

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: P474311

Luminaire Tested: **24CZ2-30-RDP-UNV-L850-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474311  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30-RDP-UNV-L850-CD1-U  
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2064.6 lumens  
Efficiency: N/A  
Efficacy: 87.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

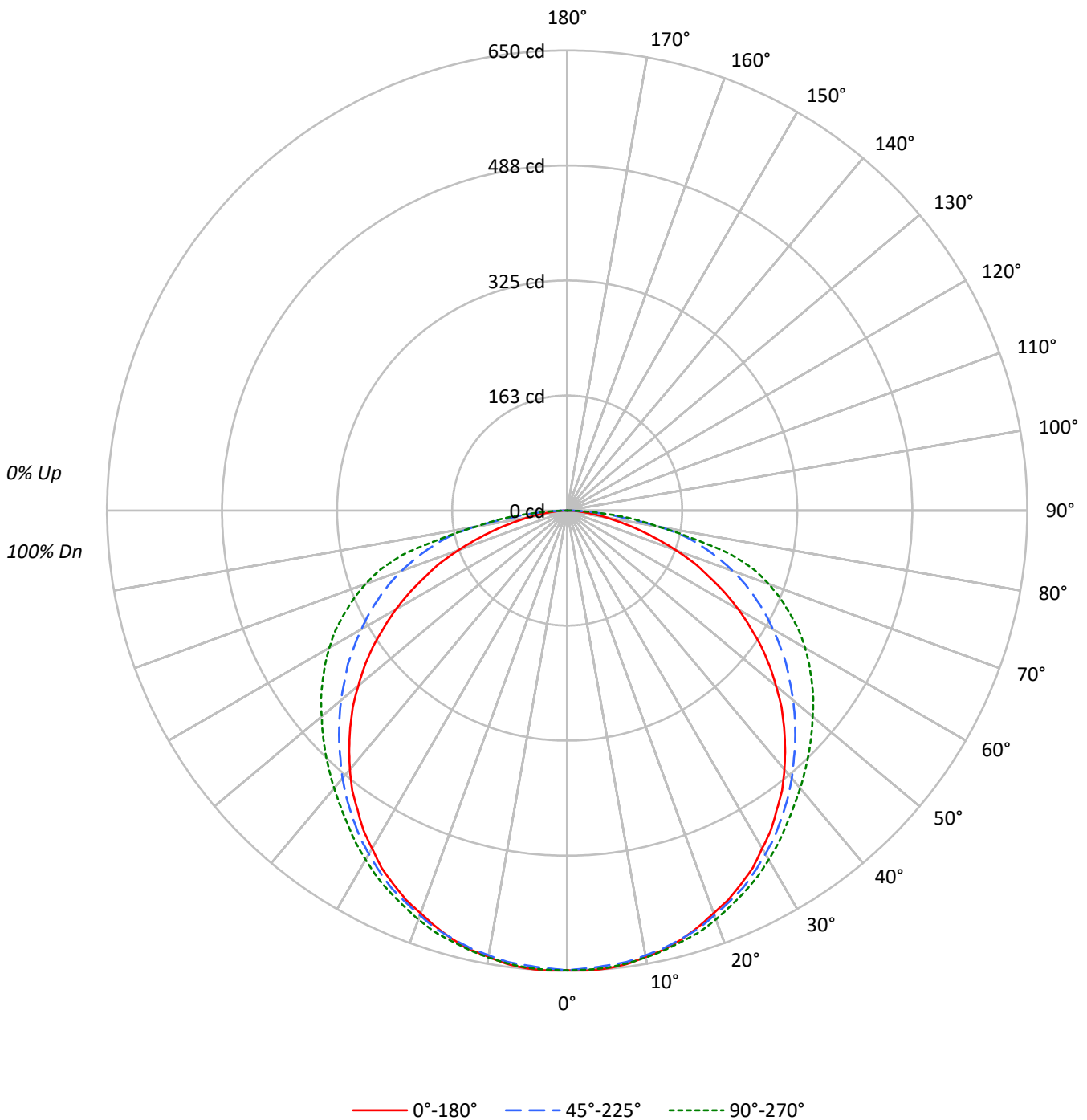
Input Watts (W): 23.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	89		92	89	87		88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27		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°	874	874	874
5°	877	871	876
10°	875	872	876
15°	873	872	877
20°	867	871	880
25°	864	873	882
30°	856	870	885
35°	848	868	888
40°	838	867	899
45°	824	867	920
50°	806	872	948
55°	785	886	990
60°	752	904	1044
65°	704	936	1109
70°	640	979	1192
75°	543	1033	1246
80°	428	1039	1007
85°	316	790	886



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.6	3.0
10°-20°	177.3	8.6
20°-30°	271.1	13.1
30°-40°	331.3	16.0
40°-50°	353.2	17.1
50°-60°	337.7	16.4
60°-70°	286.0	13.9
70°-80°	192.2	9.3
80°-90°	54.2	2.6
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°	509.9	24.7
0°-40°	841.2	40.7
0°-60°	1532.1	74.2
0°-90°	2064.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2064.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	649	649	649	649	649	
5°	649	648	645	648	648	62
15°	627	627	626	631	630	177
25°	582	584	588	593	594	268
35°	516	520	528	539	541	323
45°	433	440	456	475	483	334
55°	335	347	378	408	422	298
65°	221	244	294	333	348	220
75°	104	142	199	232	240	112
85°	20	42	51	55	57	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	649.3	649.3	649.3	649.3	649.3
2.5°	650.3	650.3	647.2	649.3	649.3
5°	649.3	648.3	645.2	648.3	648.3
7.5°	646.2	645.2	643.1	646.2	645.2
10°	640.1	640.1	638.0	641.1	641.1
12.5°	634.9	633.9	632.9	637.0	636.0
15°	626.7	626.7	625.7	630.8	629.8
17.5°	616.5	617.5	618.6	622.7	623.7
20°	605.2	607.3	608.3	614.5	614.5
22.5°	595.0	596.0	598.1	604.2	604.2
25°	581.7	583.7	587.8	592.9	594.0
27.5°	568.3	569.4	574.5	581.7	582.7
30°	550.9	554.0	560.2	568.3	569.4
32.5°	535.6	538.6	545.8	554.0	556.1
35°	516.1	520.2	528.4	538.6	540.7
37.5°	498.7	501.7	512.0	523.3	526.3
40°	477.3	483.3	493.6	506.9	512.0
42.5°	455.7	461.9	474.2	491.5	497.6
45°	433.2	440.4	455.7	475.2	483.3
47.5°	410.7	418.9	436.3	458.8	468.0
50°	385.0	395.3	416.8	442.4	452.7
52.5°	360.5	372.8	396.3	425.0	438.3
55°	334.8	347.1	377.9	407.6	421.9
57.5°	306.2	322.5	356.4	390.2	405.5
60°	279.6	294.9	335.9	372.8	388.1
62.5°	250.9	271.4	315.4	354.3	369.7
65°	221.2	243.8	293.9	332.8	348.2
67.5°	194.6	219.2	272.4	311.3	326.6
70°	162.8	193.5	248.9	287.7	303.1
72.5°	133.1	166.9	224.3	262.2	276.5
75°	104.4	142.3	198.7	232.5	239.7
77.5°	77.9	117.7	172.0	186.4	181.3
80°	55.3	94.3	134.1	126.9	130.0
82.5°	35.9	71.7	83.0	94.3	97.2
85°	20.5	42.0	51.2	55.3	57.4
87.5°	9.2	15.4	20.5	20.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)