

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: P271938

Luminaire Tested: **14CZ2-29-S-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: P271938  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-29-S-UNV-L935-CD1-U  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI  
Light Source: (84) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

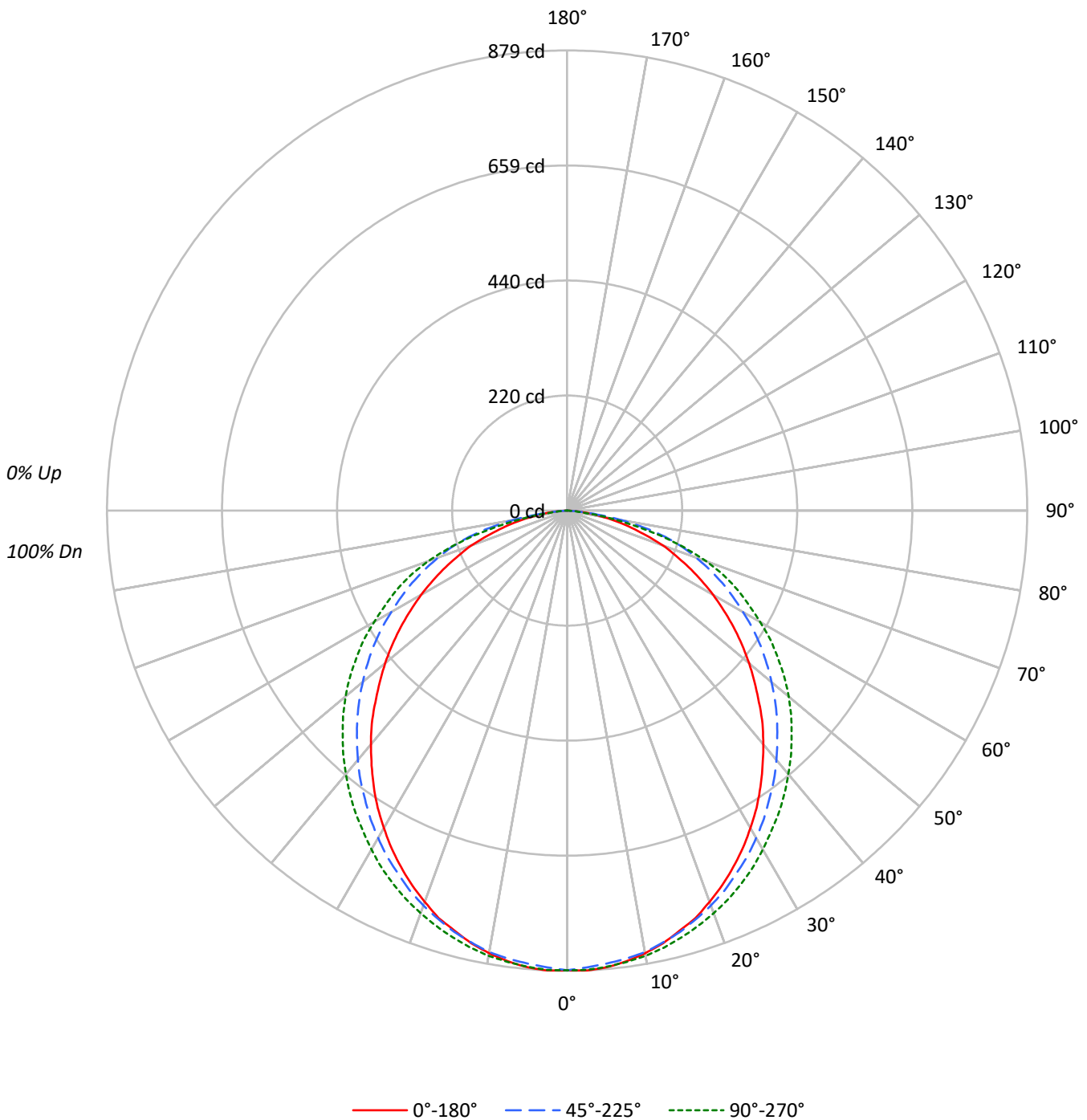
Lumens per Lamp: N/A  
Luminaire Lumens: 2460.0 lumens  
Efficiency: N/A  
Efficacy: 101.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 24.3  
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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2363	2363	2363
5°	2365	2346	2362
10°	2346	2340	2360
15°	2314	2321	2351
20°	2277	2298	2344
25°	2231	2271	2336
30°	2175	2244	2323
35°	2116	2212	2316
40°	2048	2185	2309
45°	1973	2159	2307
50°	1899	2134	2313
55°	1820	2117	2306
60°	1733	2088	2291
65°	1631	2082	2291
70°	1536	2063	2227
75°	1332	2016	1903
80°	1077	1626	1266
85°	716	565	377



