

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: P474233

Luminaire Tested: **24CZ2-35VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474233  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35VHE-RDP-UNV-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP  
INSERT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2373.2 lumens  
Efficiency: N/A  
Efficacy: 99.3 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

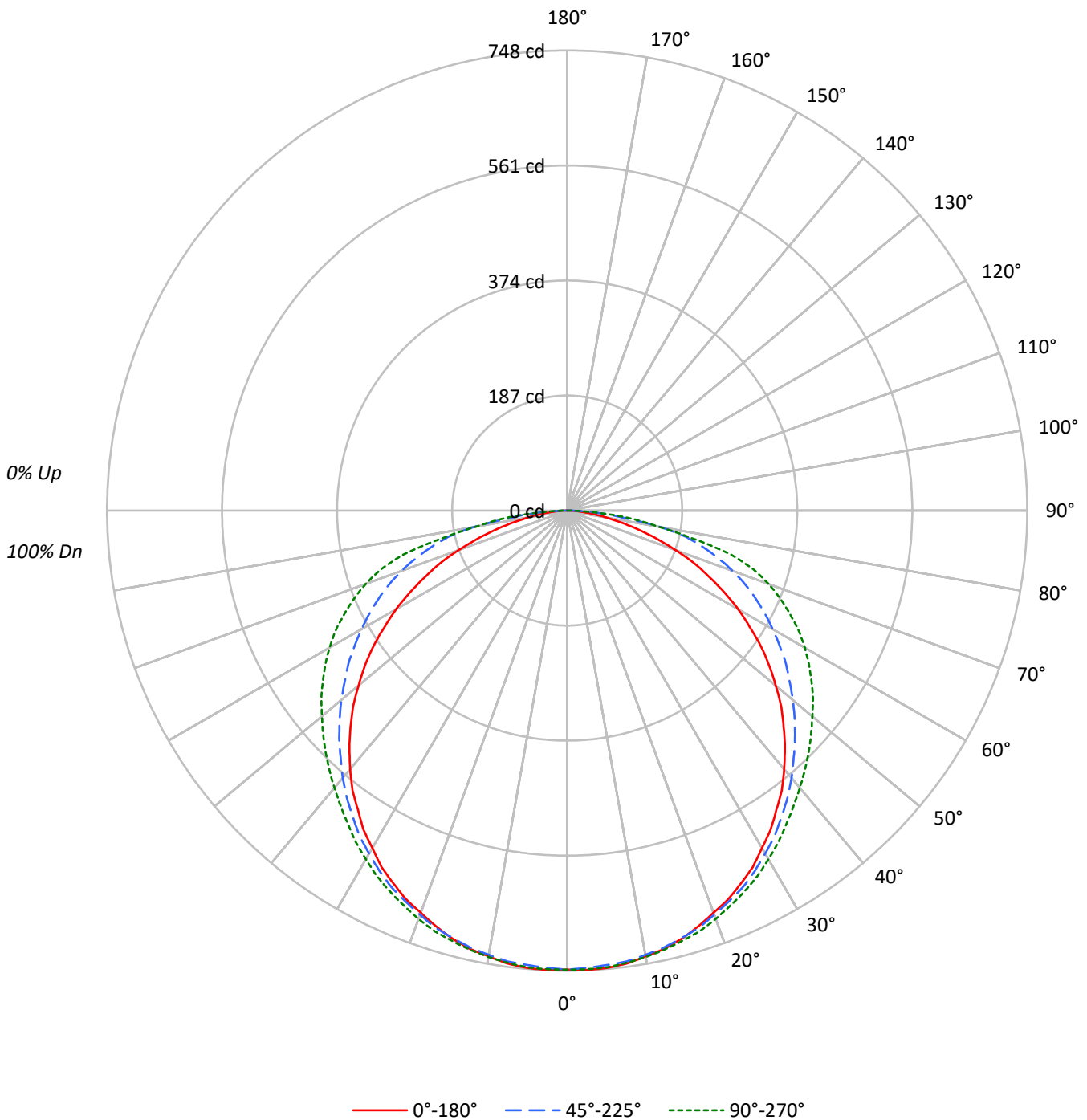
Input Watts (W): 23.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1004	1004	1004
5°	1008	1002	1006
10°	1005	1002	1007
15°	1003	1002	1008
20°	996	1001	1011
25°	993	1003	1014
30°	984	1000	1017
35°	974	998	1021
40°	964	996	1034
45°	947	997	1057
50°	926	1003	1089
55°	903	1019	1138
60°	865	1039	1200
65°	810	1075	1274
70°	736	1126	1371
75°	624	1187	1432
80°	493	1195	1158
85°	364	909	1019



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.8	3.0
10°-20°	203.7	8.6
20°-30°	311.6	13.1
30°-40°	380.9	16.0
40°-50°	406.0	17.1
50°-60°	388.1	16.4
60°-70°	328.8	13.9
70°-80°	221.0	9.3
80°-90°	62.4	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°	586.1	24.7
0°-40°	967.0	40.7
0°-60°	1761.0	74.2
0°-90°	2373.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2373.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	746	745	742	745	745	71
15°	720	720	719	725	724	203
25°	669	671	676	682	683	308
35°	593	598	607	619	622	372
45°	498	506	524	546	556	384
55°	385	399	434	468	485	343
65°	254	280	338	382	400	252
75°	120	164	228	267	276	129
85°	24	48	59	64	66	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	746.3	746.3	746.3	746.3	746.3
2.5°	747.5	747.5	744.0	746.3	746.3
5°	746.3	745.2	741.6	745.2	745.2
7.5°	742.8	741.6	739.3	742.8	741.6
10°	735.7	735.7	733.4	736.9	736.9
12.5°	729.8	728.7	727.5	732.2	731.0
15°	720.4	720.4	719.2	725.1	724.0
17.5°	708.6	709.8	711.0	715.7	716.9
20°	695.7	698.0	699.2	706.3	706.3
22.5°	683.9	685.1	687.4	694.5	694.5
25°	668.6	671.0	675.7	681.6	682.7
27.5°	653.3	654.5	660.4	668.6	669.8
30°	633.3	636.8	643.9	653.3	654.5
32.5°	615.6	619.1	627.4	636.8	639.2
35°	593.2	597.9	607.4	619.1	621.5
37.5°	573.2	576.7	588.5	601.5	605.0
40°	548.6	555.5	567.3	582.6	588.5
42.5°	523.9	530.9	545.1	565.0	572.0
45°	497.9	506.2	523.9	546.2	555.5
47.5°	472.0	481.5	501.5	527.4	538.0
50°	442.6	454.4	479.1	508.5	520.3
52.5°	414.3	428.5	455.5	488.5	503.8
55°	384.9	399.0	434.3	468.5	485.0
57.5°	351.9	370.8	409.6	448.5	466.1
60°	321.4	339.0	386.1	428.5	446.1
62.5°	288.4	312.0	362.5	407.3	424.9
65°	254.3	280.2	337.8	382.5	400.2
67.5°	223.7	251.9	313.2	357.8	375.5
70°	187.1	222.5	286.1	330.7	348.4
72.5°	153.0	191.9	257.8	301.4	317.9
75°	120.0	163.6	228.4	267.2	275.5
77.5°	89.5	135.3	197.7	214.2	208.3
80°	63.6	108.4	154.2	145.9	149.5
82.5°	41.2	82.4	95.4	108.4	111.8
85°	23.6	48.3	58.9	63.6	66.0
87.5°	10.6	17.7	23.6	23.6	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)