

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: P259443

Luminaire Tested: **22CZ-LD5-20-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259443  
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-5700K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2297.0 lumens  
Efficiency: N/A  
Efficacy: 143.6 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

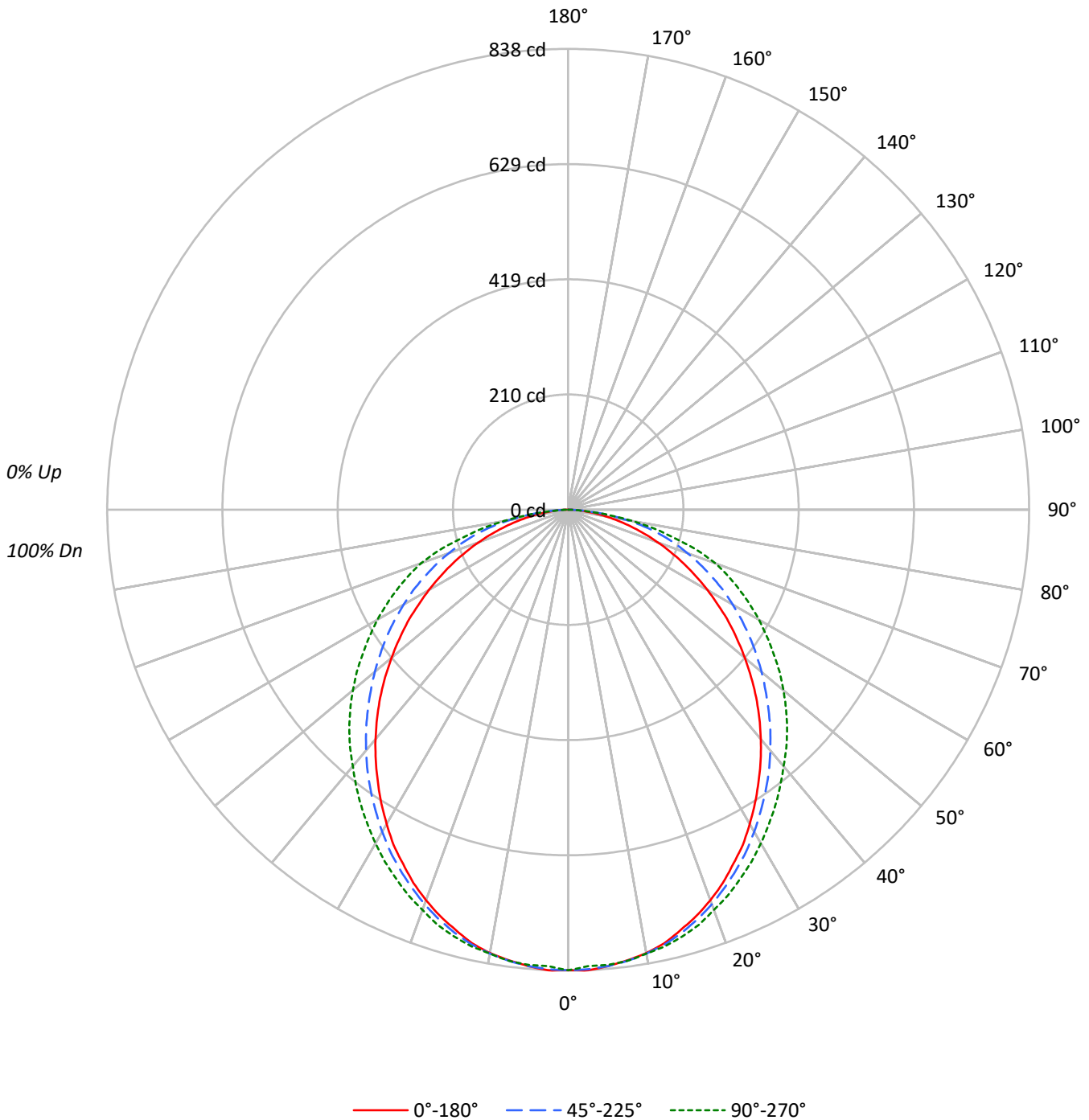
Input Watts (W): 15.996  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2253	2253	2253
5°	2250	2250	2244
10°	2237	2240	2240
15°	2204	2219	2238
20°	2164	2186	2218
25°	2110	2146	2198
30°	2050	2101	2177
35°	1983	2055	2157
40°	1914	2008	2139
45°	1839	1961	2141
50°	1755	1922	2138
55°	1672	1889	2138
60°	1574	1858	2155
65°	1475	1834	2185
70°	1363	1814	2239
75°	1228	1801	2076
80°	1077	1675	1812
85°	886	1260	1124



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.1	3.4
10°-20°	224.6	9.8
20°-30°	333.6	14.5
30°-40°	392.7	17.1
40°-50°	400.4	17.4
50°-60°	361.1	15.7
60°-70°	284.4	12.4
70°-80°	175.4	7.6
80°-90°	45.5	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°	637.4	27.7
0°-40°	1030.1	44.8
0°-60°	1791.6	78.0
0°-90°	2297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2297.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	837	837	837	837	837	
5°	833	834	833	832	831	79
15°	791	794	797	801	803	223
25°	710	715	723	735	740	327
35°	604	610	626	645	656	378
45°	483	491	515	546	563	372
55°	356	368	403	439	456	318
65°	232	248	288	324	343	230
75°	118	138	173	193	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°	837.4	837.4	837.4	837.4	837.4
2.5°	838.5	838.5	836.3	834.1	830.8
5°	833.0	834.1	833.0	831.9	830.8
7.5°	826.4	827.5	827.5	827.5	827.5
10°	818.6	819.7	819.7	819.7	819.7
12.5°	807.6	808.7	809.8	810.9	813.1
15°	791.1	794.4	796.6	801.0	803.2
17.5°	774.5	777.8	781.1	786.6	791.1
20°	755.7	758.0	763.5	770.1	774.5
22.5°	734.8	738.1	743.6	752.4	759.1
25°	710.5	714.9	722.7	734.8	740.3
27.5°	687.3	690.7	700.6	713.8	721.5
30°	659.8	664.2	676.3	692.9	700.6
32.5°	632.2	637.7	650.9	669.7	678.5
35°	603.5	610.1	625.6	645.4	656.5
37.5°	574.8	581.4	599.1	621.1	633.3
40°	545.0	551.6	571.5	595.8	609.0
42.5°	514.1	521.9	543.9	571.5	586.9
45°	483.2	491.0	515.2	546.1	562.7
47.5°	451.2	460.1	486.5	520.7	537.3
50°	419.2	429.2	459.0	494.3	510.8
52.5°	387.3	398.3	430.3	466.7	484.3
55°	356.4	368.5	402.7	439.1	455.7
57.5°	323.3	337.6	374.0	409.3	428.1
60°	292.4	307.8	345.3	380.6	400.5
62.5°	261.5	278.0	317.7	353.1	371.8
65°	231.7	248.2	288.0	324.4	343.1
67.5°	201.9	220.7	259.3	295.7	314.4
70°	173.2	193.1	230.6	265.9	284.6
72.5°	145.6	165.5	203.0	236.1	247.1
75°	118.1	137.9	173.2	193.1	199.7
77.5°	92.7	111.4	142.3	154.5	163.3
80°	69.5	86.1	108.1	115.8	116.9
82.5°	47.4	61.8	75.0	76.1	75.0
85°	28.7	36.4	40.8	38.6	36.4
87.5°	13.2	14.3	13.2	8.8	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)