

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: P259444

Luminaire Tested: **22CZ-LD5-20-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259444  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-20-S-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2303.0 lumens  
Efficiency: N/A  
Efficacy: 142.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

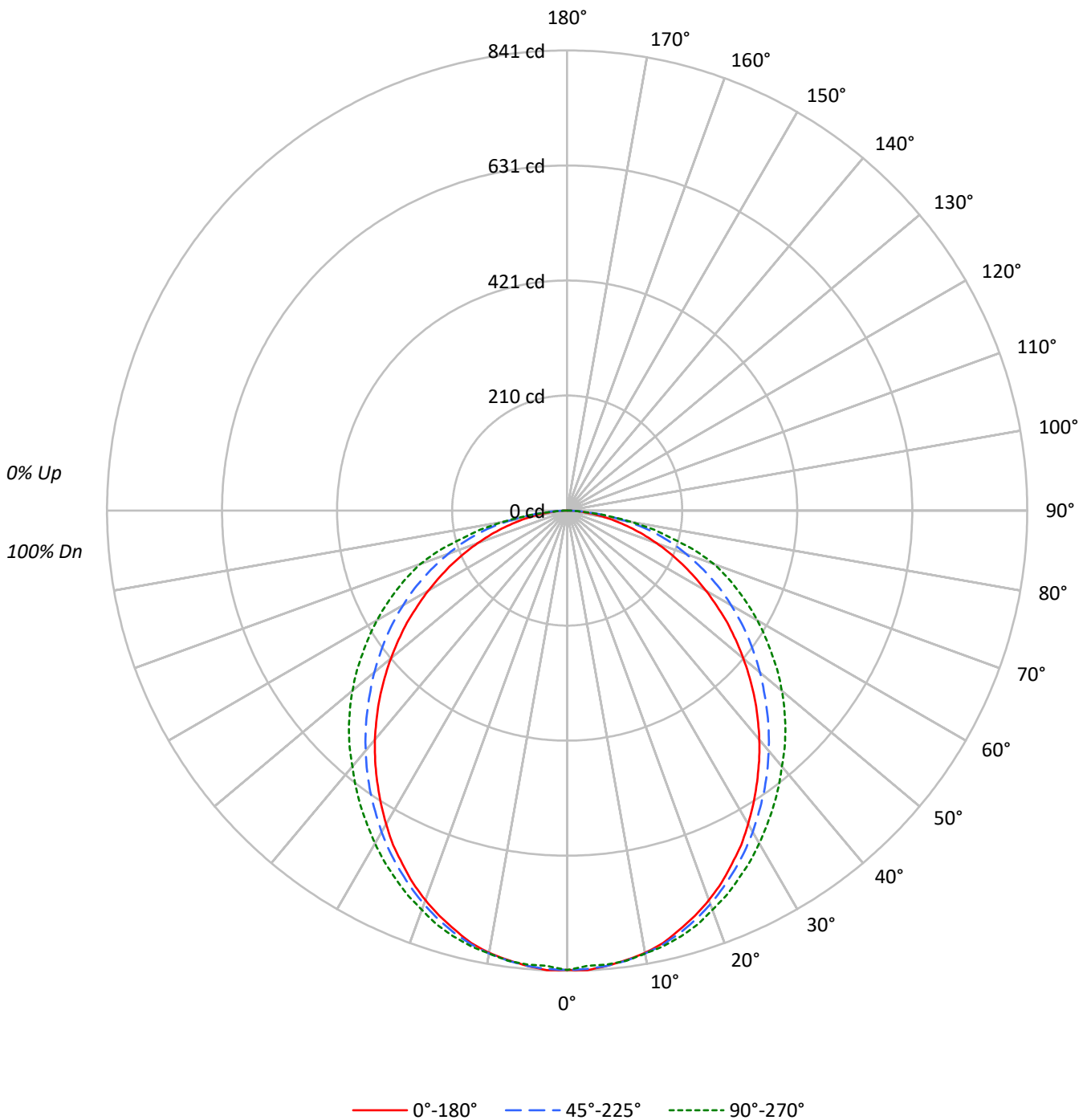
Input Watts (W): 16.182  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2259	2259	2259
5°	2256	2256	2250
10°	2243	2246	2246
15°	2210	2225	2243
20°	2170	2192	2224
25°	2115	2151	2204
30°	2055	2107	2183
35°	1988	2060	2162
40°	1919	2013	2145
45°	1844	1966	2147
50°	1760	1927	2144
55°	1676	1894	2143
60°	1577	1863	2161
65°	1479	1838	2190
70°	1367	1819	2245
75°	1231	1806	2082
80°	1080	1680	1818
85°	889	1263	1127



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.3	3.4
10°-20°	225.2	9.8
20°-30°	334.5	14.5
30°-40°	393.8	17.1
40°-50°	401.4	17.4
50°-60°	362.1	15.7
60°-70°	285.2	12.4
70°-80°	175.9	7.6
80°-90°	45.7	2.0
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°	639.0	27.7
0°-40°	1032.8	44.8
0°-60°	1796.3	78.0
0°-90°	2303.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2303.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	840	840	840	840	840	
5°	835	836	835	834	833	79
15°	793	796	799	803	805	224
25°	712	717	724	737	742	328
35°	605	612	627	647	658	379
45°	484	492	517	548	564	373
55°	357	370	404	440	457	319
65°	232	249	289	325	344	230
75°	118	138	174	194	200	126
85°	29	36	41	39	36	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	839.6	839.6	839.6	839.6	839.6
2.5°	840.7	840.7	838.5	836.3	832.9
5°	835.2	836.3	835.2	834.0	832.9
7.5°	828.5	829.6	829.6	829.6	829.6
10°	820.8	821.9	821.9	821.9	821.9
12.5°	809.7	810.8	811.9	813.0	815.2
15°	793.1	796.4	798.7	803.1	805.3
17.5°	776.5	779.8	783.2	788.7	793.1
20°	757.7	759.9	765.5	772.1	776.5
22.5°	736.7	740.0	745.6	754.4	761.0
25°	712.4	716.8	724.5	736.7	742.2
27.5°	689.1	692.5	702.4	715.7	723.4
30°	661.5	665.9	678.1	694.7	702.4
32.5°	633.8	639.4	652.6	671.4	680.3
35°	605.1	611.7	627.2	647.1	658.2
37.5°	576.3	582.9	600.6	622.8	634.9
40°	546.4	553.1	573.0	597.3	610.6
42.5°	515.5	523.2	545.3	573.0	588.5
45°	484.5	492.2	516.6	547.6	564.1
47.5°	452.4	461.3	487.8	522.1	538.7
50°	420.3	430.3	460.2	495.6	512.2
52.5°	388.3	399.3	431.4	467.9	485.6
55°	357.3	369.5	403.8	440.3	456.8
57.5°	324.1	338.5	375.0	410.4	429.2
60°	293.1	308.6	346.2	381.6	401.5
62.5°	262.2	278.8	318.6	354.0	372.8
65°	232.3	248.9	288.7	325.2	344.0
67.5°	202.4	221.2	259.9	296.5	315.3
70°	173.7	193.6	231.2	266.6	285.4
72.5°	146.0	165.9	203.5	236.7	247.8
75°	118.4	138.3	173.7	193.6	200.2
77.5°	92.9	111.7	142.7	154.9	163.7
80°	69.7	86.3	108.4	116.1	117.3
82.5°	47.6	61.9	75.2	76.3	75.2
85°	28.8	36.5	40.9	38.7	36.5
87.5°	13.3	14.4	13.3	8.8	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)