

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: P475495

Luminaire Tested: **14CZ2-25-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475495  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-25-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**

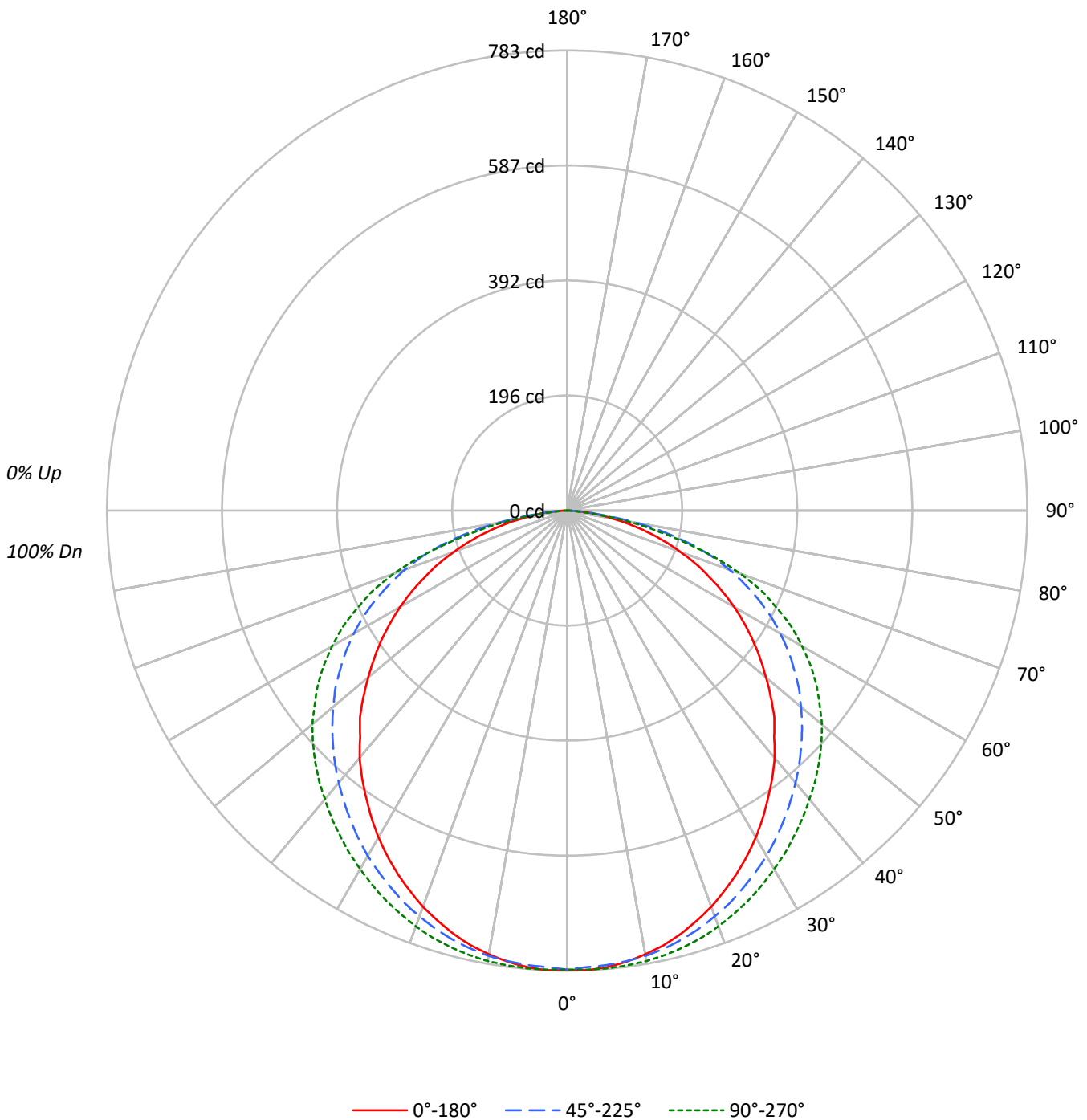
Lumens per Lamp: N/A  
Luminaire Lumens: 2452.7 lumens  
Efficiency: N/A  
Efficacy: 129.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.34 / 1.43  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 19  
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



