

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: P277355

Luminaire Tested: **22CZ2-24HE-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277355  
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-L93050-W2A1-U-3000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1864.0 lumens  
Efficiency: N/A  
Efficacy: 103.7 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

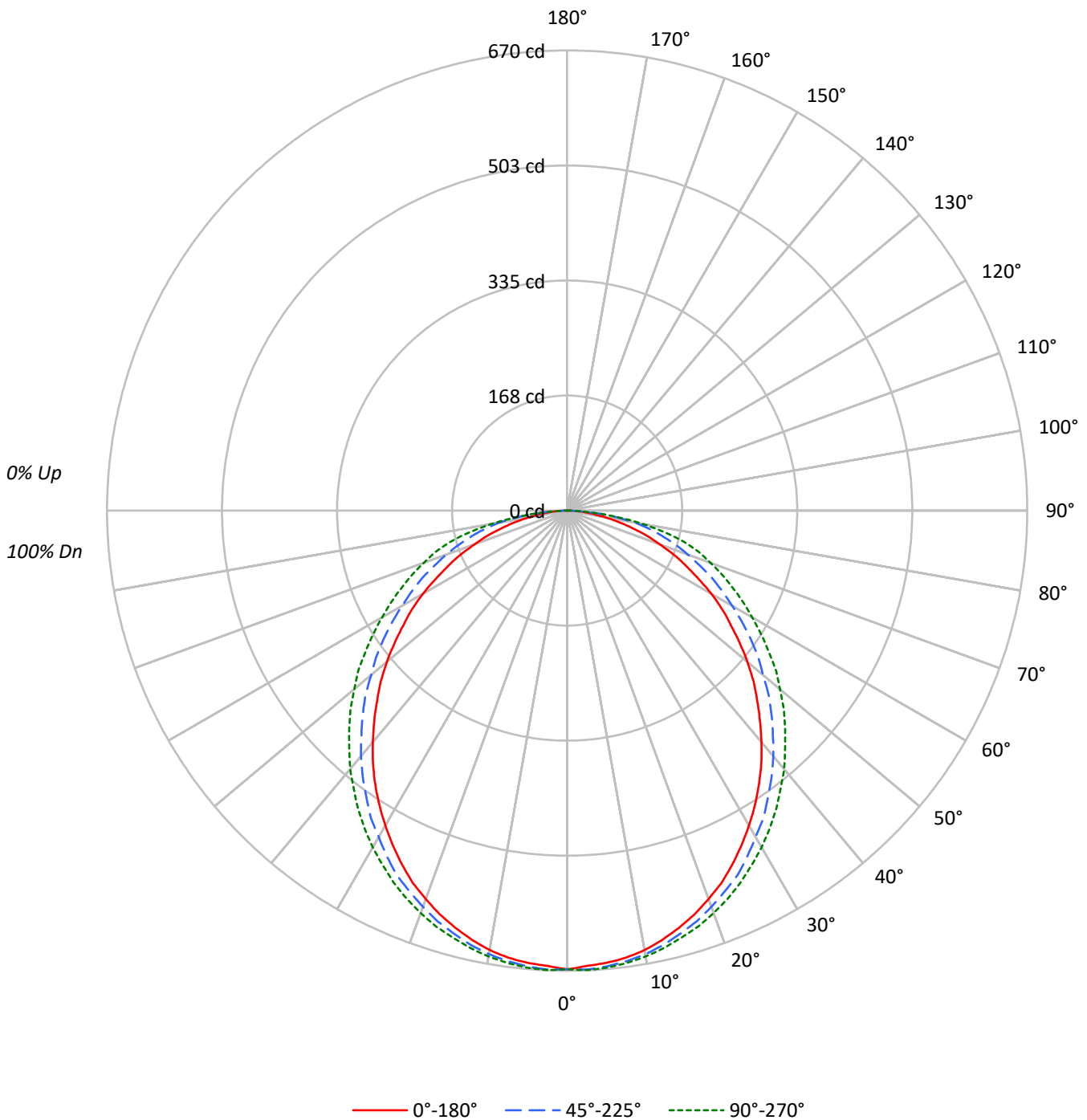
Input Watts (W): 17.981271  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1797	1797	1797
5°	1786	1800	1804
10°	1775	1792	1801
15°	1752	1776	1793
20°	1723	1758	1786
25°	1689	1741	1774
30°	1646	1705	1759
35°	1600	1674	1743
40°	1546	1640	1726
45°	1490	1602	1708
50°	1435	1558	1693
55°	1367	1530	1681
60°	1306	1493	1676
65°	1218	1484	1694
70°	1122	1471	1745
75°	1013	1492	1835
80°	876	1536	1725
85°	726	1288	1288



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.2	3.4
10°-20°	179.8	9.6
20°-30°	269.0	14.4
30°-40°	318.5	17.1
40°-50°	324.6	17.4
50°-60°	290.9	15.6
60°-70°	227.8	12.2
70°-80°	146.9	7.9
80°-90°	43.4	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°	511.9	27.5
0°-40°	830.4	44.6
0°-60°	1445.9	77.6
0°-90°	1864.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1864.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	661	663	666	667	668	63
15°	629	632	638	643	644	177
25°	569	574	586	594	598	262
35°	487	493	510	525	530	304
45°	391	400	421	443	449	302
55°	291	301	326	349	358	261
65°	191	203	233	256	266	190
75°	97	112	144	168	176	104
85°	24	32	42	42	42	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	667.9	667.9	667.9	667.9	667.9
2.5°	663.6	665.3	668.8	669.7	669.7
5°	661.0	662.7	666.2	667.1	667.9
7.5°	656.6	657.5	661.8	663.6	664.5
10°	649.7	651.4	655.8	658.4	659.2
12.5°	640.1	642.7	647.9	651.4	652.3
15°	628.8	632.3	637.5	642.7	643.6
17.5°	616.6	620.1	627.1	633.1	634.9
20°	601.8	606.2	614.0	621.0	623.6
22.5°	587.0	590.5	600.1	608.8	611.4
25°	568.8	574.0	586.2	594.0	597.5
27.5°	549.7	555.7	567.9	578.4	581.8
30°	529.6	535.7	548.8	561.8	566.2
32.5°	508.8	515.7	531.4	544.4	548.8
35°	487.0	493.1	509.6	525.3	530.5
37.5°	464.4	469.6	488.8	505.3	510.5
40°	440.1	447.0	467.0	486.2	491.4
42.5°	415.7	423.5	443.5	464.4	469.6
45°	391.4	400.1	420.9	442.7	448.8
47.5°	367.9	374.8	398.3	419.2	427.9
50°	342.7	349.6	372.2	395.7	404.4
52.5°	316.6	326.1	350.5	373.1	383.5
55°	291.3	300.9	326.1	348.7	358.3
57.5°	267.9	275.7	301.8	325.3	334.8
60°	242.6	249.6	277.4	302.7	311.4
62.5°	215.7	226.1	254.8	278.3	288.7
65°	191.3	202.6	233.1	255.7	266.1
67.5°	168.7	179.2	208.7	233.1	244.4
70°	142.6	156.5	187.0	211.3	221.8
72.5°	121.8	133.9	165.2	189.6	200.9
75°	97.4	112.2	143.5	167.9	176.5
77.5°	77.4	92.2	121.8	140.9	145.2
80°	56.5	71.3	99.1	108.7	111.3
82.5°	38.3	52.2	71.3	73.9	74.8
85°	23.5	32.2	41.7	41.7	41.7
87.5°	11.3	13.0	14.8	13.9	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)