

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: P388082

Luminaire Tested: **22CZ2-55VHE-SQR-UNV-L930-CD1-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: P388082
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-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: 4381.9 lumens
Efficiency: N/A
Efficacy: 111.2 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

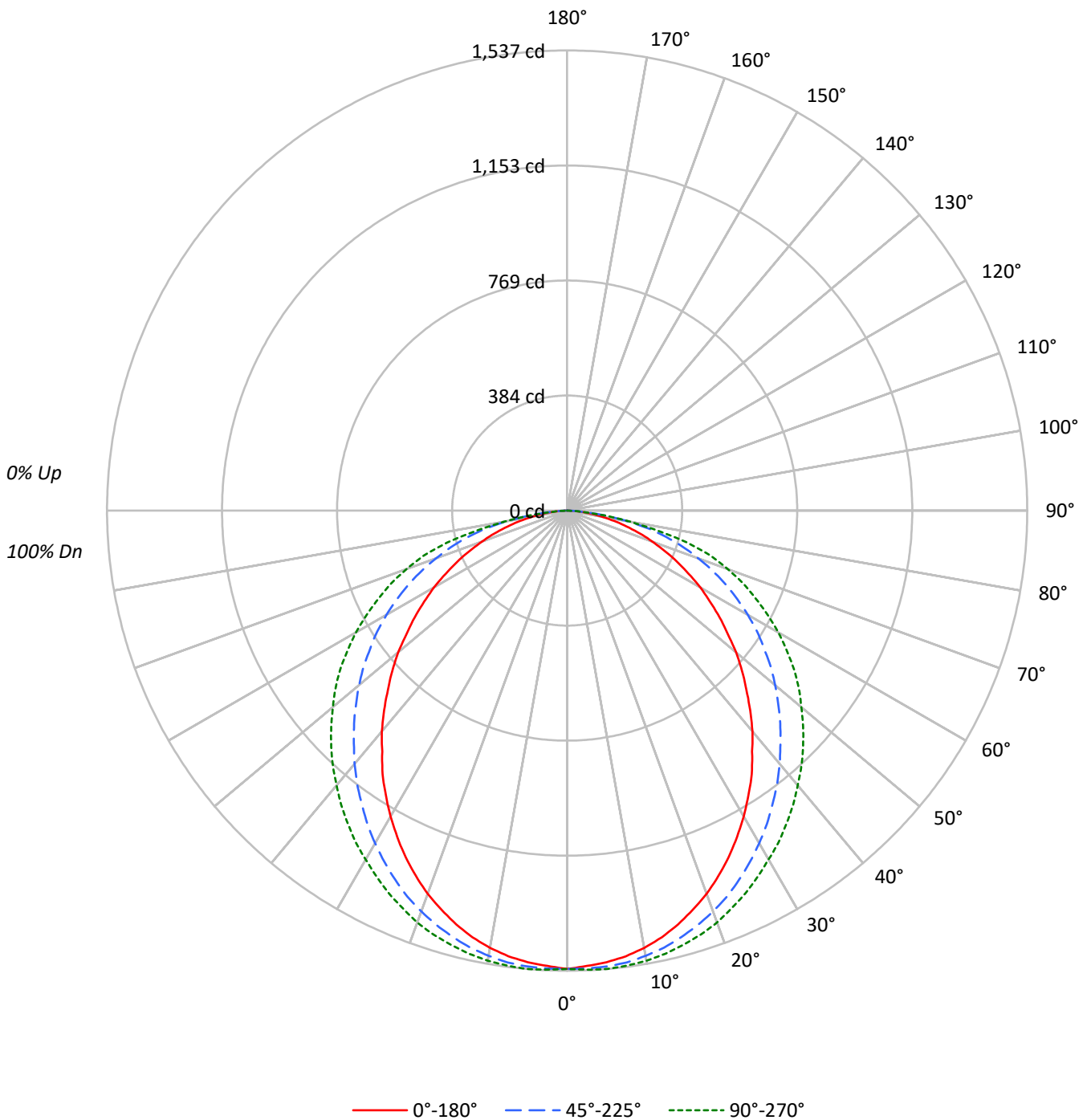
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4119	4119	4119
5°	4090	4129	4152
10°	4052	4126	4171
15°	3986	4108	4183
20°	3901	4080	4193
25°	3792	4039	4187
30°	3664	3987	4181
35°	3532	3929	4195
40°	3382	3880	4208
45°	3221	3831	4243
50°	3082	3796	4275
55°	2917	3766	4342
60°	2765	3750	4388
65°	2583	3721	4423
70°	2373	3666	4484
75°	2141	3568	4325
80°	1836	3158	3256
85°	1476	1862	1476



