

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: P390485

Luminaire Tested: **22CZ2-55VHE-RDP-UNV-L940-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: P390485  
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: 22CZ2-55VHE-RDP-UNV-L940-CD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3177.1 lumens  
Efficiency: N/A  
Efficacy: 80.6 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

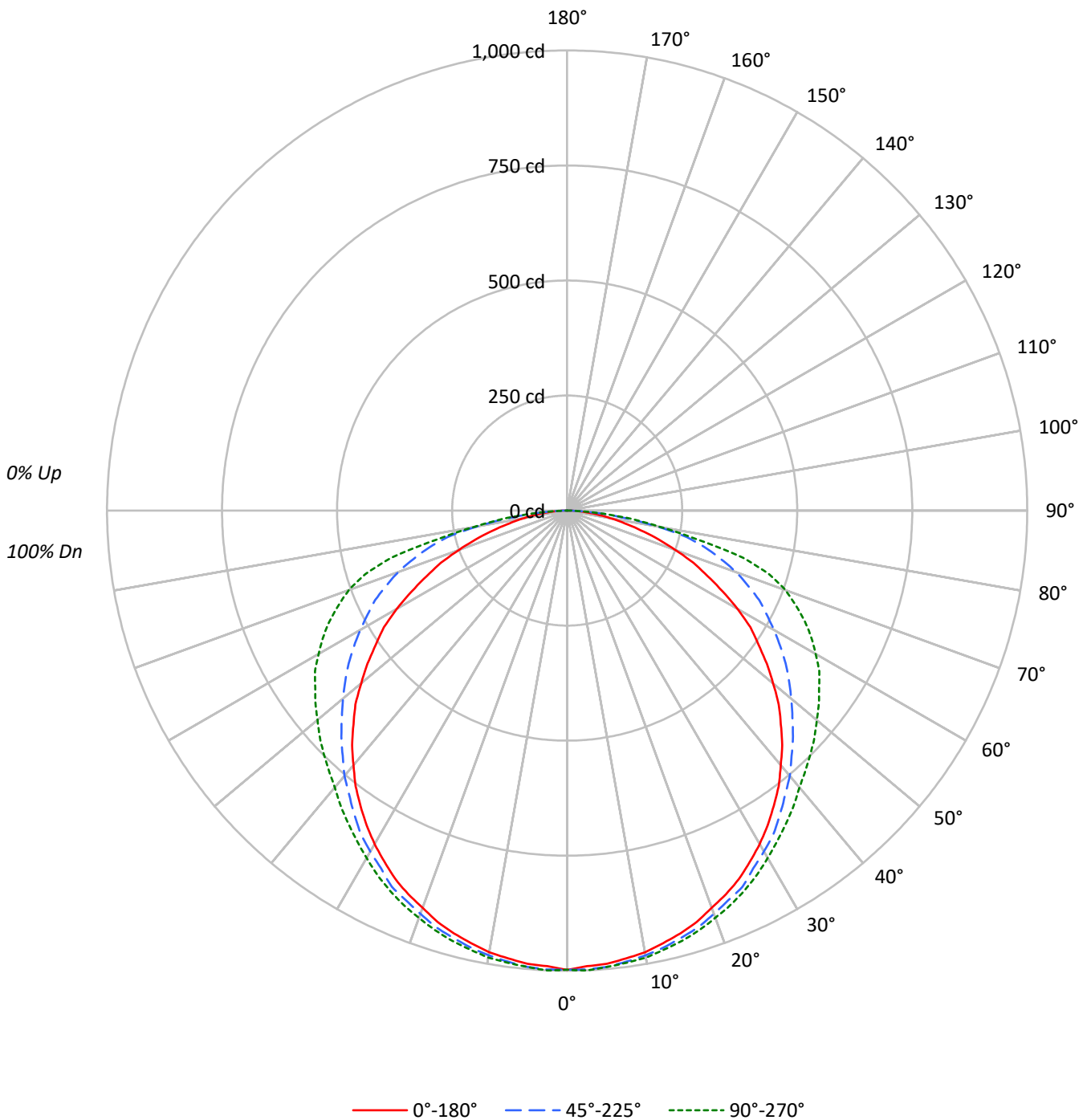
Input Watts (W): 39.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P390485

