

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: P390674

Luminaire Tested: **22CZ2-75VHE-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: P390674  
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: 22CZ2-75VHE-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: 4297.2 lumens  
Efficiency: N/A  
Efficacy: 78.6 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

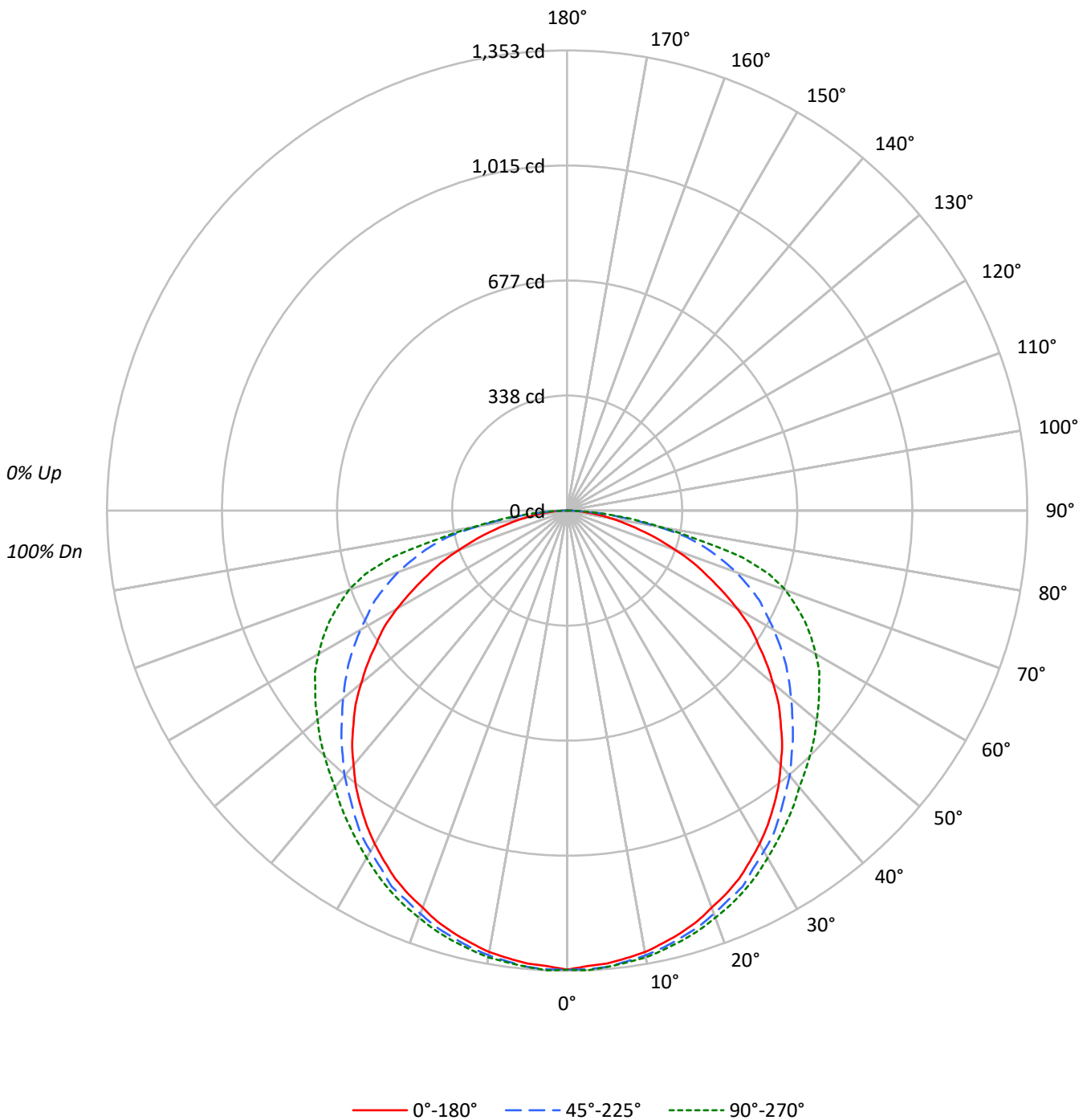
Input Watts (W): 54.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P390674

