

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: P388080

Luminaire Tested: **22CZ2-55VHE-SQR-UNV-L930-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: P388080  
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-L930-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4275.3 lumens  
Efficiency: N/A  
Efficacy: 108.5 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

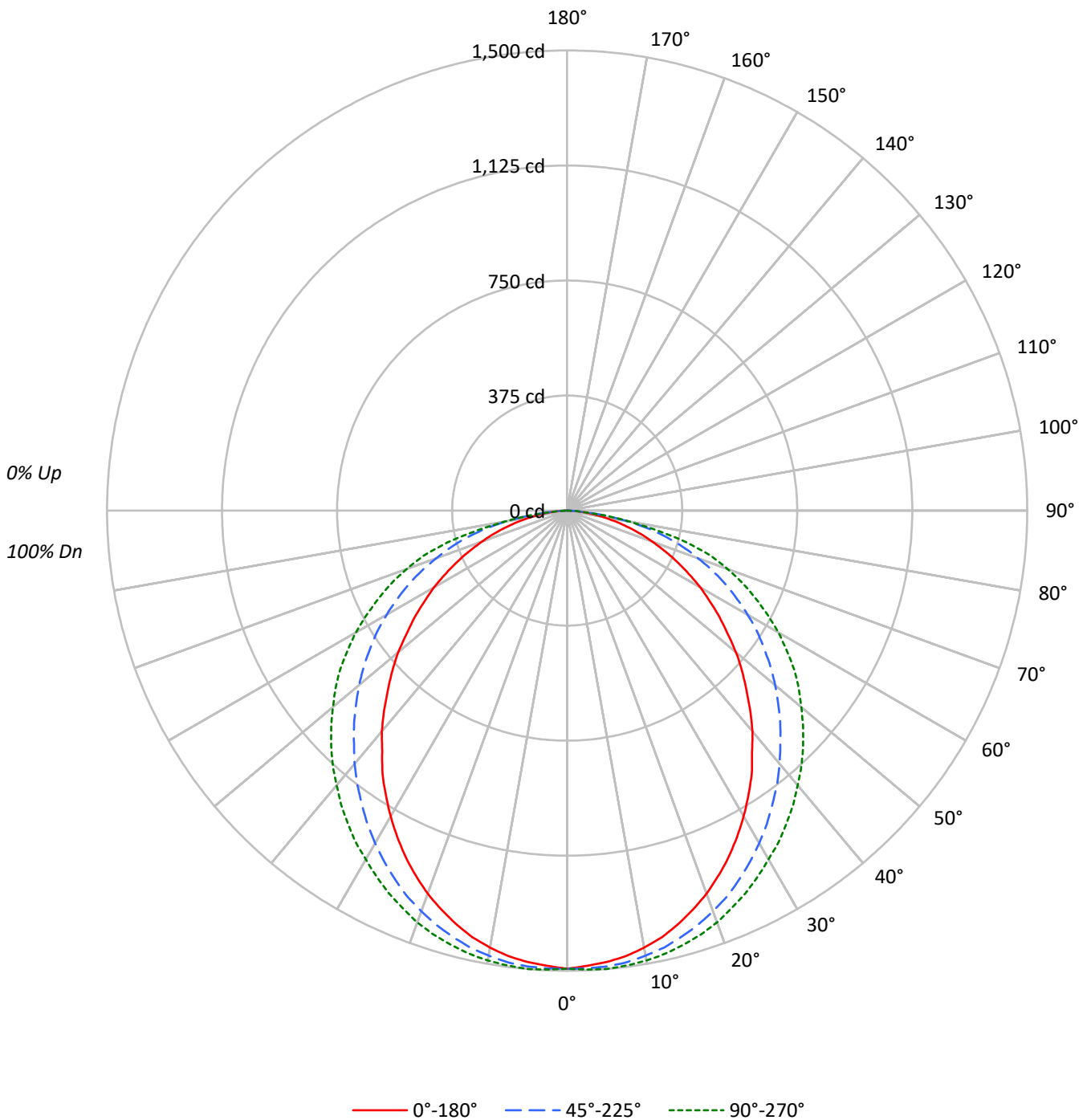
Input Watts (W): 39.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4019	4019	4019
5°	3990	4029	4051
10°	3953	4026	4070
15°	3889	4008	4082
20°	3806	3981	4091
25°	3699	3940	4085
30°	3575	3890	4080
35°	3446	3833	4093
40°	3300	3785	4106
45°	3143	3737	4139
50°	3007	3704	4171
55°	2846	3675	4236
60°	2697	3659	4281
65°	2520	3631	4315
70°	2315	3576	4375
75°	2089	3481	4219
80°	1793	3082	3175
85°	1442	1815	1442



