

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: P230913

Luminaire Tested: **14CZ-LD5-25-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230913  
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-L935-CD1-U  
Description: CRUZE 1x4 LED TROFFER  
WITH SMOOTH LENS  
Light Source: (84) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2199.0 lumens  
Efficiency: N/A  
Efficacy: 107.3 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

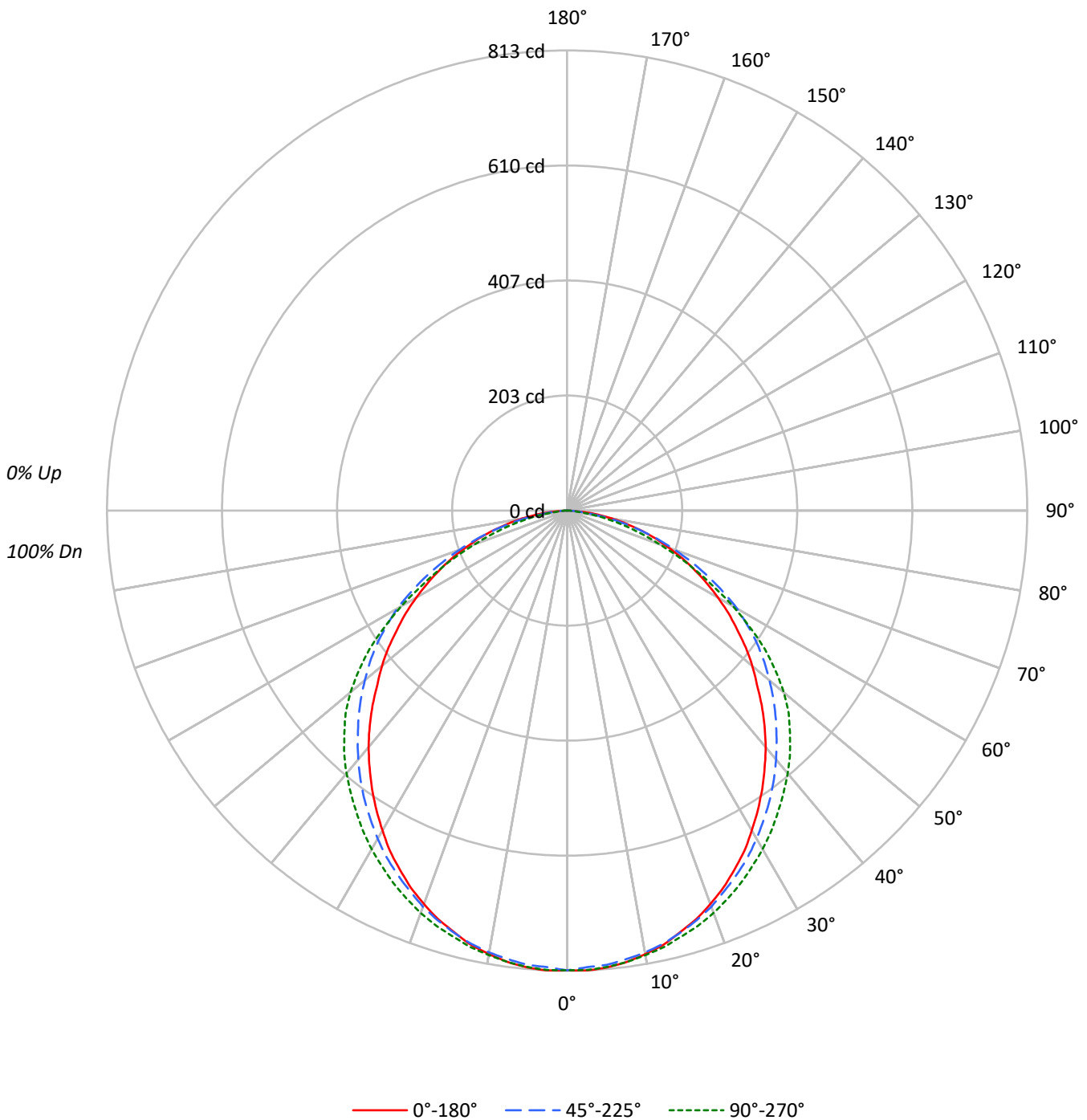
Input Watts (W): 20.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2186	2186	2186
5°	2189	2176	2186
10°	2174	2166	2179
15°	2148	2151	2170
20°	2119	2133	2166
25°	2077	2106	2156
30°	2028	2080	2147
35°	1973	2051	2134
40°	1917	2017	2131
45°	1850	1984	2118
50°	1788	1953	2092
55°	1719	1922	2000
60°	1656	1867	1824
65°	1585	1747	1603
70°	1496	1589	1357
75°	1395	1376	1121
80°	1230	1063	820
85°	969	516	454



