

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: P259485

Luminaire Tested: **22CZ-LD5-44-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259485  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-44-S-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4578.0 lumens  
Efficiency: N/A  
Efficacy: 129.9 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

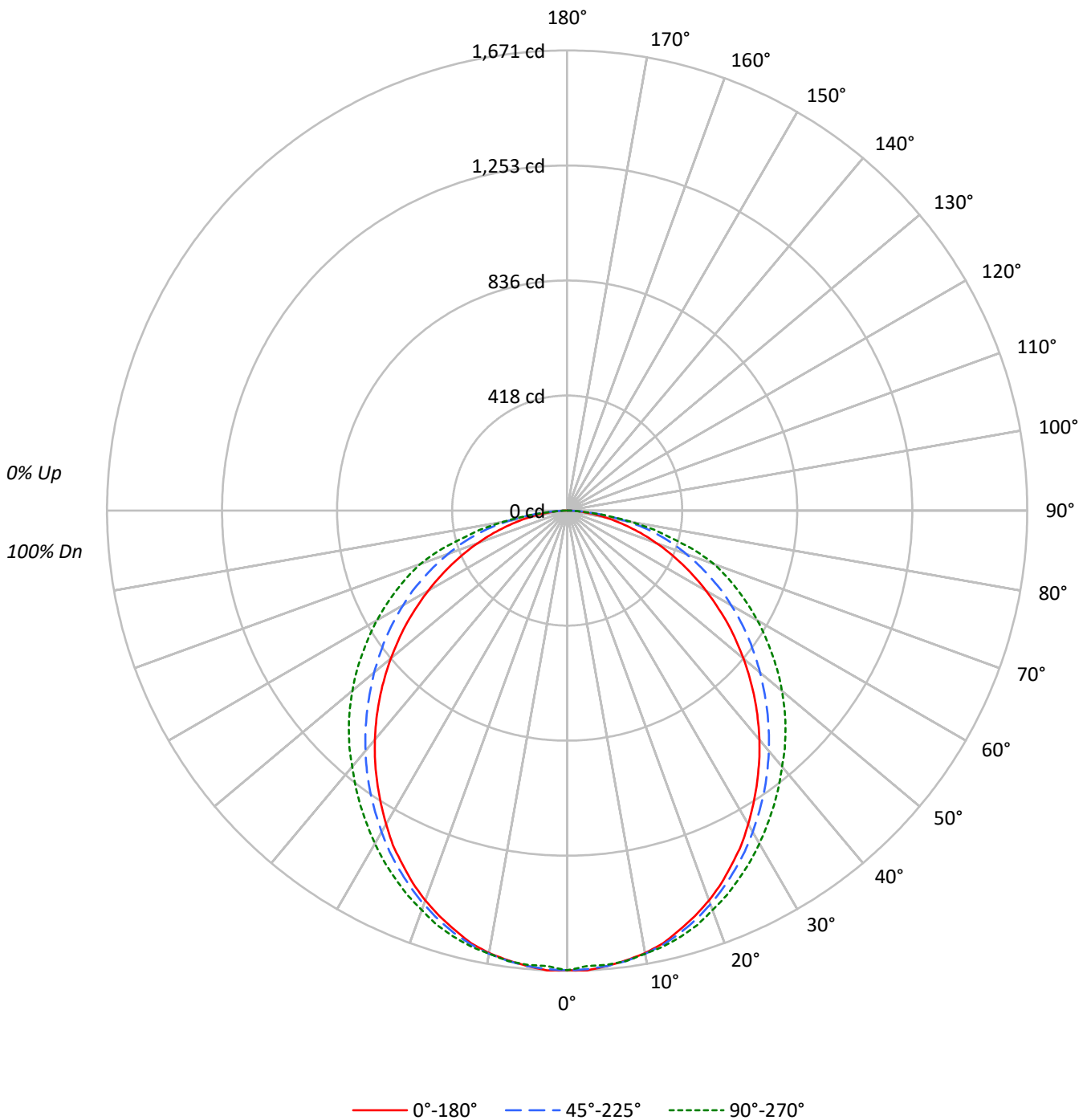
Input Watts (W): 35.247  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P259485

CATALOG NUMBER: 22CZ-LD5-44-S-UNV-L82765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P259485

