

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: P259081

Luminaire Tested: **14CZ-LD5-29-SQP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259081  
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-3500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1612.0 lumens  
Efficiency: N/A  
Efficacy: 71.3 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

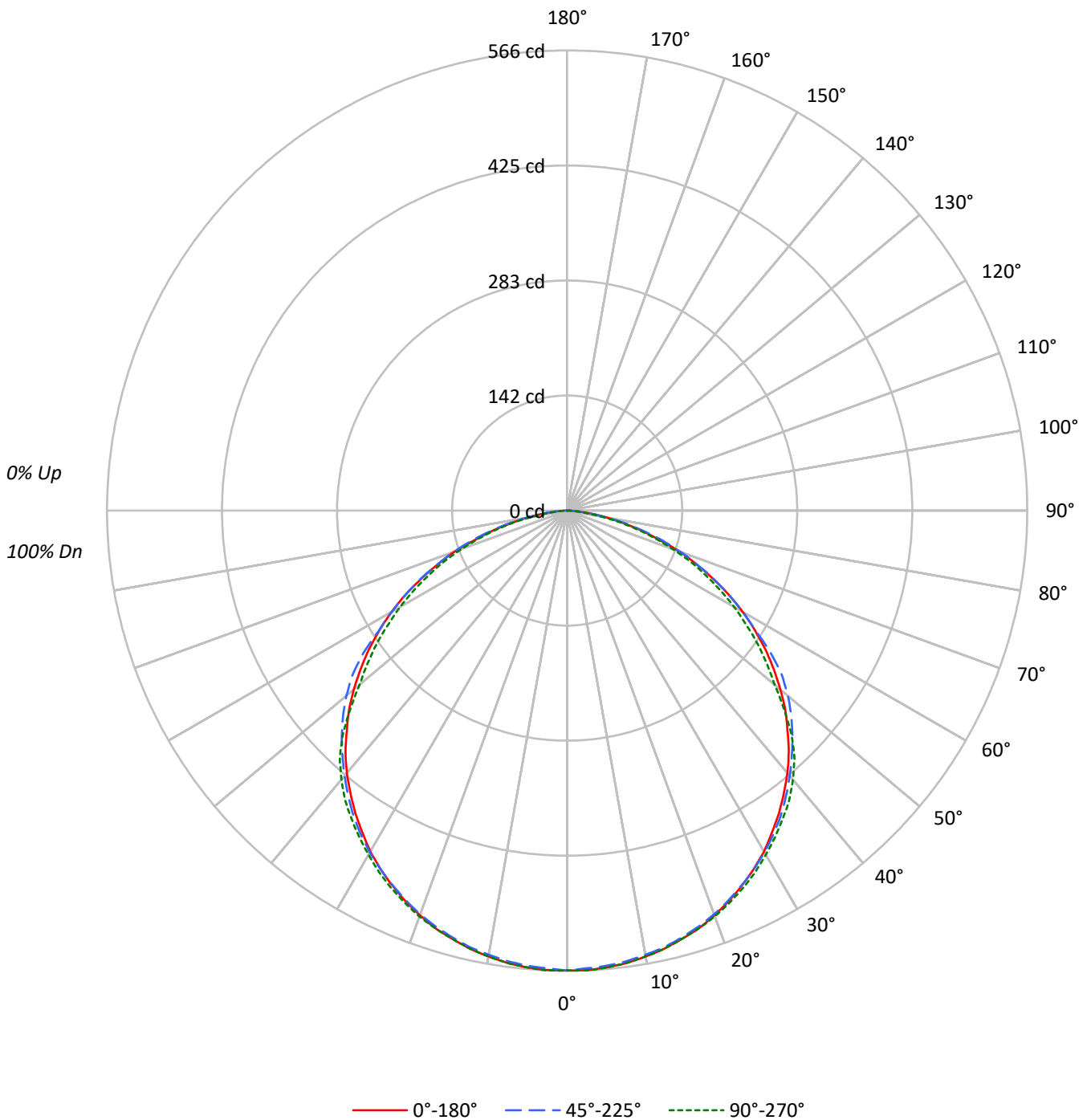
Input Watts (W): 22.599  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1522	1522	1522
5°	1524	1518	1524
10°	1522	1516	1522
15°	1520	1515	1520
20°	1517	1513	1521
25°	1511	1509	1521
30°	1505	1508	1519
35°	1492	1505	1519
40°	1481	1496	1517
45°	1459	1492	1486
50°	1433	1484	1394
55°	1396	1437	1342
60°	1343	1340	1278
65°	1259	1266	1196
70°	1156	1168	1083
75°	971	1016	925
80°	770	787	651
85°	506	438	371



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.6	3.3
10°-20°	154.0	9.6
20°-30°	235.1	14.6
30°-40°	286.8	17.8
40°-50°	300.0	18.6
50°-60°	265.6	16.5
60°-70°	195.6	12.1
70°-80°	101.2	6.3
80°-90°	20.2	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°	442.6	27.5
0°-40°	729.5	45.3
0°-60°	1295.0	80.3
0°-90°	1612.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1612.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	566	566	566	566	566	
5°	564	564	562	564	564	54
15°	546	546	544	546	546	154
25°	509	509	508	512	512	235
35°	454	455	458	462	462	284
45°	383	387	392	395	390	296
55°	298	304	306	290	286	265
65°	198	210	199	191	188	196
75°	93	100	98	92	89	100
85°	16	18	14	13	12	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	565.7	565.7	565.7	565.7	565.7
2.5°	565.7	565.7	563.5	565.7	566.2
5°	564.0	564.0	561.9	564.0	564.0
7.5°	561.3	560.8	559.1	561.3	561.3
10°	556.9	556.9	554.8	557.5	556.9
12.5°	552.0	551.5	550.4	552.6	552.0
15°	545.5	545.5	543.8	546.0	545.5
17.5°	538.9	538.4	536.7	538.9	538.9
20°	529.6	529.1	528.5	530.7	531.3
22.5°	519.8	519.3	518.7	522.0	522.0
25°	508.9	508.9	508.3	511.6	512.2
27.5°	496.9	496.9	497.4	501.8	501.2
30°	484.3	484.3	485.4	488.7	488.7
32.5°	469.0	470.1	472.3	476.1	476.1
35°	454.3	455.4	458.1	462.5	462.5
37.5°	437.9	439.5	442.3	447.7	448.8
40°	421.5	422.6	425.9	431.9	431.9
42.5°	403.5	404.6	409.0	415.0	413.9
45°	383.3	386.6	392.0	395.3	390.4
47.5°	364.2	366.4	374.0	370.2	362.0
50°	342.4	346.7	354.4	340.7	333.1
52.5°	320.0	324.9	333.1	314.0	309.6
55°	297.6	303.6	306.3	290.5	286.1
57.5°	273.6	280.1	274.6	265.4	261.0
60°	249.5	257.2	249.0	240.2	237.5
62.5°	224.4	233.2	223.9	216.2	212.4
65°	197.7	209.7	198.8	191.1	187.8
67.5°	171.5	184.0	172.5	166.0	163.8
70°	146.9	154.0	148.5	142.0	137.6
72.5°	117.4	124.5	123.4	116.3	113.6
75°	93.4	99.9	97.7	91.7	89.0
77.5°	69.3	76.4	74.3	67.2	66.1
80°	49.7	54.6	50.8	44.2	42.0
82.5°	31.1	34.9	30.0	25.1	24.0
85°	16.4	17.5	14.2	12.6	12.0
87.5°	5.5	6.0	6.0	5.5	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)