

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: P388084

Luminaire Tested: **22CZ2-55VHE-SQR-UNV-L935-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: P388084
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-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4434.6 lumens
Efficiency: N/A
Efficacy: 112.6 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

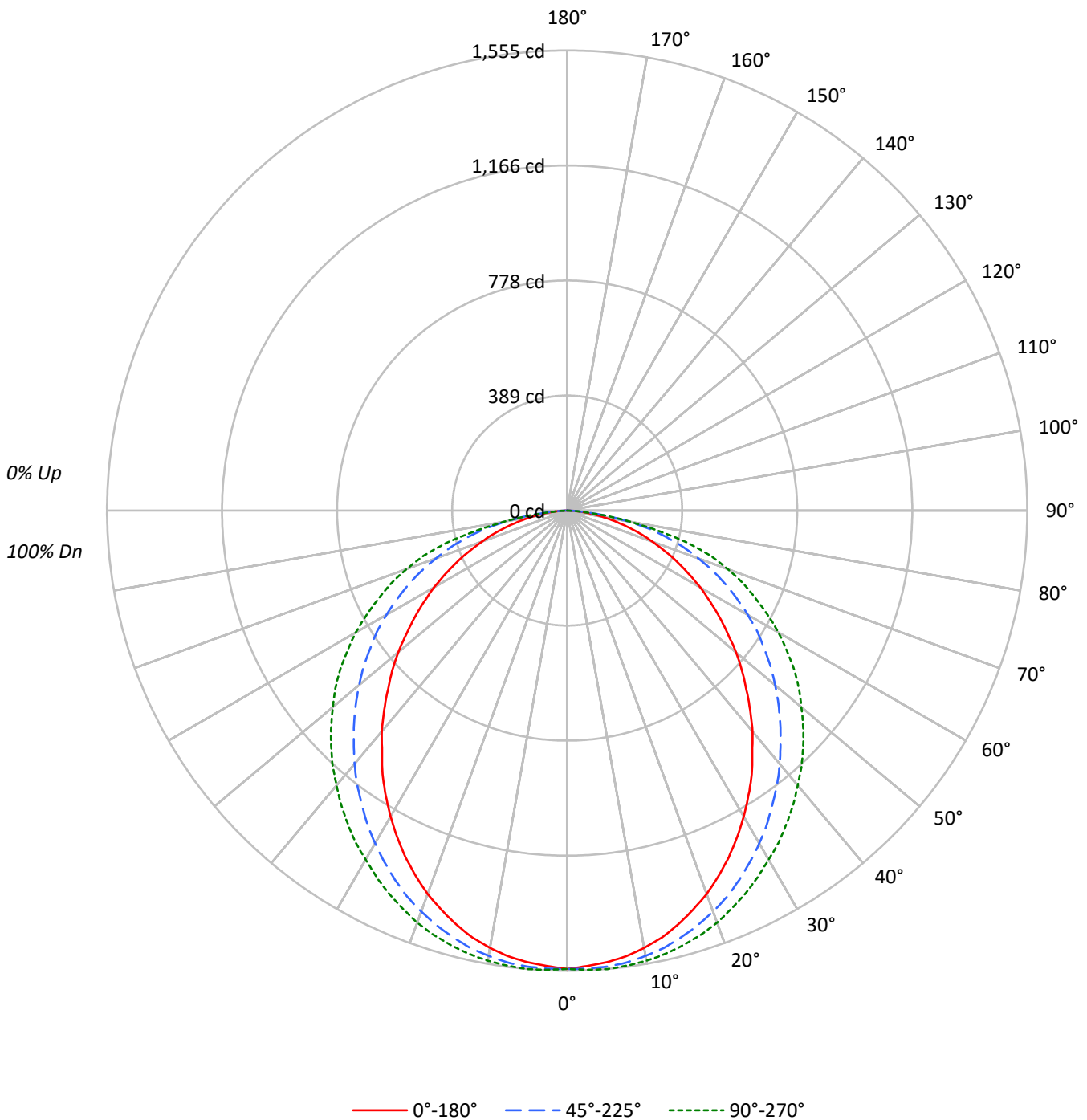
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4169	4169	4169
5°	4139	4179	4202
10°	4101	4176	4221
15°	4034	4157	4233
20°	3948	4129	4243
25°	3837	4087	4237
30°	3708	4035	4231
35°	3575	3976	4245
40°	3423	3926	4259
45°	3260	3877	4293
50°	3119	3842	4326
55°	2952	3811	4394
60°	2798	3795	4441
65°	2613	3766	4476
70°	2401	3710	4537
75°	2167	3611	4377
80°	1860	3197	3295
85°	1494	1883	1494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.9	3.3
10°-20°	419.9	9.5
20°-30°	630.6	14.2
30°-40°	752.1	17.0
40°-50°	777.6	17.5
50°-60°	715.0	16.1
60°-70°	569.2	12.8
70°-80°	347.7	7.8
80°-90°	75.6	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°	1197.4	27.0
0°-40°	1949.5	44.0
0°-60°	3442.1	77.6
0°-90°	4434.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4434.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1549	1549	1549	1549	1549	
5°	1532	1536	1547	1553	1555	145
15°	1448	1465	1492	1513	1520	408
25°	1292	1324	1376	1414	1427	594
35°	1088	1134	1210	1273	1292	679
45°	857	918	1019	1101	1128	662
55°	629	699	812	905	937	563
65°	410	480	591	674	703	407
