

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: P#

Luminaire Tested: **22CZ-LD5-44SE-S-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
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-LD5-44SE-S-UNV-L830-CD1-U  
Description: CRUZE 2x2 LED TROFFER

Light Source: -  
Ballast/Driver: -

**Summary**

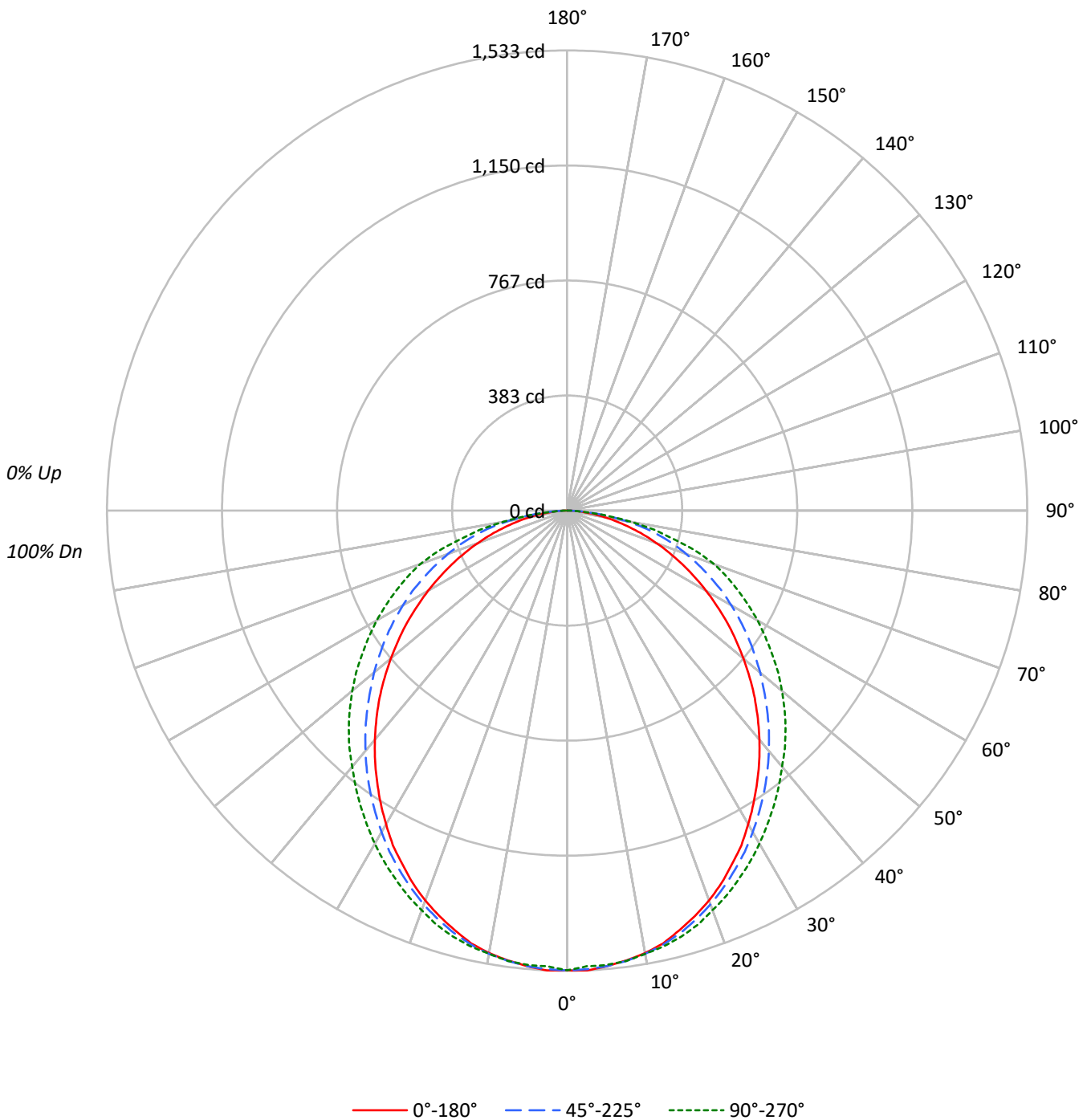
Lumens per Lamp: N/A  
Luminaire Lumens: 4200.7 lumens  
Efficiency: N/A  
Efficacy: 105.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P#  
CATALOG NUMBER: 22CZ-LD5-44SE-S-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 22CZ-LD5-44SE-S-UNV-L830-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	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°	4121	4121	4121
5°	4097	4090	4086
10°	4055	4046	4060
15°	3977	3983	4038
20°	3887	3898	3984
25°	3770	3799	3928
30°	3644	3692	3870
35°	3503	3581	3810
40°	3360	3466	3755
45°	3203	3349	3730
50°	3029	3241	3691
55°	2854	3138	3649
60°	2648	3028	3628
65°	2437	2912	3609
70°	2191	2778	3601
75°	1892	2605	3200
80°	1535	2187	2581
85°	1030	1276	1308



