

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: P475260

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

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475260  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24HE-SQR-UNV-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

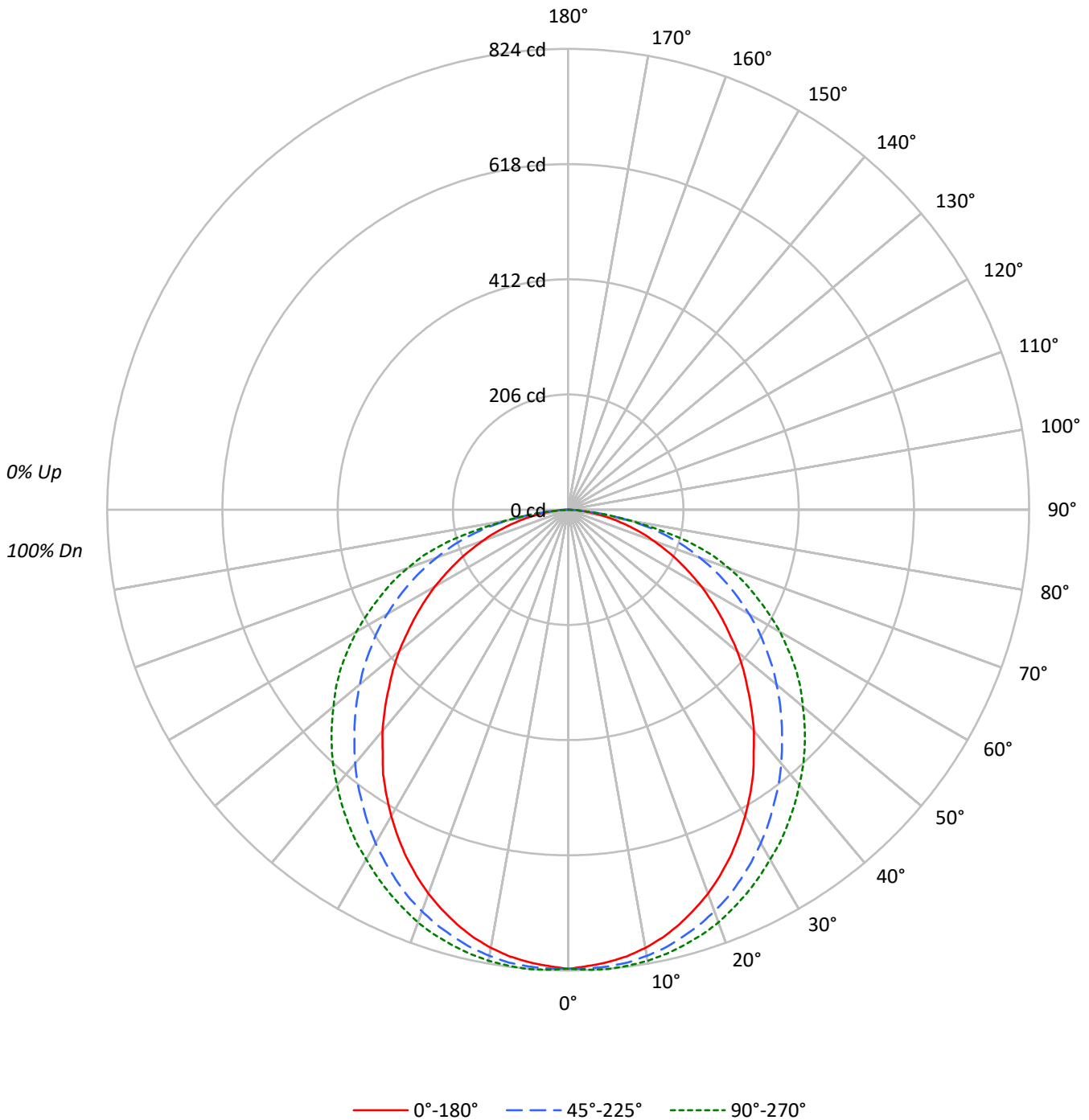
Lumens per Lamp: N/A  
Luminaire Lumens: 2350.4 lumens  
Efficiency: N/A  
Efficacy: 129.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 18.1  
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	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	2209	2209	2209
5°	2194	2215	2227
10°	2173	2213	2237
15°	2138	2203	2244
20°	2092	2188	2249
25°	2034	2166	2246
30°	1965	2139	2243
35°	1895	2107	2250
40°	1814	2081	2257
45°	1728	2055	2275
50°	1653	2036	2293
55°	1565	2020	2329
60°	1483	2012	2354
65°	1385	1996	2372
70°	1272	1965	2404
75°	1149	1913	2320
80°	986	1695	1746
85°	794	997	794



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.8	3.3
10°-20°	222.5	9.5
20°-30°	334.3	14.2
30°-40°	398.6	17.0
40°-50°	412.2	17.5
50°-60°	378.9	16.1
60°-70°	301.6	12.8
70°-80°	184.3	7.8
80°-90°	40.0	1.7
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°	634.6	27.0
0°-40°	1033.3	44.0
0°-60°	1824.4	77.6
0°-90°	2350.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2350.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	821	821	821	821	821	
5°	812	814	820	823	824	77
15°	768	776	791	802	805	216
25°	685	702	730	750	756	315
35°	577	601	641	675	685	360
45°	454	486	540	584	598	351
55°	334	370	431	480	496	298
65°	218	254	313	357	372	215
75°	110	143	184	216	223	118
85°	26	31	32	28	26	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	821.0	821.0	821.0	821.0	821.0
2.5°	816.6	817.7	821.0	823.3	823.3
5°	812.1	814.3	819.9	823.3	824.5
7.5°	805.4	808.8	816.6	821.0	822.2
10°	795.4	799.9	809.9	816.6	818.8
12.5°	783.1	789.8	802.1	811.0	813.2
15°	767.6	776.4	790.9	802.1	805.4
17.5°	749.7	760.8	778.7	792.1	796.6
20°	730.6	741.9	764.2	779.8	785.3
22.5°	708.4	722.9	748.5	766.4	770.9
25°	685.0	701.6	729.5	749.7	756.3
27.5°	659.3	679.4	709.5	734.1	739.7
30°	632.5	653.7	688.3	715.1	721.8
32.5°	604.6	629.2	666.0	696.1	705.1
35°	576.7	601.3	641.4	675.0	685.0
37.5°	544.4	573.4	618.1	652.6	664.8
40°	516.5	544.4	592.4	630.3	642.6
42.5°	485.2	515.4	565.6	606.8	621.4
45°	454.0	486.4	539.9	583.5	597.9
47.5°	425.0	457.3	513.1	558.9	573.4
50°	394.9	428.3	486.4	533.3	547.7
52.5°	362.5	399.3	459.6	506.5	523.3
55°	333.5	370.3	430.6	479.7	496.5
57.5°	303.4	341.3	403.9	450.7	466.4
60°	275.5	312.3	373.8	419.4	437.3
62.5°	245.4	283.3	343.5	388.2	405.0
65°	217.5	254.4	313.4	357.0	372.5
67.5°	189.6	226.5	282.2	323.5	341.3
70°	161.7	198.6	249.8	290.1	305.6
72.5°	137.3	169.6	218.6	255.5	270.0
75°	110.5	142.8	184.0	216.4	223.1
77.5°	85.9	114.9	149.5	163.9	166.3
80°	63.6	85.9	109.4	112.7	112.7
82.5°	42.3	59.1	68.0	69.1	68.0
85°	25.7	31.2	32.3	27.9	25.7
87.5°	8.9	8.9	5.6	3.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)