

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: P259172

Luminaire Tested: **14CZ-LD5-29-SQP-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259172  
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-L92765-W2A1-U-2700K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1486.0 lumens  
Efficiency: N/A  
Efficacy: 67.4 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

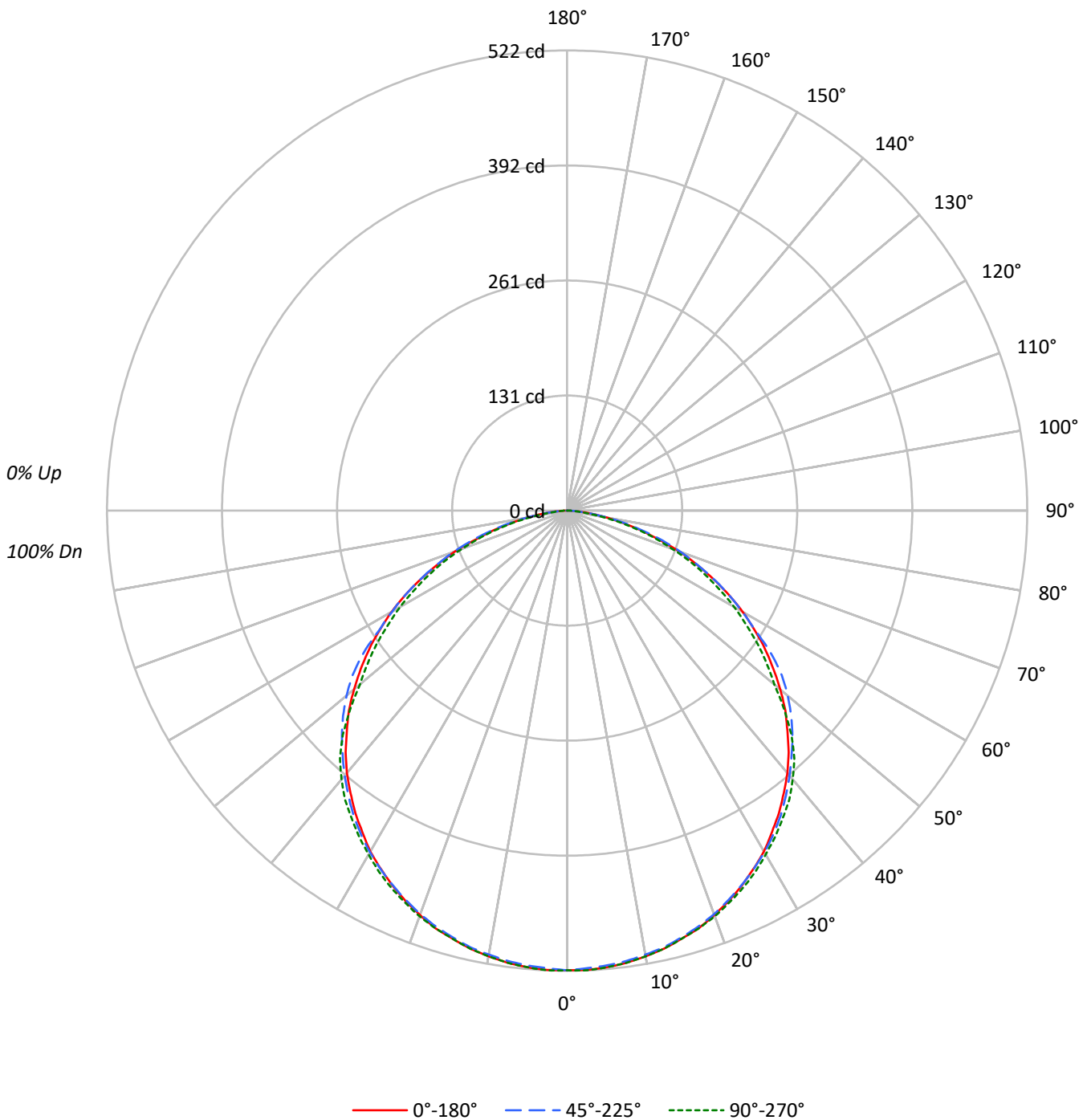
Input Watts (W): 22.041  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P259172

