

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: P259270

Luminaire Tested: **22CZ-LD5-20-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259270  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-20-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2110.0 lumens  
Efficiency: N/A  
Efficacy: 135.1 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

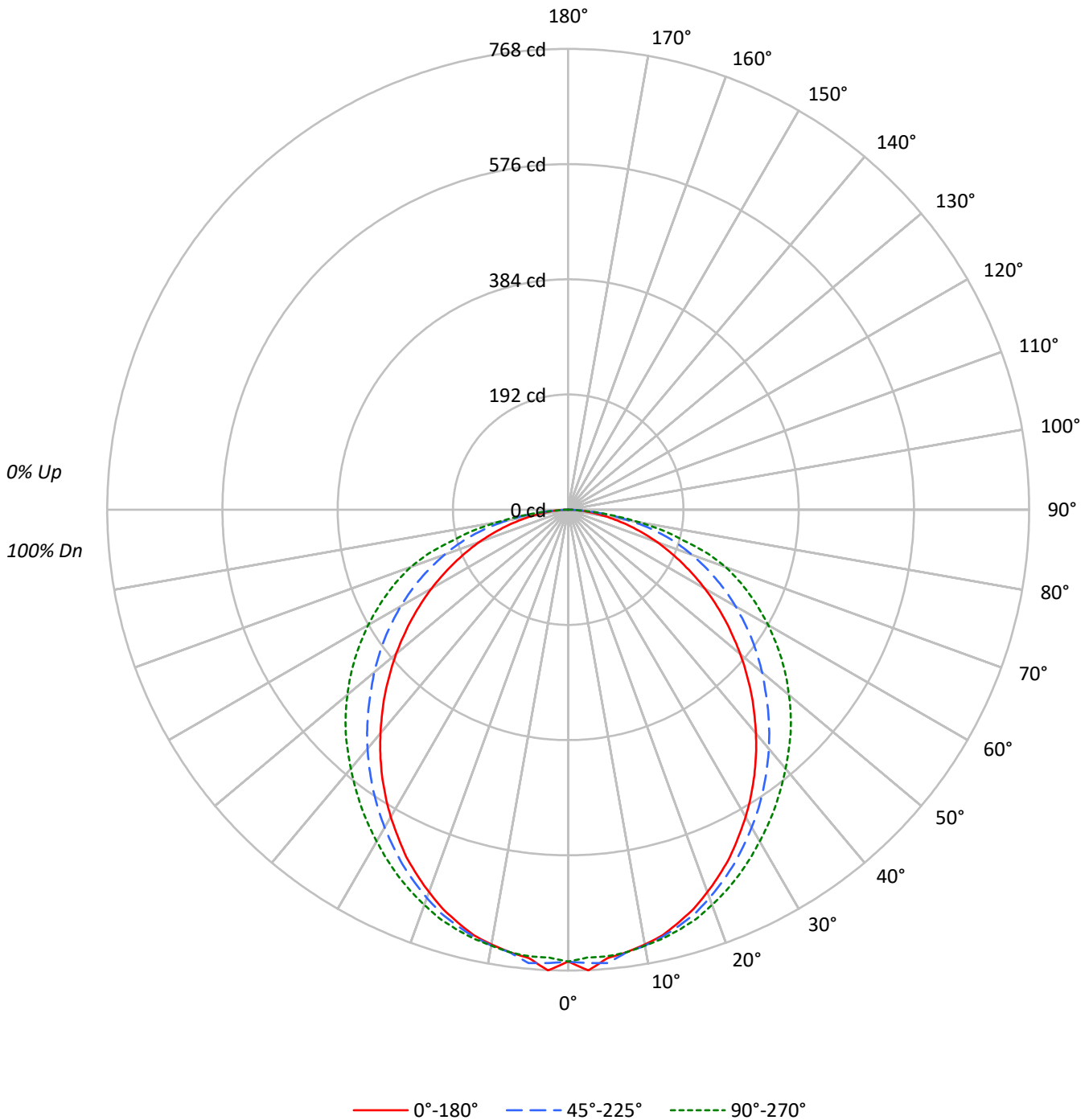
Input Watts (W): 15.624  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	2027	2027	2027
5°	2026	2048	2018
10°	2010	2016	2016
15°	1984	1998	2015
20°	1942	1972	2007
25°	1895	1938	1996
30°	1836	1900	1983
35°	1776	1864	1979
40°	1709	1827	1979
45°	1640	1792	1995
50°	1568	1765	2010
55°	1492	1748	2036
60°	1414	1734	2071
65°	1326	1725	2124
70°	1235	1720	2196
75°	1120	1718	2080
80°	970	1590	1844
85°	824	1204	1173



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.4	3.4
10°-20°	202.3	9.6
20°-30°	301.0	14.3
30°-40°	356.0	16.9
40°-50°	365.9	17.3
50°-60°	334.3	15.8
60°-70°	267.5	12.7
70°-80°	167.9	8.0
80°-90°	43.7	2.1
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°	574.8	27.2
0°-40°	930.7	44.1
0°-60°	1631.0	77.3
0°-90°	2110.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2110.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	753	753	753	753	753	
5°	750	750	758	753	747	71
15°	712	713	717	721	723	201
25°	638	642	653	664	672	293
35°	541	548	567	589	602	338
45°	431	442	471	506	524	332
55°	318	334	372	414	434	285
65°	208	227	271	312	334	207
75°	108	128	165	190	200	114
85°	27	34	39	38	38	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	753.1	753.1	753.1	753.1	753.1
2.5°	768.5	765.4	756.2	750.1	747.0
5°	750.1	750.1	758.3	753.1	747.0
7.5°	743.9	743.9	743.9	759.3	743.9
10°	735.7	736.7	737.7	743.9	737.7
12.5°	726.5	726.5	728.5	730.6	731.6
15°	712.1	713.1	717.2	721.3	723.4
17.5°	696.7	699.8	704.9	710.0	714.1
20°	678.2	682.3	688.5	696.7	700.8
22.5°	658.7	662.8	671.0	680.3	687.5
25°	638.2	642.3	652.6	663.9	672.1
27.5°	614.6	619.7	632.1	647.4	655.7
30°	591.0	597.2	611.5	629.0	638.2
32.5°	566.4	573.6	590.0	609.5	620.8
35°	540.7	547.9	567.4	589.0	602.3
37.5°	514.1	522.3	543.8	568.4	582.8
40°	486.4	495.6	520.2	546.9	563.3
42.5°	458.7	468.9	495.6	527.4	543.8
45°	430.9	442.2	471.0	505.8	524.3
47.5°	402.2	415.6	445.3	484.3	502.8
50°	374.5	387.9	421.7	461.7	480.2
52.5°	345.8	361.2	397.1	438.1	457.6
55°	318.1	333.5	372.5	413.5	434.0
57.5°	290.4	305.8	346.8	388.9	409.4
60°	262.7	279.1	322.2	363.2	384.8
62.5°	235.0	252.4	296.5	338.6	359.1
65°	208.3	226.8	270.9	311.9	333.5
67.5°	182.6	202.1	245.2	285.2	306.8
70°	157.0	176.5	218.6	257.5	279.1
72.5°	132.4	151.9	192.9	227.8	244.2
75°	107.7	128.3	165.2	189.8	200.1
77.5°	84.1	104.7	136.5	152.9	164.2
80°	62.6	80.0	102.6	114.9	119.0
82.5°	43.1	57.5	71.8	74.9	77.0
85°	26.7	33.9	39.0	38.0	38.0
87.5°	12.3	13.3	11.3	8.2	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)