

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: P388087

Luminaire Tested: **22CZ2-55VHE-SQR-UNV-L940-CD1-SWPD1-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: P388087  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-55VHE-SQR-UNV-L940-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4480.4 lumens  
Efficiency: N/A  
Efficacy: 113.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

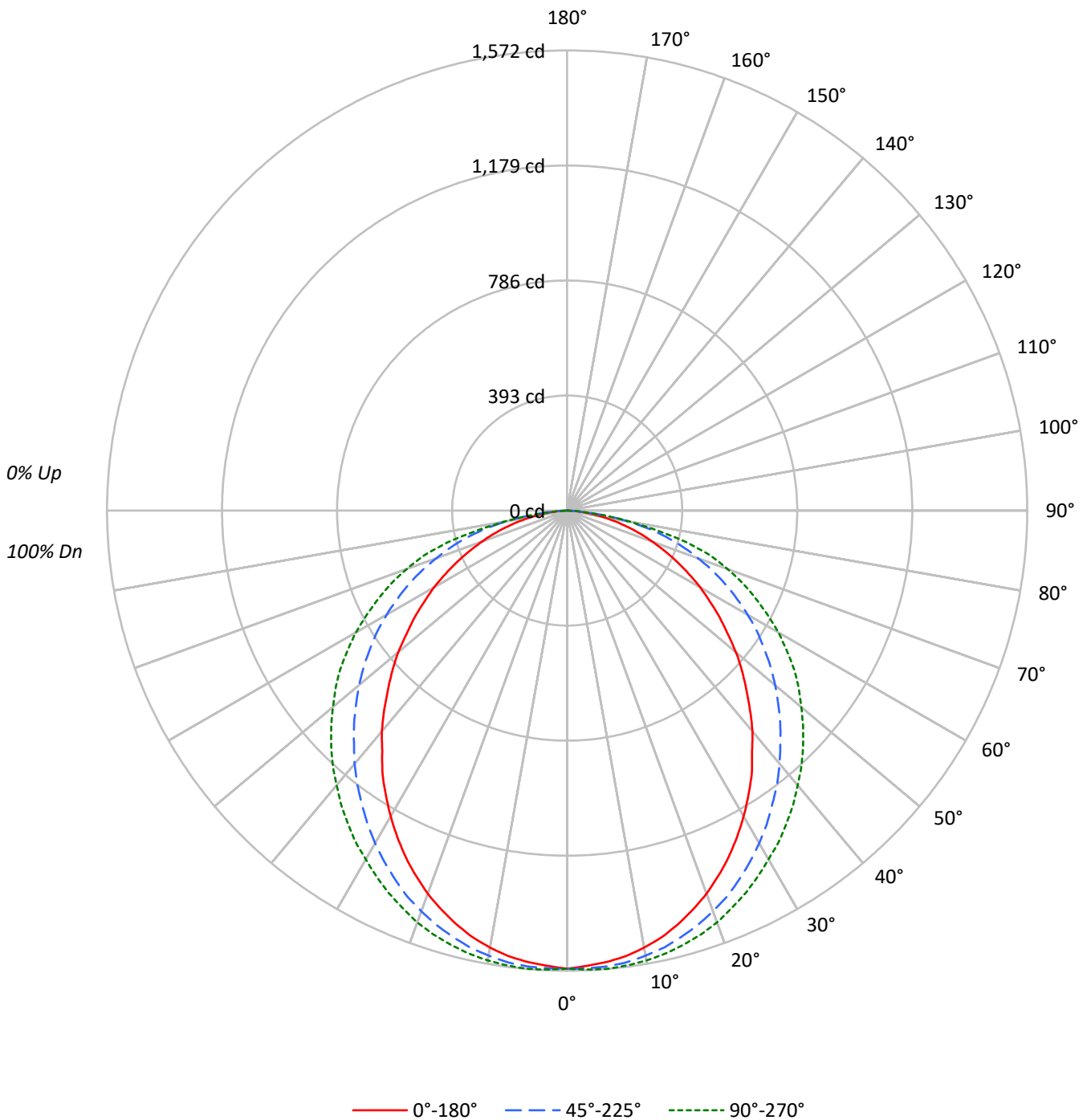
Input Watts (W): 39.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	4212	4212	4212
5°	4182	4222	4245
10°	4143	4218	4265
15°	4076	4200	4277
20°	3989	4172	4287
25°	3877	4129	4281
30°	3746	4077	4275
35°	3612	4017	4289
40°	3459	3967	4303
45°	3294	3917	4338
50°	3152	3882	4371
55°	2983	3851	4440
60°	2827	3834	4486
65°	2641	3805	4523
70°	2426	3747	4585
75°	2189	3648	4422
80°	1878	3230	3329
85°	1510	1905	1510



