

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: P474619

Luminaire Tested: **24CZ2-30HE-SQR-UNV-L835-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474619  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30HE-SQR-UNV-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2945.2 lumens  
Efficiency: N/A  
Efficacy: 132.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

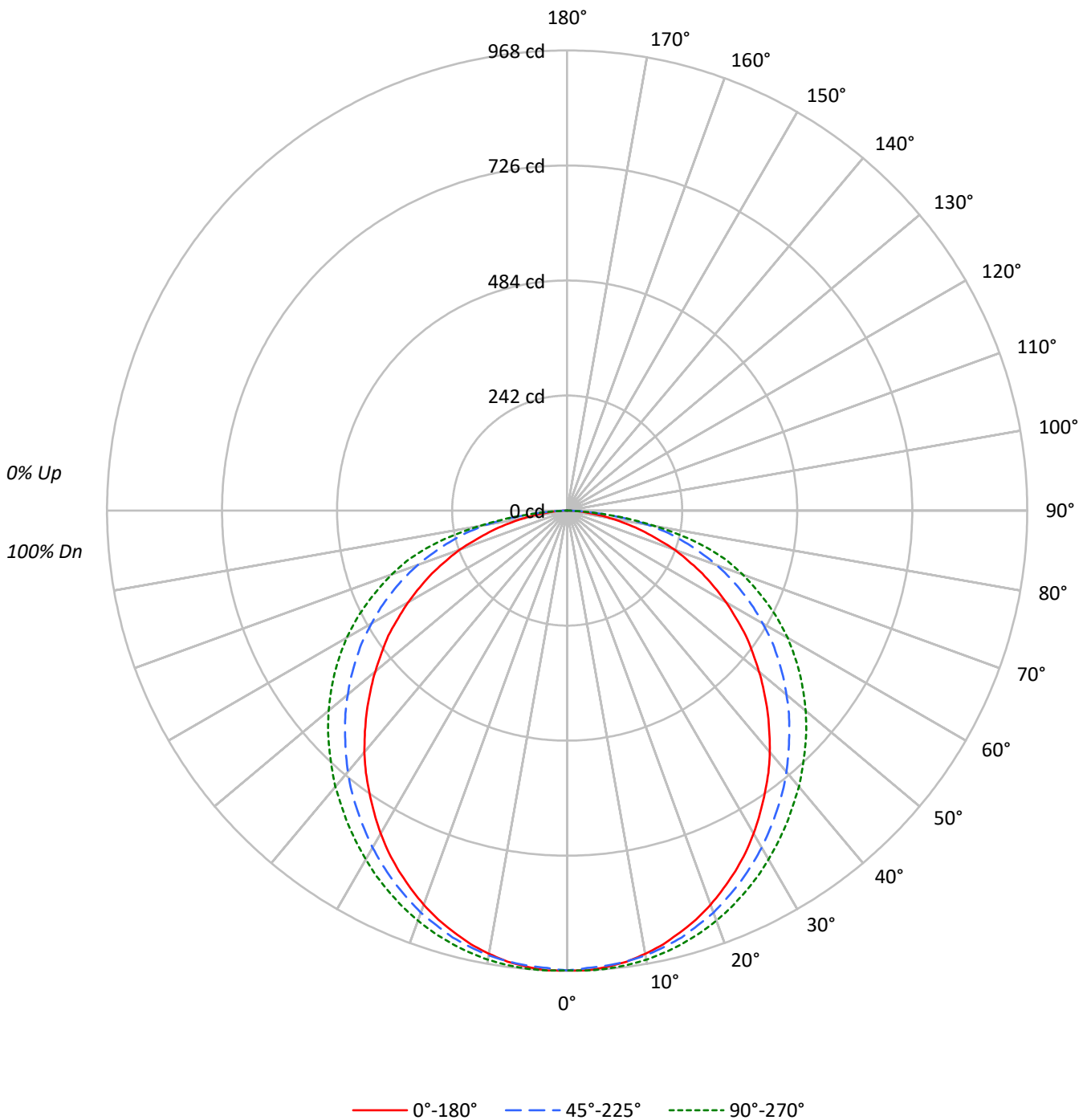
Input Watts (W): 22.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	96	93	96	93	90		92	90	87		89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	59	53	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	43	38		49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34		46	39	34		44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	25		35	29	24	23

