

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: P277201

Luminaire Tested: **22CZ2-34HE-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277201  
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-5000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2991.0 lumens  
Efficiency: N/A  
Efficacy: 111.8 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

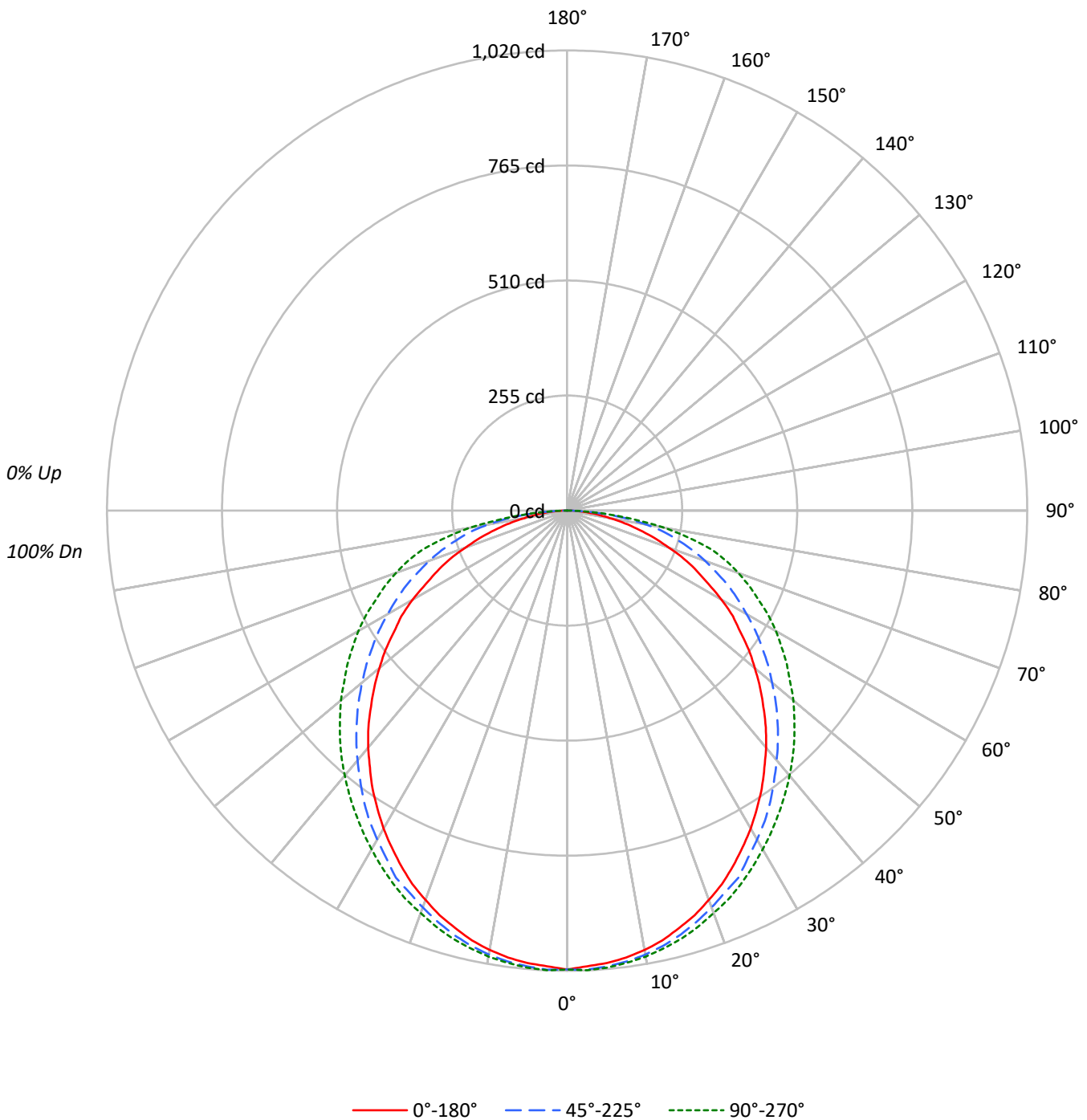
Input Watts (W): 26.746056  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82					82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48					48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41					41			
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

