

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: P259281

Luminaire Tested: **22CZ-LD5-24-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259281  
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-LD5-24-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2476.0 lumens  
Efficiency: N/A  
Efficacy: 137.9 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

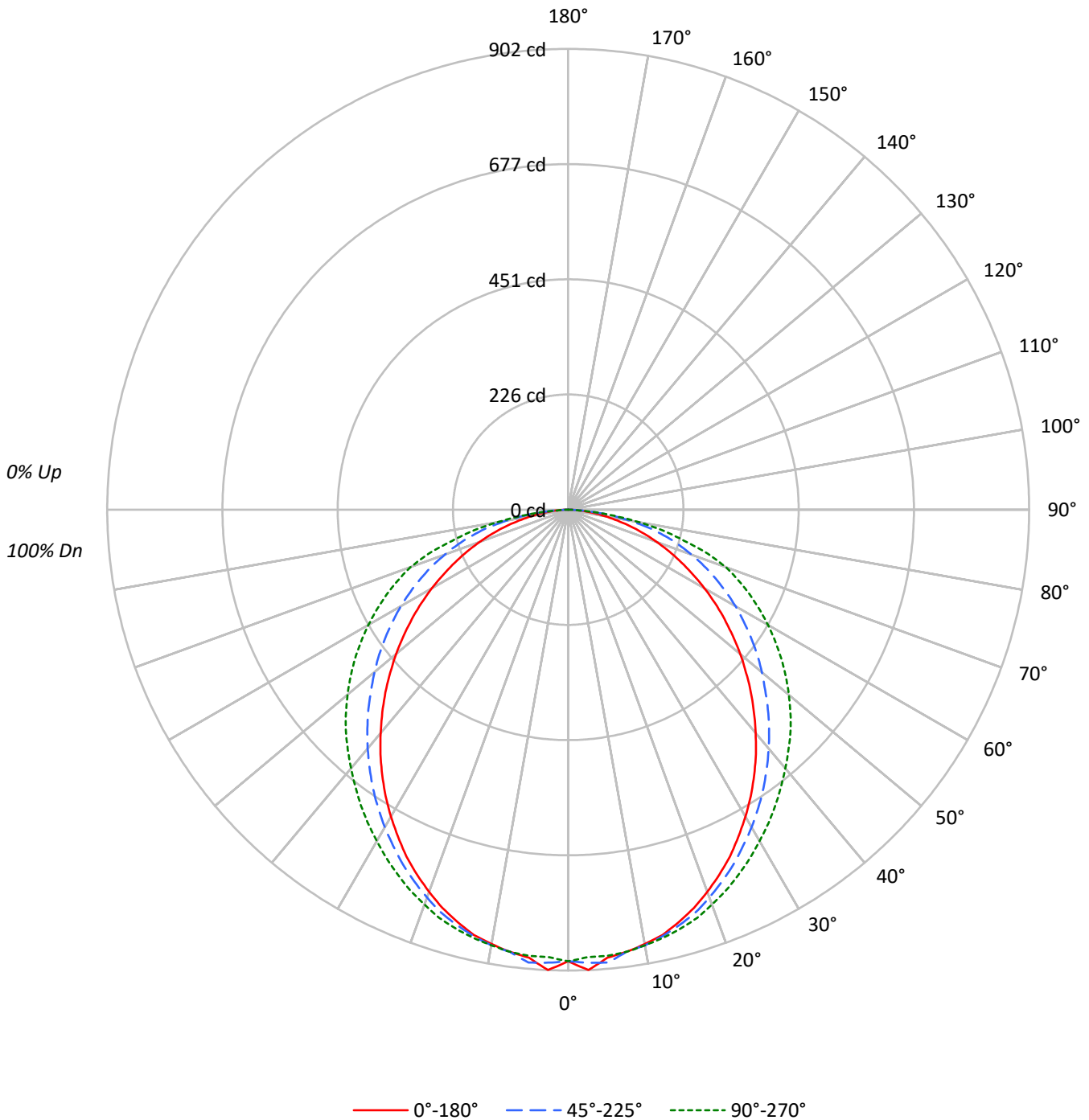
Input Watts (W): 17.949  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2378	2378	2378
5°	2378	2404	2368
10°	2359	2366	2366
15°	2328	2345	2365
20°	2279	2314	2355
25°	2224	2274	2341
30°	2155	2230	2327
35°	2084	2187	2322
40°	2005	2144	2322
45°	1925	2103	2342
50°	1840	2072	2359
55°	1751	2051	2389
60°	1659	2035	2430
65°	1556	2024	2492
70°	1449	2018	2577
75°	1314	2016	2441
80°	1137	1866	2165
85°	966	1414	1374



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.8	3.4
10°-20°	237.4	9.6
20°-30°	353.2	14.3
30°-40°	417.7	16.9
40°-50°	429.4	17.3
50°-60°	392.3	15.8
60°-70°	313.9	12.7
70°-80°	197.0	8.0
80°-90°	51.3	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°	674.5	27.2
0°-40°	1092.2	44.1
0°-60°	1913.9	77.3
0°-90°	2476.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2476.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	880	880	890	884	876	84
15°	836	837	842	846	849	235
25°	749	754	766	779	789	344
35°	634	643	666	691	707	397
45°	506	519	553	594	615	390
55°	373	391	437	485	509	334
65°	244	266	318	366	391	243
75°	126	150	194	223	235	134
85°	31	40	46	44	44	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	883.8	883.8	883.8	883.8	883.8
2.5°	901.8	898.2	887.4	880.2	876.5
5°	880.2	880.2	889.8	883.8	876.5
7.5°	872.9	872.9	872.9	891.0	872.9
10°	863.3	864.5	865.7	872.9	865.7
12.5°	852.5	852.5	854.9	857.3	858.5
15°	835.6	836.8	841.6	846.4	848.9
17.5°	817.5	821.2	827.2	833.2	838.0
20°	795.9	800.7	807.9	817.5	822.4
22.5°	773.0	777.8	787.4	798.3	806.7
25°	748.9	753.7	765.8	779.0	788.6
27.5°	721.2	727.2	741.7	759.8	769.4
30°	693.5	700.8	717.6	738.1	748.9
32.5°	664.6	673.1	692.3	715.2	728.4
35°	634.5	643.0	665.8	691.1	706.8
37.5°	603.2	612.9	638.1	667.0	683.9
40°	570.7	581.6	610.4	641.8	661.0
42.5°	538.2	550.2	581.6	618.9	638.1
45°	505.7	518.9	552.7	593.6	615.3
47.5°	472.0	487.6	522.6	568.3	590.0
50°	439.5	455.1	494.9	541.8	563.5
52.5°	405.8	423.8	466.0	514.1	537.0
55°	373.3	391.3	437.1	485.2	509.3
57.5°	340.7	358.8	407.0	456.3	480.4
60°	308.2	327.5	378.1	426.2	451.5
62.5°	275.7	296.2	348.0	397.3	421.4
65°	244.4	266.1	317.9	366.0	391.3
67.5°	214.3	237.2	287.8	334.7	360.0
70°	184.2	207.1	256.5	302.2	327.5
72.5°	155.3	178.2	226.4	267.3	286.6
75°	126.4	150.5	193.9	222.7	234.8
77.5°	98.7	122.8	160.1	179.4	192.6
80°	73.4	93.9	120.4	134.9	139.7
82.5°	50.6	67.4	84.3	87.9	90.3
85°	31.3	39.7	45.8	44.5	44.5
87.5°	14.4	15.7	13.2	9.6	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)