

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: P294796

Luminaire Tested: **14CZ2-29-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: P294796
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: 14CZ2-29-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: 1846.4 lumens
Efficiency: N/A
Efficacy: 76.0 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

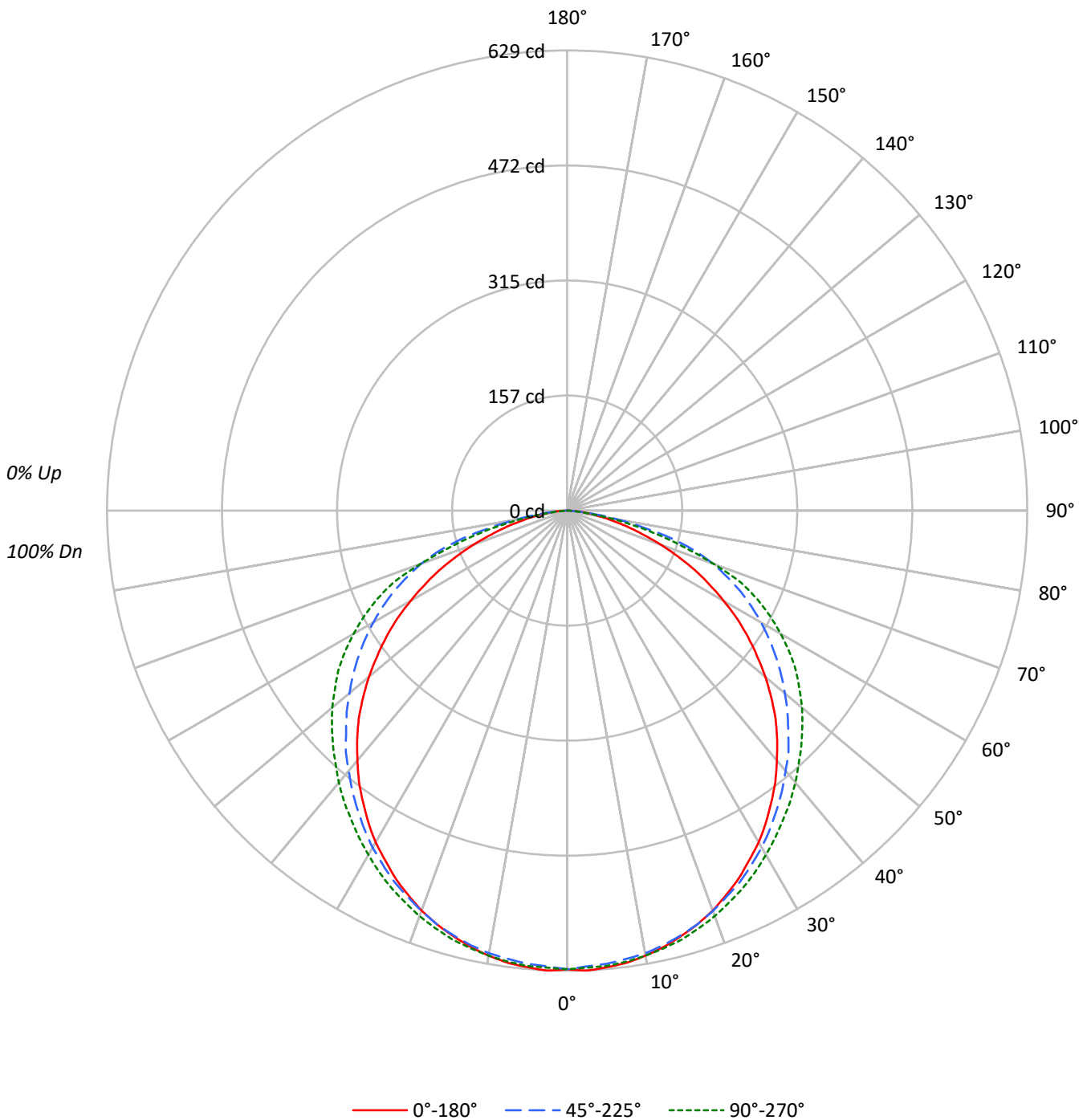
Input Watts (W): 24.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1687	1687	1687
5°	1692	1680	1687
10°	1688	1679	1688
15°	1677	1674	1690
20°	1666	1668	1689
25°	1648	1662	1689
30°	1627	1652	1688
35°	1598	1640	1692
40°	1566	1632	1705
45°	1533	1626	1724
50°	1480	1626	1755
55°	1416	1635	1792
60°	1331	1647	1815
65°	1228	1664	1826
70°	1069	1667	1681
75°	882	1551	1358
80°	693	1116	908
85°	537	429	216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	3.2
10°-20°	170.3	9.2
20°-30°	258.7	14.0
30°-40°	313.4	17.0
40°-50°	330.3	17.9
50°-60°	308.3	16.7
60°-70°	246.4	13.3
70°-80°	135.6	7.3
80°-90°	23.9	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°	488.4	26.5
0°-40°	801.8	43.4
0°-60°	1440.4	78.0
0°-90°	1846.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1846.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	626	625	622	626	625	60
15°	602	602	601	607	607	170
25°	555	556	560	568	569	256
35°	486	491	499	512	515	304
45°	403	410	427	446	453	310
55°	302	317	348	373	382	270
65°	193	217	261	283	287	190
75°	85	121	149	134	131	91
85°	17	22	14	9	7	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	627.0	627.0	627.0	627.0	627.0
2.5°	629.4	627.6	623.6	627.0	625.3
5°	626.5	624.7	621.8	625.9	624.7
7.5°	623.6	621.2	618.3	623.0	621.8
10°	617.7	616.0	614.3	618.3	617.7
12.5°	610.8	610.2	608.5	613.1	612.5
15°	602.1	602.1	600.9	606.7	606.7
17.5°	592.8	592.2	592.8	599.2	598.6
20°	581.8	581.8	582.3	589.9	589.9
22.5°	568.4	569.0	570.7	580.0	579.4
25°	555.0	556.2	559.7	567.8	569.0
27.5°	538.8	541.7	545.8	555.6	556.8
30°	523.7	525.4	531.8	541.1	543.4
32.5°	505.7	509.2	516.1	526.6	529.5
35°	486.5	491.2	499.3	512.1	515.0
37.5°	467.4	471.4	482.5	495.8	501.0
40°	445.9	452.9	464.5	479.6	485.4
42.5°	425.0	432.0	447.6	463.3	468.5
45°	402.9	410.5	427.3	446.5	452.9
47.5°	378.5	387.3	408.7	429.1	436.0
50°	353.6	364.6	388.4	411.1	419.2
52.5°	327.5	341.4	368.7	392.5	400.0
55°	301.9	317.0	348.4	372.7	382.0
57.5°	275.8	292.0	327.5	355.3	360.5
60°	247.3	267.1	306.0	330.4	337.3
62.5°	219.5	242.1	283.9	307.1	312.9
65°	192.8	217.1	261.3	282.7	286.8
67.5°	163.7	192.8	236.3	256.0	257.2
70°	135.9	169.5	211.9	221.2	213.7
72.5°	108.6	144.6	183.5	175.9	169.5
75°	84.8	121.3	149.2	134.1	130.6
77.5°	62.7	99.3	106.8	98.7	92.3
80°	44.7	78.4	72.0	61.5	58.6
82.5°	30.8	49.4	39.5	30.8	26.7
85°	17.4	22.1	13.9	8.7	7.0
87.5°	7.5	5.2	2.9	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)