

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: P390626

Luminaire Tested: **22CZ2-70VHE-RDP-UNV-L935-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: P390626  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-70VHE-RDP-UNV-L935-CD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3990.1 lumens  
Efficiency: N/A  
Efficacy: 79.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

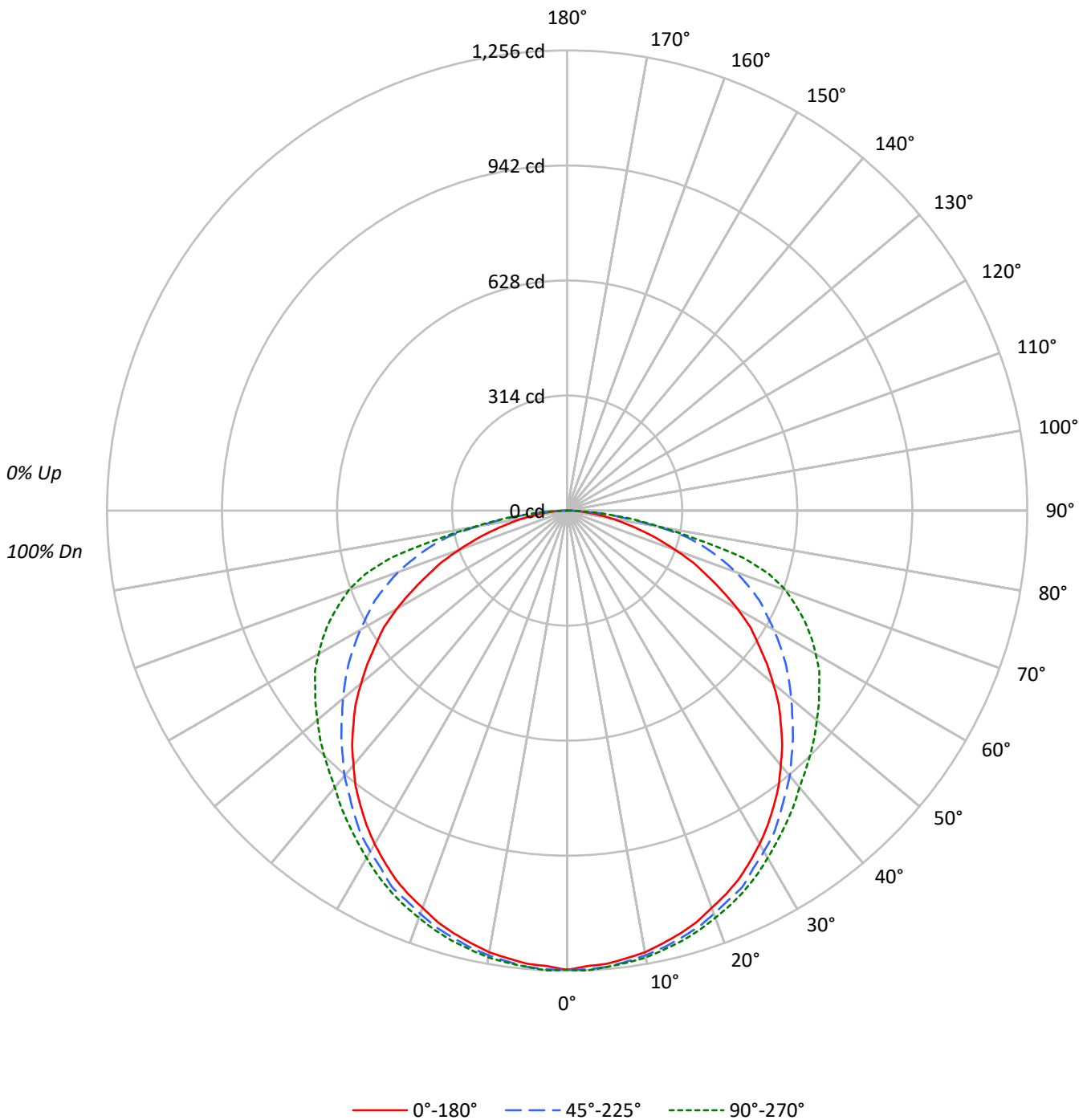
Input Watts (W): 50.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P390626

