

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: P259067

Luminaire Tested: **14CZ-LD5-44-SQP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259067  
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-LD5-44-SQP-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2954.0 lumens  
Efficiency: N/A  
Efficacy: 81.0 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

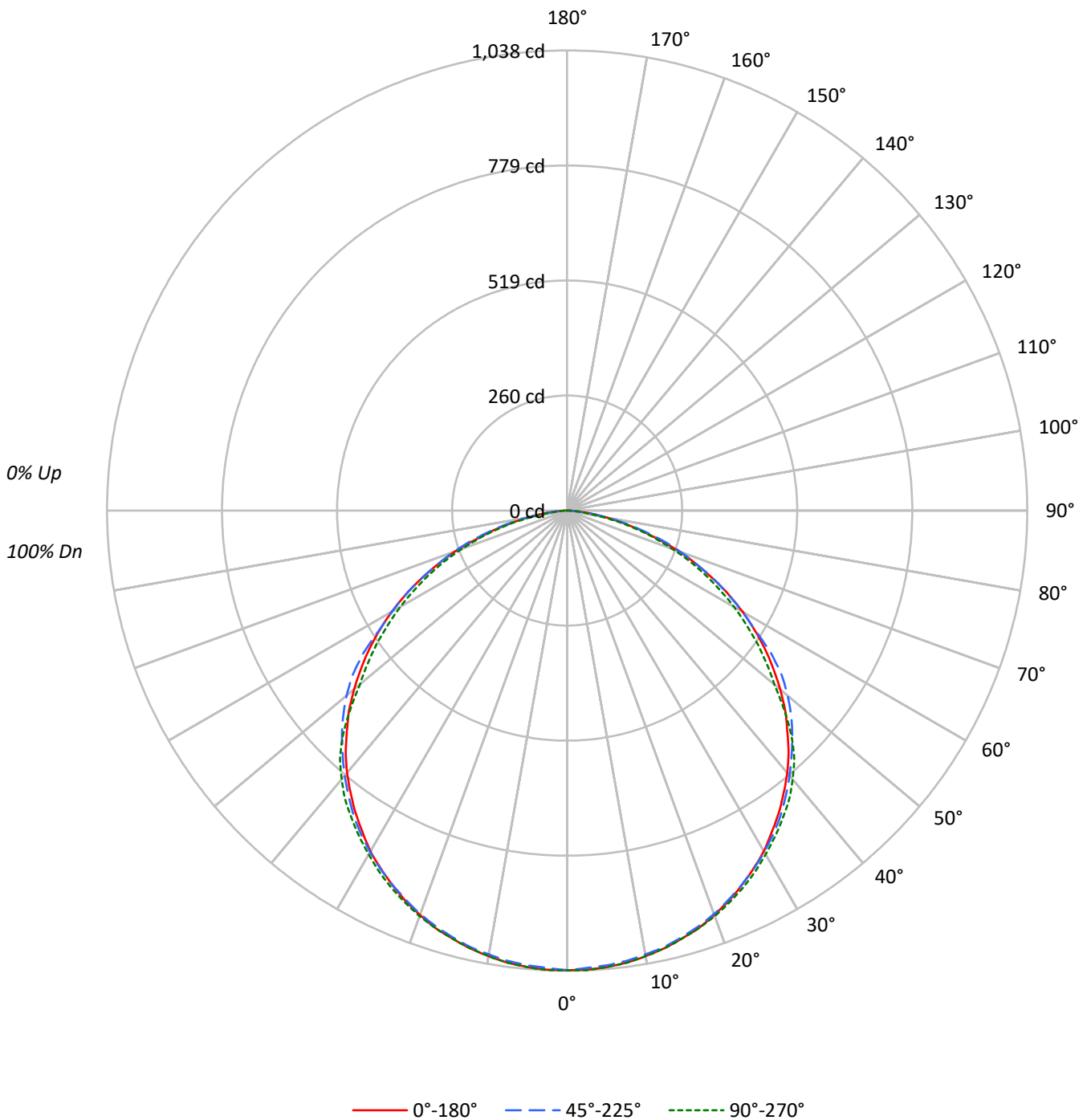
Input Watts (W): 36.456  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2789	2789	2789
5°	2792	2781	2792
10°	2789	2778	2789
15°	2785	2776	2785
20°	2779	2774	2788
25°	2769	2766	2787
30°	2758	2764	2783
35°	2735	2758	2784
40°	2714	2742	2780
45°	2673	2734	2723
50°	2627	2719	2555
55°	2558	2633	2460
60°	2461	2456	2343
65°	2306	2319	2192
70°	2118	2142	1983
75°	1779	1862	1696
80°	1412	1443	1193
85°	926	803	679