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.4	3.3
10°-20°	424.2	9.5
20°-30°	637.2	14.2
30°-40°	759.9	17.0
40°-50°	785.7	17.5
50°-60°	722.3	16.1
60°-70°	575.0	12.8
70°-80°	351.3	7.8
80°-90°	76.4	1.7
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°	1209.8	27.0
0°-40°	1969.7	44.0
0°-60°	3477.7	77.6
0°-90°	4480.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4480.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1565	1565	1565	1565	1565	
5°	1548	1552	1563	1569	1572	147
15°	1463	1480	1508	1529	1535	412
25°	1306	1338	1391	1429	1442	601
35°	1099	1146	1223	1286	1306	686
45°	866	927	1029	1112	1140	669
55°	636	706	821	914	946	569
65°	415	485	598	680	710	411
75°	210	272	351	412	425	224
85°	49	60	62	53	49	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1565.1	1565.1	1565.1	1565.1	1565.1
2.5°	1556.6	1558.7	1565.1	1569.4	1569.4
5°	1548.1	1552.4	1563.0	1569.4	1571.5
7.5°	1535.3	1541.7	1556.6	1565.1	1567.2
10°	1516.2	1524.7	1543.8	1556.6	1560.9
12.5°	1492.8	1505.6	1529.0	1546.0	1550.2
15°	1463.0	1480.1	1507.7	1529.0	1535.3
17.5°	1429.0	1450.3	1484.3	1509.8	1518.3
20°	1392.9	1414.1	1456.7	1486.4	1497.1
22.5°	1350.3	1378.0	1426.9	1460.9	1469.4
25°	1305.7	1337.6	1390.7	1429.0	1441.8
27.5°	1256.8	1295.0	1352.5	1399.2	1409.9
30°	1205.7	1246.1	1312.1	1363.1	1375.9
32.5°	1152.6	1199.4	1269.5	1326.9	1344.0
35°	1099.4	1146.2	1222.7	1286.5	1305.7
37.5°	1037.7	1093.0	1178.1	1244.0	1267.4
40°	984.6	1037.7	1129.2	1201.5	1224.9
42.5°	925.0	982.4	1078.1	1156.8	1184.5
45°	865.5	927.2	1029.2	1112.2	1139.8
47.5°	810.2	871.9	978.2	1065.4	1093.0
50°	752.8	816.6	927.2	1016.5	1044.1
52.5°	691.1	761.3	876.1	965.4	997.3
55°	635.8	706.0	820.8	914.4	946.3
57.5°	578.4	650.7	769.8	859.1	888.9
60°	525.2	595.4	712.4	799.6	833.6
62.5°	467.8	540.1	655.0	740.0	771.9
65°	414.7	484.8	597.5	680.5	710.3
67.5°	361.5	431.7	538.0	616.7	650.7
70°	308.3	378.5	476.3	552.9	582.7
72.5°	261.6	323.2	416.8	487.0	514.6
75°	210.5	272.2	350.9	412.5	425.3
77.5°	163.7	219.0	285.0	312.6	316.9
80°	121.2	163.7	208.4	214.8	214.8
82.5°	80.8	112.7	129.7	131.8	129.7
85°	48.9	59.5	61.7	53.2	48.9
87.5°	17.0	17.0	10.6	6.4	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)