

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: P259452

Luminaire Tested: **22CZ-LD5-24-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259452  
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-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: 2592.0 lumens  
Efficiency: N/A  
Efficacy: 143.7 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

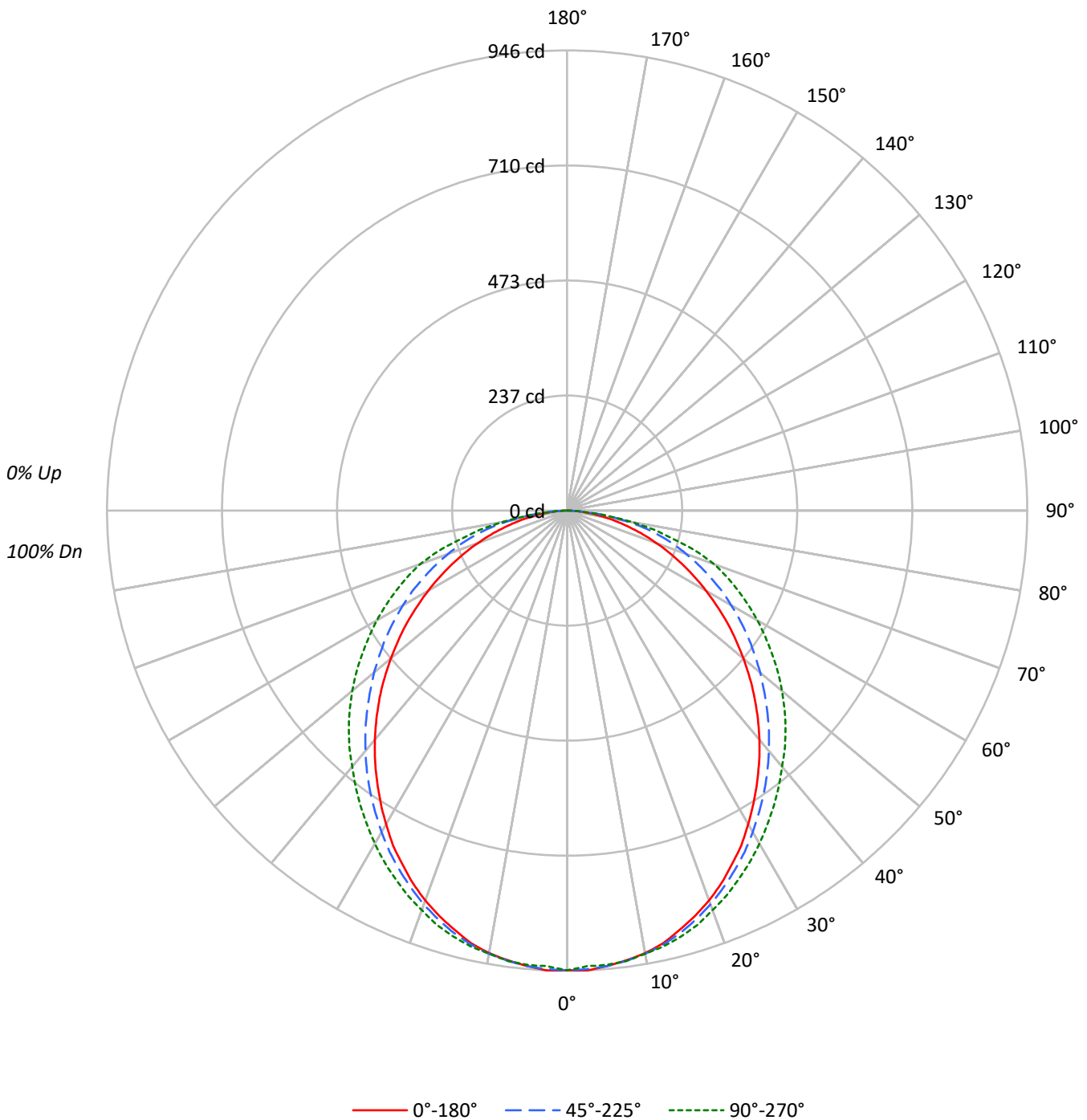
Input Watts (W): 18.042  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2543	2543	2543
5°	2539	2539	2532
10°	2524	2528	2528
15°	2487	2504	2525
20°	2442	2467	2503
25°	2381	2421	2480
30°	2313	2371	2457
35°	2237	2319	2434
40°	2160	2265	2414
45°	2075	2213	2416
50°	1981	2168	2413
55°	1886	2132	2412
60°	1776	2097	2432
65°	1664	2069	2465
70°	1538	2047	2527
75°	1385	2033	2342
80°	1215	1891	2046
85°	1000	1423	1269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.2	3.4
10°-20°	253.5	9.8
20°-30°	376.5	14.5
30°-40°	443.2	17.1
40°-50°	451.8	17.4
50°-60°	407.5	15.7
60°-70°	321.0	12.4
70°-80°	198.0	7.6
80°-90°	51.4	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°	719.2	27.7
0°-40°	1162.4	44.8
0°-60°	2021.7	78.0
0°-90°	2592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2592.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	940	941	940	939	938	89
15°	893	896	899	904	906	252
25°	802	807	816	829	835	369
35°	681	688	706	728	741	426
45°	545	554	581	616	635	420
55°	402	416	454	496	514	359
65°	261	280	325	366	387	259
75°	133	156	196	218	225	142
85°	32	41	46	44	41	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	944.9	944.9	944.9	944.9	944.9
2.5°	946.2	946.2	943.7	941.2	937.5
5°	940.0	941.2	940.0	938.7	937.5
7.5°	932.5	933.7	933.7	933.7	933.7
10°	923.8	925.0	925.0	925.0	925.0
12.5°	911.3	912.6	913.8	915.1	917.5
15°	892.6	896.4	898.9	903.9	906.3
17.5°	874.0	877.7	881.4	887.7	892.6
20°	852.8	855.3	861.5	869.0	874.0
22.5°	829.2	832.9	839.1	849.1	856.5
25°	801.8	806.7	815.5	829.2	835.4
27.5°	775.6	779.4	790.6	805.5	814.2
30°	744.5	749.5	763.2	781.8	790.6
32.5°	713.4	719.6	734.5	755.7	765.7
35°	681.0	688.5	705.9	728.3	740.8
37.5°	648.6	656.1	676.0	700.9	714.6
40°	615.0	622.5	644.9	672.3	687.2
42.5°	580.2	588.9	613.8	644.9	662.3
45°	545.3	554.0	581.4	616.3	634.9
47.5°	509.2	519.2	549.0	587.6	606.3
50°	473.1	484.3	517.9	557.7	576.4
52.5°	437.0	449.4	485.5	526.6	546.5
55°	402.1	415.8	454.4	495.5	514.2
57.5°	364.8	381.0	422.0	461.9	483.1
60°	329.9	347.3	389.7	429.5	451.9
62.5°	295.1	313.7	358.6	398.4	419.6
65°	261.4	280.1	324.9	366.0	387.2
67.5°	227.8	249.0	292.6	333.7	354.8
70°	195.5	217.9	260.2	300.0	321.2
72.5°	164.3	186.7	229.1	266.4	278.9
75°	133.2	155.6	195.5	217.9	225.3
77.5°	104.6	125.7	160.6	174.3	184.3
80°	78.4	97.1	122.0	130.7	132.0
82.5°	53.5	69.7	84.7	85.9	84.7
85°	32.4	41.1	46.1	43.6	41.1
87.5°	14.9	16.2	14.9	10.0	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)