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.9	3.4
10°-20°	236.0	9.6
20°-30°	354.0	14.4
30°-40°	422.2	17.2
40°-50°	436.5	17.7
50°-60°	398.5	16.2
60°-70°	313.6	12.7
70°-80°	182.6	7.4
80°-90°	33.6	1.4
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°	672.9	27.4
0°-40°	1095.1	44.5
0°-60°	1930.2	78.5
0°-90°	2460.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2460.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	878	878	878	878	878	
5°	876	873	868	876	874	83
15°	831	832	833	844	844	234
25°	751	755	765	783	787	346
35°	644	652	673	699	705	403
45°	518	535	567	599	606	400
55°	388	409	451	484	492	347
65°	256	283	327	352	360	254
75°	128	159	194	190	183	136
85°	23	33	18	15	12	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	878.2	878.2	878.2	878.2	878.2
2.5°	879.4	877.0	873.3	879.4	878.2
5°	875.7	873.3	868.4	875.7	874.5
7.5°	868.4	866.0	863.5	870.9	869.6
10°	858.7	857.4	856.2	864.8	863.5
12.5°	846.5	846.5	845.2	855.0	855.0
15°	830.6	831.8	833.1	844.0	844.0
17.5°	816.0	814.8	818.4	830.6	831.8
20°	795.2	797.7	802.6	817.2	818.4
22.5°	774.5	776.9	785.5	800.1	803.8
25°	751.3	755.0	764.7	783.0	786.7
27.5°	726.9	731.8	745.2	764.7	768.4
30°	700.1	707.4	722.1	744.0	747.7
32.5°	673.3	680.6	698.9	720.8	725.7
35°	644.0	652.5	673.3	698.9	705.0
37.5°	613.5	624.5	648.9	674.5	681.8
40°	583.0	595.2	622.0	648.9	657.4
42.5°	552.5	564.7	594.0	624.5	633.0
45°	518.4	535.4	567.2	598.9	606.2
47.5°	485.4	503.7	539.1	570.8	580.6
50°	453.7	472.0	509.8	542.8	552.5
52.5°	420.8	440.3	480.6	514.7	523.2
55°	387.9	408.6	451.3	484.2	491.5
57.5°	354.9	376.9	420.8	452.5	461.0
60°	322.0	345.2	387.9	419.6	425.7
62.5°	289.1	313.5	357.4	385.4	391.5
65°	256.1	283.0	326.9	352.5	359.8
67.5°	224.4	251.3	293.9	318.3	324.4
70°	195.2	219.5	262.2	280.5	283.0
72.5°	158.6	189.1	230.5	240.3	234.2
75°	128.1	158.6	193.9	190.3	183.0
77.5°	97.6	128.1	151.2	139.0	129.3
80°	69.5	100.0	104.9	86.6	81.7
82.5°	45.1	69.5	58.5	45.1	36.6
85°	23.2	32.9	18.3	14.6	12.2
87.5°	7.3	4.9	2.4	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)