

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: P294792

Luminaire Tested: **14CZ2-25-HRP-UNV-L935-CD1-U**

Issue Date: 12/2/2019

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: P294792  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-25-HRP-UNV-L935-CD1-U  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS  
Light Source: (84) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

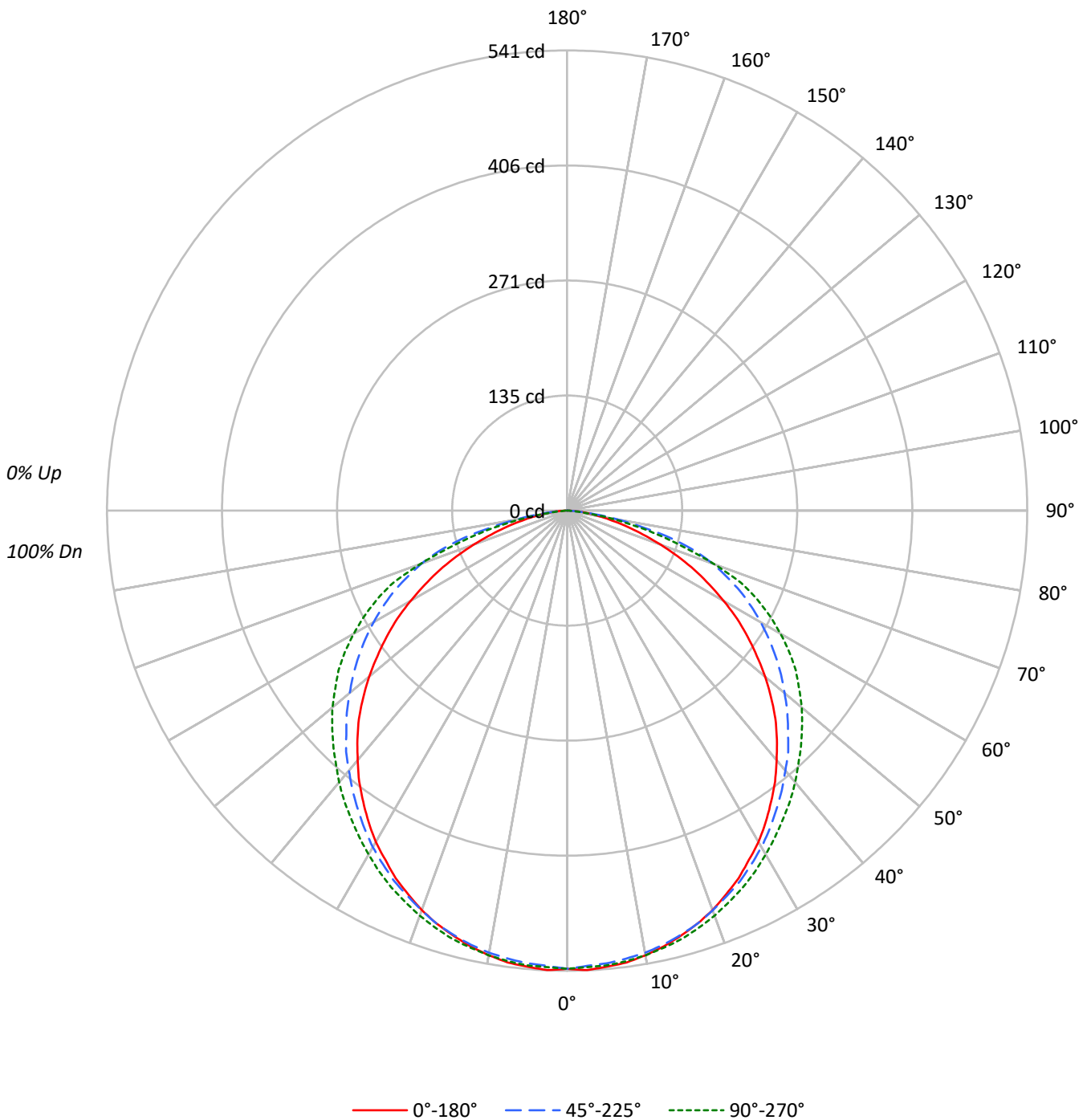
Lumens per Lamp: N/A  
Luminaire Lumens: 1586.4 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 20.5  
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	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	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	38	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	1450	1450	1450
5°	1454	1443	1450
10°	1450	1442	1450
15°	1441	1438	1452
20°	1431	1433	1451
25°	1416	1428	1452
30°	1398	1420	1451
35°	1373	1409	1454
40°	1346	1402	1465
45°	1318	1397	1481
50°	1272	1397	1508
55°	1217	1404	1540
60°	1144	1415	1560
65°	1054	1429	1569
70°	918	1433	1445
75°	757	1333	1167
80°	595	959	781
85°	463	371	185