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.6	3.3
10°-20°	404.8	9.5
20°-30°	608.0	14.2
30°-40°	725.1	17.0
40°-50°	749.7	17.5
50°-60°	689.3	16.1
60°-70°	548.7	12.8
70°-80°	335.2	7.8
80°-90°	72.9	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°	1154.4	27.0
0°-40°	1879.5	44.0
0°-60°	3318.5	77.6
0°-90°	4275.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4275.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1494	1494	1494	1494	1494	
5°	1477	1481	1491	1498	1500	140
15°	1396	1412	1439	1459	1465	393
25°	1246	1276	1327	1364	1376	573
35°	1049	1094	1167	1228	1246	654
45°	826	885	982	1061	1088	639
55°	607	674	783	872	903	543
65°	396	463	570	649	678	392
75°	201	260	335	394	406	214
85°	47	57	59	51	47	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1493.5	1493.5	1493.5	1493.5	1493.5
2.5°	1485.3	1487.4	1493.5	1497.5	1497.5
5°	1477.2	1481.3	1491.4	1497.5	1499.6
7.5°	1465.1	1471.1	1485.3	1493.5	1495.5
10°	1446.8	1454.9	1473.2	1485.3	1489.4
12.5°	1424.5	1436.6	1459.0	1475.2	1479.3
15°	1396.1	1412.3	1438.7	1459.0	1465.1
17.5°	1363.6	1383.9	1416.4	1440.7	1448.8
20°	1329.1	1349.4	1390.0	1418.4	1428.5
22.5°	1288.5	1314.9	1361.6	1394.0	1402.2
25°	1245.9	1276.3	1327.1	1363.6	1375.8
27.5°	1199.2	1235.8	1290.5	1335.2	1345.3
30°	1150.5	1189.1	1252.0	1300.7	1312.9
32.5°	1099.8	1144.4	1211.4	1266.2	1282.4
35°	1049.1	1093.7	1166.8	1227.6	1245.9
37.5°	990.2	1043.0	1124.2	1187.1	1209.4
40°	939.5	990.2	1077.5	1146.5	1168.8
42.5°	882.7	937.5	1028.8	1103.9	1130.2
45°	825.9	884.7	982.1	1061.3	1087.6
47.5°	773.1	832.0	933.4	1016.6	1043.0
50°	718.3	779.2	884.7	969.9	996.3
52.5°	659.5	726.4	836.0	921.2	951.7
55°	606.7	673.7	783.3	872.5	903.0
57.5°	551.9	620.9	734.6	819.8	848.2
60°	501.2	568.2	679.8	763.0	795.4
62.5°	446.4	515.4	625.0	706.1	736.6
65°	395.7	462.6	570.2	649.3	677.7
67.5°	345.0	411.9	513.4	588.5	620.9
70°	294.2	361.2	454.5	527.6	556.0
72.5°	249.6	308.4	397.7	464.7	491.1
75°	200.9	259.7	334.8	393.7	405.8
77.5°	156.2	209.0	271.9	298.3	302.3
80°	115.7	156.2	198.9	204.9	204.9
82.5°	77.1	107.5	123.8	125.8	123.8
85°	46.7	56.8	58.8	50.7	46.7
87.5°	16.2	16.2	10.1	6.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)