CATALOG NUMBER: 22CZ-LD5-44-S-UNV-L82765-W2A1-U-4500K

**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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	4491	4491	4491
5°	4485	4485	4473
10°	4458	4464	4464
15°	4392	4423	4460
20°	4313	4357	4420
25°	4205	4276	4381
30°	4086	4188	4339
35°	3951	4096	4298
40°	3816	4001	4264
45°	3665	3908	4268
50°	3498	3829	4262
55°	3332	3765	4260
60°	3136	3704	4296
65°	2940	3654	4355
70°	2716	3616	4463
75°	2446	3589	4138
80°	2146	3340	3612
85°	1766	2513	2242



TEST NUMBER: P259485

CATALOG NUMBER: 22CZ-LD5-44-S-UNV-L82765-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.6	3.4
10°-20°	447.7	9.8
20°-30°	665.0	14.5
30°-40°	782.7	17.1
40°-50°	798.0	17.4
50°-60°	719.7	15.7
60°-70°	566.9	12.4
70°-80°	349.7	7.6
80°-90°	90.8	2.0
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°	1270.3	27.7
0°-40°	2053.0	44.8
0°-60°	3570.7	78.0
0°-90°	4578.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4578.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1669	1669	1669	1669	1669	
5°	1660	1662	1660	1658	1656	158
15°	1577	1583	1588	1596	1601	445
25°	1416	1425	1440	1464	1476	652
35°	1203	1216	1247	1286	1308	752
45°	963	978	1027	1088	1121	742
55°	710	734	803	875	908	634
65°	462	495	574	646	684	457
75°	235	275	345	385	398	251
85°	57	73	81	77	73	67
90°	0	0	0	0	0	



TEST NUMBER: P259485

CATALOG NUMBER: 22CZ-LD5-44-S-UNV-L82765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1669.0	1669.0	1669.0	1669.0	1669.0
2.5°	1671.2	1671.2	1666.8	1662.4	1655.8
5°	1660.2	1662.4	1660.2	1658.0	1655.8
7.5°	1647.0	1649.2	1649.2	1649.2	1649.2
10°	1631.6	1633.8	1633.8	1633.8	1633.8
12.5°	1609.6	1611.8	1614.0	1616.2	1620.6
15°	1576.6	1583.2	1587.6	1596.4	1600.8
17.5°	1543.6	1550.2	1556.8	1567.8	1576.6
20°	1506.2	1510.6	1521.6	1534.8	1543.6
22.5°	1464.5	1471.1	1482.0	1499.6	1512.8
25°	1416.1	1424.9	1440.3	1464.5	1475.5
27.5°	1369.9	1376.5	1396.3	1422.7	1438.1
30°	1314.9	1323.7	1347.9	1380.9	1396.3
32.5°	1260.0	1271.0	1297.3	1334.7	1352.3
35°	1202.8	1216.0	1246.8	1286.3	1308.3
37.5°	1145.6	1158.8	1194.0	1238.0	1262.2
40°	1086.2	1099.4	1139.0	1187.4	1213.8
42.5°	1024.7	1040.1	1084.0	1139.0	1169.8
45°	963.1	978.5	1026.9	1088.4	1121.4
47.5°	899.3	916.9	969.7	1037.9	1070.9
50°	835.6	855.4	914.7	985.1	1018.1
52.5°	771.8	793.8	857.6	930.1	965.3
55°	710.2	734.4	802.6	875.2	908.1
57.5°	644.3	672.9	745.4	815.8	853.2
60°	582.7	613.5	688.3	758.6	798.2
62.5°	521.1	554.1	633.3	703.6	741.0
65°	461.8	494.7	573.9	646.5	683.9
67.5°	402.4	439.8	516.7	589.3	626.7
70°	345.2	384.8	459.6	529.9	567.3
72.5°	290.3	329.8	404.6	470.6	492.5
75°	235.3	274.9	345.2	384.8	398.0
77.5°	184.7	222.1	283.7	307.8	325.4
80°	138.5	171.5	215.5	230.9	233.1
82.5°	94.6	123.1	149.5	151.7	149.5
85°	57.2	72.6	81.4	77.0	72.6
87.5°	26.4	28.6	26.4	17.6	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)