

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: P475497

Luminaire Tested: **14CZ2-35-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475497  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-35-SQR-UNV-L835-CD1-U  
Description: 1'X4' TROFFER LED MODULE, SQUARE LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

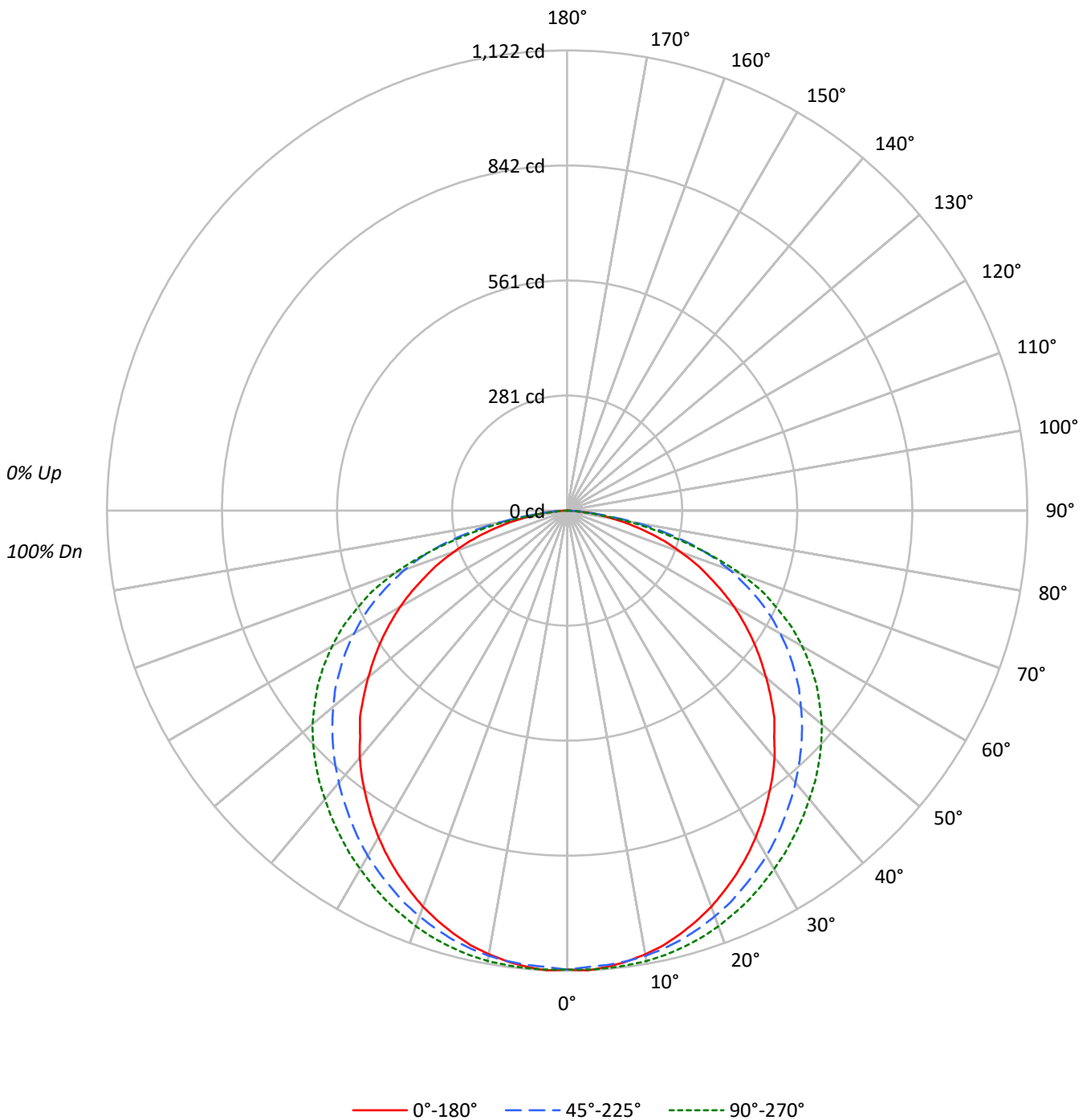
Lumens per Lamp: N/A  
Luminaire Lumens: 3513.7 lumens  
Efficiency: N/A  
Efficacy: 123.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.34 / 1.43  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.5  
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	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	74		81	76	72		77	74	70	68
3	89	78	69	63	86	76	68	62	73	67	61		70	65	60		68	63	59	57
4	81	69	60	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	38		50	43	38		49	43	38	36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24		36	29	24		35	29	24	22

