

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: P277197

Luminaire Tested: **22CZ2-34HE-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277197  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-34HE-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2491.0 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

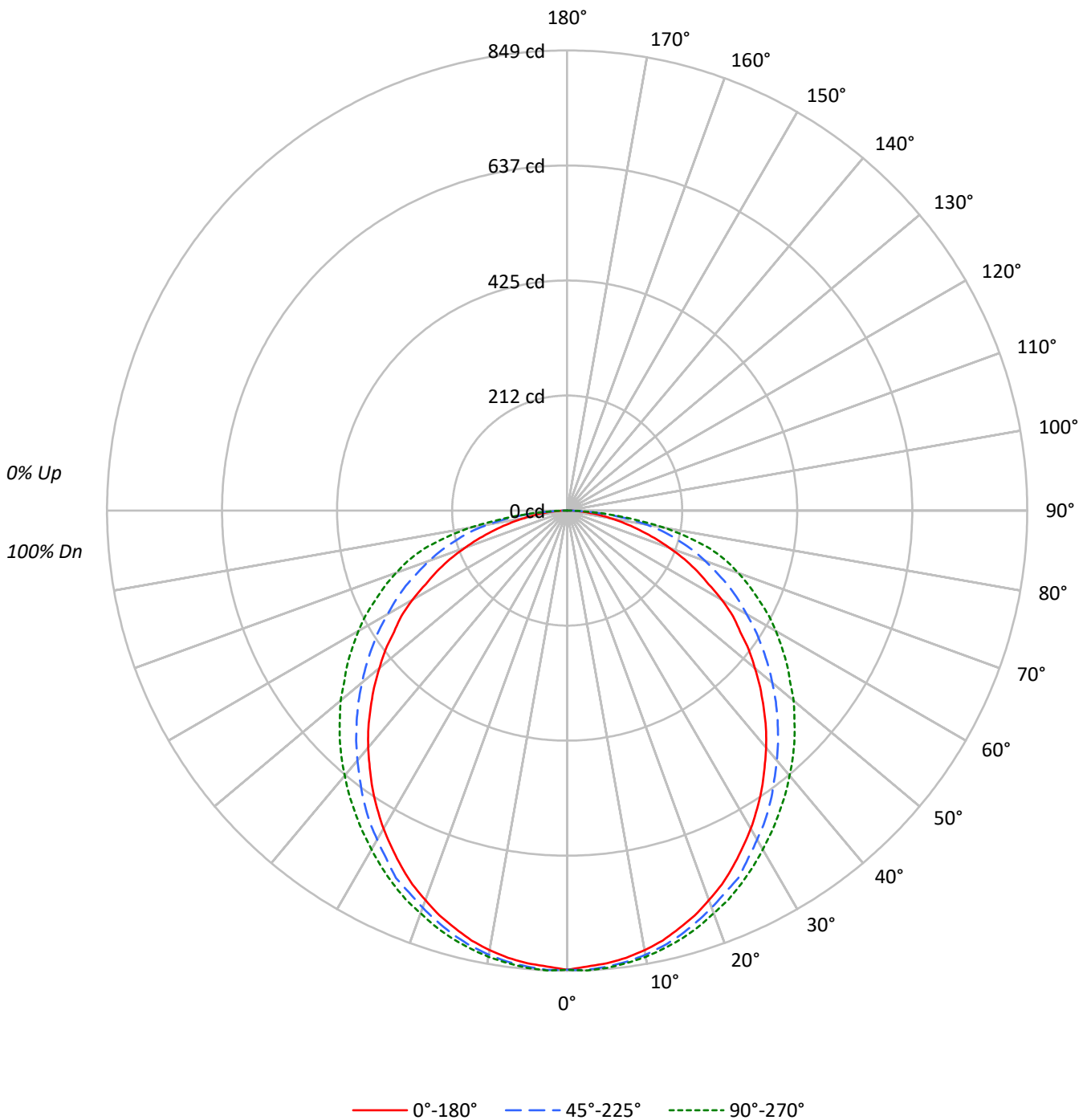
Input Watts (W): 26.258364  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2279	2279	2279
5°	2265	2281	2288
10°	2251	2274	2284
15°	2223	2257	2278
20°	2190	2233	2264
25°	2151	2220	2257
30°	2106	2179	2243
35°	2058	2150	2239
40°	2007	2114	2243
45°	1950	2090	2258
50°	1894	2068	2284
55°	1829	2059	2323
60°	1774	2058	2394
65°	1686	2092	2482
70°	1572	2131	2643
75°	1440	2205	2855
80°	1254	2298	2811
85°	1096	2044	2232



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.1	3.2
10°-20°	228.2	9.2
20°-30°	342.5	13.7
30°-40°	409.3	16.4
40°-50°	425.6	17.1
50°-60°	394.4	15.8
60°-70°	323.5	13.0
70°-80°	218.7	8.8
80°-90°	68.7	2.8
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°	650.8	26.1
0°-40°	1060.0	42.6
0°-60°	1880.0	75.5
0°-90°	2491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2491.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	838	840	844	846	847	80
15°	798	802	810	815	818	225
25°	724	730	748	756	760	334
35°	626	635	654	674	682	392
45°	512	522	549	581	593	396
55°	390	402	439	478	495	350
65°	265	280	328	371	390	262
75°	138	162	212	255	275	147
85°	36	49	66	74	72	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	847.0	847.0	847.0	847.0	847.0
2.5°	842.1	844.5	848.2	849.4	849.4
5°	838.4	839.6	844.5	845.8	847.0
7.5°	832.3	834.7	839.6	840.9	842.1
10°	823.7	826.1	832.3	834.7	836.0
12.5°	812.7	815.1	822.5	826.1	827.4
15°	798.0	801.6	810.2	815.1	817.6
17.5°	783.2	786.9	795.5	802.9	805.3
20°	764.9	773.4	779.6	789.4	790.6
22.5°	746.5	751.4	762.4	772.2	777.1
25°	724.4	730.5	747.7	756.3	760.0
27.5°	701.1	709.7	723.2	736.7	741.6
30°	677.8	684.0	701.1	717.1	722.0
32.5°	652.1	660.7	679.1	695.0	702.3
35°	626.4	634.9	654.5	674.2	681.5
37.5°	598.2	608.0	627.6	650.9	660.7
40°	571.2	578.5	601.8	630.0	638.6
42.5°	543.0	551.6	576.1	606.7	616.5
45°	512.4	522.2	549.1	581.0	593.3
47.5°	482.9	492.7	522.2	554.0	568.7
50°	452.3	464.6	494.0	530.7	545.5
52.5°	422.9	433.9	467.0	505.0	518.5
55°	389.8	402.0	438.8	478.0	495.2
57.5°	362.8	371.4	411.8	452.3	469.5
60°	329.7	340.8	382.4	425.3	444.9
62.5°	294.2	312.6	355.5	399.6	419.2
65°	264.8	279.5	328.5	371.4	389.8
67.5°	234.1	250.1	297.9	343.2	364.0
70°	199.8	220.6	270.9	316.2	335.9
72.5°	169.2	191.2	242.7	286.8	307.7
75°	138.5	161.8	212.1	255.0	274.6
77.5°	109.1	134.8	183.9	217.0	229.2
80°	80.9	105.4	148.3	171.6	181.4
82.5°	56.4	77.2	109.1	121.3	123.8
85°	35.5	49.0	66.2	73.5	72.3
87.5°	15.9	19.6	24.5	27.0	25.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)