

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: P388083

Luminaire Tested: **22CZ2-55VHE-SQR-UNV-L935-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: P388083  
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-SDWPD1-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: 4381.1 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

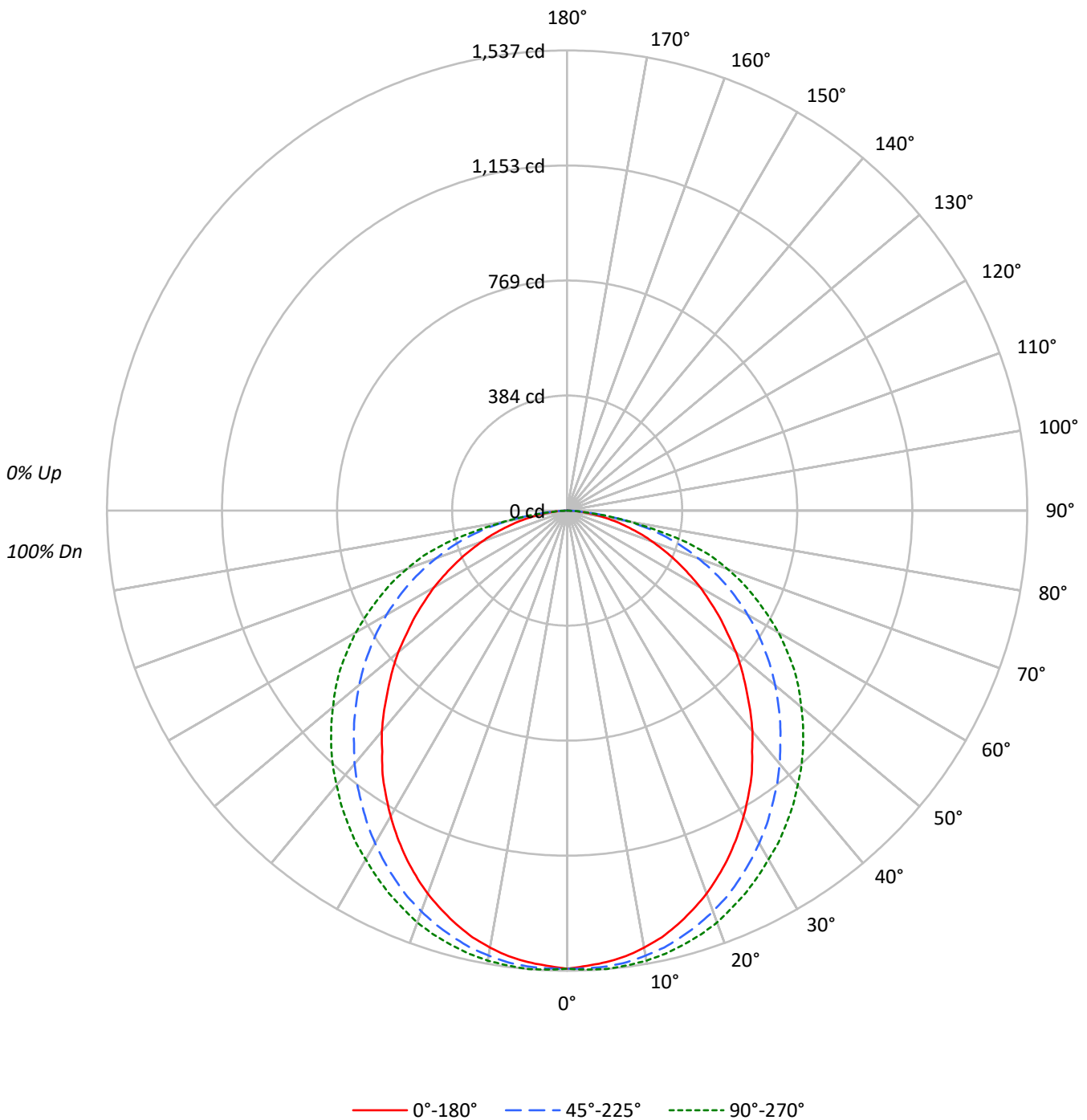
Input Watts (W): 39.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4118	4118	4118
5°	4089	4128	4151
10°	4051	4125	4171
15°	3986	4107	4182
20°	3900	4079	4192
25°	3791	4038	4186
30°	3663	3987	4181
35°	3531	3928	4194
40°	3382	3879	4207
45°	3221	3830	4241
50°	3082	3795	4274
55°	2917	3765	4341
60°	2764	3749	4387
65°	2582	3720	4422
70°	2372	3665	4483
75°	2141	3567	4324
80°	1836	3158	3254
85°	1476	1862	1476



