

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: P271989

Luminaire Tested: **22CZ2-34HE-UNV-L930-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: P271989  
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-L930-CD1-U  
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (196) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2793.5 lumens  
Efficiency: N/A  
Efficacy: 108.3 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

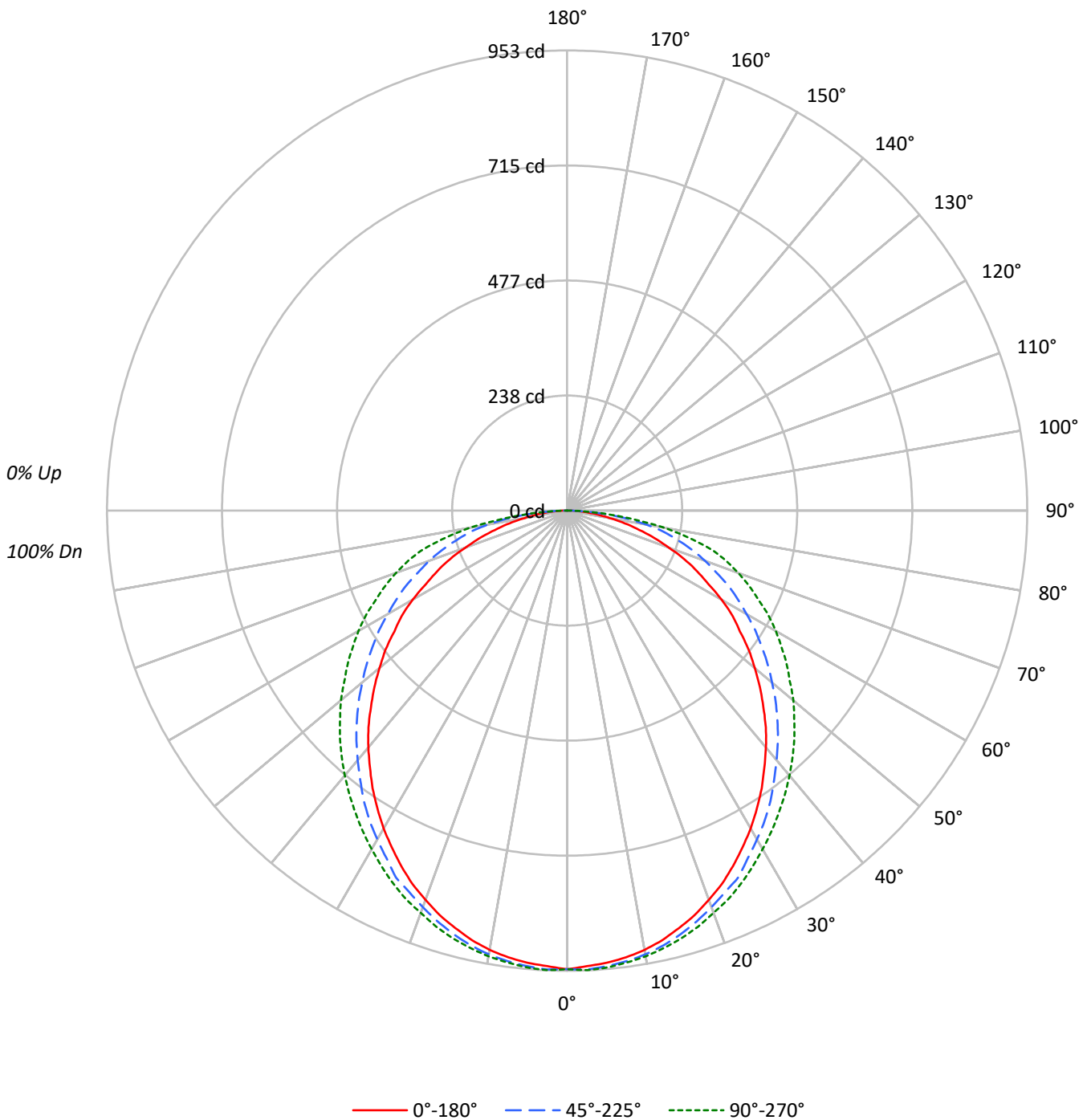
Input Watts (W): 25.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2556	2556	2556
5°	2540	2558	2566
10°	2524	2550	2562
15°	2493	2531	2554
20°	2456	2503	2539
25°	2412	2490	2530
30°	2362	2443	2516
35°	2307	2411	2511
40°	2250	2371	2516
45°	2187	2343	2532
50°	2123	2319	2561
55°	2051	2309	2605
60°	1990	2308	2686
65°	1890	2346	2783
70°	1763	2390	2963
75°	1615	2472	3201
80°	1406	2577	3152
85°	1232	2291	2504



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.8	3.2
10°-20°	255.9	9.2
20°-30°	384.1	13.7
30°-40°	459.0	16.4
40°-50°	477.3	17.1
50°-60°	442.3	15.8
60°-70°	362.8	13.0
70°-80°	245.3	8.8
80°-90°	77.1	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°	729.8	26.1
0°-40°	1188.7	42.6
0°-60°	2108.3	75.5
0°-90°	2793.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2793.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	950	950	950	950	950	
5°	940	942	947	948	950	89
15°	895	899	909	914	917	252
25°	812	819	838	848	852	374
35°	702	712	734	756	764	439
45°	575	586	616	652	665	444
55°	437	451	492	536	555	393
65°	297	313	368	416	437	293
75°	155	181	238	286	308	165
85°	40	55	74	82	81	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	949.8	949.8	949.8	949.8	949.8
2.5°	944.3	947.1	951.2	952.6	952.6
5°	940.2	941.6	947.1	948.5	949.8
7.5°	933.3	936.1	941.6	943.0	944.3
10°	923.7	926.5	933.3	936.1	937.5
12.5°	911.4	914.1	922.3	926.5	927.8
15°	894.9	899.0	908.6	914.1	916.9
17.5°	878.4	882.5	892.1	900.4	903.1
20°	857.7	867.4	874.2	885.2	886.6
22.5°	837.1	842.6	855.0	866.0	871.5
25°	812.4	819.3	838.5	848.1	852.2
27.5°	786.3	795.9	811.0	826.1	831.6
30°	760.1	767.0	786.3	804.1	809.6
32.5°	731.3	740.9	761.5	779.4	787.6
35°	702.4	712.0	734.0	756.0	764.3
37.5°	670.8	681.8	703.8	729.9	740.9
40°	640.6	648.8	674.9	706.5	716.2
42.5°	608.9	618.6	646.1	680.4	691.4
45°	574.6	585.6	615.8	651.6	665.3
47.5°	541.6	552.6	585.6	621.3	637.8
50°	507.2	521.0	554.0	595.2	611.7
52.5°	474.2	486.6	523.7	566.3	581.5
55°	437.1	450.9	492.1	536.1	555.3
57.5°	406.9	416.5	461.9	507.2	526.5
60°	369.8	382.1	428.9	477.0	499.0
62.5°	329.9	350.5	398.6	448.1	470.1
65°	296.9	313.4	368.4	416.5	437.1
67.5°	262.5	280.4	334.0	384.9	408.3
70°	224.1	247.4	303.8	354.6	376.6
72.5°	189.7	214.4	272.2	321.7	345.0
75°	155.3	181.4	237.8	285.9	307.9
77.5°	122.3	151.2	206.2	243.3	257.0
80°	90.7	118.2	166.3	192.4	203.4
82.5°	63.2	86.6	122.3	136.1	138.8
85°	39.9	55.0	74.2	82.5	81.1
87.5°	17.9	22.0	27.5	30.2	28.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)