

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-L840-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-L840-CD1-U  
Description: CRUZE 2x2 LED TROFFER

Light Source: -  
Ballast/Driver: -

**Summary**

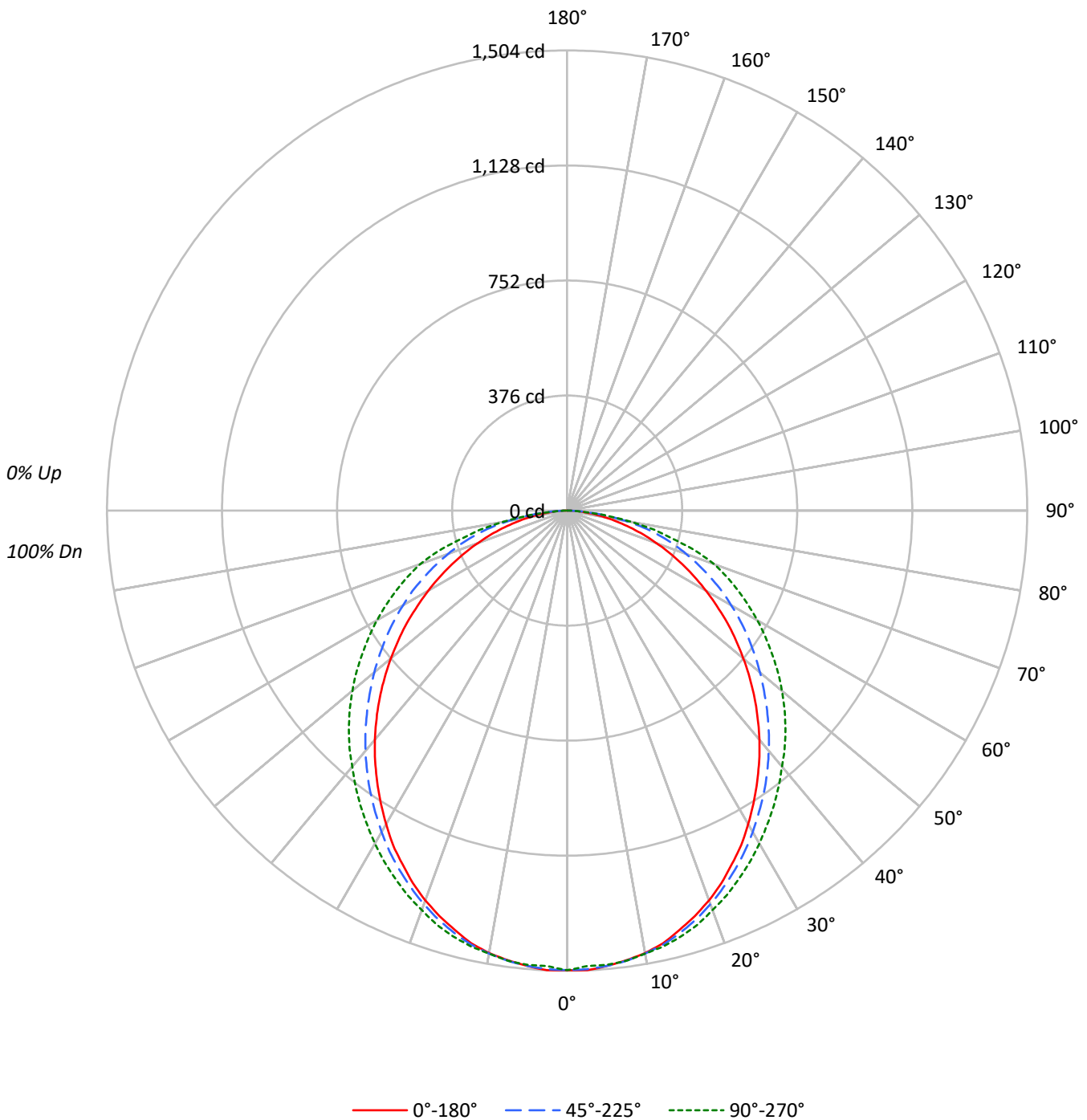
Lumens per Lamp: N/A  
Luminaire Lumens: 4120.0 lumens  
Efficiency: N/A  
Efficacy: 118.1 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 34.88  
Input Voltage (V): NR  
Input Current (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



