

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: P259278

Luminaire Tested: **22CZ-LD5-24-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259278  
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-LD5-24-UNV-L82765-W2A1-U-3000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2301.0 lumens  
Efficiency: N/A  
Efficacy: 131.6 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

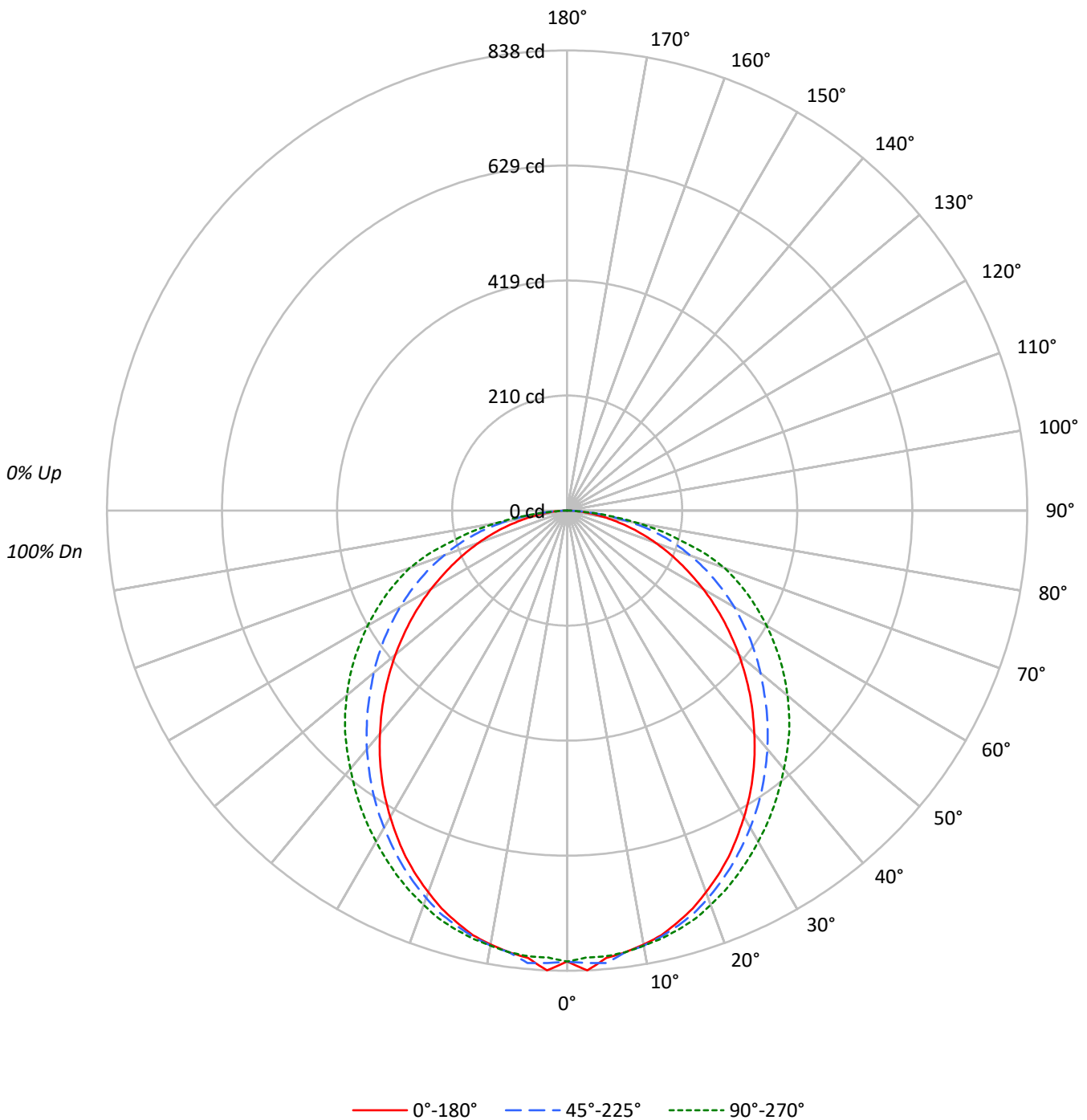
Input Watts (W): 17.484  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2210	2210	2210
5°	2209	2234	2200
10°	2192	2198	2198
15°	2163	2179	2198
20°	2118	2150	2188
25°	2067	2113	2176
30°	2003	2072	2163
35°	1937	2033	2158
40°	1863	1993	2158
45°	1789	1955	2176
50°	1710	1925	2192
55°	1628	1906	2221
60°	1541	1891	2258
65°	1446	1881	2316
70°	1347	1875	2395
75°	1222	1873	2269
80°	1058	1734	2011
85°	898	1312	1278



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.9	3.4
10°-20°	220.6	9.6
20°-30°	328.2	14.3
30°-40°	388.2	16.9
40°-50°	399.0	17.3
50°-60°	364.6	15.8
60°-70°	291.7	12.7
70°-80°	183.0	8.0
80°-90°	47.7	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°	626.8	27.2
0°-40°	1015.0	44.1
0°-60°	1778.6	77.3
0°-90°	2301.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2301.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	821	821	821	821	821	
5°	818	818	827	821	815	78
15°	776	778	782	787	789	219
25°	696	700	712	724	733	320
35°	590	598	619	642	657	369
45°	470	482	514	552	572	362
55°	347	364	406	451	473	310
65°	227	247	295	340	364	225
75°	118	140	180	207	218	125
85°	29	37	42	41	41	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	821.3	821.3	821.3	821.3	821.3
2.5°	838.1	834.7	824.7	817.9	814.6
5°	817.9	817.9	826.9	821.3	814.6
7.5°	811.2	811.2	811.2	828.0	811.2
10°	802.3	803.4	804.5	811.2	804.5
12.5°	792.2	792.2	794.4	796.7	797.8
15°	776.5	777.7	782.1	786.6	788.9
17.5°	759.8	763.1	768.7	774.3	778.8
20°	739.6	744.1	750.8	759.8	764.2
22.5°	718.4	722.8	731.8	741.9	749.7
25°	696.0	700.5	711.6	724.0	732.9
27.5°	670.2	675.8	689.3	706.1	715.0
30°	644.5	651.2	666.9	685.9	696.0
32.5°	617.7	625.5	643.4	664.7	677.0
35°	589.7	597.5	618.8	642.3	656.8
37.5°	560.6	569.5	593.0	619.9	635.6
40°	530.4	540.4	567.3	596.4	614.3
42.5°	500.2	511.4	540.4	575.1	593.0
45°	470.0	482.3	513.6	551.6	571.8
47.5°	438.6	453.2	485.6	528.1	548.3
50°	408.4	423.0	459.9	503.5	523.7
52.5°	377.1	393.9	433.0	477.8	499.0
55°	346.9	363.7	406.2	450.9	473.3
57.5°	316.7	333.4	378.2	424.1	446.5
60°	286.4	304.4	351.3	396.1	419.6
62.5°	256.2	275.3	323.4	369.3	391.6
65°	227.1	247.3	295.4	340.2	363.7
67.5°	199.2	220.4	267.4	311.1	334.6
70°	171.2	192.5	238.3	280.9	304.4
72.5°	144.3	165.6	210.4	248.4	266.3
75°	117.5	139.9	180.1	207.0	218.2
77.5°	91.8	114.1	148.8	166.7	179.0
80°	68.3	87.3	111.9	125.3	129.8
82.5°	47.0	62.7	78.3	81.7	83.9
85°	29.1	36.9	42.5	41.4	41.4
87.5°	13.4	14.5	12.3	9.0	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)