

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: P474907

Luminaire Tested: **22CZ2-24-S-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474907  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24-S-UNV-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2503.2 lumens  
Efficiency: N/A  
Efficacy: 135.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

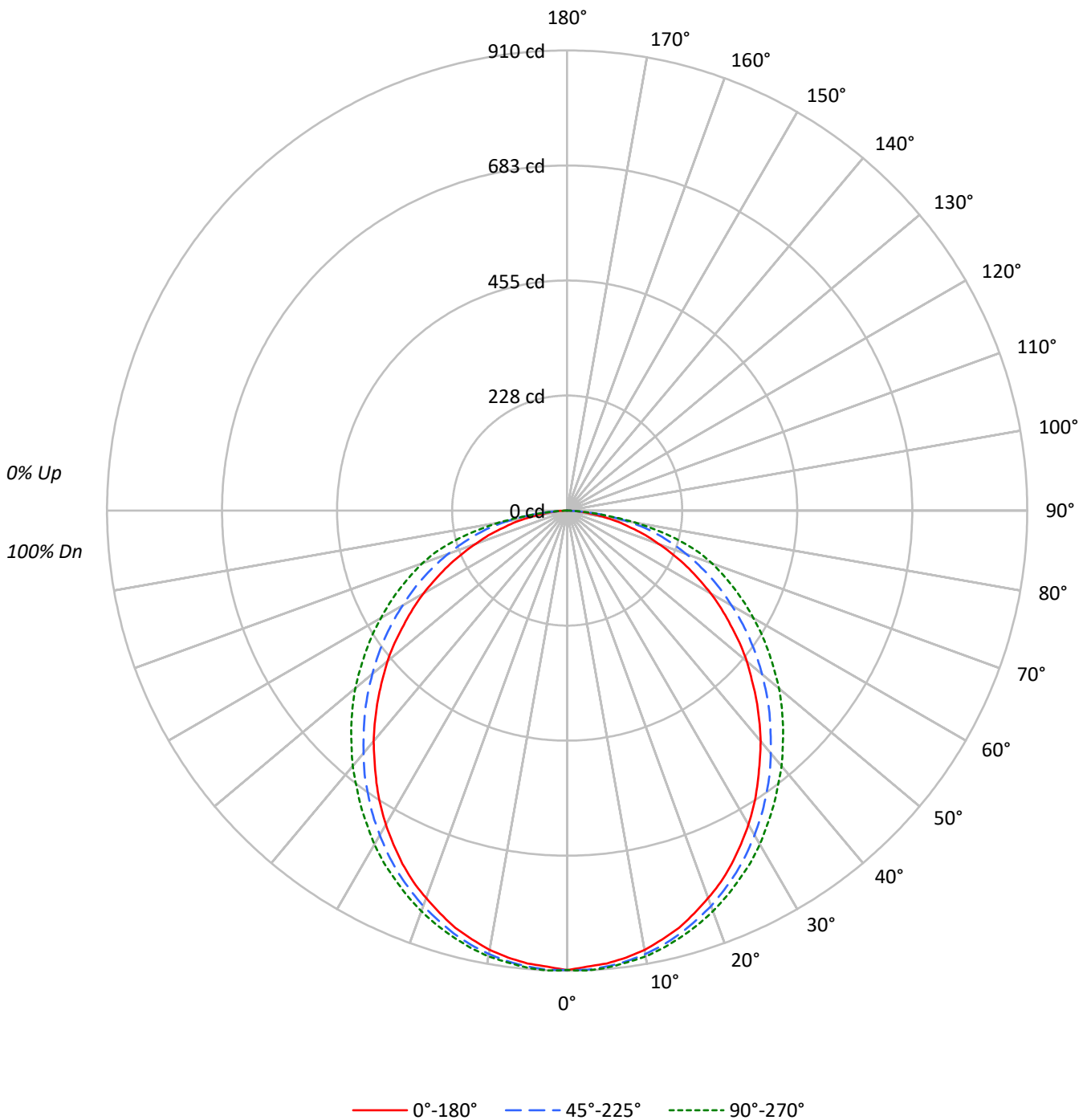
Input Watts (W): 18.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	88	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2445	2445	2445
5°	2428	2445	2451
10°	2410	2433	2446
15°	2379	2412	2432
20°	2335	2383	2415
25°	2288	2347	2390
30°	2229	2302	2368
35°	2159	2255	2338
40°	2092	2200	2317
45°	2015	2153	2299
50°	1942	2105	2290
55°	1850	2063	2279
60°	1767	2021	2289
65°	1659	1998	2322
70°	1515	1973	2397
75°	1360	1959	2400
80°	1145	1849	2131
85°	861	1254	1161



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.8	3.4
10°-20°	243.7	9.7
20°-30°	363.4	14.5
30°-40°	428.8	17.1
40°-50°	436.9	17.5
50°-60°	394.0	15.7
60°-70°	309.4	12.4
70°-80°	193.4	7.7
80°-90°	47.7	1.9
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°	693.0	27.7
0°-40°	1121.8	44.8
0°-60°	1952.7	78.0
0°-90°	2503.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2503.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	899	901	905	907	908	85
15°	854	857	866	872	873	240
25°	771	775	790	802	805	355
35°	657	666	686	705	712	411
45°	530	538	566	593	604	408
55°	394	407	440	474	486	354
65°	260	274	314	349	365	257
75°	131	149	188	220	231	140
85°	28	36	41	40	38	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	908.7	908.7	908.7	908.7	908.7
2.5°	902.6	904.4	908.7	910.5	910.5
5°	899.0	900.8	905.0	906.9	907.5
7.5°	891.7	894.1	899.0	901.4	901.4
10°	882.0	885.0	890.5	894.1	895.3
12.5°	868.7	872.3	879.6	883.8	885.0
15°	854.1	857.2	865.7	871.7	872.9
17.5°	835.4	840.2	849.3	857.2	859.0
20°	815.4	820.8	832.3	841.4	843.2
22.5°	794.8	799.0	811.7	822.6	825.1
25°	770.6	774.8	790.5	802.1	805.1
27.5°	743.9	751.2	766.9	780.2	785.1
30°	717.2	724.5	740.9	756.6	762.1
32.5°	688.2	696.0	714.8	731.2	736.6
35°	657.3	666.4	686.3	705.1	711.8
37.5°	625.2	635.5	657.9	677.9	685.1
40°	595.5	602.8	626.4	649.4	659.7
42.5°	562.2	571.9	595.5	621.5	631.2
45°	529.5	538.5	565.8	593.1	604.0
47.5°	495.5	507.0	534.3	564.6	575.5
50°	464.0	473.7	502.8	534.9	547.0
52.5°	430.1	440.4	471.9	505.2	516.1
55°	394.4	407.1	439.8	473.7	485.8
57.5°	361.7	373.8	408.3	443.4	456.2
60°	328.3	340.4	375.6	411.3	425.3
62.5°	293.2	307.1	345.3	379.8	395.6
65°	260.5	274.4	313.8	348.9	364.7
67.5°	226.0	242.3	281.7	318.6	334.4
70°	192.6	212.0	250.8	287.1	304.7
72.5°	163.0	178.7	219.3	257.5	272.0
75°	130.8	149.0	188.4	220.5	230.8
77.5°	103.6	119.3	156.9	178.1	184.8
80°	73.9	91.5	119.3	132.1	137.5
82.5°	49.1	63.6	81.2	83.6	82.4
85°	27.9	35.7	40.6	40.0	37.6
87.5°	10.9	12.1	9.1	5.5	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)