

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: P258711

Luminaire Tested: **14CZ-LD5-25-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258711  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-25-S-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2634.7 lumens  
Efficiency: N/A  
Efficacy: 140.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

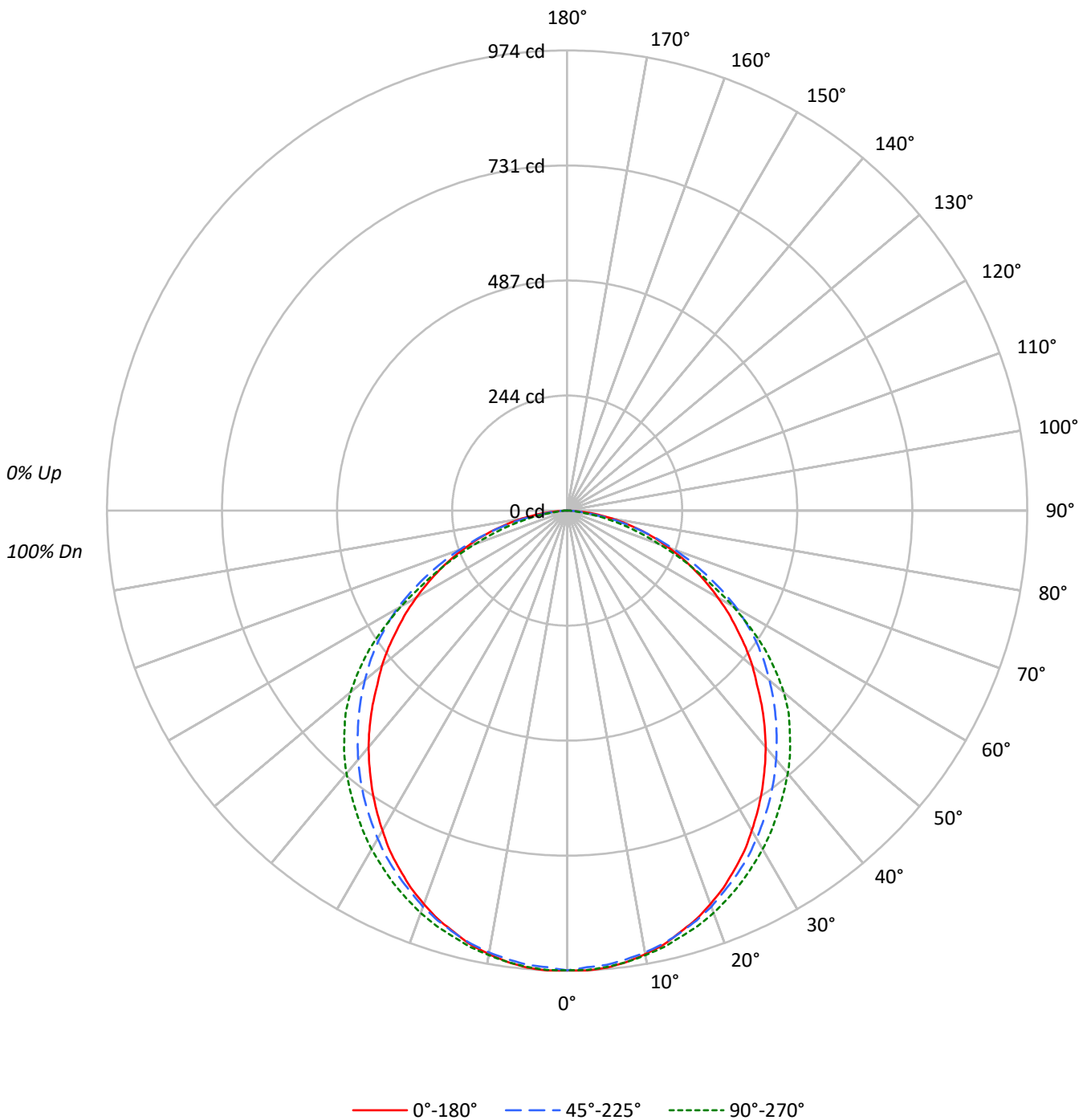
Input Watts (W): 18.693  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P258711

