

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: P475438

Luminaire Tested: **14CZ2-48HE-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475438
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-48HE-RDP-UNV-L840-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3331.4 lumens
Efficiency: N/A
Efficacy: 93.3 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

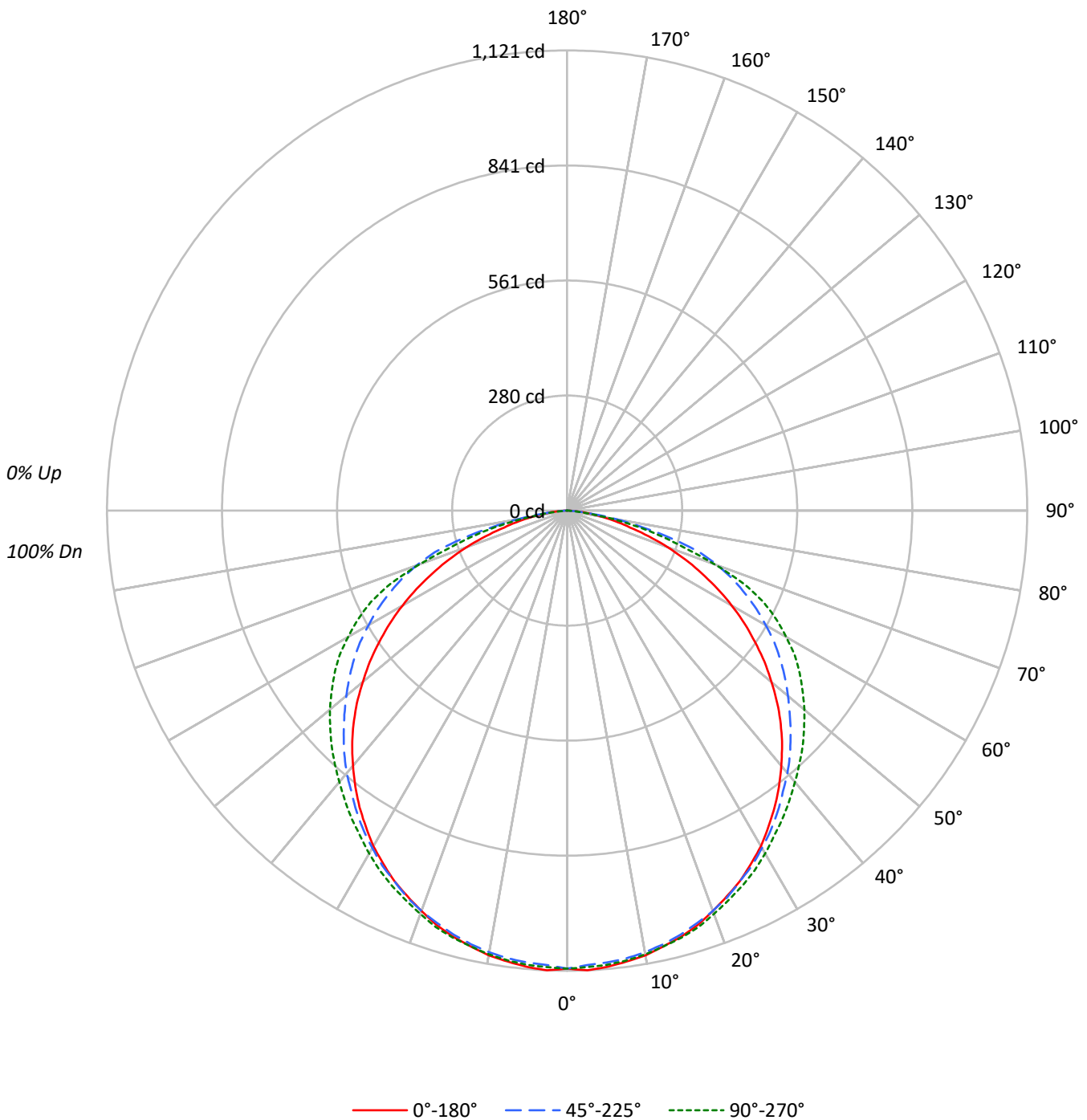
Input Watts (W): 35.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3003	3003	3003
5°	3014	2986	3000
10°	3006	2985	2999
15°	2993	2978	3000
20°	2972	2972	2994
25°	2958	2958	2996
30°	2934	2950	2998
35°	2896	2939	3007
40°	2851	2933	3033
45°	2801	2930	3088
50°	2722	2940	3158
55°	2624	2977	3246
60°	2492	3010	3317
65°	2302	3047	3362
70°	2046	3069	3008
75°	1650	2758	2407
80°	1289	1934	1571
85°	883	562	401