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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°	4042	4042	4042
5°	4018	4011	4008
10°	3977	3968	3982
15°	3901	3906	3960
20°	3812	3823	3907
25°	3698	3726	3853
30°	3574	3622	3795
35°	3436	3512	3737
40°	3296	3399	3683
45°	3142	3285	3658
50°	2971	3178	3620
55°	2799	3078	3579
60°	2597	2970	3558
65°	2390	2856	3539
70°	2149	2725	3532
75°	1855	2556	3139
80°	1506	2145	2533
85°	1012	1250	1283



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.8	3.4
10°-20°	402.9	9.8
20°-30°	598.4	14.5
30°-40°	704.4	17.1
40°-50°	718.1	17.4
50°-60°	647.7	15.7
60°-70°	510.2	12.4
70°-80°	314.7	7.6
80°-90°	81.7	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°	1143.2	27.7
0°-40°	1847.6	44.8
0°-60°	3213.4	78.0
0°-90°	4120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4120.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1502	1502	1502	1502	1502	
5°	1494	1496	1494	1492	1490	142
15°	1419	1425	1429	1437	1441	400
25°	1274	1282	1296	1318	1328	587
35°	1082	1094	1122	1158	1177	677
45°	867	881	924	980	1009	668
55°	639	661	722	788	817	570
65°	416	445	516	582	615	412
75°	212	247	311	346	358	226
85°	52	65	73	69	65	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1502.0	1502.0	1502.0	1502.0	1502.0
2.5°	1504.0	1504.0	1500.0	1496.0	1490.1
5°	1494.1	1496.0	1494.1	1492.1	1490.1
7.5°	1482.2	1484.2	1484.2	1484.2	1484.2
10°	1468.3	1470.3	1470.3	1470.3	1470.3
12.5°	1448.5	1450.5	1452.5	1454.5	1458.4
15°	1418.9	1424.8	1428.8	1436.7	1440.6
17.5°	1389.2	1395.1	1401.1	1410.9	1418.9
20°	1355.5	1359.5	1369.4	1381.3	1389.2
22.5°	1317.9	1323.9	1333.8	1349.6	1361.5
25°	1274.4	1282.3	1296.2	1317.9	1327.8
27.5°	1232.8	1238.8	1256.6	1280.3	1294.2
30°	1183.4	1191.3	1213.1	1242.7	1256.6
32.5°	1133.9	1143.8	1167.5	1201.2	1217.0
35°	1082.5	1094.3	1122.0	1157.7	1177.4
37.5°	1031.0	1042.9	1074.5	1114.1	1135.9
40°	977.6	989.4	1025.1	1068.6	1092.3
42.5°	922.2	936.0	975.6	1025.1	1052.8
45°	866.8	880.6	924.1	979.6	1009.2
47.5°	809.4	825.2	872.7	934.0	963.7
50°	752.0	769.8	823.2	886.5	916.2
52.5°	694.6	714.4	771.8	837.1	868.7
55°	639.2	660.9	722.3	787.6	817.3
57.5°	579.8	605.5	670.8	734.2	767.8
60°	524.4	552.1	619.4	682.7	718.3
62.5°	469.0	498.7	569.9	633.2	666.9
65°	415.6	445.3	516.5	581.8	615.4
67.5°	362.1	395.8	465.0	530.3	564.0
70°	310.7	346.3	413.6	476.9	510.6
72.5°	261.2	296.8	364.1	423.5	443.3
75°	211.7	247.4	310.7	346.3	358.2
77.5°	166.2	199.9	255.3	277.0	292.9
80°	124.7	154.4	193.9	207.8	209.8
82.5°	85.1	110.8	134.6	136.5	134.6
85°	51.5	65.3	73.2	69.3	65.3
87.5°	23.7	25.7	23.7	15.8	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)