

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: P274729

Luminaire Tested: **14CZ2-60HE-RDP-UNV-L940-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: P274729
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: 14CZ2-60HE-RDP-UNV-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (196) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3301.0 lumens
Efficiency: N/A
Efficacy: 68.3 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

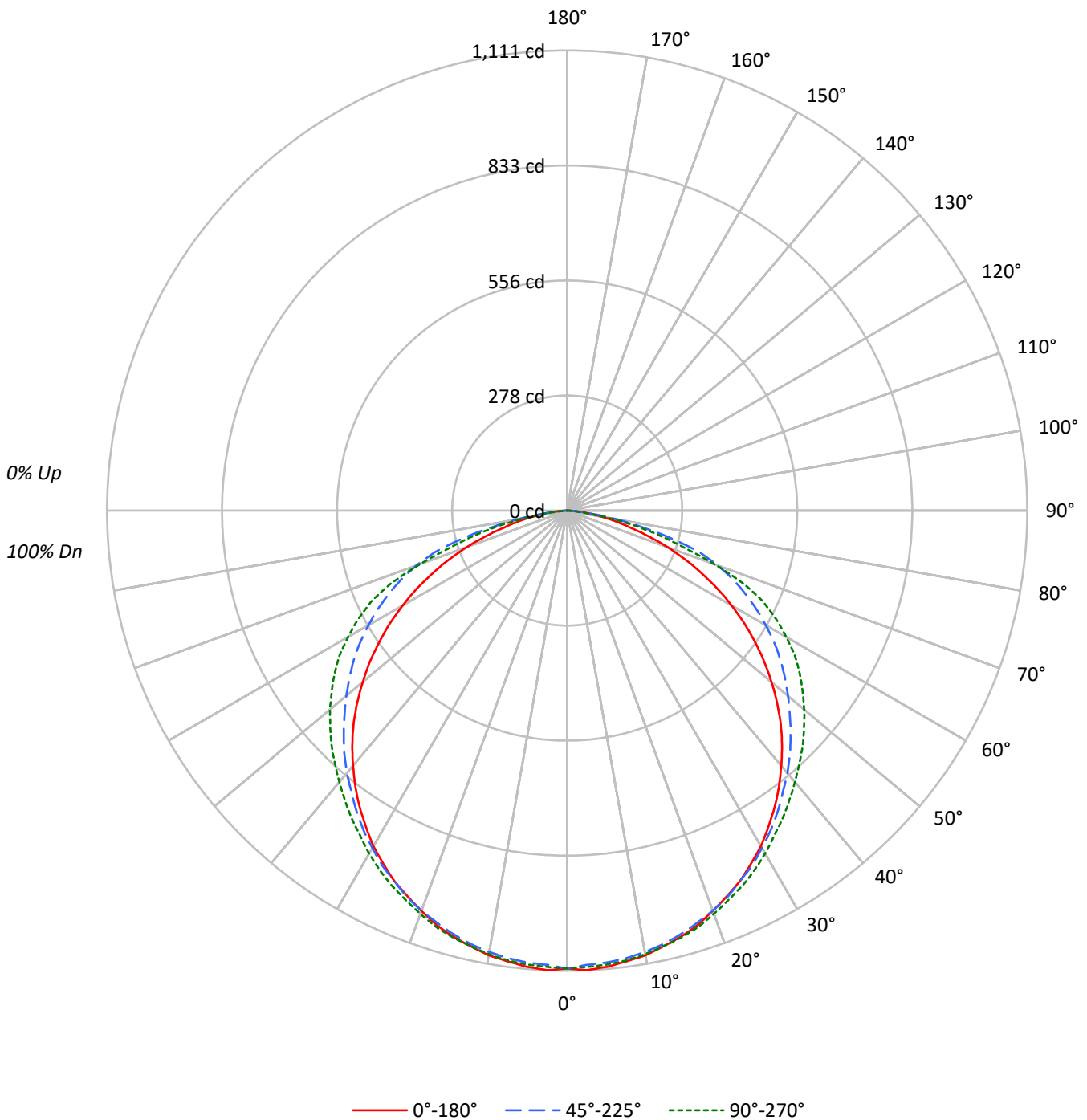
Input Watts (W): 48.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2975	2975	2975
5°	2987	2959	2972
10°	2979	2958	2972
15°	2965	2951	2972
20°	2945	2945	2967
25°	2931	2931	2969
30°	2907	2923	2971
35°	2870	2912	2980
40°	2825	2906	3006
45°	2775	2903	3060
50°	2697	2913	3129
55°	2600	2950	3216
60°	2469	2982	3287
65°	2281	3019	3331
70°	2028	3042	2980
75°	1634	2733	2385
80°	1278	1917	1557
85°	874	556	398