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.0	3.2
10°-20°	146.4	9.2
20°-30°	222.3	14.0
30°-40°	269.3	17.0
40°-50°	283.8	17.9
50°-60°	264.9	16.7
60°-70°	211.7	13.3
70°-80°	116.5	7.3
80°-90°	20.6	1.3
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°	419.6	26.5
0°-40°	688.9	43.4
0°-60°	1237.6	78.0
0°-90°	1586.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1586.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	539	539	539	539	539	
5°	538	537	534	538	537	51
15°	517	517	516	521	521	146
25°	477	478	481	488	489	220
35°	418	422	429	440	442	262
45°	346	353	367	384	389	266
55°	259	272	299	320	328	232
65°	166	187	224	243	246	163
75°	73	104	128	115	112	78
85°	15	19	12	8	6	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	538.7	538.7	538.7	538.7	538.7
2.5°	540.7	539.2	535.8	538.7	537.2
5°	538.2	536.7	534.3	537.7	536.7
7.5°	535.8	533.8	531.3	535.3	534.3
10°	530.8	529.3	527.8	531.3	530.8
12.5°	524.8	524.3	522.8	526.8	526.3
15°	517.3	517.3	516.3	521.3	521.3
17.5°	509.3	508.8	509.3	514.8	514.3
20°	499.8	499.8	500.3	506.8	506.8
22.5°	488.4	488.9	490.4	498.3	497.8
25°	476.9	477.9	480.9	487.9	488.9
27.5°	462.9	465.4	468.9	477.4	478.4
30°	450.0	451.4	456.9	464.9	466.9
32.5°	434.5	437.5	443.5	452.4	454.9
35°	418.0	422.0	429.0	440.0	442.5
37.5°	401.6	405.1	414.5	426.0	430.5
40°	383.1	389.1	399.1	412.0	417.0
42.5°	365.1	371.1	384.6	398.1	402.6
45°	346.2	352.7	367.1	383.6	389.1
47.5°	325.2	332.7	351.2	368.6	374.6
50°	303.8	313.3	333.7	353.2	360.2
52.5°	281.3	293.3	316.8	337.2	343.7
55°	259.4	272.4	299.3	320.3	328.2
57.5°	236.9	250.9	281.3	305.3	309.8
60°	212.5	229.5	262.9	283.8	289.8
62.5°	188.6	208.0	243.9	263.9	268.9
65°	165.6	186.6	224.5	242.9	246.4
67.5°	140.7	165.6	203.0	220.0	221.0
70°	116.7	145.7	182.1	190.1	183.6
72.5°	93.3	124.2	157.6	151.1	145.7
75°	72.8	104.3	128.2	115.2	112.2
77.5°	53.9	85.3	91.8	84.8	79.3
80°	38.4	67.3	61.9	52.9	50.4
82.5°	26.4	42.4	33.9	26.4	22.9
85°	15.0	19.0	12.0	7.5	6.0
87.5°	6.5	4.5	2.5	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)