

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: P475499

Luminaire Tested: **14CZ2-44-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475499  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-44-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**

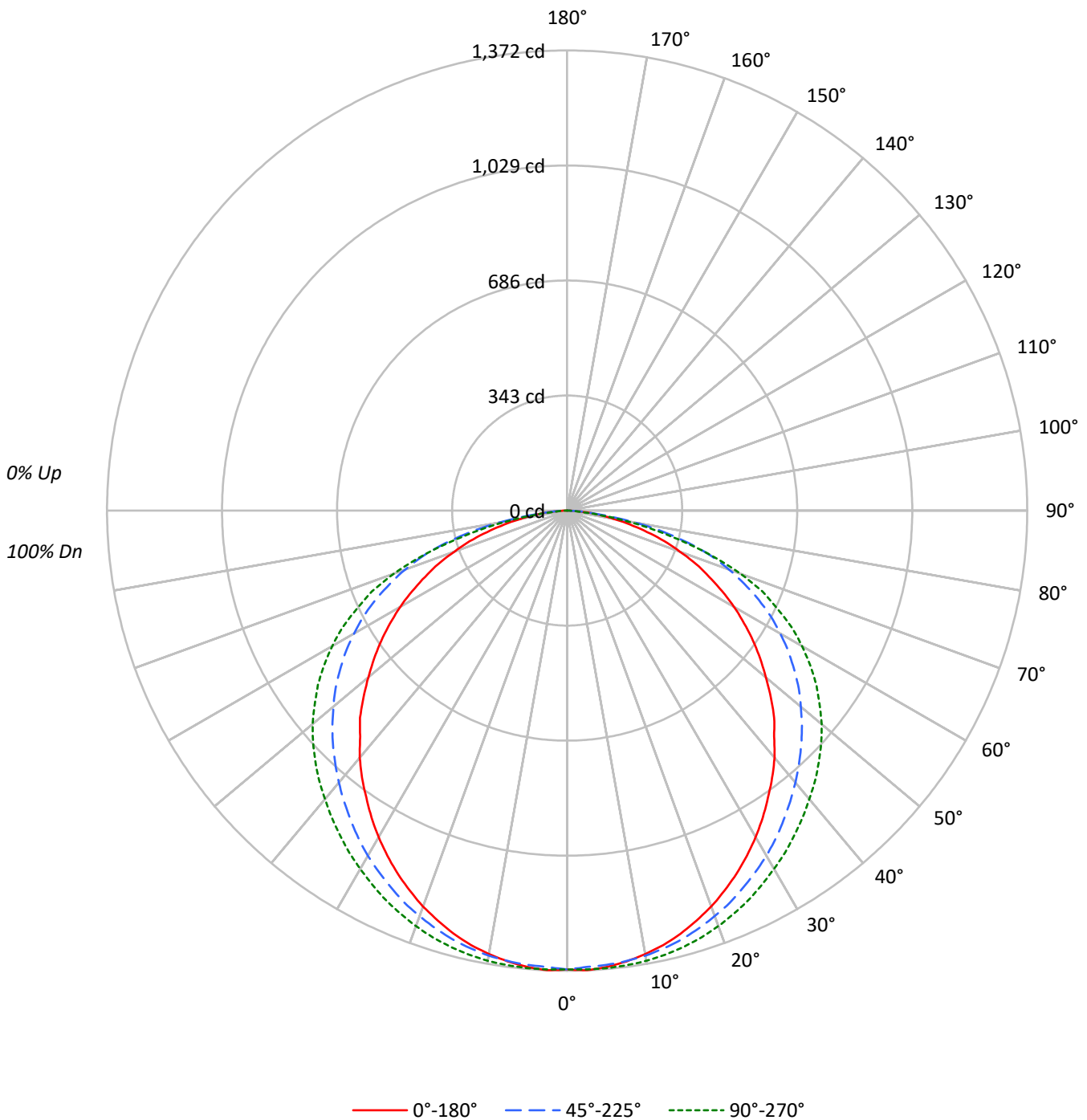
Lumens per Lamp: N/A  
Luminaire Lumens: 4295.5 lumens  
Efficiency: N/A  
Efficacy: 124.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.34 / 1.43  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.6  
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	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°	3682	3682	3682
5°	3689	3673	3699
10°	3669	3682	3725
15°	3639	3686	3751
20°	3598	3685	3775
25°	3547	3684	3803
30°	3494	3693	3833
35°	3431	3697	3881
40°	3379	3719	3945
45°	3323	3757	4039
50°	3239	3808	4148
55°	3175	3875	4256
60°	3094	3949	4354
65°	2973	4016	4402
70°	2815	4046	4323
75°	2572	3909	3733
80°	2162	3195	2782
85°	1572	1612	1050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.9	3.0
10°-20°	374.4	8.7
20°-30°	572.5	13.3
30°-40°	702.7	16.4
40°-50°	755.7	17.6
50°-60°	725.4	16.9
60°-70°	601.0	14.0
70°-80°	360.2	8.4
80°-90°	73.7	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°	1076.8	25.1
0°-40°	1779.5	41.4
0°-60°	3260.6	75.9
0°-90°	4295.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4295.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1368	1368	1368	1368	1368	
5°	1366	1363	1360	1370	1369	130
15°	1306	1312	1323	1344	1346	368
25°	1195	1214	1241	1274	1281	550
35°	1044	1079	1126	1169	1181	654
