

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: P274723

Luminaire Tested: **14CZ2-48HE-RDP-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: P274723  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-48HE-RDP-UNV-L930-CD1-U  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 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: 2553.9 lumens  
Efficiency: N/A  
Efficacy: 69.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

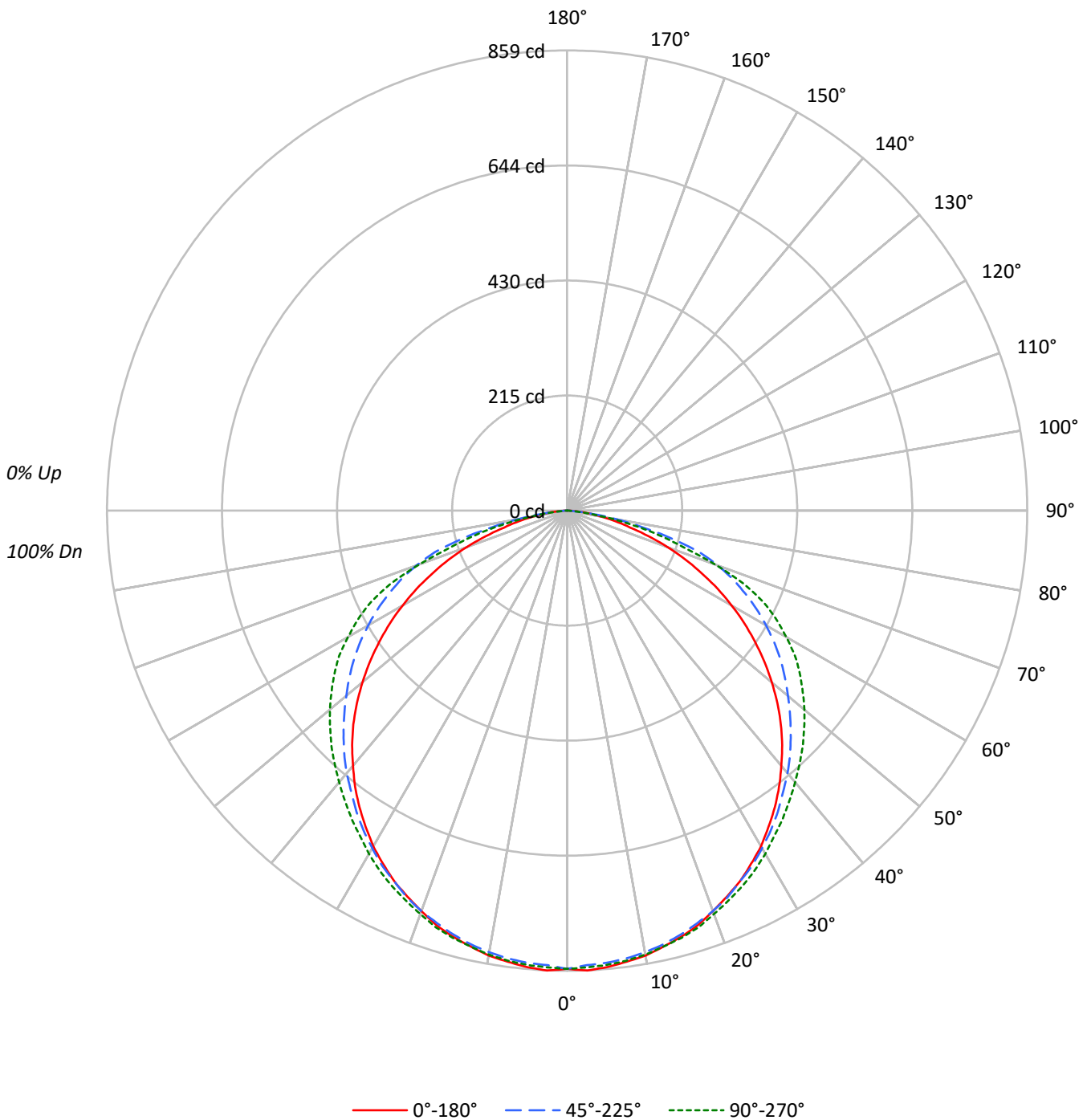
Input Watts (W): 36.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2302	2302	2302
5°	2311	2289	2300
10°	2305	2288	2299
15°	2294	2283	2300
20°	2278	2278	2295
25°	2267	2267	2297
30°	2249	2261	2298
35°	2220	2253	2305
40°	2185	2248	2325
45°	2148	2246	2367
50°	2087	2254	2421
55°	2011	2282	2488
60°	1910	2307	2543
65°	1764	2336	2578
70°	1569	2353	2306
75°	1264	2115	1845
80°	989	1483	1206
85°	676	432	309



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.0	3.2
10°-20°	232.3	9.1
20°-30°	353.7	13.8
30°-40°	430.8	16.9
40°-50°	457.0	17.9
50°-60°	431.3	16.9
60°-70°	348.3	13.6
70°-80°	188.9	7.4
80°-90°	30.6	1.2
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°	666.9	26.1
0°-40°	1097.7	43.0
0°-60°	1986.1	77.8
0°-90°	2553.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2553.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	855	855	855	855	855	
5°	855	853	847	853	851	81
15°	824	822	820	826	826	232
25°	764	762	764	772	774	352
35°	676	680	686	700	702	423
45°	564	572	590	612	622	435
55°	429	447	486	518	530	383
65°	277	311	367	397	405	275
75°	122	178	203	183	178	133
85°	22	24	14	12	10	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	855.4	855.4	855.4	855.4	855.4
2.5°	859.4	855.4	849.4	855.4	853.4
5°	855.4	853.4	847.4	853.4	851.4
7.5°	849.4	849.4	843.4	847.4	847.4
10°	843.4	841.4	837.4	843.4	841.4
12.5°	833.4	831.4	829.4	835.4	833.4
15°	823.5	821.5	819.5	825.5	825.5
17.5°	811.5	809.5	807.5	815.5	815.5
20°	795.6	795.6	795.6	803.5	801.5
22.5°	779.6	779.6	781.6	789.6	787.6
25°	763.6	761.7	763.6	771.6	773.6
27.5°	743.7	745.7	747.7	755.7	757.7
30°	723.8	725.8	727.8	737.7	739.7
32.5°	699.8	703.8	707.8	719.8	719.8
35°	675.9	679.9	685.9	699.8	701.8
37.5°	650.0	654.0	662.0	677.9	681.9
40°	622.1	628.1	640.0	656.0	662.0
42.5°	594.2	602.1	616.1	634.0	642.0
45°	564.3	572.2	590.2	612.1	622.1
47.5°	532.4	542.3	564.3	592.2	600.2
50°	498.5	512.4	538.3	568.3	578.2
52.5°	464.6	480.5	512.4	544.3	554.3
55°	428.7	446.6	486.5	518.4	530.4
57.5°	392.8	412.7	458.6	492.5	504.4
60°	354.9	378.8	428.7	462.6	472.5
62.5°	317.0	344.9	398.8	432.7	440.6
65°	277.1	311.0	366.9	396.8	404.8
67.5°	239.3	279.1	335.0	356.9	356.9
70°	199.4	243.3	299.1	305.1	293.1
72.5°	159.5	209.4	259.2	237.3	227.3
75°	121.6	177.5	203.4	183.4	177.5
77.5°	91.7	143.6	143.6	131.6	127.6
80°	63.8	109.7	95.7	83.7	77.8
82.5°	41.9	61.8	49.8	39.9	33.9
85°	21.9	23.9	14.0	12.0	10.0
87.5°	8.0	4.0	2.0	4.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)