

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: P274727

Luminaire Tested: **14CZ2-60HE-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: P274727
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-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: 3188.3 lumens
Efficiency: N/A
Efficacy: 66.0 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

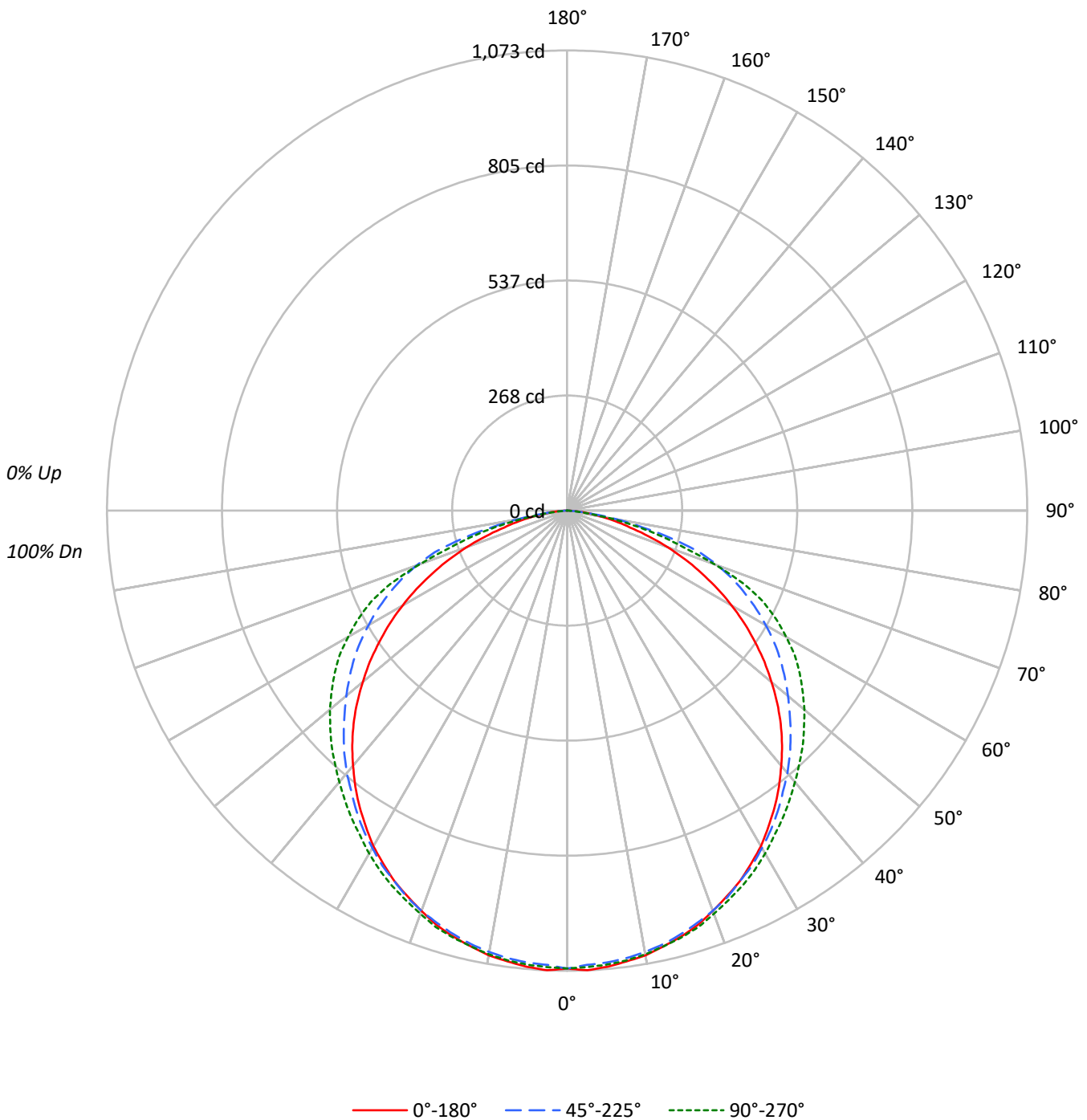
Input Watts (W): 48.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2873	2873	2873
5°	2884	2858	2871
10°	2877	2857	2870
15°	2864	2850	2871
20°	2844	2844	2865
25°	2831	2831	2868
30°	2808	2823	2870
35°	2772	2813	2878
40°	2728	2807	2903
45°	2681	2804	2955
50°	2605	2814	3022
55°	2511	2850	3106
60°	2385	2880	3175
65°	2203	2916	3217
70°	1958	2938	2879
75°	1578	2640	2303
80°	1235	1852	1505
85°	846	537	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.1	3.2
10°-20°	290.0	9.1
20°-30°	441.6	13.8
30°-40°	537.8	16.9
40°-50°	570.6	17.9
50°-60°	538.5	16.9
60°-70°	434.8	13.6
70°-80°	235.9	7.4
80°-90°	38.2	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°	832.6	26.1
0°-40°	1370.4	43.0
0°-60°	2479.5	77.8
0°-90°	3188.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3188.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1068	1068	1068	1068	1068	
5°	1068	1065	1058	1065	1063	101
15°	1028	1026	1023	1030	1030	290
25°	953	951	953	963	966	439
35°	844	849	856	874	876	528
45°	704	714	737	764	777	542
55°	535	558	607	647	662	478
