

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: P388279

Luminaire Tested: **22CZ2-95VHE-SQR-UNV-L940-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: P388279  
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: 22CZ2-95VHE-SQR-UNV-L940-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7786.1 lumens  
Efficiency: N/A  
Efficacy: 107.1 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

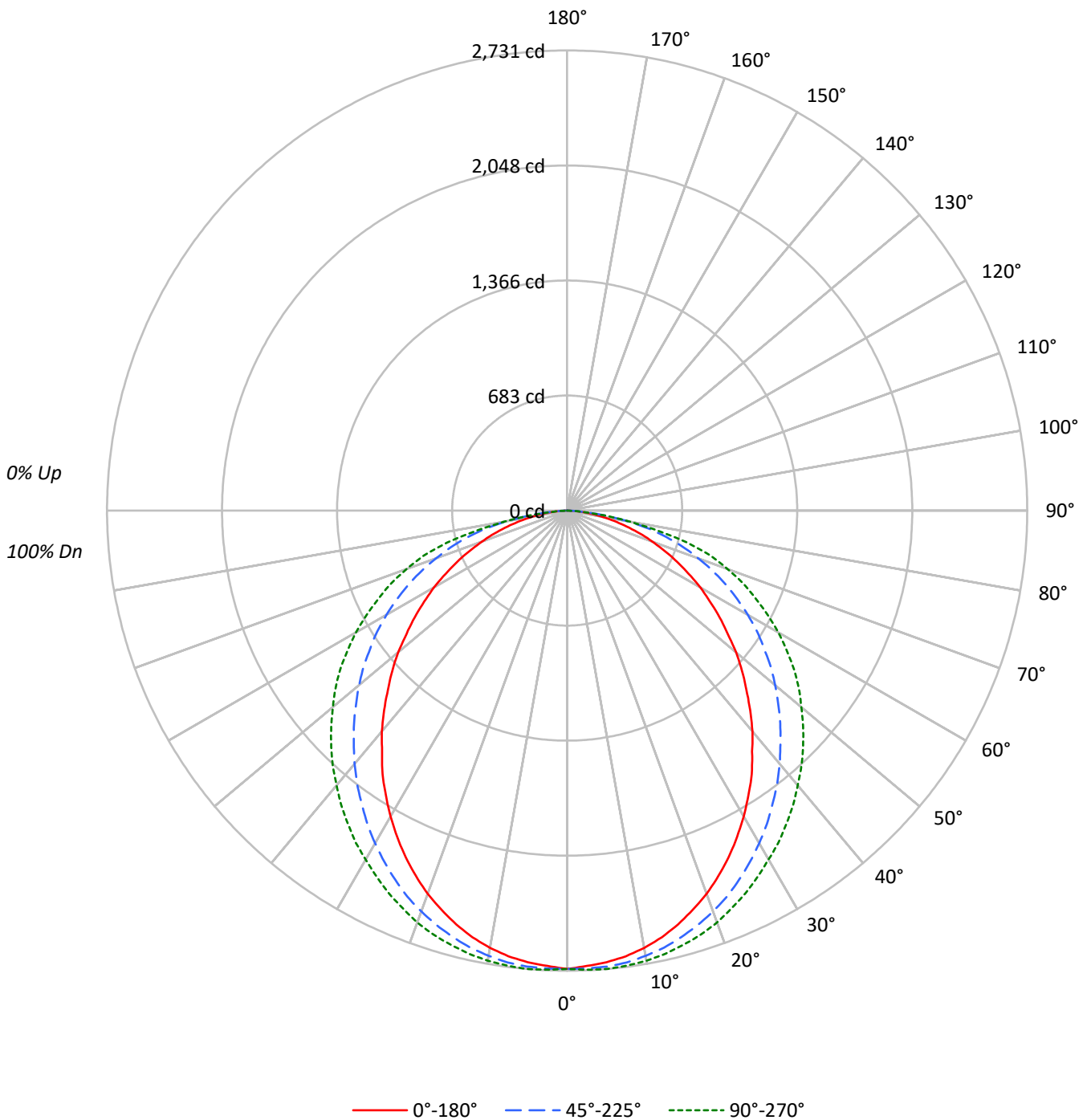
Input Watts (W): 72.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	7319	7319	7319
5°	7267	7337	7377
10°	7200	7331	7412
15°	7083	7299	7433
20°	6932	7249	7450
25°	6737	7176	7439
30°	6511	7085	7429
35°	6276	6980	7454
40°	6010	6893	7477
45°	5724	6807	7538
50°	5477	6745	7596
55°	5184	6693	7715
60°	4913	6663	7796
65°	4588	6612	7859
70°	4216	6513	7967
75°	3804	6340	7685
80°	3264	5613	5783
85°	2624	3310	2624



