

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: P475066

Luminaire Tested: **22CZ2-44VHE-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475066  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44VHE-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: 3010.3 lumens  
Efficiency: N/A  
Efficacy: 99.7 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

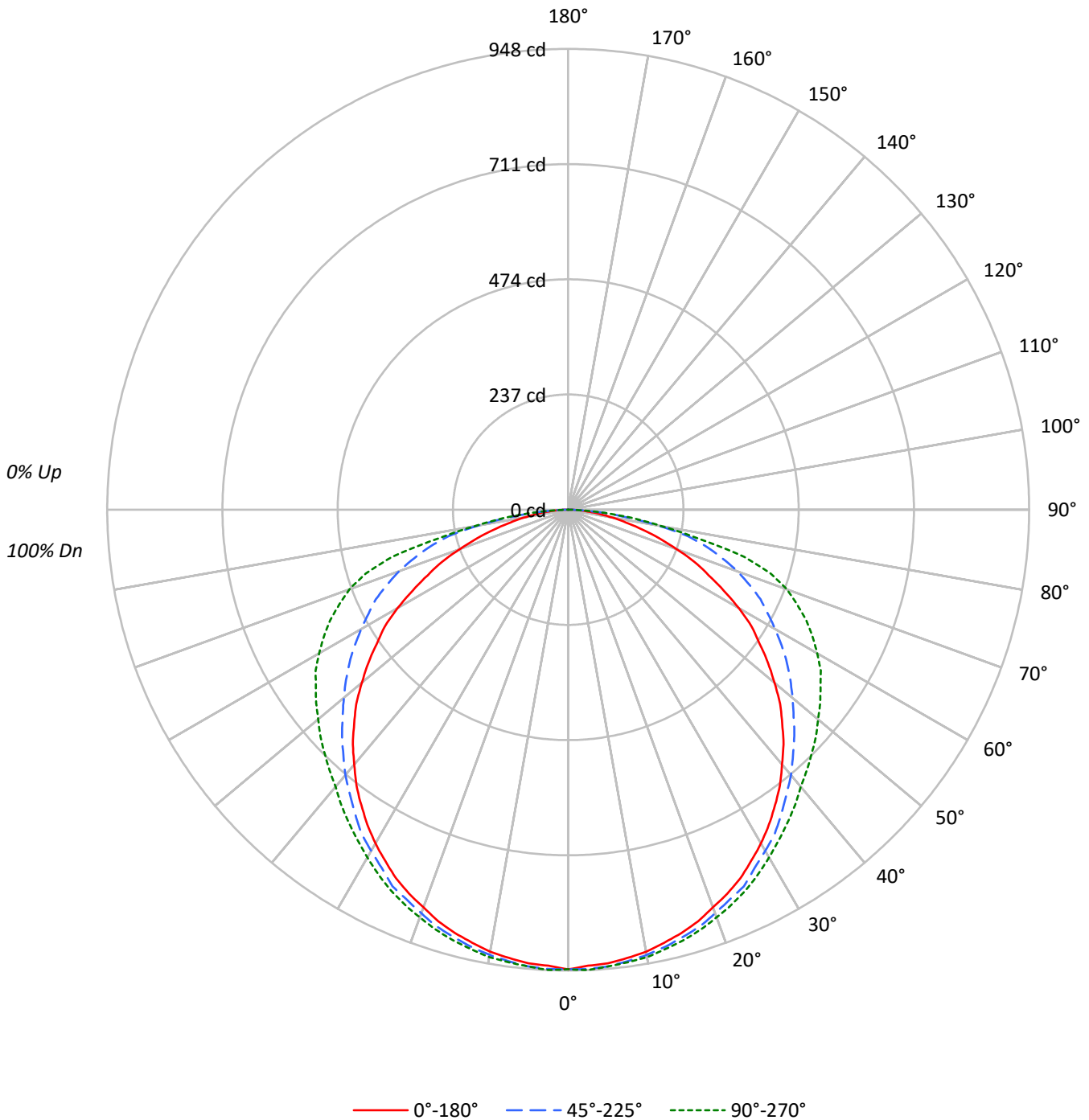
Input Watts (W): 30.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2544	2544	2544
5°	2530	2548	2548
10°	2523	2541	2554
15°	2511	2535	2554
20°	2492	2530	2556
25°	2485	2538	2564
30°	2463	2518	2567
35°	2437	2510	2583
40°	2404	2504	2614
45°	2368	2503	2696
50°	2318	2521	2809
55°	2255	2577	2971
60°	2181	2646	3182
65°	2030	2778	3441
70°	1865	2910	3764
75°	1635	3061	3892
80°	1409	2915	3056
85°	1229	2121	2325



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.4	3.0
10°-20°	256.8	8.5
20°-30°	391.8	13.0
30°-40°	478.4	15.9
40°-50°	511.5	17.0
50°-60°	493.7	16.4
60°-70°	425.0	14.1
70°-80°	287.6	9.6
80°-90°	75.9	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°	738.1	24.5
0°-40°	1216.5	40.4
0°-60°	2221.7	73.8
0°-90°	3010.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3010.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	937	939	943	943	943	89
15°	901	904	910	914	917	254
25°	837	841	855	859	864	385
35°	742	748	764	779	786	464
45°	622	633	658	691	708	480
55°	481	496	549	604	633	431
65°	319	350	436	505	540	317
75°	157	208	294	354	374	169
85°	40	56	69	71	75	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	945.5	945.5	945.5	945.5	945.5
2.5°	938.9	941.1	945.5	945.5	947.7
5°	936.7	938.9	943.3	943.3	943.3
7.5°	930.1	932.3	936.7	938.9	938.9
10°	923.3	925.7	930.1	932.3	934.5
12.5°	912.3	914.5	921.1	925.7	925.7
15°	901.3	903.5	910.1	914.5	916.7
17.5°	887.9	892.5	899.1	903.5	905.7
20°	870.3	874.7	883.5	890.3	892.5
22.5°	854.9	859.3	868.1	874.7	879.1
25°	837.0	841.4	854.9	859.3	863.7
27.5°	814.8	819.4	830.4	839.2	845.8
30°	792.8	797.2	810.4	821.6	826.0
32.5°	768.4	775.0	790.6	799.4	806.0
35°	741.8	748.4	764.0	779.4	786.2
37.5°	715.4	722.0	737.4	757.4	766.2
40°	684.3	693.1	712.9	739.6	744.0
42.5°	655.5	666.5	684.3	715.4	726.4
45°	622.3	633.3	657.7	690.9	708.5
47.5°	591.2	602.3	628.9	668.7	690.9
50°	553.6	569.0	602.3	648.9	670.9
52.5°	518.2	531.4	575.8	626.7	653.3
55°	480.6	496.0	549.2	604.5	633.3
57.5°	447.3	460.5	520.4	582.4	615.7
60°	405.3	422.9	491.6	558.0	591.2
62.5°	360.9	387.5	462.7	531.4	566.8
65°	318.8	349.9	436.3	504.8	540.4
67.5°	281.2	314.4	403.1	476.2	509.4
70°	237.0	279.0	369.9	440.7	478.4
72.5°	197.2	243.6	332.3	403.1	436.3
75°	157.3	208.2	294.4	354.3	374.3
77.5°	121.7	170.5	252.4	270.2	272.4
80°	90.9	135.1	188.1	190.3	197.2
82.5°	62.1	95.3	121.7	132.9	135.1
85°	39.8	55.5	68.7	70.9	75.3
87.5°	17.8	20.0	24.4	22.2	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)