

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: P294799

Luminaire Tested: **14CZ2-35-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: P294799
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: 14CZ2-35-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

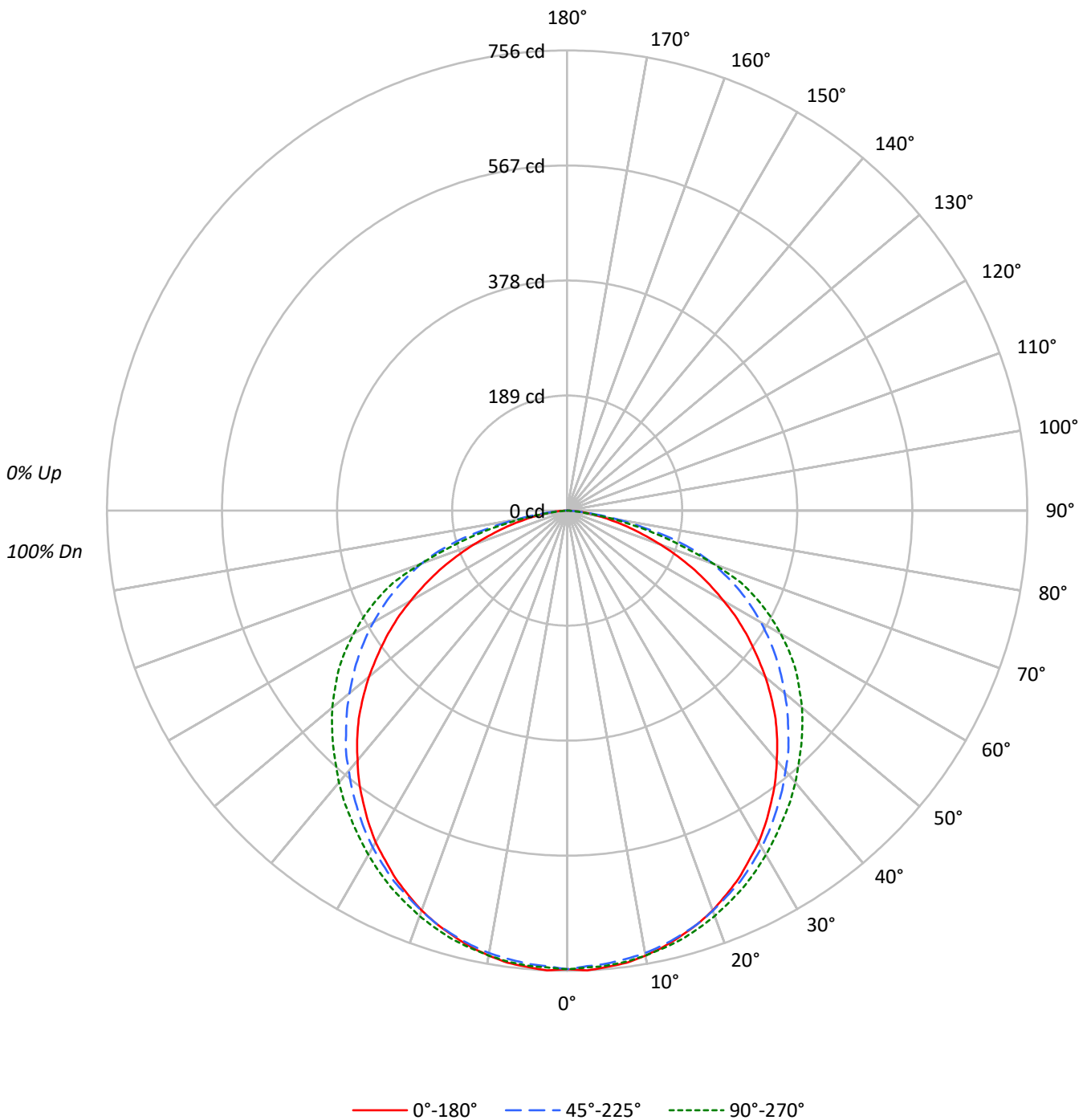
Lumens per Lamp: N/A
Luminaire Lumens: 2218.6 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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°	2027	2027	2027
5°	2033	2018	2028
10°	2028	2017	2028
15°	2015	2011	2031
20°	2002	2004	2030
25°	1980	1997	2030
30°	1955	1986	2029
35°	1920	1971	2033
40°	1882	1961	2049
45°	1843	1954	2071
50°	1779	1954	2109
55°	1702	1964	2153
60°	1600	1979	2181
65°	1475	1999	2194
70°	1284	2003	2020
75°	1059	1864	1632
80°	832	1340	1093
85°	645	516	259



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.3	3.2
10°-20°	204.7	9.2
20°-30°	310.8	14.0
30°-40°	376.6	17.0
40°-50°	396.9	17.9
50°-60°	370.5	16.7
60°-70°	296.1	13.3
70°-80°	162.9	7.3
80°-90°	28.8	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°	586.8	26.5
0°-40°	963.4	43.4
0°-60°	1730.8	78.0
0°-90°	2218.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2218.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	753	753	753	753	753	
5°	753	751	747	752	751	72
15°	723	723	722	729	729	204
25°	667	668	672	682	684	307
35°	585	590	600	615	619	366
45°	484	493	514	536	544	373
55°	363	381	419	448	459	324
65°	232	261	314	340	345	228
75°	102	146	179	161	157	110
85°	21	26	17	10	8	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	753.4	753.4	753.4	753.4	753.4
2.5°	756.2	754.1	749.3	753.4	751.3
5°	752.7	750.6	747.2	752.0	750.6
7.5°	749.3	746.5	743.0	748.6	747.2
10°	742.3	740.2	738.1	743.0	742.3
12.5°	733.9	733.2	731.1	736.7	736.0
15°	723.4	723.4	722.0	729.0	729.0
17.5°	712.3	711.6	712.3	720.0	719.3
20°	699.0	699.0	699.7	708.8	708.8
22.5°	683.0	683.7	685.8	696.9	696.2
25°	666.9	668.3	672.5	682.3	683.7
27.5°	647.4	650.9	655.8	667.6	669.0
30°	629.3	631.4	639.0	650.2	653.0
32.5°	607.6	611.8	620.2	632.7	636.2
35°	584.6	590.2	600.0	615.3	618.8
37.5°	561.6	566.5	579.7	595.8	602.1
40°	535.8	544.2	558.1	576.2	583.2
42.5°	510.7	519.0	537.9	556.7	563.0
45°	484.2	493.2	513.5	536.5	544.2
47.5°	454.9	465.3	491.1	515.5	523.9
50°	424.9	438.1	466.7	493.9	503.7
52.5°	393.5	410.2	443.0	471.6	480.7
55°	362.8	380.9	418.6	447.9	459.0
57.5°	331.4	350.9	393.5	426.9	433.2
60°	297.2	320.9	367.7	397.0	405.3
62.5°	263.7	290.9	341.1	369.0	376.0
65°	231.6	260.9	313.9	339.7	344.6
67.5°	196.7	231.6	283.9	307.7	309.0
70°	163.2	203.7	254.6	265.8	256.7
72.5°	130.5	173.7	220.5	211.4	203.7
75°	101.9	145.8	179.3	161.2	157.0
77.5°	75.3	119.3	128.4	118.6	110.9
80°	53.7	94.2	86.5	73.9	70.5
82.5°	37.0	59.3	47.4	37.0	32.1
85°	20.9	26.5	16.7	10.5	8.4
87.5°	9.1	6.3	3.5	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)