

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: P277326

Luminaire Tested: **22CZ2-24HE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277326  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24HE-S-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2395.0 lumens  
Efficiency: N/A  
Efficacy: 136.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

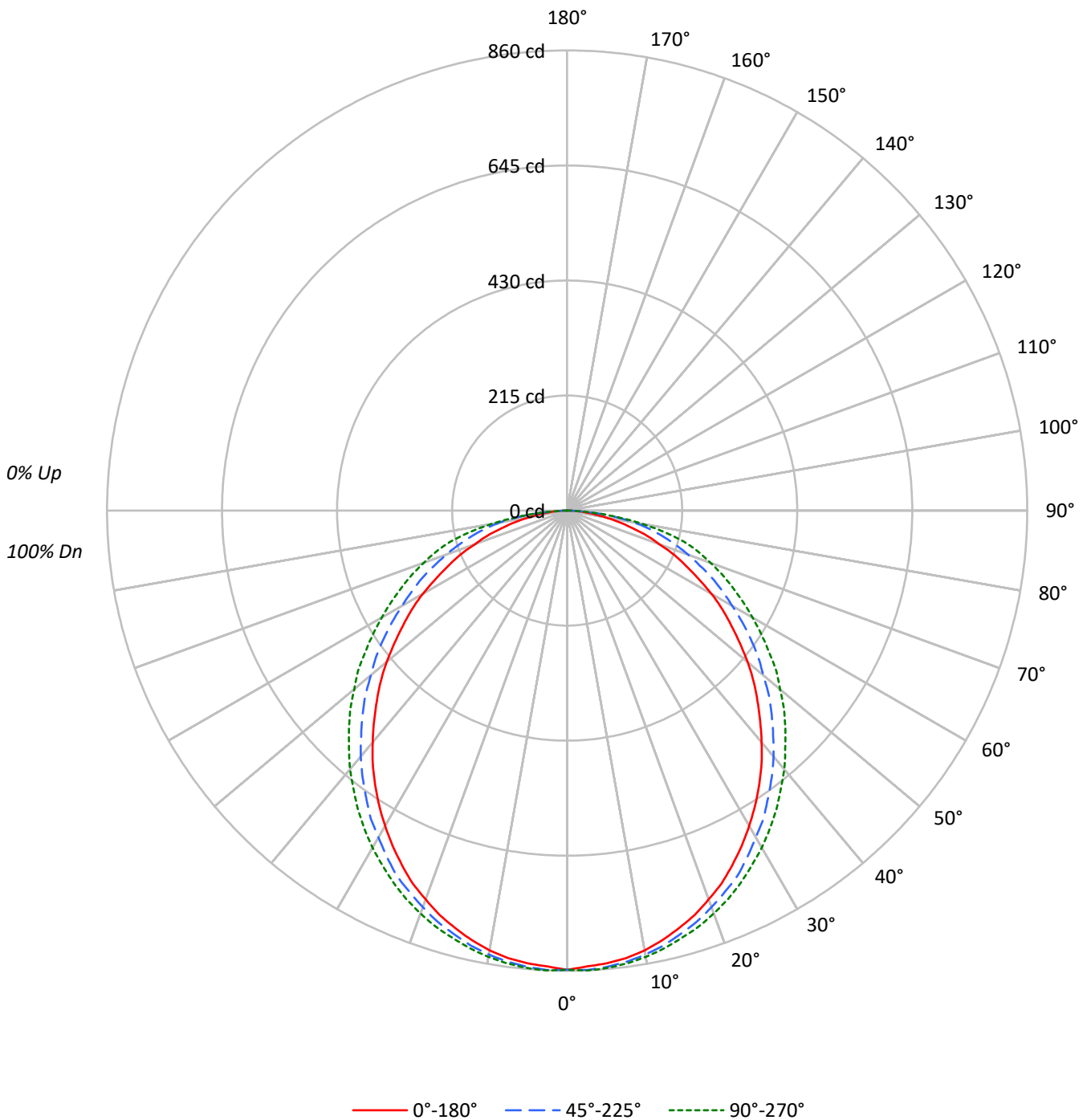
Input Watts (W): 17.577  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	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	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2309	2309	2309
5°	2294	2312	2318
10°	2281	2302	2314
15°	2251	2282	2304
20°	2214	2259	2294
25°	2170	2236	2279
30°	2115	2191	2261
35°	2056	2151	2239
40°	1986	2108	2218
45°	1914	2058	2194
50°	1843	2002	2175
55°	1756	1966	2160
60°	1678	1919	2153
65°	1565	1907	2177
70°	1442	1891	2242
75°	1302	1917	2358
80°	1125	1974	2216
85°	932	1655	1655



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.2	3.4
10°-20°	231.0	9.6
20°-30°	345.6	14.4
30°-40°	409.2	17.1
40°-50°	417.1	17.4
50°-60°	373.8	15.6
60°-70°	292.7	12.2
70°-80°	188.7	7.9
80°-90°	55.7	2.3
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°	657.7	27.5
0°-40°	1067.0	44.5
0°-60°	1857.8	77.6
0°-90°	2395.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2395.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	849	852	856	857	858	81
15°	808	812	819	826	827	228
25°	731	738	753	763	768	336
35°	626	634	655	675	682	391
45°	503	514	541	569	577	388
55°	374	387	419	448	460	336
65°	246	260	300	328	342	244
75°	125	144	184	216	227	134
85°	30	41	54	54	54	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	858.2	858.2	858.2	858.2	858.2
2.5°	852.6	854.9	859.3	860.4	860.4
5°	849.3	851.5	856.0	857.1	858.2
7.5°	843.7	844.8	850.4	852.6	853.7
10°	834.7	837.0	842.6	845.9	847.0
12.5°	822.4	825.8	832.5	837.0	838.1
15°	807.9	812.4	819.1	825.8	826.9
17.5°	792.3	796.7	805.7	813.5	815.7
20°	773.3	778.9	788.9	797.9	801.2
22.5°	754.3	758.7	771.0	782.2	785.6
25°	730.8	737.5	753.2	763.2	767.7
27.5°	706.2	714.1	729.7	743.1	747.6
30°	680.5	688.4	705.1	721.9	727.5
32.5°	653.7	662.6	682.8	699.5	705.1
35°	625.8	633.6	654.8	674.9	681.6
37.5°	596.7	603.4	628.0	649.2	655.9
40°	565.4	574.4	600.1	624.7	631.4
42.5°	534.1	544.2	569.9	596.7	603.4
45°	502.9	514.0	540.8	568.8	576.6
47.5°	472.7	481.6	511.8	538.6	549.8
50°	440.3	449.2	478.3	508.4	519.6
52.5°	406.8	419.0	450.3	479.4	492.8
55°	374.3	386.6	419.0	448.1	460.4
57.5°	344.2	354.2	387.8	417.9	430.2
60°	311.8	320.7	356.5	388.9	400.0
62.5°	277.1	290.5	327.4	357.6	371.0
65°	245.8	260.4	299.5	328.5	341.9
67.5°	216.8	230.2	268.2	299.5	314.0
70°	183.3	201.1	240.3	271.5	285.0
72.5°	156.4	172.1	212.3	243.6	258.1
75°	125.2	144.2	184.4	215.7	226.8
77.5°	99.5	118.4	156.4	181.0	186.6
80°	72.6	91.6	127.4	139.7	143.0
82.5°	49.2	67.0	91.6	95.0	96.1
85°	30.2	41.3	53.6	53.6	53.6
87.5°	14.5	16.8	19.0	17.9	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)