CATALOG NUMBER: 22CZ2-75VHE-RDP-UNV-L935-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P390674

CATALOG NUMBER: 22CZ2-75VHE-RDP-UNV-L935-CD1-U

**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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	3632	3632	3632
5°	3612	3638	3638
10°	3602	3628	3645
15°	3584	3619	3646
20°	3558	3612	3648
25°	3548	3623	3661
30°	3517	3595	3664
35°	3479	3583	3687
40°	3431	3576	3731
45°	3381	3573	3850
50°	3309	3599	4010
55°	3218	3678	4242
60°	3113	3777	4542
65°	2898	3966	4911
70°	2661	4153	5372
75°	2333	4371	5554
80°	2008	4164	4359
85°	1757	3026	3319



TEST NUMBER: P390674

CATALOG NUMBER: 22CZ2-75VHE-RDP-UNV-L935-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.7	3.0
10°-20°	366.6	8.5
20°-30°	559.3	13.0
30°-40°	682.9	15.9
40°-50°	730.2	17.0
50°-60°	704.8	16.4
60°-70°	606.7	14.1
70°-80°	410.5	9.6
80°-90°	108.3	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°	1053.6	24.5
0°-40°	1736.6	40.4
0°-60°	3171.6	73.8
0°-90°	4297.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4297.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1350	1350	1350	1350	1350	
5°	1337	1340	1347	1347	1347	127
15°	1287	1290	1299	1306	1309	363
25°	1195	1201	1220	1226	1233	550
35°	1059	1068	1091	1113	1122	663
45°	888	904	939	986	1012	686
55°	686	708	784	863	904	615
65°	455	500	623	721	771	453
75°	224	297	420	506	534	241
85°	57	79	98	101	108	64
90°	0	0	0	0	0	



TEST NUMBER: P390674

CATALOG NUMBER: 22CZ2-75VHE-RDP-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1349.8	1349.8	1349.8	1349.8	1349.8
2.5°	1340.3	1343.5	1349.8	1349.8	1353.0
5°	1337.2	1340.3	1346.7	1346.7	1346.7
7.5°	1327.7	1330.9	1337.2	1340.3	1340.3
10°	1318.2	1321.4	1327.7	1330.9	1334.0
12.5°	1302.4	1305.6	1315.1	1321.4	1321.4
15°	1286.6	1289.8	1299.2	1305.6	1308.7
17.5°	1267.6	1274.0	1283.4	1289.8	1292.9
20°	1242.3	1248.7	1261.3	1270.8	1274.0
22.5°	1220.2	1226.5	1239.2	1248.7	1255.0
25°	1194.9	1201.2	1220.2	1226.5	1232.9
27.5°	1163.3	1169.6	1185.4	1198.1	1207.6
30°	1131.7	1138.0	1157.0	1172.8	1179.1
32.5°	1096.9	1106.4	1128.5	1141.2	1150.7
35°	1059.0	1068.5	1090.6	1112.7	1122.2
37.5°	1021.1	1030.5	1052.7	1081.1	1093.8
40°	976.8	989.5	1017.9	1055.8	1062.2
42.5°	935.7	951.5	976.8	1021.1	1036.9
45°	888.3	904.1	938.9	986.3	1011.6
47.5°	844.0	859.8	897.8	954.7	986.3
50°	790.3	812.4	859.8	926.2	957.8
52.5°	739.7	758.7	821.9	894.6	932.5
55°	686.0	708.1	784.0	863.0	904.1
57.5°	638.6	657.5	742.9	831.4	878.8
60°	578.5	603.8	701.8	796.6	844.0
62.5°	515.3	553.2	660.7	758.7	809.3
65°	455.2	499.5	622.8	720.7	771.3
67.5°	401.5	448.9	575.3	679.7	727.1
70°	338.2	398.3	527.9	629.1	682.8
72.5°	281.3	347.7	474.2	575.3	622.8
75°	224.4	297.2	420.4	505.8	534.2
77.5°	173.9	243.4	360.4	385.7	388.8
80°	129.6	192.8	268.7	271.9	281.3
82.5°	88.5	135.9	173.9	189.7	192.8
85°	56.9	79.0	98.0	101.2	107.5
87.5°	25.3	28.5	34.8	31.6	31.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)