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L83050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P258711

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L83050-W2A1-U-4000K

**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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2619	2619	2619
5°	2623	2607	2619
10°	2605	2595	2611
15°	2574	2577	2600
20°	2538	2555	2595
25°	2489	2524	2583
30°	2430	2491	2572
35°	2364	2457	2557
40°	2297	2417	2553
45°	2216	2377	2538
50°	2143	2339	2506
55°	2060	2302	2396
60°	1984	2237	2186
65°	1899	2093	1921
70°	1792	1902	1626
75°	1672	1648	1342
80°	1474	1274	982
85°	1161	618	543



TEST NUMBER: P258711

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L83050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.0	3.5
10°-20°	262.0	9.9
20°-30°	393.2	14.9
30°-40°	468.7	17.8
40°-50°	482.8	18.3
50°-60°	430.3	16.3
60°-70°	310.0	11.8
70°-80°	162.1	6.2
80°-90°	33.5	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°	747.1	28.4
0°-40°	1215.9	46.1
0°-60°	2129.0	80.8
0°-90°	2634.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2634.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	971	968	965	971	970	92
15°	924	925	925	934	933	261
25°	838	843	850	866	870	386
35°	720	729	748	772	778	450
45°	582	595	625	660	667	449
55°	439	453	491	513	511	394
65°	298	309	329	314	302	295
75°	161	169	158	137	129	170
85°	38	33	20	18	18	44
90°	0	0	0	0	0	



TEST NUMBER: P258711

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L83050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	973.2	973.2	973.2	973.2	973.2
2.5°	974.4	972.1	967.4	973.2	973.2
5°	970.9	968.5	965.0	970.9	969.7
7.5°	963.9	961.5	958.0	965.0	963.9
10°	953.3	952.1	949.8	956.8	955.6
12.5°	941.5	940.4	939.2	946.2	946.2
15°	923.9	925.1	925.1	934.5	933.3
17.5°	907.5	908.7	909.8	921.6	921.6
20°	886.4	887.5	892.2	905.2	906.3
22.5°	864.1	865.2	871.1	886.4	888.7
25°	838.2	842.9	850.0	866.4	869.9
27.5°	812.4	815.9	827.7	846.5	848.8
30°	781.9	788.9	801.8	823.0	827.7
32.5°	751.4	759.6	774.8	798.3	804.2
35°	719.7	729.1	747.8	772.5	778.4
37.5°	686.8	695.0	718.5	744.3	752.5
40°	653.9	662.1	688.0	717.3	726.7
42.5°	618.7	630.4	656.3	689.1	698.5
45°	582.3	595.2	624.6	659.8	666.8
47.5°	544.7	558.8	592.9	628.1	636.3
50°	511.9	524.8	558.8	592.9	598.7
52.5°	476.6	488.4	526.0	554.1	555.3
55°	439.1	453.2	490.7	513.0	510.7
57.5°	405.0	416.8	453.2	464.9	457.9
60°	368.6	379.2	415.6	416.8	406.2
62.5°	333.4	344.0	372.2	363.9	351.0
65°	298.2	308.8	328.7	313.5	301.7
67.5°	264.1	273.5	285.3	265.3	253.6
70°	227.8	240.7	241.8	218.4	206.6
72.5°	196.1	203.1	200.8	178.4	167.9
75°	160.8	169.1	158.5	137.4	129.1
77.5°	128.0	133.8	119.7	99.8	93.9
80°	95.1	98.6	82.2	66.9	63.4
82.5°	64.6	64.6	47.0	36.4	32.9
85°	37.6	32.9	20.0	17.6	17.6
87.5°	12.9	8.2	8.2	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)