

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: P475048

Luminaire Tested: **22CZ2-100VHE-RDP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475048  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-100VHE-RDP-UNV-L835-CD1-U  
Description: 2'X2' 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: 6714.2 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

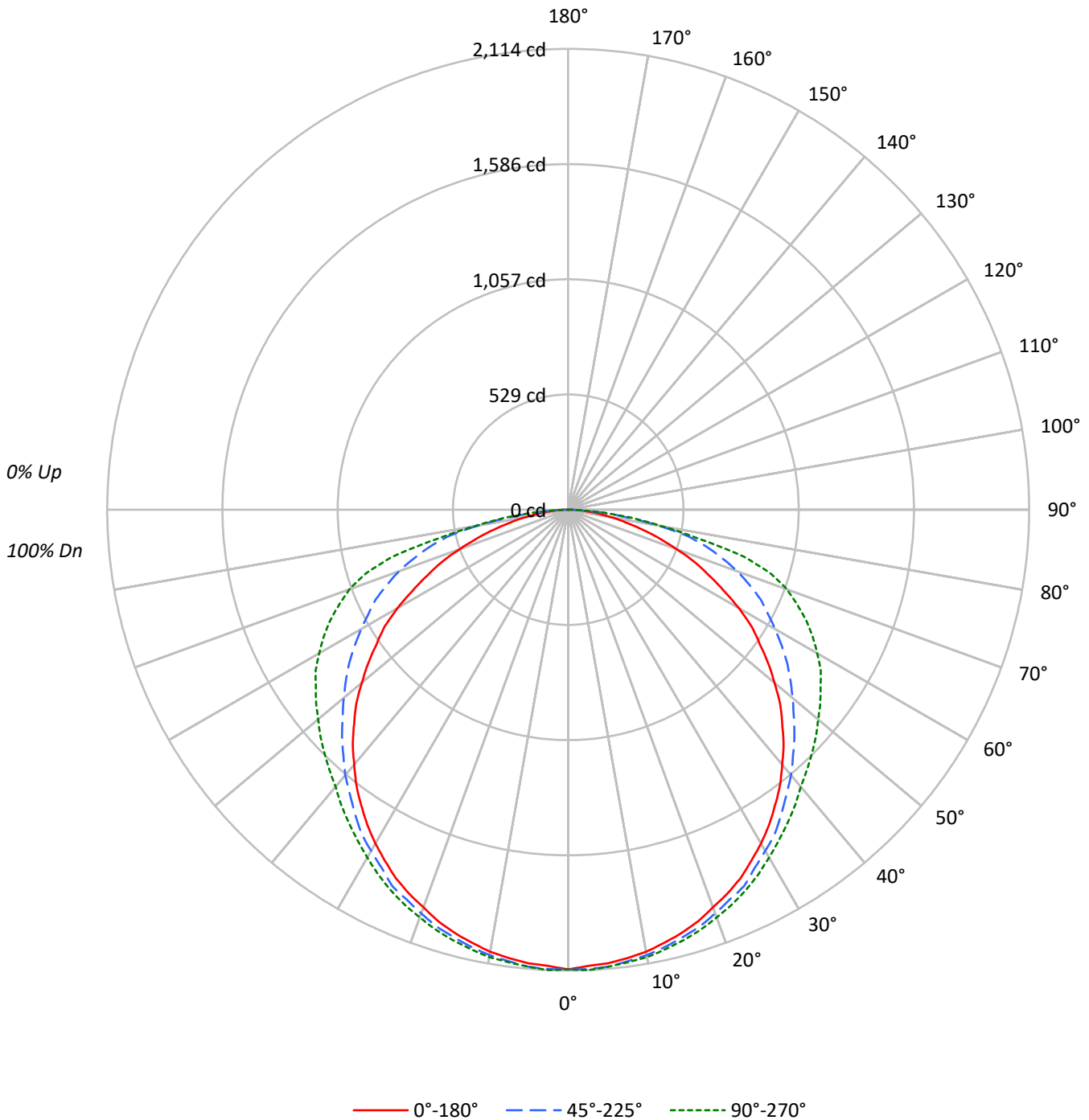
Input Watts (W): 75.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P475048

CATALOG NUMBER: 22CZ2-100VHE-RDP-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475048

