

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: P259212

Luminaire Tested: **22CZ-LD5-20-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259212  
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-L83050-W2A1-U-5000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2290.0 lumens  
Efficiency: N/A  
Efficacy: 140.7 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

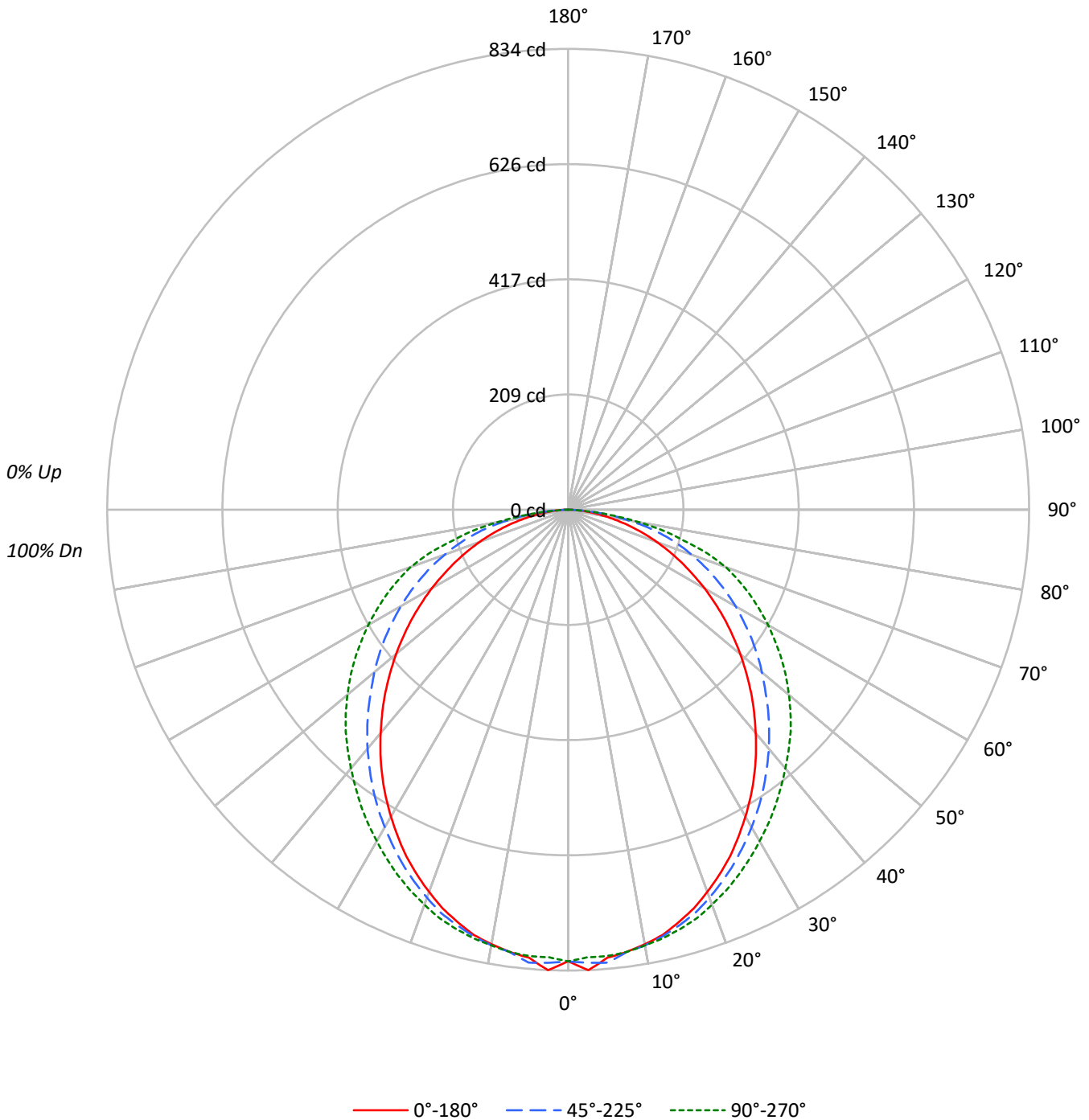
Input Watts (W): 16.275  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2200	2200	2200
5°	2199	2223	2190
10°	2182	2188	2188
15°	2153	2169	2187
20°	2108	2140	2178
25°	2057	2103	2166
30°	1993	2062	2152
35°	1928	2023	2147
40°	1854	1983	2148
45°	1780	1945	2165
50°	1702	1916	2182
55°	1620	1896	2210
60°	1534	1882	2248
65°	1440	1872	2304
70°	1341	1866	2383
75°	1215	1864	2258
80°	1052	1726	2002
85°	895	1306	1272



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.5	3.4
10°-20°	219.6	9.6
20°-30°	326.7	14.3
30°-40°	386.3	16.9
40°-50°	397.1	17.3
50°-60°	362.9	15.8
60°-70°	290.3	12.7
70°-80°	182.2	8.0
80°-90°	47.5	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°	623.8	27.2
0°-40°	1010.1	44.1
0°-60°	1770.1	77.3
0°-90°	2290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2290.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	817	817	817	817	817	
5°	814	814	823	817	811	77
15°	773	774	778	783	785	218
25°	693	697	708	720	729	318
35°	587	595	616	639	654	367
45°	468	480	511	549	569	361
55°	345	362	404	449	471	309
65°	226	246	294	338	362	224
75°	117	139	179	206	217	124
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°	817.4	817.4	817.4	817.4	817.4
2.5°	834.1	830.7	820.7	814.0	810.7
5°	814.0	814.0	822.9	817.4	810.7
7.5°	807.4	807.4	807.4	824.1	807.4
10°	798.4	799.6	800.7	807.4	800.7
12.5°	788.4	788.4	790.7	792.9	794.0
15°	772.8	773.9	778.4	782.9	785.1
17.5°	756.1	759.5	765.0	770.6	775.1
20°	736.1	740.5	747.2	756.1	760.6
22.5°	714.9	719.4	728.3	738.3	746.1
25°	692.7	697.1	708.2	720.5	729.4
27.5°	667.0	672.6	686.0	702.7	711.6
30°	641.4	648.1	663.7	682.6	692.7
32.5°	614.7	622.5	640.3	661.5	673.7
35°	586.9	594.7	615.8	639.2	653.7
37.5°	557.9	566.8	590.2	616.9	632.5
40°	527.8	537.9	564.6	593.5	611.4
42.5°	497.8	508.9	537.9	572.4	590.2
45°	467.7	480.0	511.1	549.0	569.0
47.5°	436.5	451.0	483.3	525.6	545.7
50°	406.5	420.9	457.7	501.1	521.2
52.5°	375.3	392.0	431.0	475.5	496.7
55°	345.2	361.9	404.2	448.8	471.1
57.5°	315.1	331.9	376.4	422.1	444.3
60°	285.1	302.9	349.7	394.2	417.6
62.5°	255.0	273.9	321.8	367.5	389.8
65°	226.1	246.1	294.0	338.5	361.9
67.5°	198.2	219.4	266.1	309.6	333.0
70°	170.4	191.5	237.2	279.5	302.9
72.5°	143.7	164.8	209.4	247.2	265.0
75°	116.9	139.2	179.3	206.0	217.2
77.5°	91.3	113.6	148.1	165.9	178.2
80°	67.9	86.9	111.4	124.7	129.2
82.5°	46.8	62.4	78.0	81.3	83.5
85°	29.0	36.7	42.3	41.2	41.2
87.5°	13.4	14.5	12.2	8.9	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)