

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: P388347

Luminaire Tested: **22CZ2-50VHE-UNV-L940-CD1-SDWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P388347  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-50VHE-UNV-L940-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

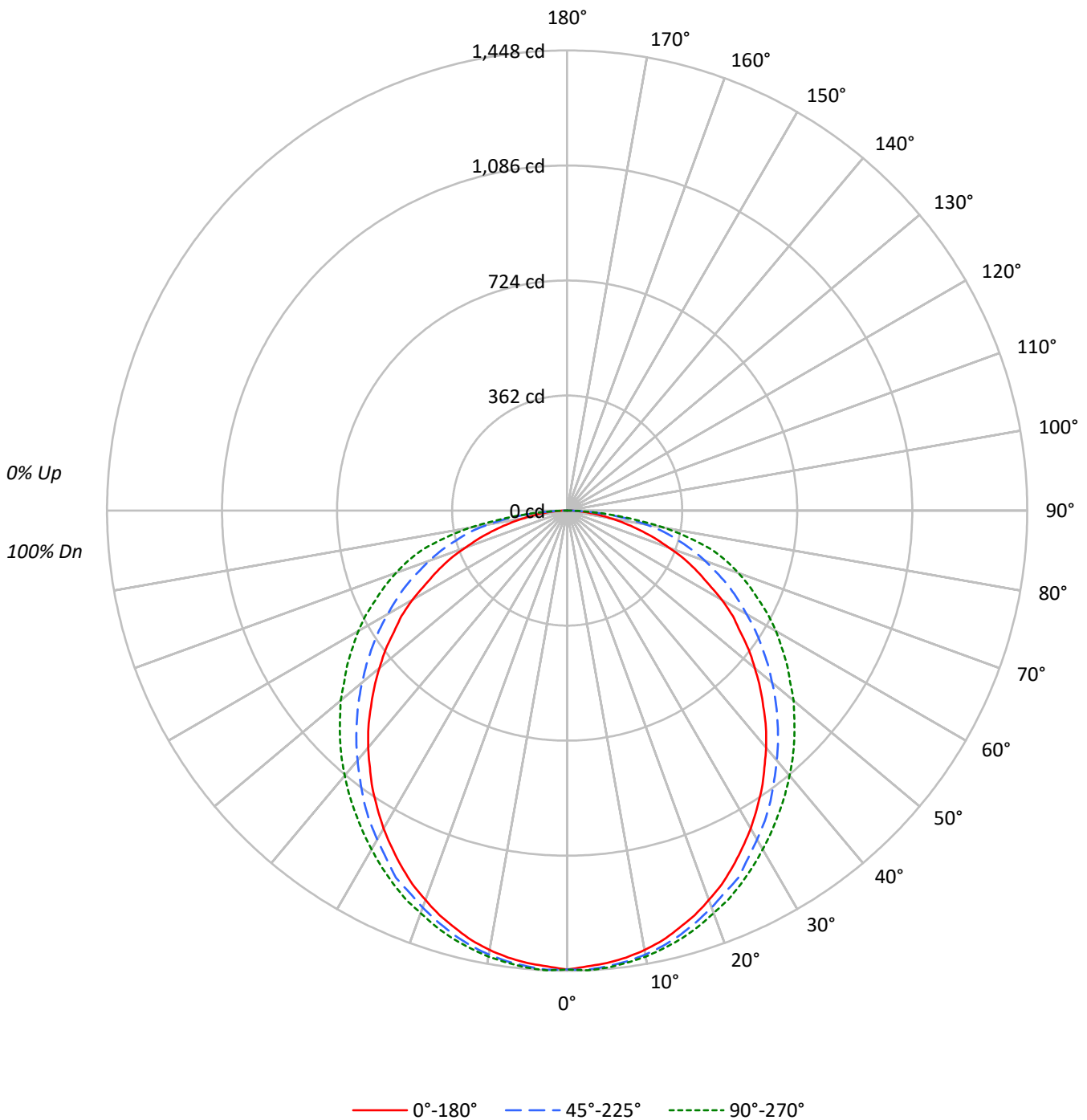
Lumens per Lamp: N/A  
Luminaire Lumens: 4246.5 lumens  
Efficiency: N/A  
Efficacy: 117.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	3886	3886	3886
5°	3861	3889	3900
10°	3837	3877	3894
15°	3790	3848	3883
20°	3734	3806	3860
25°	3667	3784	3847
30°	3590	3714	3824
35°	3508	3665	3817
40°	3420	3604	3824
45°	3324	3562	3849
50°	3228	3525	3893
55°	3118	3510	3961
60°	3025	3508	4082
65°	2874	3566	4231
70°	2680	3633	4504
75°	2455	3759	4867
80°	2137	3918	4793
85°	1871	3483	3807