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.2	3.3
10°-20°	282.2	9.6
20°-30°	430.8	14.6
30°-40°	525.7	17.8
40°-50°	549.7	18.6
50°-60°	486.6	16.5
60°-70°	358.4	12.1
70°-80°	185.5	6.3
80°-90°	37.0	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°	811.2	27.5
0°-40°	1336.8	45.3
0°-60°	2373.2	80.3
0°-90°	2954.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2954.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1037	1037	1037	1037	1037	
5°	1034	1034	1030	1034	1034	98
15°	1000	1000	997	1001	1000	282
25°	932	932	932	938	939	430
35°	832	834	840	848	848	521
45°	702	708	718	724	715	542
55°	545	556	561	532	524	486
65°	362	384	364	350	344	359
75°	171	183	179	168	163	183
85°	30	32	26	23	22	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1036.6	1036.6	1036.6	1036.6	1036.6
2.5°	1036.6	1036.6	1032.6	1036.6	1037.6
5°	1033.6	1033.6	1029.6	1033.6	1033.6
7.5°	1028.6	1027.6	1024.6	1028.6	1028.6
10°	1020.6	1020.6	1016.6	1021.6	1020.6
12.5°	1011.6	1010.6	1008.6	1012.6	1011.6
15°	999.6	999.6	996.6	1000.6	999.6
17.5°	987.6	986.6	983.6	987.6	987.6
20°	970.6	969.6	968.6	972.6	973.6
22.5°	952.6	951.6	950.6	956.6	956.6
25°	932.5	932.5	931.5	937.6	938.6
27.5°	910.5	910.5	911.5	919.5	918.5
30°	887.5	887.5	889.5	895.5	895.5
32.5°	859.5	861.5	865.5	872.5	872.5
35°	832.5	834.5	839.5	847.5	847.5
37.5°	802.5	805.5	810.5	820.5	822.5
40°	772.5	774.5	780.5	791.5	791.5
42.5°	739.4	741.4	749.4	760.4	758.4
45°	702.4	708.4	718.4	724.4	715.4
47.5°	667.4	671.4	685.4	678.4	663.4
50°	627.4	635.4	649.4	624.4	610.4
52.5°	586.3	595.4	610.4	575.3	567.3
55°	545.3	556.3	561.3	532.3	524.3
57.5°	501.3	513.3	503.3	486.3	478.3
60°	457.3	471.3	456.3	440.3	435.3
62.5°	411.2	427.3	410.2	396.2	389.2
65°	362.2	384.2	364.2	350.2	344.2
67.5°	314.2	337.2	316.2	304.2	300.2
70°	269.2	282.2	272.2	260.2	252.1
72.5°	215.1	228.1	226.1	213.1	208.1
75°	171.1	183.1	179.1	168.1	163.1
77.5°	127.1	140.1	136.1	123.1	121.1
80°	91.1	100.1	93.1	81.0	77.0
82.5°	57.0	64.0	55.0	46.0	44.0
85°	30.0	32.0	26.0	23.0	22.0
87.5°	10.0	11.0	11.0	10.0	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)