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.6	3.2
10°-20°	303.0	9.1
20°-30°	461.4	13.8
30°-40°	561.9	16.9
40°-50°	596.2	17.9
50°-60°	562.7	16.9
60°-70°	454.3	13.6
70°-80°	246.5	7.4
80°-90°	39.9	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°	870.0	26.1
0°-40°	1431.9	43.0
0°-60°	2590.8	77.8
0°-90°	3331.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3331.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1116	1113	1105	1113	1111	106
15°	1074	1072	1069	1077	1077	303
25°	996	994	996	1006	1009	459
35°	882	887	895	913	916	551
45°	736	746	770	798	812	567
55°	559	583	635	676	692	500
65°	362	406	479	518	528	358
75°	159	232	265	239	232	173
85°	29	31	18	16	13	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1115.8	1115.8	1115.8	1115.8	1115.8
2.5°	1121.0	1115.8	1108.0	1115.8	1113.2
5°	1115.8	1113.2	1105.4	1113.2	1110.6
7.5°	1108.0	1108.0	1100.2	1105.4	1105.4
10°	1100.2	1097.6	1092.4	1100.2	1097.6
12.5°	1087.2	1084.6	1082.0	1089.8	1087.2
15°	1074.2	1071.6	1069.0	1076.8	1076.8
17.5°	1058.6	1056.0	1053.4	1063.8	1063.8
20°	1037.7	1037.7	1037.7	1048.2	1045.6
22.5°	1016.9	1016.9	1019.5	1029.9	1027.3
25°	996.1	993.5	996.1	1006.5	1009.1
27.5°	970.1	972.7	975.3	985.7	988.3
30°	944.1	946.7	949.3	962.3	964.9
32.5°	912.9	918.1	923.3	938.9	938.9
35°	881.7	886.9	894.7	912.9	915.5
37.5°	847.9	853.1	863.5	884.3	889.5
40°	811.5	819.3	834.9	855.7	863.5
42.5°	775.1	785.5	803.7	827.1	837.5
45°	736.0	746.5	769.9	798.5	811.5
47.5°	694.4	707.4	736.0	772.5	782.9
50°	650.2	668.4	702.2	741.2	754.3
52.5°	606.0	626.8	668.4	710.0	723.0
55°	559.2	582.6	634.6	676.2	691.8
57.5°	512.4	538.4	598.2	642.4	658.0
60°	463.0	494.2	559.2	603.4	616.4
62.5°	413.5	450.0	520.2	564.4	574.8
65°	361.5	405.7	478.6	517.6	528.0
67.5°	312.1	364.1	436.9	465.6	465.6
70°	260.1	317.3	390.1	397.9	382.3
72.5°	208.1	273.1	338.1	309.5	296.5
75°	158.7	231.5	265.3	239.3	231.5
77.5°	119.6	187.3	187.3	171.7	166.5
80°	83.2	143.0	124.8	109.2	101.4
82.5°	54.6	80.6	65.0	52.0	44.2
85°	28.6	31.2	18.2	15.6	13.0
87.5°	10.4	5.2	2.6	5.2	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)