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

	0°	45°	90°
0°	3011	3011	3011
5°	3018	3004	3026
10°	3001	3012	3047
15°	2977	3015	3068
20°	2943	3014	3088
25°	2901	3013	3111
30°	2858	3021	3135
35°	2806	3025	3174
40°	2764	3042	3227
45°	2718	3073	3304
50°	2650	3115	3394
55°	2597	3170	3482
60°	2531	3230	3561
65°	2432	3285	3601
70°	2303	3310	3536
75°	2104	3198	3054
80°	1768	2614	2275
85°	1288	1318	858



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.3	3.0
10°-20°	306.3	8.7
20°-30°	468.3	13.3
30°-40°	574.8	16.4
40°-50°	618.1	17.6
50°-60°	593.4	16.9
60°-70°	491.6	14.0
70°-80°	294.6	8.4
80°-90°	60.3	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°	880.9	25.1
0°-40°	1455.7	41.4
0°-60°	2667.2	75.9
0°-90°	3513.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3513.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1117	1115	1112	1121	1120	106
15°	1068	1074	1082	1099	1101	301
25°	977	993	1015	1042	1048	450
35°	854	883	921	956	966	535
45°	714	752	808	852	868	549
55°	554	606	676	725	742	494
65°	382	444	516	557	566	379
75°	202	264	308	301	294	214
85°	42	60	43	29	28	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1119.1	1119.1	1119.1	1119.1	1119.1
2.5°	1122.1	1119.1	1114.1	1122.1	1120.1
5°	1117.1	1115.1	1112.2	1121.1	1120.1
7.5°	1109.2	1109.2	1108.2	1119.1	1118.1
10°	1098.3	1100.2	1102.2	1115.1	1115.1
12.5°	1085.4	1087.4	1093.3	1108.2	1109.2
15°	1068.5	1073.5	1082.4	1099.3	1101.2
17.5°	1048.7	1056.6	1068.5	1088.3	1091.3
20°	1027.8	1036.8	1052.6	1074.5	1078.4
22.5°	1003.0	1015.9	1035.8	1058.6	1063.5
25°	977.2	993.1	1014.9	1041.7	1047.7
27.5°	949.4	968.3	994.1	1021.9	1028.8
30°	919.7	941.5	972.3	1002.0	1009.0
32.5°	887.9	913.7	947.5	980.2	989.1
35°	854.2	883.0	920.7	956.4	966.3
37.5°	821.5	852.2	893.9	932.6	943.5
40°	786.7	819.5	866.1	906.8	918.7
42.5°	747.1	786.7	837.3	881.0	894.9
45°	714.3	752.0	807.6	852.2	868.1
47.5°	673.6	717.3	776.8	824.4	840.3
50°	633.0	682.6	744.1	793.7	810.6
52.5°	593.3	643.9	712.3	760.9	775.8
55°	553.6	606.2	675.6	725.2	742.1
57.5°	511.9	569.5	639.9	689.5	703.4
60°	470.3	527.8	600.2	647.8	661.7
62.5°	426.6	488.1	560.5	604.2	618.1
65°	382.0	444.5	515.9	556.6	565.5
67.5°	340.3	403.8	468.3	506.0	514.9
70°	292.7	360.1	420.7	448.4	449.4
72.5°	249.0	311.5	369.1	377.0	375.0
75°	202.4	263.9	307.6	300.6	293.7
77.5°	156.8	219.3	242.1	222.2	217.3
80°	114.1	170.6	168.7	149.8	146.8
82.5°	78.4	118.1	97.2	79.4	73.4
85°	41.7	60.5	42.7	28.8	27.8
87.5°	15.9	14.9	8.9	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)