

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-LD5-39SE-S-UNV-L835-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-LD5-39SE-S-UNV-L835-CD1-U  
Description: CRUZE 2x2 LED TROFFER

Light Source: -  
Ballast/Driver: -

**Summary**

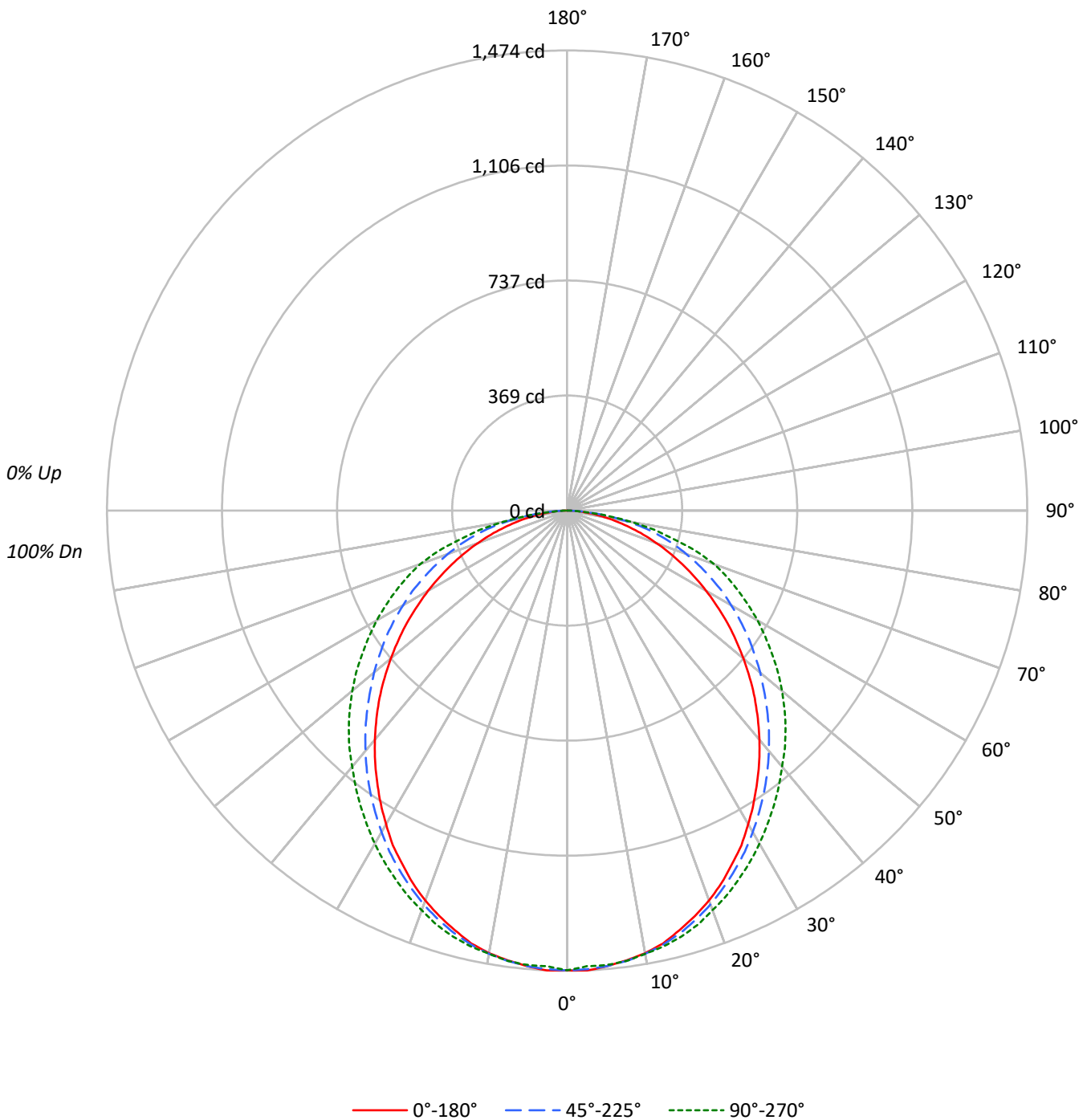
Lumens per Lamp: N/A  
Luminaire Lumens: 4039.2 lumens  
Efficiency: N/A  
Efficacy: 115.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 34.88  
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



