

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: P277544

Luminaire Tested: **22CZ2-44HE-RDP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277544  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44HE-RDP-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2342.0 lumens  
Efficiency: N/A  
Efficacy: 66.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

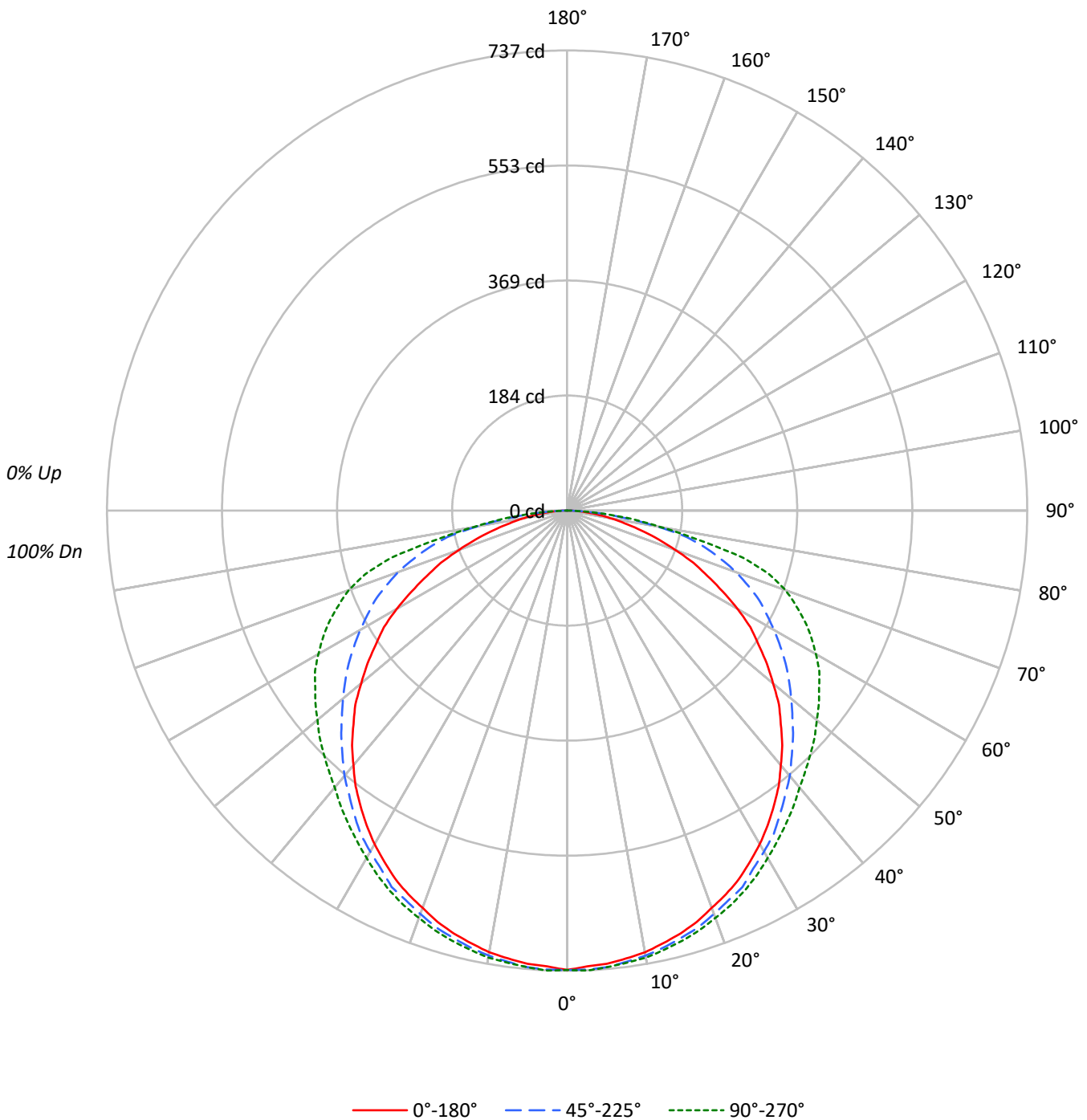
Input Watts (W): 35.253324  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1980	1980	1980
5°	1969	1982	1982
10°	1963	1977	1987
15°	1953	1973	1987
20°	1939	1968	1988
25°	1934	1974	1995
30°	1917	1959	1997
35°	1896	1953	2009
40°	1870	1949	2034
45°	1842	1947	2098
50°	1803	1962	2185
55°	1754	2005	2312
60°	1697	2059	2476
65°	1580	2161	2677
70°	1450	2264	2928
75°	1272	2382	3028
80°	1094	2269	2376
85°	957	1649	1809



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.6	3.0
10°-20°	199.8	8.5
20°-30°	304.8	13.0
30°-40°	372.2	15.9
40°-50°	398.0	17.0
50°-60°	384.1	16.4
60°-70°	330.7	14.1
70°-80°	223.7	9.6
80°-90°	59.0	2.5
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°	574.2	24.5
0°-40°	946.4	40.4
0°-60°	1728.6	73.8
0°-90°	2342.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2342.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	736	736	736	736	736	
5°	729	730	734	734	734	69
15°	701	703	708	712	713	198
25°	651	655	665	668	672	300
35°	577	582	594	606	612	361
45°	484	493	512	538	551	374
55°	374	386	427	470	493	335
65°	248	272	339	393	420	247
75°	122	162	229	276	291	131
85°	31	43	53	55	59	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	735.7	735.7	735.7	735.7	735.7
2.5°	730.5	732.2	735.7	735.7	737.4
5°	728.8	730.5	733.9	733.9	733.9
7.5°	723.6	725.3	728.8	730.5	730.5
10°	718.4	720.2	723.6	725.3	727.0
12.5°	709.8	711.5	716.7	720.2	720.2
15°	701.2	702.9	708.1	711.5	713.3
17.5°	690.9	694.3	699.5	702.9	704.7
20°	677.1	680.5	687.4	692.6	694.3
22.5°	665.0	668.5	675.4	680.5	684.0
25°	651.2	654.7	665.0	668.5	671.9
27.5°	634.0	637.5	646.1	653.0	658.1
30°	616.8	620.2	630.6	639.2	642.6
32.5°	597.8	603.0	615.1	622.0	627.1
35°	577.2	582.3	594.4	606.4	611.6
37.5°	556.5	561.7	573.7	589.2	596.1
40°	532.4	539.3	554.8	575.4	578.9
42.5°	510.0	518.6	532.4	556.5	565.1
45°	484.1	492.7	511.7	537.5	551.3
47.5°	460.0	468.6	489.3	520.3	537.5
50°	430.7	442.8	468.6	504.8	522.0
52.5°	403.2	413.5	447.9	487.6	508.2
55°	373.9	385.9	427.3	470.3	492.7
57.5°	348.0	358.4	404.9	453.1	479.0
60°	315.3	329.1	382.5	434.2	460.0
62.5°	280.8	301.5	360.1	413.5	441.1
65°	248.1	272.2	339.4	392.8	420.4
67.5°	218.8	244.6	313.6	370.4	396.3
70°	184.3	217.1	287.7	342.8	372.1
72.5°	153.3	189.5	258.4	313.6	339.4
75°	122.3	161.9	229.1	275.7	291.2
77.5°	94.8	132.7	196.4	210.2	211.9
80°	70.6	105.1	146.4	148.2	153.3
82.5°	48.2	74.1	94.8	103.4	105.1
85°	31.0	43.1	53.4	55.1	58.6
87.5°	13.8	15.5	19.0	17.2	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)