

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: P294791

Luminaire Tested: **14CZ2-25-HRP-UNV-L930-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: P294791  
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-L930-CD1-U  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS  
Light Source: (84) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

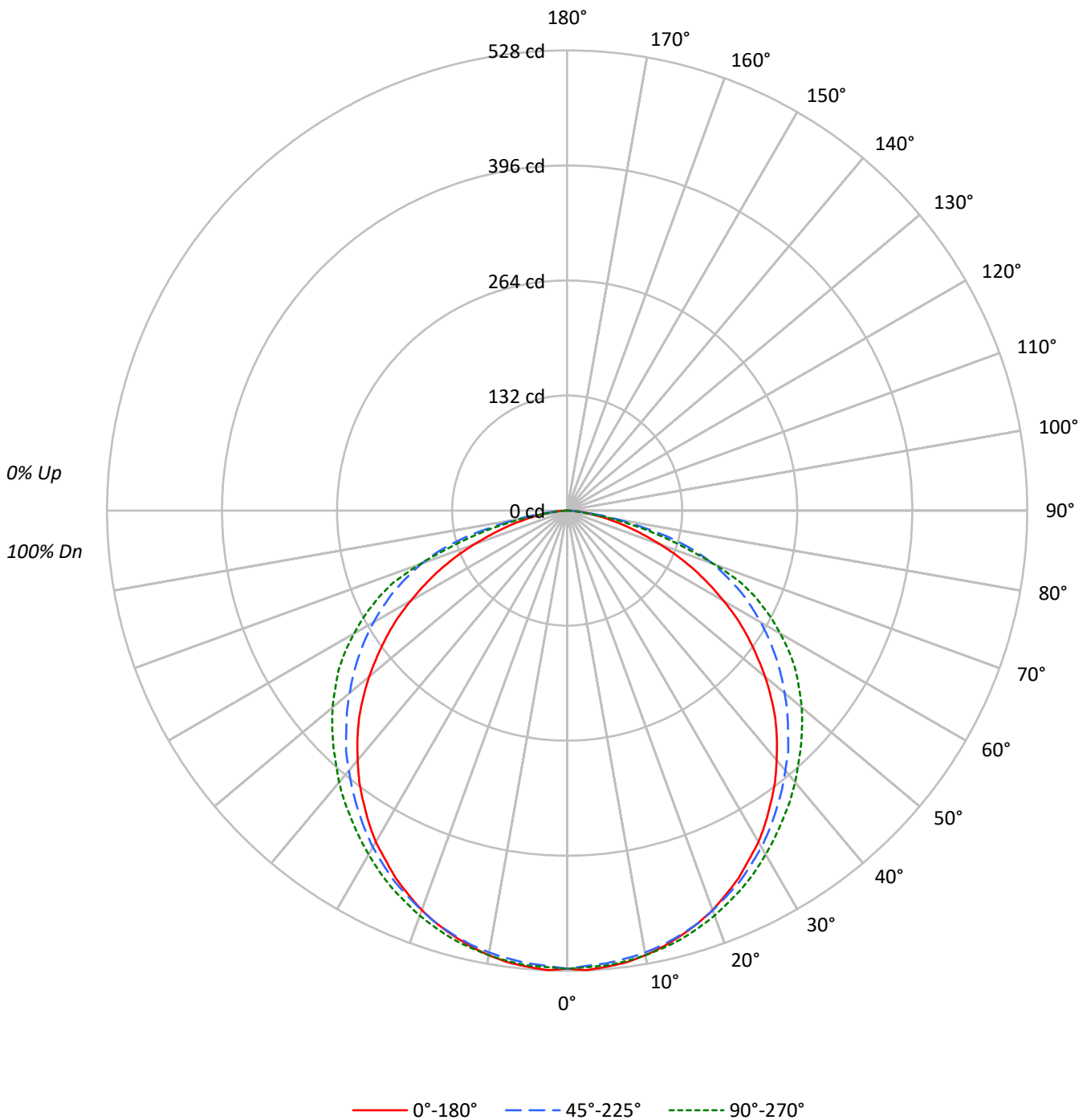
Lumens per Lamp: N/A  
Luminaire Lumens: 1548.1 lumens  
Efficiency: N/A  
Efficacy: 75.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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°	1415	1415	1415
5°	1419	1408	1415
10°	1415	1407	1415
15°	1406	1404	1417
20°	1397	1398	1416
25°	1382	1393	1417
30°	1364	1386	1416
35°	1340	1375	1418
40°	1313	1368	1430
45°	1286	1364	1445
50°	1241	1364	1472
55°	1187	1370	1503
60°	1116	1380	1522
65°	1029	1395	1531
70°	896	1398	1409
75°	739	1301	1138
80°	581	936	762
85°	451	361	179



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.8	3.2
10°-20°	142.8	9.2
20°-30°	216.9	14.0
30°-40°	262.8	17.0
40°-50°	276.9	17.9
50°-60°	258.5	16.7
60°-70°	206.6	13.3
70°-80°	113.7	7.3
80°-90°	20.1	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°	409.5	26.5
0°-40°	672.3	43.4
0°-60°	1207.7	78.0
0°-90°	1548.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1548.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	526	526	526	526	526	
5°	525	524	521	525	524	50
15°	505	505	504	509	509	142
25°	465	466	469	476	477	214
35°	408	412	419	429	432	255
45°	338	344	358	374	380	260
55°	253	266	292	312	320	226
65°	162	182	219	237	240	159
75°	71	102	125	112	110	77
85°	15	18	12	7	6	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	525.7	525.7	525.7	525.7	525.7
2.5°	527.7	526.2	522.8	525.7	524.3
5°	525.3	523.8	521.4	524.8	523.8
7.5°	522.8	520.9	518.4	522.3	521.4
10°	518.0	516.5	515.0	518.4	518.0
12.5°	512.1	511.6	510.2	514.1	513.6
15°	504.8	504.8	503.8	508.7	508.7
17.5°	497.0	496.5	497.0	502.4	501.9
20°	487.8	487.8	488.3	494.6	494.6
22.5°	476.6	477.1	478.5	486.3	485.8
25°	465.4	466.4	469.3	476.1	477.1
27.5°	451.7	454.2	457.6	465.9	466.8
30°	439.1	440.6	445.9	453.7	455.6
32.5°	424.0	426.9	432.8	441.5	444.0
35°	407.9	411.8	418.6	429.4	431.8
37.5°	391.9	395.3	404.5	415.7	420.1
40°	373.9	379.7	389.4	402.1	407.0
42.5°	356.3	362.2	375.3	388.5	392.8
45°	337.8	344.2	358.3	374.3	379.7
47.5°	317.4	324.7	342.7	359.7	365.6
50°	296.5	305.7	325.7	344.7	351.5
52.5°	274.6	286.2	309.1	329.1	335.4
55°	253.1	265.8	292.1	312.5	320.3
57.5°	231.2	244.9	274.6	297.9	302.3
60°	207.4	223.9	256.5	277.0	282.8
62.5°	184.0	203.0	238.0	257.5	262.4
65°	161.6	182.1	219.1	237.1	240.5
67.5°	137.3	161.6	198.1	214.7	215.7
70°	113.9	142.1	177.7	185.5	179.1
72.5°	91.0	121.2	153.8	147.5	142.1
75°	71.1	101.7	125.1	112.4	109.5
77.5°	52.6	83.2	89.6	82.8	77.4
80°	37.5	65.7	60.4	51.6	49.2
82.5°	25.8	41.4	33.1	25.8	22.4
85°	14.6	18.5	11.7	7.3	5.8
87.5°	6.3	4.4	2.4	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)