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.8	3.5
10°-20°	218.7	9.9
20°-30°	328.2	14.9
30°-40°	391.2	17.8
40°-50°	403.0	18.3
50°-60°	359.1	16.3
60°-70°	258.8	11.8
70°-80°	135.3	6.2
80°-90°	28.0	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°	623.6	28.4
0°-40°	1014.8	46.1
0°-60°	1776.9	80.8
0°-90°	2199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2199.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	812	812	812	812	812	
5°	810	808	806	810	809	77
15°	771	772	772	780	779	218
25°	700	704	709	723	726	322
35°	601	608	624	645	650	376
45°	486	497	521	551	557	375
55°	366	378	410	428	426	329
65°	249	258	274	262	252	247
75°	134	141	132	115	108	142
85°	31	27	17	15	15	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	812.3	812.3	812.3	812.3	812.3
2.5°	813.3	811.3	807.4	812.3	812.3
5°	810.4	808.4	805.5	810.4	809.4
7.5°	804.5	802.5	799.6	805.5	804.5
10°	795.7	794.7	792.7	798.6	797.6
12.5°	785.9	784.9	783.9	789.8	789.8
15°	771.2	772.1	772.1	780.0	779.0
17.5°	757.4	758.4	759.4	769.2	769.2
20°	739.8	740.8	744.7	755.5	756.5
22.5°	721.2	722.2	727.1	739.8	741.8
25°	699.6	703.5	709.4	723.1	726.1
27.5°	678.1	681.0	690.8	706.5	708.4
30°	652.6	658.5	669.3	686.9	690.8
32.5°	627.1	634.0	646.7	666.3	671.2
35°	600.7	608.5	624.2	644.8	649.7
37.5°	573.2	580.1	599.7	621.2	628.1
40°	545.8	552.6	574.2	598.7	606.5
42.5°	516.4	526.2	547.7	575.2	583.0
45°	486.0	496.8	521.3	550.7	556.6
47.5°	454.7	466.4	494.8	524.2	531.1
50°	427.2	438.0	466.4	494.8	499.7
52.5°	397.8	407.6	439.0	462.5	463.5
55°	366.5	378.2	409.6	428.2	426.2
57.5°	338.1	347.9	378.2	388.0	382.1
60°	307.7	316.5	346.9	347.9	339.0
62.5°	278.3	287.1	310.6	303.8	293.0
65°	248.9	257.7	274.4	261.6	251.8
67.5°	220.5	228.3	238.1	221.5	211.7
70°	190.1	200.9	201.9	182.3	172.5
72.5°	163.6	169.5	167.6	148.9	140.1
75°	134.2	141.1	132.3	114.6	107.8
77.5°	106.8	111.7	99.9	83.3	78.4
80°	79.4	82.3	68.6	55.9	52.9
82.5°	53.9	53.9	39.2	30.4	27.4
85°	31.4	27.4	16.7	14.7	14.7
87.5°	10.8	6.9	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)