65°	346	388	458	495	505	343
75°	152	222	254	229	222	166
85°	27	30	17	15	12	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1067.8	1067.8	1067.8	1067.8	1067.8
2.5°	1072.8	1067.8	1060.4	1067.8	1065.4
5°	1067.8	1065.4	1057.9	1065.4	1062.9
7.5°	1060.4	1060.4	1052.9	1057.9	1057.9
10°	1052.9	1050.4	1045.4	1052.9	1050.4
12.5°	1040.5	1038.0	1035.5	1043.0	1040.5
15°	1028.0	1025.5	1023.0	1030.5	1030.5
17.5°	1013.1	1010.6	1008.1	1018.1	1018.1
20°	993.2	993.2	993.2	1003.1	1000.6
22.5°	973.3	973.3	975.7	985.7	983.2
25°	953.3	950.9	953.3	963.3	965.8
27.5°	928.5	930.9	933.4	943.4	945.9
30°	903.6	906.0	908.5	921.0	923.5
32.5°	873.7	878.7	883.6	898.6	898.6
35°	843.8	848.8	856.3	873.7	876.2
37.5°	811.5	816.4	826.4	846.3	851.3
40°	776.6	784.1	799.0	818.9	826.4
42.5°	741.8	751.7	769.1	791.5	801.5
45°	704.4	714.4	736.8	764.2	776.6
47.5°	664.6	677.0	704.4	739.3	749.2
50°	622.3	639.7	672.1	709.4	721.9
52.5°	580.0	599.9	639.7	679.5	692.0
55°	535.2	557.6	607.4	647.2	662.1
57.5°	490.4	515.3	572.5	614.8	629.8
60°	443.1	472.9	535.2	577.5	589.9
62.5°	395.8	430.6	497.8	540.1	550.1
65°	346.0	388.3	458.0	495.3	505.3
67.5°	298.7	348.5	418.2	445.6	445.6
70°	248.9	303.7	373.4	380.8	365.9
72.5°	199.1	261.4	323.6	296.2	283.8
75°	151.8	221.5	253.9	229.0	221.5
77.5°	114.5	179.2	179.2	164.3	159.3
80°	79.7	136.9	119.5	104.5	97.1
82.5°	52.3	77.2	62.2	49.8	42.3
85°	27.4	29.9	17.4	14.9	12.4
87.5°	10.0	5.0	2.5	5.0	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)