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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	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°	3962	3962	3962
5°	3940	3932	3929
10°	3899	3890	3904
15°	3824	3830	3883
20°	3738	3748	3830
25°	3625	3653	3777
30°	3504	3551	3721
35°	3368	3443	3664
40°	3231	3333	3610
45°	3080	3220	3586
50°	2913	3116	3549
55°	2744	3017	3509
60°	2546	2911	3488
65°	2343	2800	3470
70°	2107	2671	3462
75°	1819	2506	3077
80°	1475	2103	2482
85°	990	1226	1257



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.0	3.4
10°-20°	395.0	9.8
20°-30°	586.7	14.5
30°-40°	690.6	17.1
40°-50°	704.1	17.4
50°-60°	635.0	15.7
60°-70°	500.2	12.4
70°-80°	308.5	7.6
80°-90°	80.1	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°	1120.8	27.7
0°-40°	1811.4	44.8
0°-60°	3150.4	78.0
0°-90°	4039.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4039.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1472	1472	1472	1472	1472	
5°	1465	1467	1465	1463	1461	139
15°	1391	1397	1401	1408	1412	392
25°	1249	1257	1271	1292	1302	576
35°	1061	1073	1100	1135	1154	664
45°	850	863	906	960	989	655
55°	627	648	708	772	801	559
65°	407	436	506	570	603	404
75°	208	242	305	340	351	221
85°	50	64	72	68	64	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1472.5	1472.5	1472.5	1472.5	1472.5
2.5°	1474.5	1474.5	1470.6	1466.7	1460.9
5°	1464.8	1466.7	1464.8	1462.8	1460.9
7.5°	1453.1	1455.1	1455.1	1455.1	1455.1
10°	1439.5	1441.5	1441.5	1441.5	1441.5
12.5°	1420.1	1422.1	1424.0	1426.0	1429.8
15°	1391.0	1396.9	1400.7	1408.5	1412.4
17.5°	1361.9	1367.8	1373.6	1383.3	1391.0
20°	1329.0	1332.8	1342.5	1354.2	1361.9
22.5°	1292.1	1297.9	1307.6	1323.1	1334.8
25°	1249.4	1257.2	1270.8	1292.1	1301.8
27.5°	1208.7	1214.5	1232.0	1255.2	1268.8
30°	1160.2	1167.9	1189.3	1218.4	1232.0
32.5°	1111.7	1121.4	1144.7	1177.6	1193.2
35°	1061.2	1072.9	1100.0	1135.0	1154.4
37.5°	1010.8	1022.4	1053.5	1092.3	1113.6
40°	958.4	970.0	1005.0	1047.6	1070.9
42.5°	904.1	917.7	956.5	1005.0	1032.1
45°	849.8	863.3	906.0	960.3	989.4
47.5°	793.5	809.0	855.6	915.7	944.8
50°	737.2	754.7	807.1	869.2	898.3
52.5°	681.0	700.4	756.6	820.7	851.7
55°	626.6	648.0	708.1	772.2	801.3
57.5°	568.4	593.7	657.7	719.8	752.8
60°	514.1	541.3	607.2	669.3	704.3
62.5°	459.8	488.9	558.7	620.8	653.8
65°	407.4	436.5	506.4	570.4	603.4
67.5°	355.0	388.0	455.9	519.9	552.9
70°	304.6	339.5	405.5	467.6	500.5
72.5°	256.1	291.0	357.0	415.2	434.6
75°	207.6	242.5	304.6	339.5	351.2
77.5°	163.0	195.9	250.3	271.6	287.1
80°	122.2	151.3	190.1	203.7	205.6
82.5°	83.4	108.6	131.9	133.9	131.9
85°	50.4	64.0	71.8	67.9	64.0
87.5°	23.3	25.2	23.3	15.5	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)