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.1	3.3
10°-20°	414.8	9.5
20°-30°	623.0	14.2
30°-40°	743.1	17.0
40°-50°	768.3	17.5
50°-60°	706.3	16.1
60°-70°	562.3	12.8
70°-80°	343.5	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°	1182.9	27.0
0°-40°	1926.0	44.0
0°-60°	3400.6	77.6
0°-90°	4381.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4381.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1530	1530	1530	1530	1530	
5°	1514	1518	1528	1535	1537	144
15°	1431	1447	1474	1495	1501	403
25°	1277	1308	1360	1397	1410	587
35°	1075	1121	1196	1258	1277	671
45°	846	907	1006	1088	1114	654
55°	622	690	803	894	925	556
65°	406	474	584	665	694	402
75°	206	266	343	403	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°	1530.4	1530.4	1530.4	1530.4	1530.4
2.5°	1522.1	1524.2	1530.4	1534.6	1534.6
5°	1513.8	1517.9	1528.3	1534.6	1536.7
7.5°	1501.3	1507.6	1522.1	1530.4	1532.5
10°	1482.6	1490.9	1509.6	1522.1	1526.3
12.5°	1459.7	1472.2	1495.1	1511.7	1515.9
15°	1430.6	1447.2	1474.3	1495.1	1501.3
17.5°	1397.3	1418.1	1451.4	1476.4	1484.7
20°	1362.0	1382.8	1424.4	1453.5	1463.9
22.5°	1320.4	1347.4	1395.3	1428.5	1436.9
25°	1276.7	1307.9	1359.9	1397.3	1409.8
27.5°	1228.9	1266.3	1322.5	1368.2	1378.6
30°	1179.0	1218.5	1283.0	1332.9	1345.4
32.5°	1127.0	1172.8	1241.4	1297.5	1314.2
35°	1075.0	1120.8	1195.6	1258.0	1276.7
37.5°	1014.7	1068.8	1152.0	1216.4	1239.3
40°	962.8	1014.7	1104.2	1174.8	1197.7
42.5°	904.5	960.7	1054.2	1131.2	1158.2
45°	846.3	906.6	1006.4	1087.5	1114.5
47.5°	792.2	852.5	956.5	1041.8	1068.8
50°	736.1	798.5	906.6	993.9	1021.0
52.5°	675.8	744.4	856.7	944.0	975.2
55°	621.7	690.4	802.6	894.1	925.3
57.5°	565.6	636.3	752.7	840.1	869.2
60°	513.6	582.2	696.6	781.8	815.1
62.5°	457.5	528.2	640.4	723.6	754.8
65°	405.5	474.1	584.3	665.4	694.5
67.5°	353.5	422.1	526.1	603.0	636.3
70°	301.5	370.1	465.8	540.6	569.8
72.5°	255.8	316.1	407.6	476.2	503.2
75°	205.9	266.2	343.1	403.4	415.9
77.5°	160.1	214.2	278.6	305.7	309.8
80°	118.5	160.1	203.8	210.0	210.0
82.5°	79.0	110.2	126.8	128.9	126.8
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)