

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: P475067

Luminaire Tested: **22CZ2-50VHE-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475067  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-50VHE-RDP-UNV-L840-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY 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: 3473.1 lumens  
Efficiency: N/A  
Efficacy: 99.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

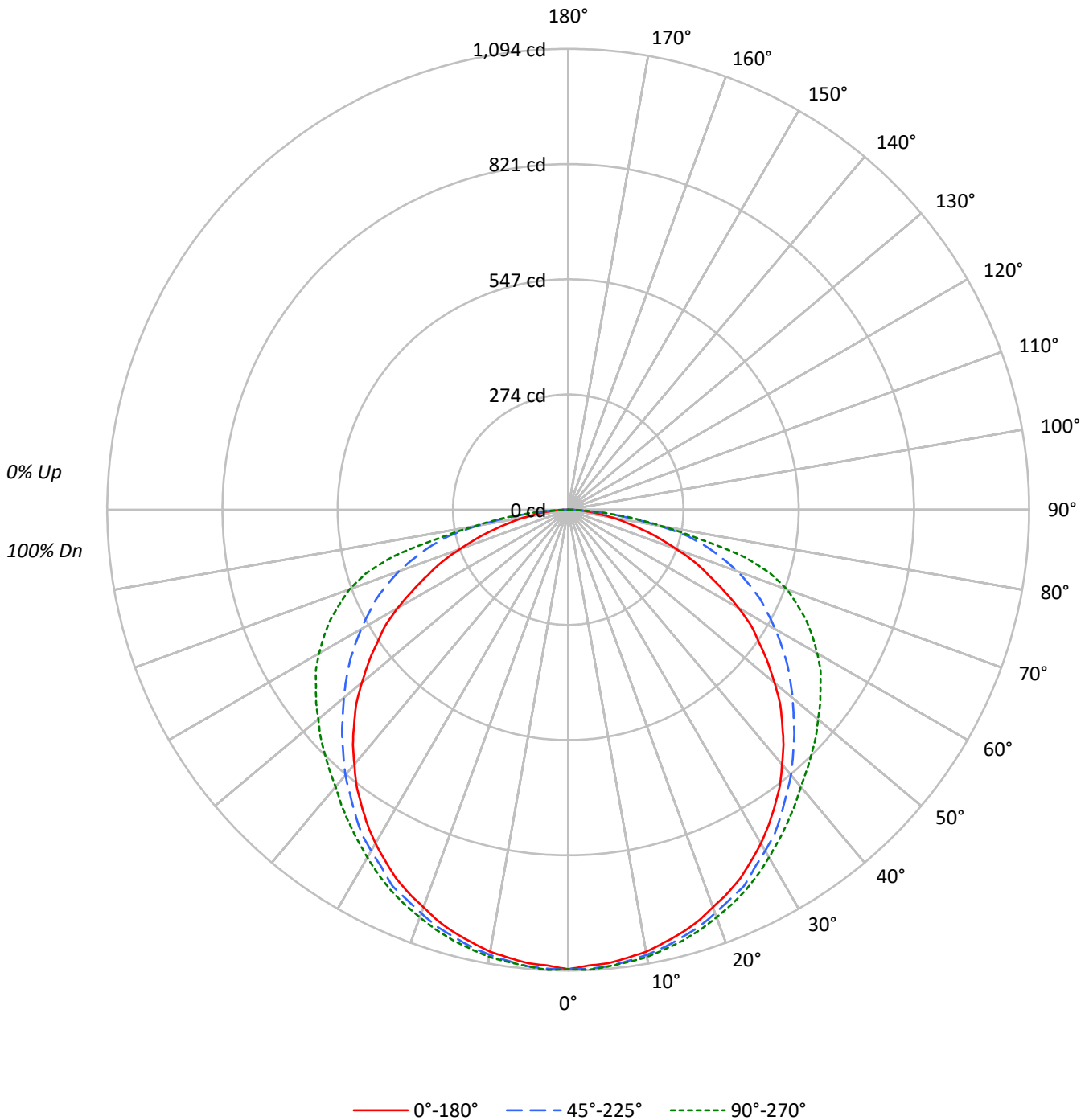
Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	2936	2936	2936
5°	2920	2940	2940
10°	2911	2932	2946
15°	2897	2925	2947
20°	2875	2919	2949
25°	2868	2928	2959
30°	2842	2905	2962
35°	2811	2896	2980
40°	2774	2890	3015
45°	2732	2888	3111
50°	2674	2909	3241
55°	2601	2973	3428
60°	2517	3053	3672
65°	2343	3205	3970
70°	2151	3358	4342
75°	1887	3532	4489
80°	1626	3364	3526
85°	1420	2445	2680



