

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: P294798

Luminaire Tested: **14CZ2-29-HRP-UNV-L950-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: P294798
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-L950-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

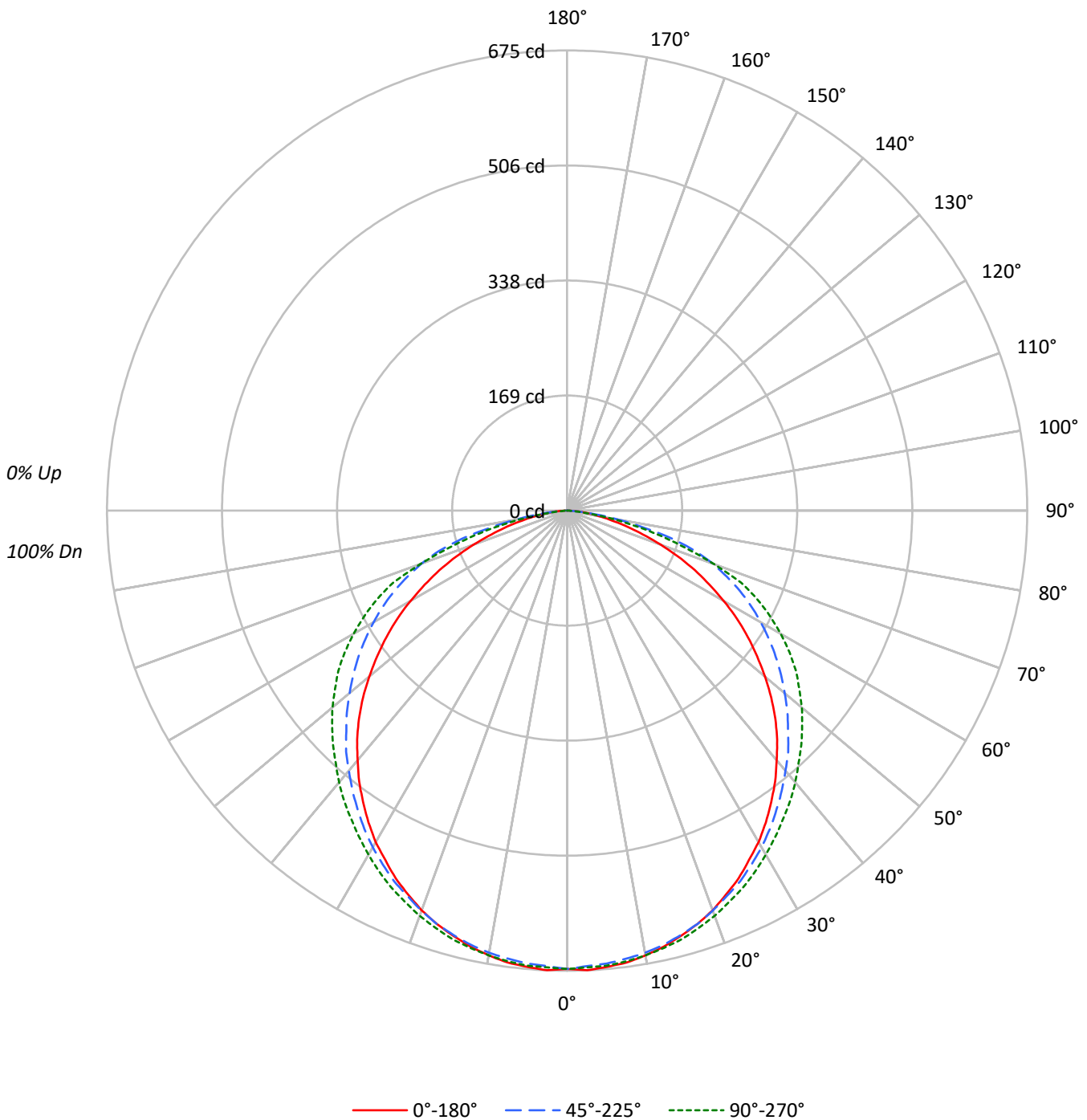
Lumens per Lamp: N/A
Luminaire Lumens: 1980.1 lumens
Efficiency: N/A
Efficacy: 81.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84				84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69				69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58				58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49				49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37				37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33				33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29				29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26				26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1809	1809	1809
5°	1815	1801	1810
10°	1810	1800	1810
15°	1799	1795	1813
20°	1787	1788	1812
25°	1767	1782	1812
30°	1745	1772	1811
35°	1714	1759	1814
40°	1680	1750	1828
45°	1644	1744	1848
50°	1587	1744	1882
55°	1519	1753	1922
60°	1427	1766	1947
65°	1316	1784	1959
70°	1146	1788	1803
75°	945	1664	1457
80°	742	1196	975
85°	577	460	232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.7	3.2
10°-20°	182.7	9.2
20°-30°	277.4	14.0
30°-40°	336.1	17.0
40°-50°	354.2	17.9
50°-60°	330.7	16.7
60°-70°	264.3	13.3
70°-80°	145.4	7.3
80°-90°	25.7	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°	523.7	26.5
0°-40°	859.9	43.4
0°-60°	1544.8	78.0