45°	873	919	987	1042	1061	671
55°	677	741	826	887	907	604
65°	467	543	631	680	691	463
75°	247	323	376	368	359	262
85°	51	74	52	35	34	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1368.1	1368.1	1368.1	1368.1	1368.1
2.5°	1371.7	1368.1	1362.0	1371.7	1369.3
5°	1365.7	1363.2	1359.6	1370.5	1369.3
7.5°	1356.0	1356.0	1354.7	1368.1	1366.9
10°	1342.6	1345.0	1347.5	1363.2	1363.2
12.5°	1326.9	1329.3	1336.6	1354.7	1356.0
15°	1306.2	1312.3	1323.2	1343.8	1346.3
17.5°	1282.0	1291.7	1306.2	1330.5	1334.1
20°	1256.5	1267.4	1286.8	1313.5	1318.4
22.5°	1226.2	1242.0	1266.2	1294.1	1300.2
25°	1194.7	1214.1	1240.7	1273.5	1280.8
27.5°	1160.7	1183.7	1215.3	1249.2	1257.7
30°	1124.3	1151.0	1188.6	1225.0	1233.5
32.5°	1085.5	1117.0	1158.3	1198.3	1209.2
35°	1044.3	1079.4	1125.5	1169.2	1181.3
37.5°	1004.2	1041.8	1092.8	1140.1	1153.4
40°	961.8	1001.8	1058.8	1108.5	1123.1
42.5°	913.3	961.8	1023.6	1077.0	1094.0
45°	873.2	919.3	987.3	1041.8	1061.2
47.5°	823.5	876.9	949.7	1007.9	1027.3
50°	773.8	834.4	909.6	970.3	990.9
52.5°	725.3	787.1	870.8	930.3	948.4
55°	676.8	741.0	825.9	886.6	907.2
57.5°	625.8	696.2	782.3	842.9	859.9
60°	574.9	645.2	733.8	792.0	809.0
62.5°	521.5	596.7	685.3	738.6	755.6
65°	466.9	543.4	630.7	680.4	691.3
67.5°	416.0	493.6	572.5	618.6	629.5
70°	357.8	440.3	514.2	548.2	549.4
72.5°	304.4	380.8	451.2	460.9	458.5
75°	247.4	322.6	376.0	367.5	359.0
77.5°	191.6	268.0	295.9	271.7	265.6
80°	139.5	208.6	206.2	183.1	179.5
82.5°	95.8	144.3	118.9	97.0	89.8
85°	50.9	74.0	52.2	35.2	34.0
87.5°	19.4	18.2	10.9	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)