TEST NUMBER: P475495  
CATALOG NUMBER: 14CZ2-25-SQR-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475495

CATALOG NUMBER: 14CZ2-25-SQR-UNV-L835-CD1-U

**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°	2102	2102	2102
5°	2106	2097	2112
10°	2095	2102	2127
15°	2078	2105	2142
20°	2054	2104	2156
25°	2025	2103	2171
30°	1995	2109	2188
35°	1959	2111	2216
40°	1929	2124	2253
45°	1897	2145	2306
50°	1850	2174	2369
55°	1813	2213	2430
60°	1767	2255	2486
65°	1698	2293	2513
70°	1607	2310	2468
75°	1469	2232	2131
80°	1234	1824	1588
85°	898	920	599



TEST NUMBER: P475495

CATALOG NUMBER: 14CZ2-25-SQR-UNV-L835-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.2	3.0
10°-20°	213.8	8.7
20°-30°	326.9	13.3
30°-40°	401.2	16.4
40°-50°	431.5	17.6
50°-60°	414.2	16.9
60°-70°	343.1	14.0
70°-80°	205.6	8.4
80°-90°	42.1	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°	614.9	25.1
0°-40°	1016.1	41.4
0°-60°	1861.8	75.9
0°-90°	2452.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2452.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	781	781	781	781	781	
5°	780	778	776	782	782	74
15°	746	749	756	767	769	210
25°	682	693	708	727	731	314
35°	596	616	643	668	674	373
45°	499	525	564	595	606	383
55°	386	423	472	506	518	345
65°	267	310	360	388	395	264
75°	141	184	215	210	205	149
85°	29	42	30	20	19	37
90°	0	0	0	0	0	



TEST NUMBER: P475495

CATALOG NUMBER: 14CZ2-25-SQR-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	781.2	781.2	781.2	781.2	781.2
2.5°	783.2	781.2	777.7	783.2	781.9
5°	779.8	778.4	776.3	782.5	781.9
7.5°	774.2	774.2	773.5	781.2	780.5
10°	766.6	768.0	769.4	778.4	778.4
12.5°	757.6	759.0	763.2	773.5	774.2
15°	745.8	749.3	755.5	767.3	768.7
17.5°	732.0	737.5	745.8	759.7	761.8
20°	717.4	723.7	734.8	750.0	752.8
22.5°	700.1	709.1	723.0	738.9	742.4
25°	682.1	693.2	708.4	727.1	731.3
27.5°	662.7	675.9	693.9	713.3	718.1
30°	642.0	657.2	678.7	699.4	704.3
32.5°	619.8	637.8	661.4	684.2	690.4
35°	596.3	616.3	642.7	667.6	674.5
37.5°	573.4	594.9	624.0	651.0	658.6
40°	549.2	572.0	604.6	633.0	641.3
42.5°	521.5	549.2	584.5	615.0	624.7
45°	498.6	524.9	563.7	594.9	606.0
47.5°	470.2	500.7	542.2	575.5	586.6
50°	441.8	476.5	519.4	554.0	565.8
52.5°	414.1	449.4	497.2	531.2	541.5
55°	386.4	423.1	471.6	506.2	518.0
57.5°	357.3	397.5	446.7	481.3	491.0
60°	328.3	368.4	419.0	452.2	461.9
62.5°	297.8	340.7	391.3	421.7	431.4
65°	266.6	310.2	360.1	388.5	394.7
67.5°	237.5	281.9	326.9	353.2	359.4
70°	204.3	251.4	293.6	313.0	313.7
72.5°	173.8	217.5	257.6	263.2	261.8
75°	141.3	184.2	214.7	209.8	205.0
77.5°	109.4	153.0	169.0	155.1	151.7
80°	79.6	119.1	117.7	104.6	102.5
82.5°	54.7	82.4	67.9	55.4	51.2
85°	29.1	42.2	29.8	20.1	19.4
87.5°	11.1	10.4	6.2	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)