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

	0°	45°	90°
0°	2737	2737	2737
5°	2719	2739	2747
10°	2702	2731	2743
15°	2669	2710	2735
20°	2630	2680	2718
25°	2583	2666	2709
30°	2529	2616	2694
35°	2471	2582	2688
40°	2409	2538	2694
45°	2341	2509	2711
50°	2274	2483	2742
55°	2196	2472	2790
60°	2131	2471	2876
65°	2024	2511	2980
70°	1888	2559	3173
75°	1729	2647	3428
80°	1505	2760	3375
85°	1318	2455	2680



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.2	3.2
10°-20°	273.9	9.2
20°-30°	411.3	13.7
30°-40°	491.4	16.4
40°-50°	511.0	17.1
50°-60°	473.6	15.8
60°-70°	388.5	13.0
70°-80°	262.6	8.8
80°-90°	82.5	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°	781.4	26.1
0°-40°	1272.8	42.6
0°-60°	2257.4	75.5
0°-90°	2991.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2991.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1017	1017	1017	1017	1017	
5°	1007	1008	1014	1016	1017	96
15°	958	962	973	979	982	270
25°	870	877	898	908	912	401
35°	752	762	786	810	818	470
45°	615	627	659	698	712	475
55°	468	483	527	574	595	421
65°	318	336	394	446	468	314
75°	166	194	255	306	330	176
85°	43	59	80	88	87	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1017.0	1017.0	1017.0	1017.0	1017.0
2.5°	1011.1	1014.1	1018.5	1019.9	1019.9
5°	1006.7	1008.2	1014.1	1015.5	1017.0
7.5°	999.3	1002.3	1008.2	1009.6	1011.1
10°	989.0	992.0	999.3	1002.3	1003.7
12.5°	975.8	978.7	987.6	992.0	993.4
15°	958.1	962.5	972.8	978.7	981.7
17.5°	940.5	944.9	955.2	964.0	967.0
20°	918.4	928.7	936.0	947.8	949.3
22.5°	896.3	902.2	915.4	927.2	933.1
25°	869.8	877.2	897.8	908.1	912.5
27.5°	841.9	852.2	868.3	884.5	890.4
30°	813.9	821.2	841.9	861.0	866.9
32.5°	783.0	793.3	815.4	834.5	843.3
35°	752.1	762.4	785.9	809.5	818.3
37.5°	718.2	730.0	753.5	781.5	793.3
40°	685.8	694.7	722.6	756.5	766.8
42.5°	652.0	662.3	691.7	728.5	740.3
45°	615.2	627.0	659.4	697.6	712.3
47.5°	579.9	591.7	627.0	665.2	682.9
50°	543.1	557.8	593.1	637.3	654.9
52.5°	507.8	521.0	560.7	606.4	622.6
55°	468.0	482.7	526.9	574.0	594.6
57.5°	435.6	445.9	494.5	543.1	563.7
60°	395.9	409.2	459.2	510.7	534.3
62.5°	353.2	375.3	426.8	479.8	503.3
65°	317.9	335.6	394.4	445.9	468.0
67.5°	281.1	300.2	357.6	412.1	437.1
70°	239.9	264.9	325.3	379.7	403.3
72.5°	203.1	229.6	291.4	344.4	369.4
75°	166.3	194.3	254.6	306.1	329.7
77.5°	131.0	161.9	220.8	260.5	275.2
80°	97.1	126.6	178.1	206.0	217.8
82.5°	67.7	92.7	131.0	145.7	148.6
85°	42.7	58.9	79.5	88.3	86.8
87.5°	19.1	23.5	29.4	32.4	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)