

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: P259448

Luminaire Tested: **22CZ-LD5-24-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259448  
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-LD5-24-S-UNV-L82765-W2A1-U-4000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2482.0 lumens  
Efficiency: N/A  
Efficacy: 139.7 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

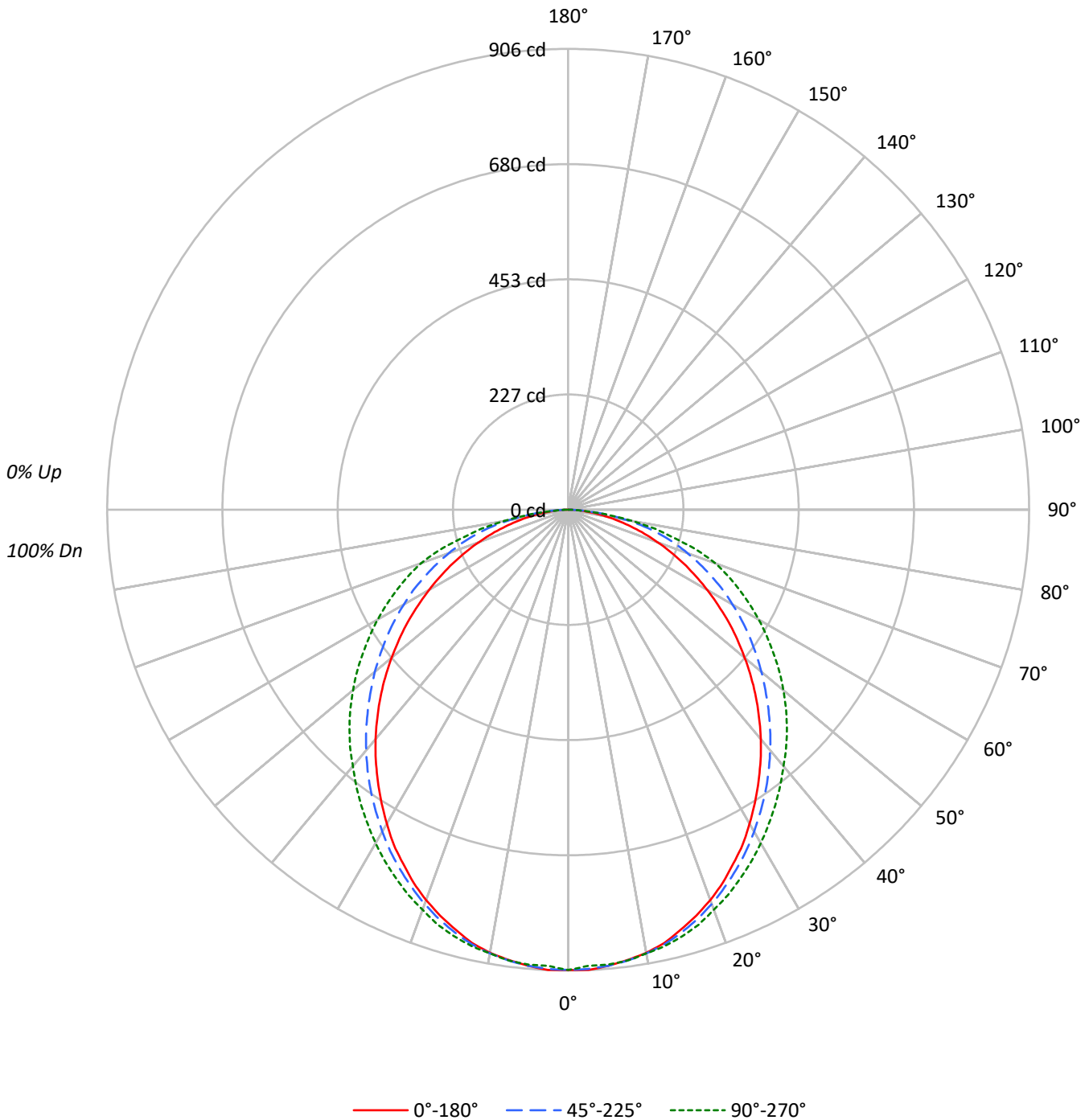
Input Watts (W): 17.763  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2435	2435	2435
5°	2431	2431	2425
10°	2417	2420	2420
15°	2381	2398	2418
20°	2338	2363	2397
25°	2279	2319	2375
30°	2215	2271	2352
35°	2142	2220	2330
40°	2069	2169	2312
45°	1987	2119	2314
50°	1896	2076	2311
55°	1807	2041	2310
60°	1700	2008	2329
65°	1594	1981	2361
70°	1473	1961	2420
75°	1327	1946	2244
80°	1164	1810	1959
85°	957	1362	1213



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.4	3.4
10°-20°	242.7	9.8
20°-30°	360.5	14.5
30°-40°	424.4	17.1
40°-50°	432.6	17.4
50°-60°	390.2	15.7
60°-70°	307.3	12.4
70°-80°	189.6	7.6
80°-90°	49.2	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°	688.7	27.7
0°-40°	1113.1	44.8
0°-60°	1935.9	78.0
0°-90°	2482.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2482.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	900	901	900	899	898	85
15°	855	858	861	866	868	241
25°	768	772	781	794	800	354
35°	652	659	676	697	709	408
45°	522	530	557	590	608	402
55°	385	398	435	474	492	344
65°	250	268	311	350	371	248
75°	128	149	187	209	216	136
85°	31	39	44	42	39	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	904.8	904.8	904.8	904.8	904.8
2.5°	906.0	906.0	903.6	901.3	897.7
5°	900.1	901.3	900.1	898.9	897.7
7.5°	892.9	894.1	894.1	894.1	894.1
10°	884.6	885.8	885.8	885.8	885.8
12.5°	872.6	873.8	875.0	876.2	878.6
15°	854.8	858.3	860.7	865.5	867.9
17.5°	836.9	840.5	844.0	850.0	854.8
20°	816.6	819.0	825.0	832.1	836.9
22.5°	794.0	797.5	803.5	813.0	820.2
25°	767.7	772.5	780.9	794.0	799.9
27.5°	742.7	746.3	757.0	771.3	779.7
30°	712.9	717.7	730.8	748.7	757.0
32.5°	683.1	689.1	703.4	723.6	733.2
35°	652.1	659.3	675.9	697.4	709.3
37.5°	621.1	628.3	647.3	671.2	684.3
40°	588.9	596.1	617.5	643.8	658.1
42.5°	555.5	563.9	587.7	617.5	634.2
45°	522.2	530.5	556.7	590.1	608.0
47.5°	487.6	497.1	525.7	562.7	580.6
50°	453.0	463.7	495.9	534.1	552.0
52.5°	418.4	430.4	464.9	504.3	523.4
55°	385.1	398.2	435.1	474.5	492.4
57.5°	349.3	364.8	404.1	442.3	462.6
60°	315.9	332.6	373.1	411.3	432.7
62.5°	282.5	300.4	343.3	381.5	401.8
65°	250.3	268.2	311.1	350.5	370.8
67.5°	218.2	238.4	280.2	319.5	339.8
70°	187.2	208.6	249.2	287.3	307.6
72.5°	157.4	178.8	219.4	255.1	267.0
75°	127.6	149.0	187.2	208.6	215.8
77.5°	100.1	120.4	153.8	166.9	176.4
80°	75.1	93.0	116.8	125.2	126.4
82.5°	51.3	66.8	81.1	82.3	81.1
85°	31.0	39.3	44.1	41.7	39.3
87.5°	14.3	15.5	14.3	9.5	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)