0°-90°	1980.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1980.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	672	672	672	672	672	
5°	672	670	667	671	670	64
15°	646	646	644	651	651	182
25°	595	596	600	609	610	274
35°	522	527	536	549	552	326
45°	432	440	458	479	486	332
55°	324	340	374	400	410	289
65°	207	233	280	303	308	204
75°	91	130	160	144	140	98
85°	19	24	15	9	8	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	672.4	672.4	672.4	672.4	672.4
2.5°	674.9	673.1	668.7	672.4	670.6
5°	671.8	670.0	666.8	671.2	670.0
7.5°	668.7	666.2	663.1	668.1	666.8
10°	662.5	660.6	658.7	663.1	662.5
12.5°	655.0	654.4	652.5	657.5	656.9
15°	645.7	645.7	644.4	650.7	650.7
17.5°	635.7	635.1	635.7	642.6	641.9
20°	623.9	623.9	624.5	632.6	632.6
22.5°	609.6	610.2	612.0	622.0	621.4
25°	595.2	596.5	600.2	608.9	610.2
27.5°	577.8	580.9	585.3	595.9	597.1
30°	561.6	563.5	570.3	580.3	582.8
32.5°	542.3	546.0	553.5	564.7	567.8
35°	521.8	526.7	535.5	549.2	552.3
37.5°	501.2	505.6	517.4	531.7	537.3
40°	478.2	485.7	498.1	514.3	520.5
42.5°	455.8	463.2	480.1	496.9	502.5
45°	432.1	440.2	458.3	478.8	485.7
47.5°	406.0	415.3	438.3	460.1	467.6
50°	379.2	391.0	416.5	440.8	449.5
52.5°	351.2	366.1	395.4	420.9	429.0
55°	323.8	340.0	373.6	399.7	409.7
57.5°	295.8	313.2	351.2	381.1	386.7
60°	265.2	286.4	328.1	354.3	361.7
62.5°	235.4	259.6	304.5	329.4	335.6
65°	206.7	232.9	280.2	303.2	307.6
67.5°	175.6	206.7	253.4	274.6	275.8
70°	145.7	181.8	227.3	237.2	229.1
72.5°	116.4	155.0	196.8	188.7	181.8
75°	90.9	130.1	160.0	143.8	140.1
77.5°	67.2	106.5	114.6	105.8	99.0
80°	47.9	84.1	77.2	66.0	62.9
82.5°	33.0	52.9	42.3	33.0	28.6
85°	18.7	23.7	14.9	9.3	7.5
87.5°	8.1	5.6	3.1	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)