CATALOG NUMBER: 22CZ2-70VHE-RDP-UNV-L935-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P390626

CATALOG NUMBER: 22CZ2-70VHE-RDP-UNV-L935-CD1-U

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24

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

	0°	45°	90°
0°	3373	3373	3373
5°	3354	3378	3378
10°	3345	3369	3385
15°	3328	3361	3385
20°	3304	3354	3387
25°	3294	3364	3399
30°	3265	3338	3402
35°	3230	3327	3423
40°	3186	3320	3465
45°	3139	3318	3575
50°	3072	3342	3723
55°	2989	3415	3939
60°	2891	3507	4218
65°	2691	3682	4560
70°	2471	3857	4988
75°	2167	4059	5158
80°	1864	3866	4048
85°	1630	2810	3081



TEST NUMBER: P390626

CATALOG NUMBER: 22CZ2-70VHE-RDP-UNV-L935-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.6	3.0
10°-20°	340.4	8.5
20°-30°	519.4	13.0
30°-40°	634.1	15.9
40°-50°	678.0	17.0
50°-60°	654.5	16.4
60°-70°	563.4	14.1
70°-80°	381.2	9.6
80°-90°	100.6	2.5
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°	978.3	24.5
0°-40°	1612.5	40.4
0°-60°	2945.0	73.8
0°-90°	3990.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3990.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1253	1253	1253	1253	1253	
5°	1242	1245	1250	1250	1250	118
15°	1195	1198	1206	1212	1215	337
25°	1110	1115	1133	1139	1145	511
35°	983	992	1013	1033	1042	615
45°	825	840	872	916	939	637
55°	637	658	728	801	840	571
65°	423	464	578	669	716	420
75°	208	276	390	470	496	224
85°	53	73	91	94	100	59
90°	0	0	0	0	0	



TEST NUMBER: P390626

CATALOG NUMBER: 22CZ2-70VHE-RDP-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1253.4	1253.4	1253.4	1253.4	1253.4
2.5°	1244.6	1247.5	1253.4	1253.4	1256.3
5°	1241.6	1244.6	1250.4	1250.4	1250.4
7.5°	1232.8	1235.7	1241.6	1244.6	1244.6
10°	1224.0	1226.9	1232.8	1235.7	1238.7
12.5°	1209.3	1212.3	1221.1	1226.9	1226.9
15°	1194.7	1197.6	1206.4	1212.3	1215.2
17.5°	1177.0	1182.9	1191.7	1197.6	1200.5
20°	1153.6	1159.4	1171.2	1180.0	1182.9
22.5°	1133.0	1138.9	1150.6	1159.4	1165.3
25°	1109.5	1115.4	1133.0	1138.9	1144.8
27.5°	1080.2	1086.0	1100.7	1112.5	1121.3
30°	1050.8	1056.7	1074.3	1089.0	1094.9
32.5°	1018.5	1027.3	1047.9	1059.6	1068.4
35°	983.3	992.1	1012.7	1033.2	1042.0
37.5°	948.1	956.9	977.4	1003.9	1015.6
40°	907.0	918.7	945.2	980.4	986.3
42.5°	868.8	883.5	907.0	948.1	962.8
45°	824.8	839.5	871.8	915.8	939.3
47.5°	783.7	798.4	833.6	886.5	915.8
50°	733.8	754.4	798.4	860.0	889.4
52.5°	686.9	704.5	763.2	830.7	865.9
55°	637.0	657.5	727.9	801.3	839.5
57.5°	592.9	610.5	689.8	772.0	816.0
60°	537.2	560.6	651.6	739.7	783.7
62.5°	478.4	513.7	613.5	704.5	751.4
65°	422.7	463.8	578.2	669.2	716.2
67.5°	372.8	416.8	534.2	631.1	675.1
70°	314.1	369.8	490.2	584.1	634.0
72.5°	261.2	322.9	440.3	534.2	578.2
75°	208.4	275.9	390.4	469.6	496.1
77.5°	161.4	226.0	334.6	358.1	361.0
80°	120.3	179.1	249.5	252.4	261.2
82.5°	82.2	126.2	161.4	176.1	179.1
85°	52.8	73.4	91.0	93.9	99.8
87.5°	23.5	26.4	32.3	29.4	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)