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.6	3.2
10°-20°	388.9	9.2
20°-30°	583.9	13.7
30°-40°	697.7	16.4
40°-50°	725.5	17.1
50°-60°	672.4	15.8
60°-70°	551.5	13.0
70°-80°	372.8	8.8
80°-90°	117.2	2.8
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°	1109.4	26.1
0°-40°	1807.1	42.6
0°-60°	3205.0	75.5
0°-90°	4246.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4246.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1429	1431	1440	1442	1444	136
15°	1360	1367	1381	1390	1394	384
25°	1235	1245	1275	1289	1296	569
35°	1068	1082	1116	1149	1162	667
45°	873	890	936	990	1011	674
55°	664	685	748	815	844	597
65°	451	476	560	633	664	446
75°	236	276	362	435	468	250
85°	61	84	113	125	123	69
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1443.9	1443.9	1443.9	1443.9	1443.9
2.5°	1435.5	1439.7	1446.0	1448.1	1448.1
5°	1429.3	1431.4	1439.7	1441.8	1443.9
7.5°	1418.8	1423.0	1431.4	1433.4	1435.5
10°	1404.2	1408.4	1418.8	1423.0	1425.1
12.5°	1385.4	1389.6	1402.1	1408.4	1410.5
15°	1360.3	1366.6	1381.2	1389.6	1393.7
17.5°	1335.2	1341.5	1356.1	1368.7	1372.8
20°	1303.9	1318.5	1329.0	1345.7	1347.8
22.5°	1272.5	1280.9	1299.7	1316.4	1324.8
25°	1234.9	1245.4	1274.6	1289.3	1295.5
27.5°	1195.2	1209.9	1232.8	1255.8	1264.2
30°	1155.5	1166.0	1195.2	1222.4	1230.8
32.5°	1111.6	1126.3	1157.6	1184.8	1197.3
35°	1067.8	1082.4	1115.8	1149.3	1161.8
37.5°	1019.7	1036.4	1069.9	1109.6	1126.3
40°	973.7	986.3	1026.0	1074.0	1088.7
42.5°	925.7	940.3	982.1	1034.3	1051.1
45°	873.4	890.2	936.1	990.5	1011.3
47.5°	823.3	840.0	890.2	944.5	969.6
50°	771.0	791.9	842.1	904.8	929.9
52.5°	720.9	739.7	796.1	860.9	883.9
55°	664.5	685.4	748.1	814.9	844.2
57.5°	618.5	633.1	702.1	771.0	800.3
60°	562.1	580.9	651.9	725.1	758.5
62.5°	501.5	532.8	606.0	681.2	714.6
65°	451.3	476.4	560.0	633.1	664.5
67.5°	399.1	426.3	507.8	585.1	620.6
70°	340.6	376.1	461.8	539.1	572.5
72.5°	288.4	326.0	413.7	489.0	524.5
75°	236.1	275.8	361.5	434.6	468.1
77.5°	186.0	229.9	313.4	369.9	390.7
80°	137.9	179.7	252.8	292.5	309.3
82.5°	96.1	131.6	186.0	206.9	211.0
85°	60.6	83.6	112.8	125.4	123.3
87.5°	27.2	33.4	41.8	46.0	43.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)