CATALOG NUMBER: 14CZ-LD5-29-SQP-UNV-L92765-W2A1-U-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P259172

CATALOG NUMBER: 14CZ-LD5-29-SQP-UNV-L92765-W2A1-U-2700K

**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°	1403	1403	1403
5°	1405	1399	1405
10°	1403	1397	1403
15°	1401	1397	1401
20°	1398	1395	1403
25°	1393	1391	1402
30°	1387	1391	1400
35°	1376	1387	1400
40°	1365	1379	1398
45°	1345	1375	1370
50°	1321	1368	1285
55°	1287	1325	1238
60°	1238	1235	1179
65°	1160	1167	1103
70°	1065	1077	998
75°	895	937	853
80°	710	725	601
85°	466	404	343



TEST NUMBER: P259172

CATALOG NUMBER: 14CZ-LD5-29-SQP-UNV-L92765-W2A1-U-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.4	3.3
10°-20°	141.9	9.6
20°-30°	216.7	14.6
30°-40°	264.4	17.8
40°-50°	276.5	18.6
50°-60°	244.8	16.5
60°-70°	180.3	12.1
70°-80°	93.3	6.3
80°-90°	18.6	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°	408.0	27.5
0°-40°	672.5	45.3
0°-60°	1193.8	80.3
0°-90°	1486.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1486.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	522	522	522	522	522	
5°	520	520	518	520	520	49
15°	503	503	501	503	503	142
25°	469	469	469	472	472	216
35°	419	420	422	426	426	262
45°	353	356	361	364	360	273
55°	274	280	282	268	264	245
65°	182	193	183	176	173	180
75°	86	92	90	85	82	92
85°	15	16	13	12	11	19
90°	0	0	0	0	0	



TEST NUMBER: P259172

CATALOG NUMBER: 14CZ-LD5-29-SQP-UNV-L92765-W2A1-U-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	521.5	521.5	521.5	521.5	521.5
2.5°	521.5	521.5	519.5	521.5	522.0
5°	520.0	520.0	517.9	520.0	520.0
7.5°	517.4	516.9	515.4	517.4	517.4
10°	513.4	513.4	511.4	513.9	513.4
12.5°	508.9	508.4	507.4	509.4	508.9
15°	502.8	502.8	501.3	503.3	502.8
17.5°	496.8	496.3	494.8	496.8	496.8
20°	488.2	487.7	487.2	489.2	489.8
22.5°	479.2	478.7	478.2	481.2	481.2
25°	469.1	469.1	468.6	471.6	472.1
27.5°	458.0	458.0	458.5	462.6	462.1
30°	446.5	446.5	447.5	450.5	450.5
32.5°	432.4	433.4	435.4	438.9	438.9
35°	418.8	419.8	422.3	426.3	426.3
37.5°	403.7	405.2	407.7	412.7	413.7
40°	388.6	389.6	392.6	398.1	398.1
42.5°	372.0	373.0	377.0	382.5	381.5
45°	353.3	356.4	361.4	364.4	359.9
47.5°	335.7	337.7	344.8	341.3	333.7
50°	315.6	319.6	326.7	314.1	307.0
52.5°	295.0	299.5	307.0	289.4	285.4
55°	274.3	279.9	282.4	267.8	263.8
57.5°	252.2	258.2	253.2	244.6	240.6
60°	230.0	237.1	229.5	221.5	219.0
62.5°	206.9	214.9	206.4	199.3	195.8
65°	182.2	193.3	183.2	176.2	173.2
67.5°	158.0	169.6	159.1	153.0	151.0
70°	135.4	141.9	136.9	130.9	126.8
72.5°	108.2	114.8	113.8	107.2	104.7
75°	86.1	92.1	90.1	84.6	82.0
77.5°	63.9	70.5	68.5	61.9	60.9
80°	45.8	50.3	46.8	40.8	38.8
82.5°	28.7	32.2	27.7	23.2	22.1
85°	15.1	16.1	13.1	11.6	11.1
87.5°	5.0	5.5	5.5	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)