.5°	472.7	474.4	477.4	483.3	484.5
40°	455.0	456.2	459.7	466.2	466.2
42.5°	435.6	436.7	441.4	447.9	446.7
45°	413.7	417.3	423.2	426.7	421.4
47.5°	393.1	395.5	403.7	399.6	390.8
50°	369.5	374.3	382.5	367.8	359.5
52.5°	345.4	350.7	359.5	338.9	334.2
55°	321.2	327.7	330.6	313.5	308.8
57.5°	295.3	302.4	296.5	286.4	281.7
60°	269.3	277.6	268.8	259.3	256.4
62.5°	242.2	251.7	241.6	233.4	229.3
65°	213.4	226.3	214.5	206.3	202.7
67.5°	185.1	198.6	186.2	179.2	176.8
70°	158.5	166.2	160.3	153.2	148.5
72.5°	126.7	134.4	133.2	125.5	122.6
75°	100.8	107.9	105.5	99.0	96.1
77.5°	74.9	82.5	80.2	72.5	71.3
80°	53.6	58.9	54.8	47.7	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)