

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: P258828

Luminaire Tested: **14CZ-LD5-25-S-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258828  
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-L92765-W2A1-U-3000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2045.0 lumens  
Efficiency: N/A  
Efficacy: 113.3 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

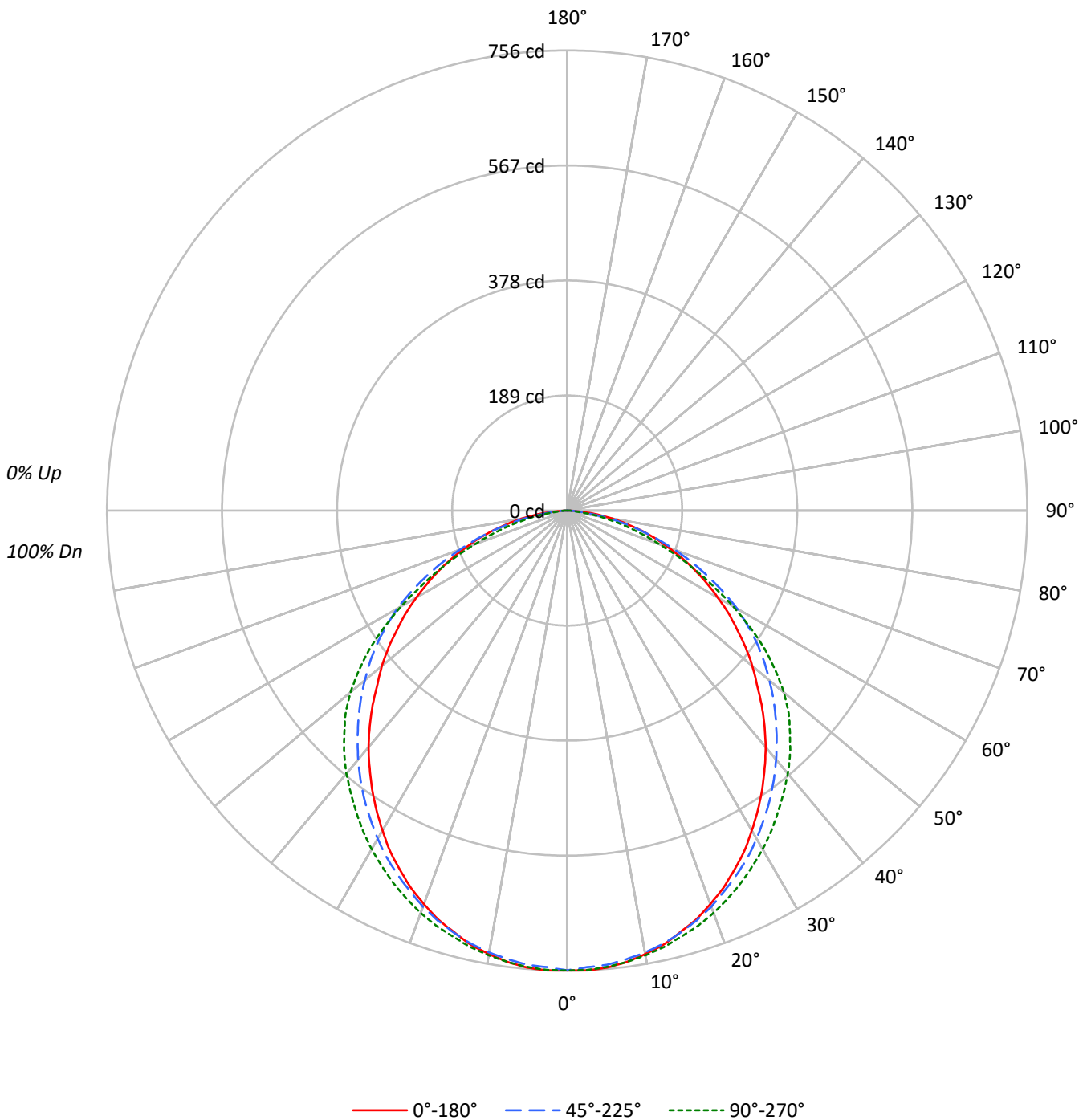
Input Watts (W): 18.042  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85					85			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

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

	0°	45°	90°
0°	2033	2033	2033
5°	2036	2023	2033
10°	2022	2014	2027
15°	1998	2001	2018
20°	1970	1983	2015
25°	1932	1959	2005
30°	1886	1934	1996
35°	1835	1907	1985
40°	1783	1876	1982
45°	1720	1845	1970
50°	1663	1816	1945
55°	1599	1787	1860
60°	1540	1736	1697
65°	1474	1624	1491
70°	1391	1477	1262
75°	1298	1279	1042
80°	1144	989	762
85°	902	479	423



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.4	3.5
10°-20°	203.4	9.9
20°-30°	305.2	14.9
30°-40°	363.8	17.8
40°-50°	374.8	18.3
50°-60°	334.0	16.3
60°-70°	240.6	11.8
70°-80°	125.8	6.2
80°-90°	26.0	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°	579.9	28.4
0°-40°	943.7	46.1
0°-60°	1652.5	80.8
0°-90°	2045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2045.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	755	755	755	755	755	
5°	754	752	749	754	753	71
15°	717	718	718	725	724	202
25°	651	654	660	672	675	300
35°	559	566	580	600	604	349
45°	452	462	485	512	518	349
55°	341	352	381	398	396	306
65°	232	240	255	243	234	229
75°	125	131	123	107	100	132
85°	29	26	16	14	14	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	755.4	755.4	755.4	755.4	755.4
2.5°	756.3	754.5	750.9	755.4	755.4
5°	753.6	751.8	749.0	753.6	752.7
7.5°	748.1	746.3	743.6	749.0	748.1
10°	739.9	739.0	737.2	742.7	741.8
12.5°	730.8	729.9	729.0	734.5	734.5
15°	717.2	718.1	718.1	725.4	724.4
17.5°	704.4	705.3	706.2	715.3	715.3
20°	688.0	688.9	692.5	702.6	703.5
22.5°	670.7	671.6	676.1	688.0	689.8
25°	650.6	654.3	659.7	672.5	675.2
27.5°	630.6	633.3	642.4	657.0	658.8
30°	606.9	612.4	622.4	638.8	642.4
32.5°	583.2	589.6	601.4	619.6	624.2
35°	558.6	565.9	580.5	599.6	604.2
37.5°	533.1	539.5	557.7	577.7	584.1
40°	507.6	513.9	534.0	556.8	564.1
42.5°	480.2	489.3	509.4	534.9	542.2
45°	452.0	462.0	484.8	512.1	517.6
47.5°	422.8	433.8	460.2	487.5	493.9
50°	397.3	407.3	433.8	460.2	464.7
52.5°	370.0	379.1	408.2	430.1	431.0
55°	340.8	351.7	380.9	398.2	396.4
57.5°	314.4	323.5	351.7	360.9	355.4
60°	286.1	294.3	322.6	323.5	315.3
62.5°	258.8	267.0	288.9	282.5	272.5
65°	231.5	239.7	255.1	243.3	234.2
67.5°	205.0	212.3	221.4	205.9	196.8
70°	176.8	186.8	187.7	169.5	160.4
72.5°	152.2	157.6	155.8	138.5	130.3
75°	124.8	131.2	123.0	106.6	100.2
77.5°	99.3	103.9	92.9	77.5	72.9
80°	73.8	76.5	63.8	51.9	49.2
82.5°	50.1	50.1	36.4	28.2	25.5
85°	29.2	25.5	15.5	13.7	13.7
87.5°	10.0	6.4	6.4	6.4	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)