

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: P274728

Luminaire Tested: **14CZ2-60HE-RDP-UNV-L935-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: P274728
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-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (196) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3267.0 lumens
Efficiency: N/A
Efficacy: 67.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

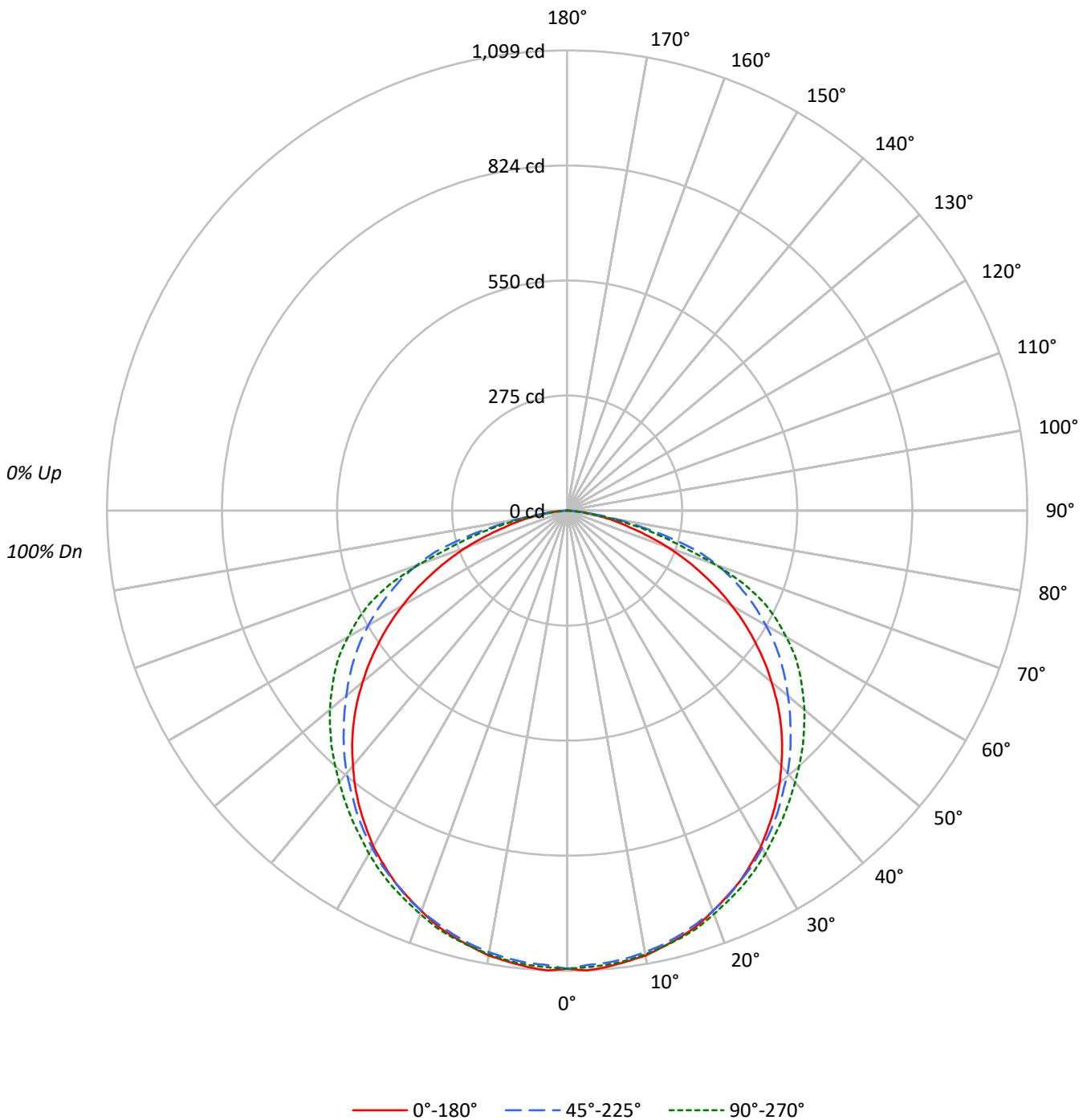
Input Watts (W): 48.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2944	2944	2944
5°	2956	2928	2942
10°	2948	2927	2941
15°	2935	2920	2942
20°	2914	2914	2936
25°	2901	2901	2938
30°	2877	2893	2940
35°	2840	2882	2949
40°	2796	2876	2975
45°	2747	2873	3029
50°	2669	2883	3097
55°	2573	2920	3183
60°	2443	2951	3253
65°	2257	2988	3297
70°	2007	3010	2950
75°	1618	2705	2360
80°	1265	1897	1542
85°	868	553	395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.6	3.2
10°-20°	297.1	9.1
20°-30°	452.5	13.8
30°-40°	551.1	16.9
40°-50°	584.7	17.9
50°-60°	551.8	16.9
60°-70°	445.5	13.6
70°-80°	241.7	7.4
80°-90°	39.1	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°	853.2	26.1
0°-40°	1404.2	43.0
0°-60°	2540.7	77.8
0°-90°	3267.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3267.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1094	1092	1084	1092	1089	104
15°	1053	1051	1048	1056	1056	297
25°	977	974	977	987	990	450
35°	865	870	877	895	898	541
45°	722	732	755	783	796	556