75°	208	269	347	408	421	222
85°	48	59	61	53	48	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1549.1	1549.1	1549.1	1549.1	1549.1
2.5°	1540.7	1542.8	1549.1	1553.3	1553.3
5°	1532.3	1536.5	1547.0	1553.3	1555.4
7.5°	1519.6	1526.0	1540.7	1549.1	1551.2
10°	1500.7	1509.1	1528.1	1540.7	1544.9
12.5°	1477.6	1490.2	1513.3	1530.2	1534.4
15°	1448.1	1464.9	1492.3	1513.3	1519.6
17.5°	1414.4	1435.5	1469.1	1494.4	1502.8
20°	1378.6	1399.7	1441.8	1471.2	1481.8
22.5°	1336.5	1363.9	1412.3	1446.0	1454.4
25°	1292.3	1323.9	1376.5	1414.4	1427.0
27.5°	1243.9	1281.8	1338.6	1384.9	1395.5
30°	1193.4	1233.4	1298.6	1349.2	1361.8
32.5°	1140.8	1187.1	1256.5	1313.4	1330.2
35°	1088.2	1134.5	1210.2	1273.4	1292.3
37.5°	1027.1	1081.9	1166.0	1231.3	1254.4
40°	974.5	1027.1	1117.6	1189.2	1212.3
42.5°	915.6	972.4	1067.1	1145.0	1172.4
45°	856.6	917.7	1018.7	1100.8	1128.2
47.5°	801.9	863.0	968.2	1054.5	1081.9
50°	745.1	808.2	917.7	1006.1	1033.4
52.5°	684.1	753.5	867.2	955.6	987.1
55°	629.3	698.8	812.4	905.1	936.6
57.5°	572.5	644.1	761.9	850.3	879.8
60°	519.9	589.3	705.1	791.4	825.1
62.5°	463.0	534.6	648.3	732.5	764.0
65°	410.4	479.9	591.4	673.5	703.0
67.5°	357.8	427.3	532.5	610.4	644.1
70°	305.2	374.6	471.5	547.2	576.7
72.5°	258.9	319.9	412.5	482.0	509.4
75°	208.4	269.4	347.3	408.3	421.0
77.5°	162.1	216.8	282.0	309.4	313.6
80°	120.0	162.1	206.3	212.6	212.6
82.5°	80.0	111.6	128.4	130.5	128.4
85°	48.4	58.9	61.0	52.6	48.4
87.5°	16.8	16.8	10.5	6.3	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)