CATALOG NUMBER: 22CZ2-100VHE-RDP-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	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	5675	5675	5675
5°	5644	5683	5683
10°	5627	5669	5696
15°	5601	5655	5696
20°	5559	5643	5701
25°	5543	5661	5720
30°	5495	5617	5725
35°	5435	5598	5761
40°	5362	5586	5829
45°	5282	5583	6014
50°	5169	5624	6265
55°	5029	5747	6627
60°	4865	5901	7098
65°	4528	6197	7675
70°	4159	6491	8395
75°	3648	6828	8680
80°	3141	6502	6815
85°	2742	4727	5184



TEST NUMBER: P475048

CATALOG NUMBER: 22CZ2-100VHE-RDP-UNV-L835-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.5	3.0
10°-20°	572.8	8.5
20°-30°	873.9	13.0
30°-40°	1067.1	15.9
40°-50°	1140.9	17.0
50°-60°	1101.3	16.4
60°-70°	948.0	14.1
70°-80°	641.4	9.6
80°-90°	169.3	2.5
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°	1646.2	24.5
0°-40°	2713.3	40.4
0°-60°	4955.5	73.8
0°-90°	6714.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6714.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2109	2109	2109	2109	2109	
5°	2089	2094	2104	2104	2104	198
15°	2010	2015	2030	2040	2045	567
25°	1867	1877	1907	1917	1926	859
35°	1654	1669	1704	1738	1754	1035
45°	1388	1412	1467	1541	1580	1071
55°	1072	1106	1225	1348	1412	961
65°	711	780	973	1126	1205	707
75°	351	464	657	790	835	376
85°	89	124	153	158	168	100
90°	0	0	0	0	0	



TEST NUMBER: P475048

CATALOG NUMBER: 22CZ2-100VHE-RDP-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2108.9	2108.9	2108.9	2108.9	2108.9
2.5°	2094.2	2099.1	2108.9	2108.9	2113.9
5°	2089.3	2094.2	2104.0	2104.0	2104.0
7.5°	2074.6	2079.5	2089.3	2094.2	2094.2
10°	2059.4	2064.8	2074.6	2079.5	2084.4
12.5°	2034.8	2039.7	2054.5	2064.8	2064.8
15°	2010.3	2015.2	2029.9	2039.7	2044.7
17.5°	1980.4	1990.7	2005.4	2015.2	2020.1
20°	1941.1	1950.9	1970.5	1985.8	1990.7
22.5°	1906.7	1916.6	1936.2	1950.9	1960.7
25°	1867.0	1876.8	1906.7	1916.6	1926.4
27.5°	1817.4	1827.7	1852.3	1871.9	1886.6
30°	1768.3	1778.1	1807.6	1832.6	1842.4
32.5°	1713.9	1728.6	1763.4	1783.1	1797.8
35°	1654.5	1669.2	1704.0	1738.4	1753.6
37.5°	1595.6	1610.3	1644.7	1689.3	1708.9
40°	1526.4	1546.0	1590.2	1649.6	1659.4
42.5°	1462.1	1486.6	1526.4	1595.6	1620.1
45°	1388.0	1412.5	1467.0	1541.1	1580.4
47.5°	1318.8	1343.3	1402.7	1491.5	1541.1
50°	1234.8	1269.2	1343.3	1447.4	1496.4
52.5°	1155.8	1185.3	1284.4	1397.8	1457.2
55°	1071.9	1106.3	1225.0	1348.2	1412.5
57.5°	997.8	1027.2	1160.7	1299.1	1373.2
60°	904.0	943.3	1096.4	1244.7	1318.8
62.5°	804.9	864.3	1032.1	1185.3	1264.3
65°	711.2	780.4	973.2	1125.9	1205.4
67.5°	627.2	701.3	899.1	1062.1	1136.2
70°	528.6	622.3	825.0	983.1	1067.0
72.5°	439.8	543.3	741.1	899.1	973.2
75°	350.9	464.3	656.7	790.2	834.8
77.5°	271.4	380.4	562.9	602.7	607.6
80°	202.7	301.3	419.6	424.5	439.8
82.5°	138.4	212.5	271.4	296.4	301.3
85°	88.8	123.7	153.1	158.0	167.9
87.5°	39.8	44.7	54.5	49.6	49.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)