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.6	3.2
10°-20°	300.2	9.1
20°-30°	457.2	13.8
30°-40°	556.8	16.9
40°-50°	590.7	17.9
50°-60°	557.5	16.9
60°-70°	450.2	13.6
70°-80°	244.2	7.4
80°-90°	39.5	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°	862.0	26.1
0°-40°	1418.8	43.0
0°-60°	2567.1	77.8
0°-90°	3301.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3301.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1106	1106	1106	1106	1106	
5°	1106	1103	1095	1103	1100	105
15°	1064	1062	1059	1067	1067	300
25°	987	984	987	997	1000	454
35°	874	879	886	905	907	546
45°	729	740	763	791	804	562
55°	554	577	629	670	686	495
65°	358	402	474	513	523	355
75°	157	229	263	237	229	172
85°	28	31	18	16	13	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1105.6	1105.6	1105.6	1105.6	1105.6
2.5°	1110.7	1105.6	1097.9	1105.6	1103.0
5°	1105.6	1103.0	1095.3	1103.0	1100.4
7.5°	1097.9	1097.9	1090.1	1095.3	1095.3
10°	1090.1	1087.5	1082.4	1090.1	1087.5
12.5°	1077.2	1074.7	1072.1	1079.8	1077.2
15°	1064.4	1061.8	1059.2	1066.9	1066.9
17.5°	1048.9	1046.3	1043.7	1054.0	1054.0
20°	1028.3	1028.3	1028.3	1038.6	1036.0
22.5°	1007.7	1007.7	1010.2	1020.5	1018.0
25°	987.0	984.5	987.0	997.3	999.9
27.5°	961.3	963.8	966.4	976.7	979.3
30°	935.5	938.1	940.7	953.5	956.1
32.5°	904.6	909.7	914.9	930.3	930.3
35°	873.6	878.8	886.5	904.6	907.2
37.5°	840.1	845.3	855.6	876.2	881.4
40°	804.1	811.8	827.3	847.9	855.6
42.5°	768.0	778.3	796.3	819.5	829.8
45°	729.3	739.6	762.8	791.2	804.1
47.5°	688.1	701.0	729.3	765.4	775.7
50°	644.3	662.3	695.8	734.5	747.4
52.5°	600.5	621.1	662.3	703.6	716.4
55°	554.1	577.3	628.8	670.1	685.5
57.5°	507.7	533.5	592.7	636.6	652.0
60°	458.7	489.7	554.1	597.9	610.8
62.5°	409.8	445.8	515.4	559.2	569.5
65°	358.2	402.0	474.2	512.8	523.2
67.5°	309.3	360.8	433.0	461.3	461.3
70°	257.7	314.4	386.6	394.3	378.8
72.5°	206.2	270.6	335.0	306.7	293.8
75°	157.2	229.4	262.9	237.1	229.4
77.5°	118.5	185.6	185.6	170.1	164.9
80°	82.5	141.7	123.7	108.2	100.5
82.5°	54.1	79.9	64.4	51.5	43.8
85°	28.3	30.9	18.0	15.5	12.9
87.5°	10.3	5.2	2.6	5.2	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)