55°	548	571	622	663	678	490
65°	354	398	469	508	518	351
75°	156	227	260	235	227	170
85°	28	31	18	15	13	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1094.2	1094.2	1094.2	1094.2	1094.2
2.5°	1099.3	1094.2	1086.5	1094.2	1091.7
5°	1094.2	1091.7	1084.0	1091.7	1089.1
7.5°	1086.5	1086.5	1078.9	1084.0	1084.0
10°	1078.9	1076.3	1071.2	1078.9	1076.3
12.5°	1066.1	1063.6	1061.0	1068.7	1066.1
15°	1053.4	1050.8	1048.3	1055.9	1055.9
17.5°	1038.1	1035.5	1033.0	1043.2	1043.2
20°	1017.7	1017.7	1017.7	1027.9	1025.3
22.5°	997.3	997.3	999.8	1010.0	1007.5
25°	976.9	974.3	976.9	987.1	989.6
27.5°	951.4	953.9	956.5	966.7	969.2
30°	925.9	928.4	931.0	943.7	946.3
32.5°	895.3	900.4	905.5	920.8	920.8
35°	864.6	869.8	877.4	895.3	897.8
37.5°	831.5	836.6	846.8	867.2	872.3
40°	795.8	803.4	818.7	839.1	846.8
42.5°	760.1	770.3	788.1	811.1	821.3
45°	721.8	732.0	755.0	783.0	795.8
47.5°	681.0	693.8	721.8	757.5	767.7
50°	637.6	655.5	688.7	726.9	739.7
52.5°	594.3	614.7	655.5	696.3	709.1
55°	548.4	571.3	622.3	663.2	678.5
57.5°	502.5	528.0	586.6	630.0	645.3
60°	454.0	484.6	548.4	591.7	604.5
62.5°	405.5	441.3	510.1	553.5	563.7
65°	354.5	397.9	469.3	507.6	517.8
67.5°	306.1	357.1	428.5	456.6	456.6
70°	255.1	311.2	382.6	390.2	374.9
72.5°	204.0	267.8	331.6	303.5	290.8
75°	155.6	227.0	260.2	234.7	227.0
77.5°	117.3	183.6	183.6	168.3	163.2
80°	81.6	140.3	122.4	107.1	99.5
82.5°	53.6	79.1	63.8	51.0	43.4
85°	28.1	30.6	17.9	15.3	12.8
87.5°	10.2	5.1	2.6	5.1	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)