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

	0°	45°	90°
0°	2603	2603	2603
5°	2603	2595	2613
10°	2587	2596	2622
15°	2559	2590	2626
20°	2526	2578	2629
25°	2485	2559	2629
30°	2437	2544	2633
35°	2382	2529	2643
40°	2330	2520	2664
45°	2267	2514	2693
50°	2206	2521	2742
55°	2154	2539	2804
60°	2082	2558	2882
65°	1998	2588	2969
70°	1895	2625	3087
75°	1698	2662	3190
80°	1429	2669	2895
85°	1059	2019	1902



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.7	3.1
10°-20°	262.7	8.9
20°-30°	397.7	13.5
30°-40°	481.1	16.3
40°-50°	507.9	17.2
50°-60°	478.9	16.3
60°-70°	394.8	13.4
70°-80°	259.0	8.8
80°-90°	71.2	2.4
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°	752.1	25.5
0°-40°	1233.3	41.9
0°-60°	2220.1	75.4
0°-90°	2945.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2945.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	967	967	967	967	967	
5°	964	964	961	967	967	91
15°	918	924	930	941	942	259
25°	837	847	862	880	886	385
35°	725	744	770	796	805	454
45°	596	622	661	696	708	460
55°	459	492	541	582	598	409
65°	314	352	406	450	466	310
75°	163	205	256	296	307	173
85°	34	59	65	64	62	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	967.4	967.4	967.4	967.4	967.4
2.5°	968.3	967.4	963.2	968.8	968.3
5°	963.6	963.6	960.8	967.4	967.4
7.5°	957.0	957.5	956.6	964.1	964.1
10°	946.7	948.6	950.0	958.5	959.4
12.5°	934.5	937.8	940.6	950.9	951.9
15°	918.5	923.6	929.8	940.6	942.5
17.5°	902.0	908.1	914.7	928.8	931.2
20°	882.2	889.3	900.1	914.2	918.0
22.5°	860.1	870.0	881.3	898.2	902.9
25°	837.1	847.4	862.0	879.9	885.5
27.5°	812.1	824.4	840.8	861.5	867.6
30°	784.4	798.5	818.7	840.8	847.4
32.5°	755.2	771.7	794.2	818.7	826.2
35°	725.1	743.9	769.8	796.1	804.6
37.5°	695.4	714.3	744.8	772.6	780.6
40°	663.4	684.1	717.5	747.2	758.5
42.5°	629.6	654.0	689.3	722.3	733.1
45°	595.7	622.5	660.6	695.9	707.7
47.5°	561.3	591.0	632.9	668.6	682.3
50°	527.0	558.5	602.3	640.9	655.0
52.5°	492.2	525.1	572.6	613.6	626.3
55°	459.2	491.7	541.1	581.6	597.6
57.5°	421.1	457.8	510.0	551.0	566.5
60°	386.8	422.5	475.2	518.5	535.5
62.5°	349.6	386.3	441.8	485.1	501.6
65°	313.8	351.5	406.5	449.8	466.3
67.5°	275.3	314.8	371.2	413.1	429.1
70°	240.9	278.1	333.6	376.4	392.4
72.5°	199.0	241.4	294.5	336.9	354.3
75°	163.3	205.1	256.0	296.4	306.8
77.5°	125.6	167.5	217.9	244.2	251.3
80°	92.2	131.7	172.2	186.3	186.8
82.5°	62.1	96.9	120.0	127.0	126.1
85°	34.3	59.3	65.4	63.5	61.6
87.5°	14.1	19.8	16.0	11.3	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)