TEST NUMBER: P#

CATALOG NUMBER: 22CZ-LD5-44SE-S-UNV-L830-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.6	3.4
10°-20°	410.8	9.8
20°-30°	610.2	14.5
30°-40°	718.2	17.1
40°-50°	732.2	17.4
50°-60°	660.4	15.7
60°-70°	520.2	12.4
70°-80°	320.9	7.6
80°-90°	83.3	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°	1165.6	27.7
0°-40°	1883.8	44.8
0°-60°	3276.4	78.0
0°-90°	4200.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4200.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1531	1531	1531	1531	1531	
5°	1523	1525	1523	1521	1519	145
15°	1447	1453	1457	1465	1469	408
25°	1299	1308	1322	1344	1354	599
35°	1104	1116	1144	1180	1200	690
45°	884	898	942	999	1029	681
55°	652	674	736	803	833	582
65°	424	454	527	593	628	420
75°	216	252	317	353	365	230
85°	52	67	75	71	67	62
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 22CZ-LD5-44SE-S-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1531.4	1531.4	1531.4	1531.4	1531.4
2.5°	1533.4	1533.4	1529.4	1525.3	1519.3
5°	1523.3	1525.3	1523.3	1521.3	1519.3
7.5°	1511.3	1513.3	1513.3	1513.3	1513.3
10°	1497.1	1499.1	1499.1	1499.1	1499.1
12.5°	1477.0	1479.0	1481.0	1482.9	1487.0
15°	1446.7	1452.7	1456.7	1464.8	1468.9
17.5°	1416.4	1422.4	1428.5	1438.6	1446.7
20°	1382.1	1386.1	1396.2	1408.4	1416.4
22.5°	1343.8	1349.9	1359.9	1376.1	1388.1
25°	1299.4	1307.5	1321.5	1343.8	1353.8
27.5°	1257.0	1263.0	1281.3	1305.4	1319.6
30°	1206.6	1214.7	1236.8	1267.1	1281.3
32.5°	1156.1	1166.2	1190.4	1224.7	1240.9
35°	1103.7	1115.8	1144.0	1180.4	1200.5
37.5°	1051.2	1063.3	1095.6	1135.9	1158.1
40°	996.7	1008.8	1045.2	1089.6	1113.8
42.5°	940.2	954.4	994.7	1045.2	1073.4
45°	883.8	897.8	942.2	998.7	1029.0
47.5°	825.3	841.4	889.8	952.4	982.6
50°	766.7	784.9	839.3	903.9	934.1
52.5°	708.2	728.4	786.9	853.5	885.8
55°	651.7	673.9	736.4	803.0	833.3
57.5°	591.2	617.4	684.0	748.6	782.9
60°	534.7	563.0	631.6	696.1	732.4
62.5°	478.2	508.4	581.1	645.6	679.9
65°	423.7	454.0	526.6	593.2	627.5
67.5°	369.3	403.6	474.1	540.7	575.0
70°	316.7	353.1	421.7	486.3	520.6
72.5°	266.3	302.7	371.3	431.8	451.9
75°	215.9	252.2	316.7	353.1	365.2
77.5°	169.5	203.8	260.3	282.4	298.6
80°	127.1	157.4	197.7	211.8	213.8
82.5°	86.7	113.0	137.2	139.2	137.2
85°	52.4	66.6	74.7	70.6	66.6
87.5°	24.2	26.2	24.2	16.2	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)