

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: P271901

Luminaire Tested: **14CZ2-29-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: P271901  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-29-UNV-L930-CD1-U  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 90CRI  
Light Source: (84) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

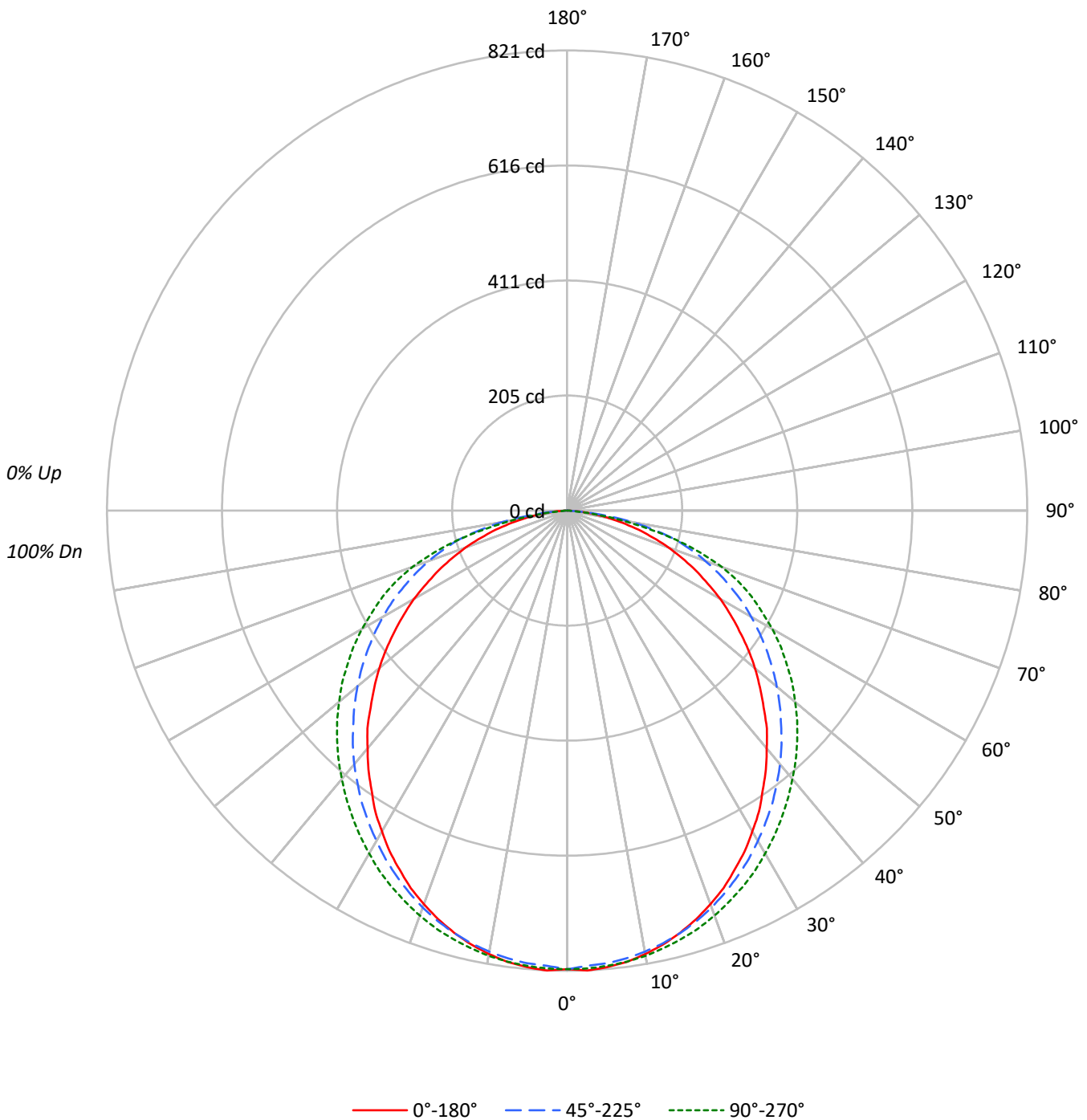
Lumens per Lamp: N/A  
Luminaire Lumens: 2375.0 lumens  
Efficiency: N/A  
Efficacy: 97.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	2202	2202	2202
5°	2209	2190	2203
10°	2195	2184	2204
15°	2172	2173	2203
20°	2140	2158	2202
25°	2099	2137	2200
30°	2054	2115	2195
35°	1999	2096	2194
40°	1946	2076	2197
45°	1886	2054	2209
50°	1831	2044	2224
55°	1762	2038	2244
60°	1699	2041	2274
65°	1612	2047	2310
70°	1512	2062	2308
75°	1371	2082	2087
80°	1125	1798	1486
85°	834	849	343



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.4	3.3
10°-20°	221.2	9.3
20°-30°	333.2	14.0
30°-40°	399.8	16.8
40°-50°	416.7	17.5
50°-60°	385.8	16.2
60°-70°	311.7	13.1
70°-80°	190.0	8.0
80°-90°	39.2	1.7
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°	631.8	26.6
0°-40°	1031.5	43.4
0°-60°	1834.0	77.2
0°-90°	2375.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2375.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	818	816	811	817	816	78
15°	780	780	780	791	791	220
25°	707	711	720	738	741	326
35°	608	618	638	661	668	381
45°	496	510	540	570	580	383
55°	376	395	434	468	478	336
65°	253	278	322	354	363	250
75°	132	161	200	203	201	138
85°	27	40	28	15	11	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	818.2	818.2	818.2	818.2	818.2
2.5°	821.4	818.7	812.9	818.7	817.7
5°	817.7	815.5	810.8	816.6	815.5
7.5°	812.4	810.3	806.0	812.9	811.8
10°	803.4	802.3	799.1	807.1	806.5
12.5°	792.8	792.2	790.7	799.7	799.1
15°	779.5	780.1	780.1	790.7	790.7
17.5°	764.7	765.8	767.9	779.5	781.1
20°	747.2	749.4	753.6	766.8	768.9
22.5°	729.2	730.8	737.2	753.1	755.2
25°	707.0	711.2	719.7	737.7	740.9
27.5°	685.8	689.5	701.2	719.7	725.0
30°	660.9	666.7	680.5	700.6	706.5
32.5°	637.1	643.4	659.3	682.6	687.9
35°	608.5	618.0	638.1	661.4	667.8
37.5°	582.5	591.5	614.3	639.7	647.1
40°	553.9	565.1	591.0	618.0	625.4
42.5°	527.5	538.0	566.1	593.7	603.7
45°	495.7	510.5	539.6	569.8	580.4
47.5°	466.6	481.4	514.7	547.1	556.6
50°	437.4	453.3	488.3	521.6	531.2
52.5°	407.2	424.2	461.8	495.2	506.3
55°	375.5	395.1	434.3	468.1	478.2
57.5°	345.3	365.4	407.2	441.7	451.7
60°	315.6	336.3	379.2	412.0	422.6
62.5°	282.8	307.2	351.6	383.9	391.9
65°	253.1	278.0	321.5	353.8	362.8
67.5°	221.9	248.9	292.3	322.0	330.5
70°	192.2	220.3	262.1	289.7	293.4
72.5°	160.5	189.1	231.4	248.9	248.9
75°	131.9	161.0	200.2	203.4	200.7
77.5°	100.6	132.9	158.3	152.0	145.6
80°	72.6	104.3	116.0	104.3	95.9
82.5°	48.7	75.7	69.9	55.6	49.3
85°	27.0	40.2	27.5	15.4	11.1
87.5°	10.1	9.0	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)