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.1	3.3
10°-20°	414.9	9.5
20°-30°	623.1	14.2
30°-40°	743.2	17.0
40°-50°	768.4	17.5
50°-60°	706.5	16.1
60°-70°	562.4	12.8
70°-80°	343.6	7.8
80°-90°	74.7	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°	1183.2	27.0
0°-40°	1926.4	44.0
0°-60°	3401.2	77.6
0°-90°	4381.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4381.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1531	1531	1531	1531	1531	
5°	1514	1518	1529	1535	1537	144
15°	1431	1448	1474	1495	1502	403
25°	1277	1308	1360	1398	1410	587
35°	1075	1121	1196	1258	1277	671
45°	846	907	1007	1088	1115	655
55°	622	690	803	894	926	556
65°	406	474	584	666	695	402
75°	206	266	343	404	416	219
85°	48	58	60	52	48	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1530.7	1530.7	1530.7	1530.7	1530.7
2.5°	1522.4	1524.5	1530.7	1534.9	1534.9
5°	1514.1	1518.2	1528.6	1534.9	1536.9
7.5°	1501.6	1507.8	1522.4	1530.7	1532.8
10°	1482.9	1491.2	1509.9	1522.4	1526.5
12.5°	1460.0	1472.5	1495.3	1512.0	1516.1
15°	1430.9	1447.5	1474.5	1495.3	1501.6
17.5°	1397.6	1418.4	1451.7	1476.6	1484.9
20°	1362.2	1383.0	1424.6	1453.8	1464.2
22.5°	1320.6	1347.7	1395.5	1428.8	1437.1
25°	1277.0	1308.2	1360.2	1397.6	1410.1
27.5°	1229.1	1266.6	1322.7	1368.5	1378.9
30°	1179.2	1218.7	1283.2	1333.1	1345.6
32.5°	1127.2	1173.0	1241.6	1297.8	1314.4
35°	1075.2	1121.0	1195.9	1258.3	1277.0
37.5°	1014.9	1069.0	1152.2	1216.7	1239.5
40°	962.9	1014.9	1104.4	1175.1	1197.9
42.5°	904.7	960.8	1054.4	1131.4	1158.4
45°	846.5	906.8	1006.6	1087.7	1114.8
47.5°	792.4	852.7	956.7	1042.0	1069.0
50°	736.2	798.6	906.8	994.1	1021.2
52.5°	675.9	744.6	856.9	944.2	975.4
55°	621.8	690.5	802.8	894.3	925.5
57.5°	565.7	636.4	752.9	840.2	869.3
60°	513.7	582.3	696.7	782.0	815.3
62.5°	457.5	528.3	640.6	723.8	755.0
65°	405.6	474.2	584.4	665.5	694.6
67.5°	353.6	422.2	526.2	603.1	636.4
70°	301.6	370.2	465.9	540.7	569.9
72.5°	255.8	316.1	407.6	476.3	503.3
75°	205.9	266.2	343.2	403.5	416.0
77.5°	160.1	214.2	278.7	305.7	309.9
80°	118.5	160.1	203.8	210.1	210.1
82.5°	79.0	110.2	126.9	128.9	126.9
85°	47.8	58.2	60.3	52.0	47.8
87.5°	16.6	16.6	10.4	6.2	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)