

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: P475008

Luminaire Tested: **22CZ2-44VHE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475008  
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-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP  
INSERT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2850.7 lumens  
Efficiency: N/A  
Efficacy: 94.4 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

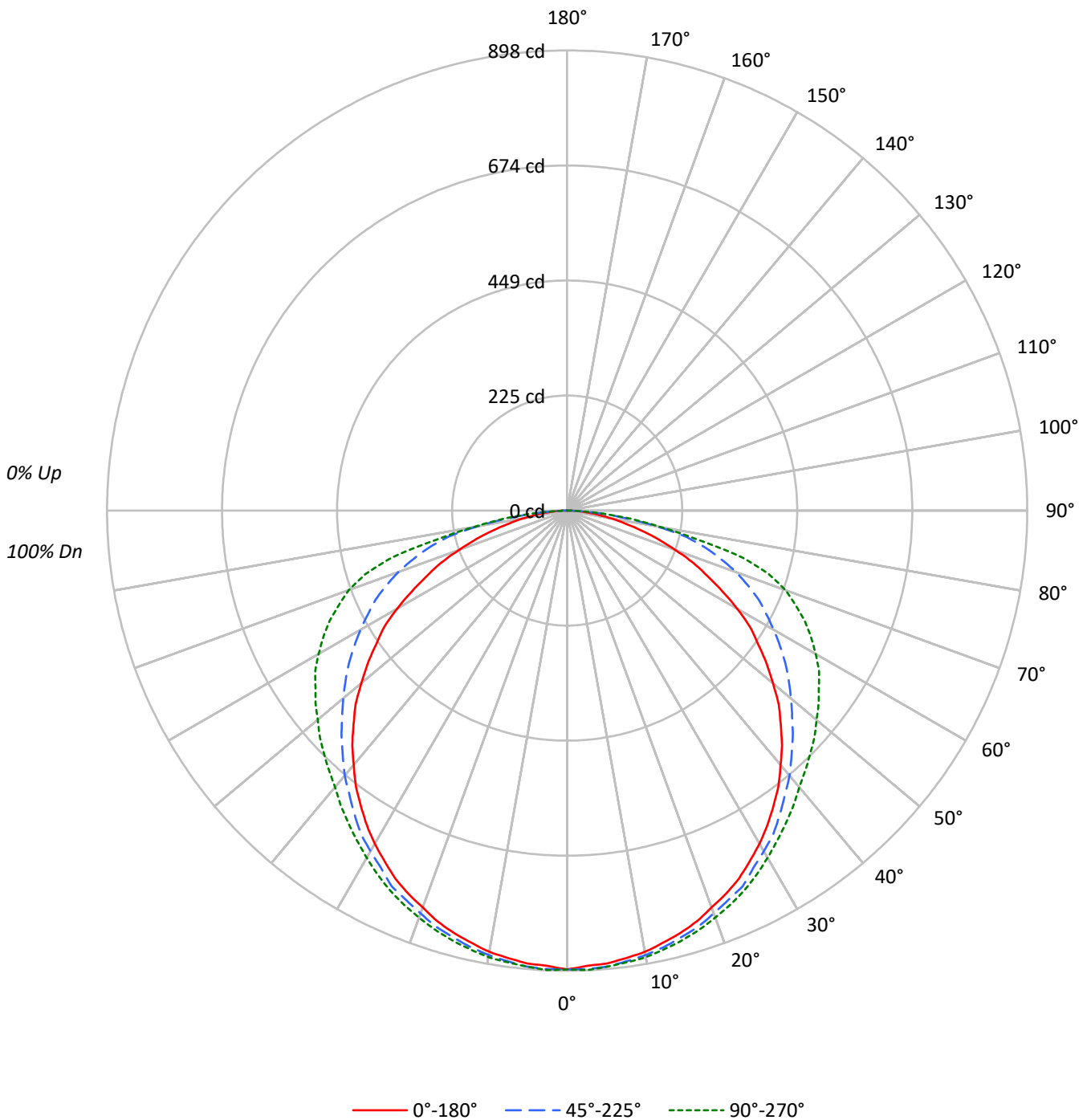
Input Watts (W): 30.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2410	2410	2410
5°	2396	2413	2413
10°	2389	2407	2418
15°	2378	2401	2418
20°	2360	2396	2420
25°	2354	2404	2428
30°	2333	2385	2431
35°	2307	2377	2446
40°	2277	2372	2475
45°	2243	2370	2554
50°	2195	2388	2660
55°	2135	2440	2814
60°	2066	2505	3013
65°	1922	2631	3259
70°	1766	2756	3564
75°	1549	2899	3686
80°	1334	2762	2893
85°	1164	2007	2201



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.7	3.0
10°-20°	243.2	8.5
20°-30°	371.1	13.0
30°-40°	453.0	15.9
40°-50°	484.4	17.0
50°-60°	467.6	16.4
60°-70°	402.5	14.1
70°-80°	272.3	9.6
80°-90°	71.9	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°	699.0	24.5
0°-40°	1152.0	40.4
0°-60°	2104.0	73.8
0°-90°	2850.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2850.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	887	889	893	893	893	84
15°	854	856	862	866	868	241
25°	793	797	810	814	818	365
35°	702	709	724	738	744	440
45°	589	600	623	654	671	455
55°	455	470	520	572	600	408
65°	302	331	413	478	512	300
75°	149	197	279	336	354	160
85°	38	52	65	67	71	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	895.4	895.4	895.4	895.4	895.4
2.5°	889.2	891.2	895.4	895.4	897.5
5°	887.1	889.2	893.3	893.3	893.3
7.5°	880.8	882.9	887.1	889.2	889.2
10°	874.4	876.7	880.8	882.9	885.0
12.5°	863.9	866.0	872.3	876.7	876.7
15°	853.5	855.6	861.9	866.0	868.1
17.5°	840.8	845.2	851.4	855.6	857.7
20°	824.1	828.3	836.6	843.1	845.2
22.5°	809.6	813.7	822.1	828.3	832.5
25°	792.7	796.8	809.6	813.7	817.9
27.5°	771.6	776.0	786.4	794.8	801.0
30°	750.8	755.0	767.5	778.1	782.3
32.5°	727.7	733.9	748.7	757.0	763.3
35°	702.4	708.7	723.5	738.1	744.5
37.5°	677.4	683.7	698.3	717.2	725.6
40°	648.1	656.4	675.2	700.4	704.5
42.5°	620.8	631.2	648.1	677.4	687.9
45°	589.3	599.7	622.8	654.3	671.0
47.5°	559.9	570.3	595.6	633.3	654.3
50°	524.3	538.9	570.3	614.5	635.4
52.5°	490.7	503.2	545.3	593.5	618.7
55°	455.1	469.7	520.1	572.4	599.7
57.5°	423.6	436.1	492.8	551.6	583.0
60°	383.8	400.5	465.5	528.5	559.9
62.5°	341.7	367.0	438.2	503.2	536.8
65°	301.9	331.3	413.2	478.0	511.8
67.5°	266.3	297.8	381.8	450.9	482.4
70°	224.4	264.2	350.3	417.4	453.0
72.5°	186.7	230.7	314.7	381.8	413.2
75°	149.0	197.1	278.8	335.5	354.5
77.5°	115.2	161.5	239.0	255.9	258.0
80°	86.1	127.9	178.2	180.2	186.7
82.5°	58.8	90.2	115.2	125.9	127.9
85°	37.7	52.5	65.0	67.1	71.3
87.5°	16.9	19.0	23.1	21.0	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)