

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: P274719

Luminaire Tested: **14CZ2-39HE-RDP-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: P274719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39HE-RDP-UNV-L930-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (196) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2099.6 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

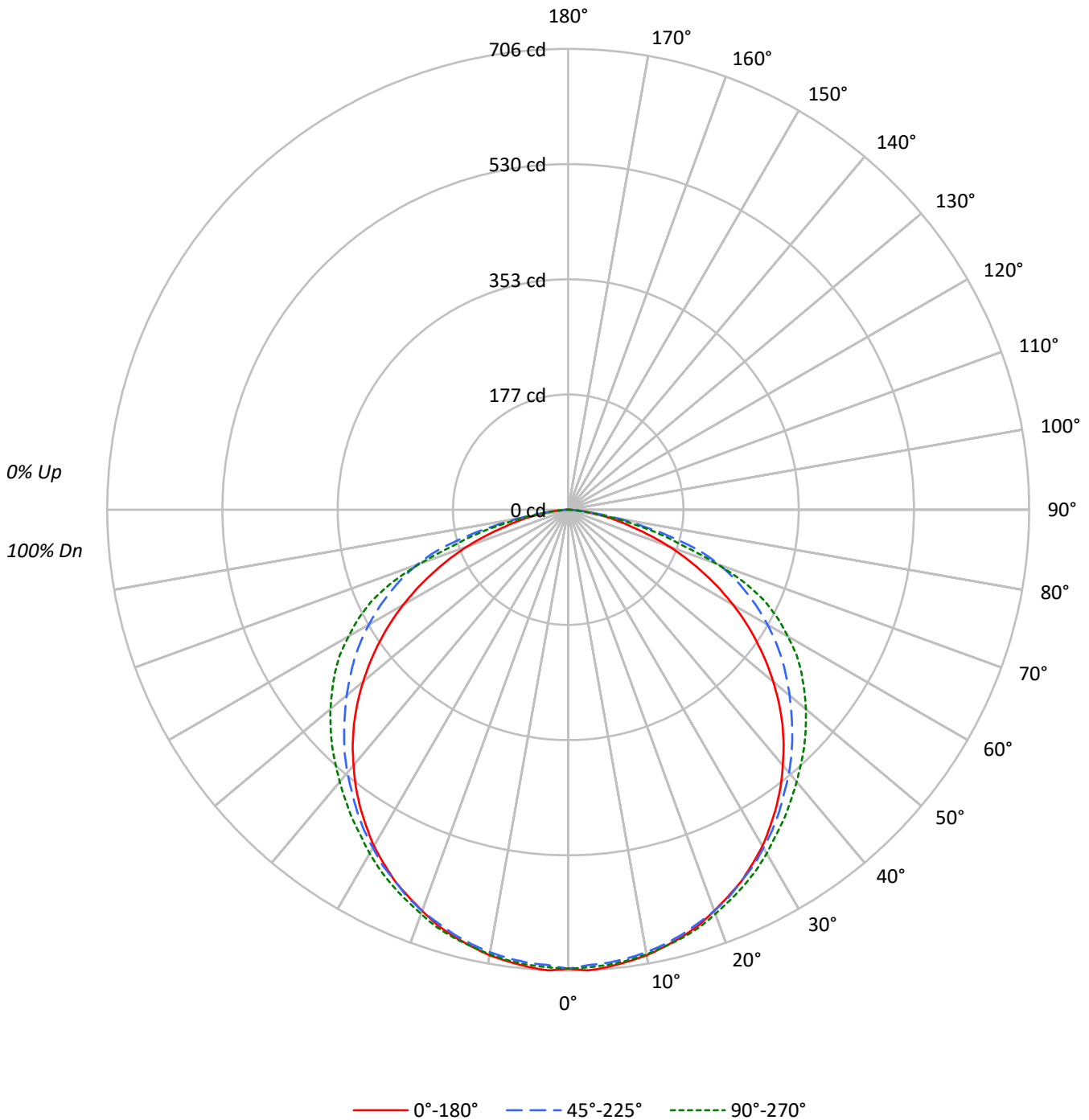
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1892	1892	1892
5°	1900	1882	1891
10°	1895	1881	1890
15°	1886	1877	1891
20°	1873	1873	1887
25°	1864	1864	1888
30°	1849	1859	1890
35°	1826	1852	1895
40°	1796	1848	1912
45°	1765	1846	1946
50°	1716	1853	1990
55°	1653	1877	2046
60°	1570	1897	2091
65°	1450	1920	2119
70°	1290	1935	1896
75°	1040	1738	1517
80°	814	1220	990
85°	556	355	253



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	3.2
10°-20°	191.0	9.1
20°-30°	290.8	13.8
30°-40°	354.2	16.9
40°-50°	375.7	17.9
50°-60°	354.6	16.9
60°-70°	286.3	13.6
70°-80°	155.3	7.4
80°-90°	25.1	1.2
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°	548.3	26.1
0°-40°	902.5	43.0
0°-60°	1632.8	77.8
0°-90°	2099.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2099.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	703	702	697	702	700	67
15°	677	675	674	679	679	191
25°	628	626	628	634	636	289
35°	556	559	564	575	577	347
45°	464	470	485	503	511	357
55°	352	367	400	426	436	315
65°	228	256	302	326	333	226
75°	100	146	167	151	146	109
85°	18	20	12	10	8	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	703.2	703.2	703.2	703.2	703.2
2.5°	706.5	703.2	698.3	703.2	701.6
5°	703.2	701.6	696.7	701.6	699.9
7.5°	698.3	698.3	693.4	696.7	696.7
10°	693.4	691.7	688.5	693.4	691.7
12.5°	685.2	683.5	681.9	686.8	685.2
15°	677.0	675.3	673.7	678.6	678.6
17.5°	667.1	665.5	663.9	670.4	670.4
20°	654.0	654.0	654.0	660.6	659.0
22.5°	640.9	640.9	642.6	649.1	647.5
25°	627.8	626.2	627.8	634.4	636.0
27.5°	611.4	613.1	614.7	621.3	622.9
30°	595.0	596.7	598.3	606.5	608.1
32.5°	575.4	578.6	581.9	591.7	591.7
35°	555.7	559.0	563.9	575.4	577.0
37.5°	534.4	537.7	544.2	557.3	560.6
40°	511.4	516.3	526.2	539.3	544.2
42.5°	488.5	495.0	506.5	521.3	527.8
45°	463.9	470.4	485.2	503.2	511.4
47.5°	437.7	445.9	463.9	486.8	493.4
50°	409.8	421.3	442.6	467.2	475.4
52.5°	381.9	395.0	421.3	447.5	455.7
55°	352.4	367.2	400.0	426.2	436.0
57.5°	322.9	339.3	377.0	404.9	414.7
60°	291.8	311.4	352.4	380.3	388.5
62.5°	260.6	283.6	327.8	355.7	362.3
65°	227.8	255.7	301.6	326.2	332.8
67.5°	196.7	229.5	275.4	293.4	293.4
70°	163.9	200.0	245.9	250.8	241.0
72.5°	131.1	172.1	213.1	195.1	186.9
75°	100.0	145.9	167.2	150.8	145.9
77.5°	75.4	118.0	118.0	108.2	104.9
80°	52.5	90.2	78.7	68.8	63.9
82.5°	34.4	50.8	41.0	32.8	27.9
85°	18.0	19.7	11.5	9.8	8.2
87.5°	6.6	3.3	1.6	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)