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.2	3.0
10°-20°	296.3	8.5
20°-30°	452.1	13.0
30°-40°	552.0	15.9
40°-50°	590.2	17.0
50°-60°	569.7	16.4
60°-70°	490.4	14.1
70°-80°	331.8	9.6
80°-90°	87.6	2.5
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°	851.6	24.5
0°-40°	1403.5	40.4
0°-60°	2563.4	73.8
0°-90°	3473.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3473.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1081	1083	1088	1088	1088	103
15°	1040	1042	1050	1055	1058	293
25°	966	971	986	991	996	444
35°	856	863	882	899	907	536
45°	718	731	759	797	818	554
55°	554	572	634	697	731	497
65°	368	404	503	582	624	366
75°	182	240	340	409	432	195
85°	46	64	79	82	87	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1090.9	1090.9	1090.9	1090.9	1090.9
2.5°	1083.3	1085.8	1090.9	1090.9	1093.5
5°	1080.8	1083.3	1088.4	1088.4	1088.4
7.5°	1073.1	1075.7	1080.8	1083.3	1083.3
10°	1065.3	1068.1	1073.1	1075.7	1078.2
12.5°	1052.6	1055.1	1062.7	1068.1	1068.1
15°	1039.9	1042.4	1050.0	1055.1	1057.7
17.5°	1024.4	1029.7	1037.3	1042.4	1045.0
20°	1004.1	1009.2	1019.3	1027.2	1029.7
22.5°	986.3	991.4	1001.5	1009.2	1014.2
25°	965.8	970.8	986.3	991.4	996.5
27.5°	940.1	945.4	958.1	968.3	975.9
30°	914.7	919.8	935.0	948.0	953.1
32.5°	886.5	894.2	912.2	922.3	930.0
35°	855.8	863.4	881.5	899.2	907.1
37.5°	825.4	833.0	850.7	873.8	884.0
40°	789.6	799.7	822.6	853.3	858.4
42.5°	756.3	769.0	789.6	825.4	838.1
45°	718.0	730.7	758.8	797.2	817.5
47.5°	682.2	694.9	725.6	771.5	797.2
50°	638.8	656.5	694.9	748.7	774.1
52.5°	597.9	613.1	664.4	723.0	753.8
55°	554.5	572.2	633.7	697.4	730.7
57.5°	516.1	531.4	600.4	672.0	710.3
60°	467.6	488.0	567.2	643.8	682.2
62.5°	416.4	447.1	533.9	613.1	654.0
65°	367.9	403.7	503.4	582.4	623.5
67.5°	324.5	362.8	465.1	549.4	587.7
70°	273.4	321.9	426.8	508.5	551.9
72.5°	227.5	281.0	383.4	465.1	503.4
75°	181.5	240.2	339.7	408.7	431.8
77.5°	140.4	196.8	291.2	311.8	314.3
80°	104.9	155.9	217.1	219.6	227.5
82.5°	71.6	109.9	140.4	153.3	155.9
85°	46.0	64.0	79.2	81.7	86.8
87.5°	20.6	23.1	28.2	25.6	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)