

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: P271990

Luminaire Tested: **22CZ2-34HE-UNV-L935-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P271990  
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-L935-CD1-U  
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (196) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2863.0 lumens  
Efficiency: N/A  
Efficacy: 111.0 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

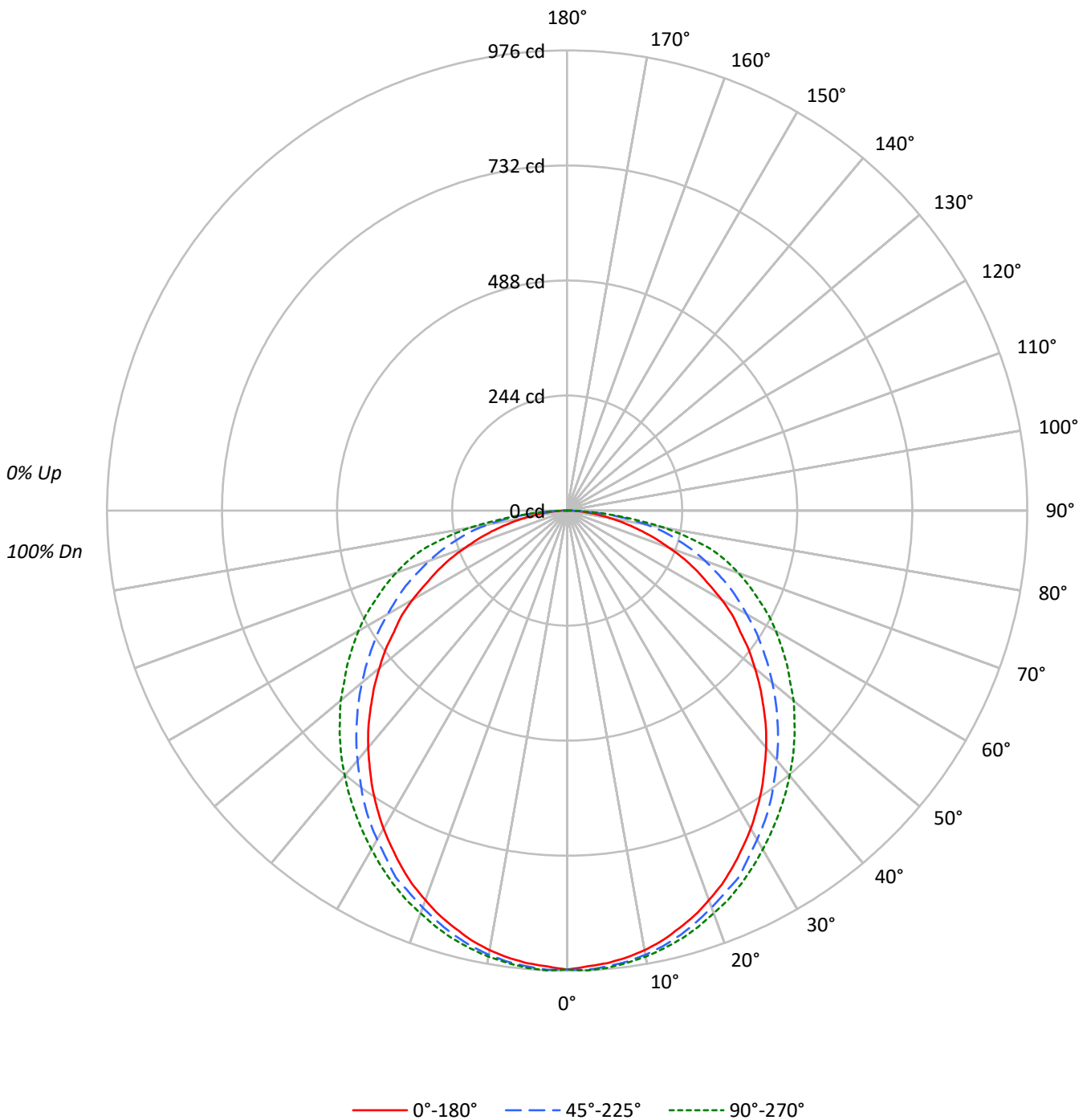
Input Watts (W): 25.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2620	2620	2620
5°	2603	2622	2630
10°	2587	2614	2625
15°	2555	2594	2618
20°	2517	2566	2602
25°	2472	2552	2593
30°	2421	2504	2578
35°	2365	2471	2573
40°	2306	2430	2578
45°	2241	2402	2595
50°	2176	2377	2624
55°	2102	2366	2670
60°	2040	2365	2752
65°	1938	2404	2853
70°	1806	2449	3037
75°	1655	2534	3281
80°	1441	2642	3231
85°	1263	2350	2566



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.1	3.2
10°-20°	262.2	9.2
20°-30°	393.7	13.7
30°-40°	470.4	16.4
40°-50°	489.1	17.1
50°-60°	453.3	15.8
60°-70°	371.8	13.0
70°-80°	251.4	8.8
80°-90°	79.0	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°	747.9	26.1
0°-40°	1218.3	42.6
0°-60°	2160.8	75.5
0°-90°	2863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2863.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	964	965	971	972	974	91
15°	917	921	931	937	940	259
25°	833	840	859	869	873	383
35°	720	730	752	775	783	450
45°	589	600	631	668	682	455
55°	448	462	504	549	569	403
65°	304	321	378	427	448	301
75°	159	186	244	293	316	169
85°	41	56	76	84	83	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	973.5	973.5	973.5	973.5	973.5
2.5°	967.8	970.7	974.9	976.3	976.3
5°	963.6	965.0	970.7	972.1	973.5
7.5°	956.6	959.4	965.0	966.4	967.8
10°	946.7	949.5	956.6	959.4	960.8
12.5°	934.0	936.8	945.3	949.5	950.9
15°	917.1	921.3	931.2	936.8	939.7
17.5°	900.2	904.4	914.3	922.8	925.6
20°	879.1	888.9	896.0	907.3	908.7
22.5°	858.0	863.6	876.3	887.5	893.2
25°	832.6	839.6	859.4	869.2	873.4
27.5°	805.8	815.7	831.2	846.7	852.3
30°	779.1	786.1	805.8	824.1	829.8
32.5°	749.5	759.3	780.5	798.8	807.2
35°	719.9	729.8	752.3	774.8	783.3
37.5°	687.5	698.8	721.3	748.1	759.3
40°	656.5	664.9	691.7	724.1	734.0
42.5°	624.1	634.0	662.1	697.4	708.6
45°	588.9	600.1	631.1	667.8	681.9
47.5°	555.1	566.3	600.1	636.8	653.7
50°	519.8	533.9	567.7	610.0	626.9
52.5°	486.0	498.7	536.7	580.4	595.9
55°	448.0	462.1	504.3	549.4	569.2
57.5°	417.0	426.9	473.4	519.8	539.6
60°	379.0	391.6	439.5	488.8	511.4
62.5°	338.1	359.2	408.5	459.3	481.8
65°	304.3	321.2	377.6	426.9	448.0
67.5°	269.1	287.4	342.3	394.5	418.4
70°	229.6	253.6	311.3	363.5	386.0
72.5°	194.4	219.8	278.9	329.7	353.6
75°	159.2	186.0	243.7	293.0	315.6
77.5°	125.4	155.0	211.3	249.4	263.4
80°	93.0	121.2	170.5	197.2	208.5
82.5°	64.8	88.8	125.4	139.5	142.3
85°	40.9	56.4	76.1	84.5	83.1
87.5°	18.3	22.5	28.2	31.0	29.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)