CATALOG NUMBER: 22CZ2-55VHE-RDP-UNV-L940-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P390485

CATALOG NUMBER: 22CZ2-55VHE-RDP-UNV-L940-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°	2686	2686	2686
5°	2670	2689	2689
10°	2663	2682	2695
15°	2650	2676	2696
20°	2630	2670	2697
25°	2623	2679	2706
30°	2600	2658	2709
35°	2572	2649	2726
40°	2537	2644	2759
45°	2500	2641	2846
50°	2446	2661	2965
55°	2380	2719	3136
60°	2302	2793	3358
65°	2143	2932	3631
70°	1968	3071	3972
75°	1725	3231	4107
80°	1485	3079	3223
85°	1300	2238	2455



TEST NUMBER: P390485

CATALOG NUMBER: 22CZ2-55VHE-RDP-UNV-L940-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.4	3.0
10°-20°	271.0	8.5
20°-30°	413.5	13.0
30°-40°	504.9	15.9
40°-50°	539.9	17.0
50°-60°	521.1	16.4
60°-70°	448.6	14.1
70°-80°	303.5	9.6
80°-90°	80.1	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°	779.0	24.5
0°-40°	1283.9	40.4
0°-60°	2344.9	73.8
0°-90°	3177.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3177.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	989	991	996	996	996	94
15°	951	954	961	965	968	268
25°	884	888	902	907	912	407
35°	783	790	806	823	830	490
45°	657	668	694	729	748	507
55°	507	524	580	638	668	454
65°	337	369	460	533	570	335
75°	166	220	311	374	395	178
85°	42	58	72	75	80	47
90°	0	0	0	0	0	



TEST NUMBER: P390485

CATALOG NUMBER: 22CZ2-55VHE-RDP-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	998.0	998.0	998.0	998.0	998.0
2.5°	991.0	993.3	998.0	998.0	1000.3
5°	988.6	991.0	995.6	995.6	995.6
7.5°	981.6	984.0	988.6	991.0	991.0
10°	974.6	976.9	981.6	984.0	986.3
12.5°	962.9	965.3	972.3	976.9	976.9
15°	951.2	953.6	960.6	965.3	967.6
17.5°	937.2	941.9	948.9	953.6	955.9
20°	918.5	923.2	932.5	939.6	941.9
22.5°	902.2	906.8	916.2	923.2	927.9
25°	883.5	888.1	902.2	906.8	911.5
27.5°	860.1	864.8	876.4	885.8	892.8
30°	836.7	841.4	855.4	867.1	871.8
32.5°	811.0	818.0	834.4	843.7	850.7
35°	783.0	790.0	806.3	822.7	829.7
37.5°	754.9	761.9	778.3	799.3	808.7
40°	722.2	731.5	752.6	780.6	785.3
42.5°	691.8	703.5	722.2	754.9	766.6
45°	656.8	668.4	694.1	729.2	747.9
47.5°	624.0	635.7	663.8	705.8	729.2
50°	584.3	600.7	635.7	684.8	708.2
52.5°	546.9	560.9	607.7	661.4	689.5
55°	507.2	523.5	579.6	638.1	668.4
57.5°	472.1	486.1	549.2	614.7	649.7
60°	427.7	446.4	518.9	589.0	624.0
62.5°	381.0	409.0	488.5	560.9	598.3
65°	336.6	369.3	460.4	532.9	570.3
67.5°	296.8	331.9	425.4	502.5	537.6
70°	250.1	294.5	390.3	465.1	504.8
72.5°	208.0	257.1	350.6	425.4	460.4
75°	165.9	219.7	310.8	374.0	395.0
77.5°	128.5	180.0	266.4	285.1	287.5
80°	95.8	142.6	198.7	201.0	208.0
82.5°	65.4	100.5	128.5	140.2	142.6
85°	42.1	58.4	72.5	74.8	79.5
87.5°	18.7	21.0	25.7	23.4	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)