

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: P475429

Luminaire Tested: **14CZ2-48HE-RDP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475429  
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-L835-CD1-U  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3269.3 lumens  
Efficiency: N/A  
Efficacy: 91.6 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

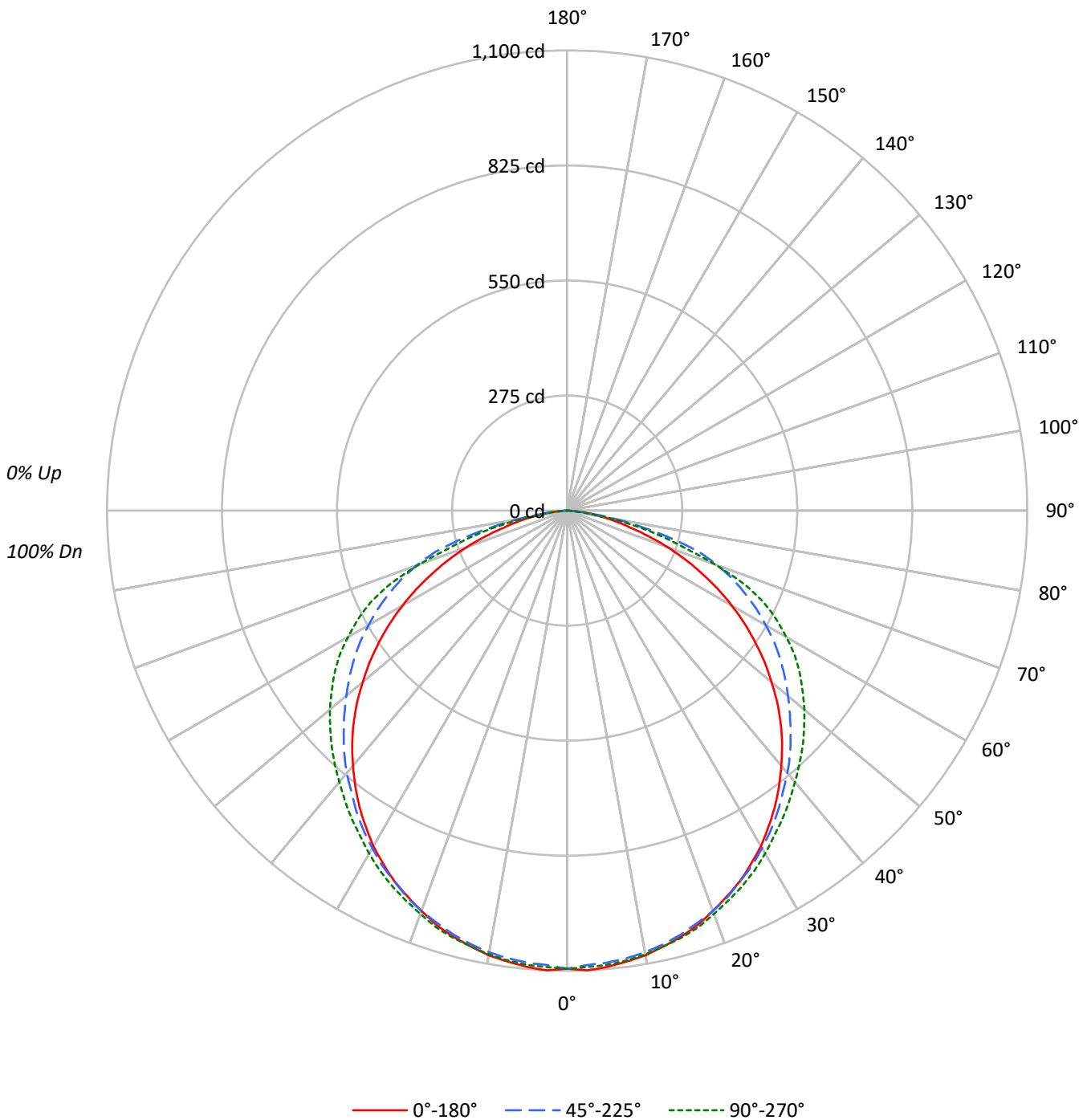
Input Watts (W): 35.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2947	2947	2947
5°	2958	2930	2944
10°	2950	2929	2943
15°	2937	2922	2944
20°	2916	2916	2938
25°	2903	2903	2940
30°	2879	2895	2942
35°	2843	2884	2951
40°	2797	2878	2977
45°	2749	2875	3030
50°	2671	2885	3099
55°	2575	2922	3185
60°	2445	2954	3256
65°	2259	2990	3299
70°	2008	3013	2952
75°	1619	2706	2362
80°	1266	1898	1542
85°	868	553	395



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.6	3.2
10°-20°	297.3	9.1
20°-30°	452.8	13.8
30°-40°	551.5	16.9
40°-50°	585.1	17.9
50°-60°	552.2	16.9
60°-70°	445.8	13.6
70°-80°	241.9	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°	853.8	26.1
0°-40°	1405.2	43.0
0°-60°	2542.5	77.8
0°-90°	3269.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3269.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1095	1095	1095	1095	1095	
5°	1095	1092	1085	1092	1090	104
15°	1054	1052	1049	1057	1057	297
25°	978	975	978	988	990	450
35°	865	870	878	896	898	541
45°	722	732	756	784	796	556
55°	549	572	623	664	679	490
65°	355	398	470	508	518	352
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°	1095.0	1095.0	1095.0	1095.0	1095.0
2.5°	1100.1	1095.0	1087.3	1095.0	1092.4
5°	1095.0	1092.4	1084.8	1092.4	1089.9
7.5°	1087.3	1087.3	1079.7	1084.8	1084.8
10°	1079.7	1077.1	1072.0	1079.7	1077.1
12.5°	1066.9	1064.3	1061.8	1069.4	1066.9
15°	1054.1	1051.6	1049.0	1056.7	1056.7
17.5°	1038.8	1036.3	1033.7	1043.9	1043.9
20°	1018.4	1018.4	1018.4	1028.6	1026.1
22.5°	998.0	998.0	1000.5	1010.7	1008.2
25°	977.6	975.0	977.6	987.8	990.3
27.5°	952.0	954.6	957.1	967.4	969.9
30°	926.5	929.1	931.6	944.4	946.9
32.5°	895.9	901.0	906.1	921.4	921.4
35°	865.3	870.4	878.0	895.9	898.4
37.5°	832.1	837.2	847.4	867.8	872.9
40°	796.3	804.0	819.3	839.7	847.4
42.5°	760.6	770.8	788.7	811.7	821.9
45°	722.3	732.5	755.5	783.6	796.3
47.5°	681.5	694.2	722.3	758.1	768.3
50°	638.1	656.0	689.1	727.4	740.2
52.5°	594.7	615.1	656.0	696.8	709.6
55°	548.8	571.7	622.8	663.6	678.9
57.5°	502.8	528.3	587.0	630.4	645.8
60°	454.3	485.0	548.8	592.2	604.9
62.5°	405.8	441.6	510.5	553.9	564.1
65°	354.8	398.2	469.6	507.9	518.1
67.5°	306.3	357.3	428.8	456.9	456.9
70°	255.2	311.4	382.9	390.5	375.2
72.5°	204.2	268.0	331.8	303.7	291.0
75°	155.7	227.2	260.3	234.8	227.2
77.5°	117.4	183.8	183.8	168.5	163.4
80°	81.7	140.4	122.5	107.2	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)