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	257.9	3.3
10°-20°	737.2	9.5
20°-30°	1107.3	14.2
30°-40°	1320.6	17.0
40°-50°	1365.3	17.5
50°-60°	1255.3	16.1
60°-70°	999.3	12.8
70°-80°	610.5	7.8
80°-90°	132.7	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°	2102.3	27.0
0°-40°	3422.9	44.0
0°-60°	6043.5	77.6
0°-90°	7786.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7786.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2720	2720	2720	2720	2720	
5°	2690	2698	2716	2727	2731	255
15°	2542	2572	2620	2657	2668	716
25°	2269	2324	2417	2483	2506	1044
35°	1911	1992	2125	2236	2269	1192
45°	1504	1611	1789	1933	1981	1163
55°	1105	1227	1426	1589	1644	988
65°	721	843	1038	1183	1234	714
75°	366	473	610	717	739	390
85°	85	104	107	92	85	98
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2719.9	2719.9	2719.9	2719.9	2719.9
2.5°	2705.1	2708.8	2719.9	2727.3	2727.3
5°	2690.3	2697.7	2716.2	2727.3	2731.0
7.5°	2668.1	2679.2	2705.1	2719.9	2723.6
10°	2634.9	2649.7	2682.9	2705.1	2712.5
12.5°	2594.2	2616.4	2657.0	2686.6	2694.0
15°	2542.5	2572.1	2620.1	2657.0	2668.1
17.5°	2483.4	2520.3	2579.4	2623.8	2638.6
20°	2420.5	2457.5	2531.4	2583.1	2601.6
22.5°	2346.6	2394.7	2479.7	2538.8	2553.6
25°	2269.0	2324.5	2416.8	2483.4	2505.5
27.5°	2184.0	2250.5	2350.3	2431.6	2450.1
30°	2095.3	2165.6	2280.1	2368.8	2391.0
32.5°	2002.9	2084.2	2206.2	2306.0	2335.5
35°	1910.6	1991.9	2124.9	2235.8	2269.0
37.5°	1803.4	1899.5	2047.3	2161.9	2202.5
40°	1711.0	1803.4	1962.3	2087.9	2128.6
42.5°	1607.5	1707.3	1873.6	2010.3	2058.4
45°	1504.1	1611.2	1788.6	1932.7	1980.8
47.5°	1408.0	1515.1	1699.9	1851.4	1899.5
50°	1308.2	1419.1	1611.2	1766.4	1814.5
52.5°	1201.0	1323.0	1522.5	1677.7	1733.2
55°	1104.9	1226.9	1426.5	1589.1	1644.5
57.5°	1005.2	1130.8	1337.8	1493.0	1544.7
60°	912.8	1034.7	1238.0	1389.5	1448.6
62.5°	813.0	938.7	1138.2	1286.0	1341.5
65°	720.6	842.6	1038.4	1182.6	1234.3
67.5°	628.2	750.2	935.0	1071.7	1130.8
70°	535.8	657.8	827.8	960.8	1012.6
72.5°	454.5	561.7	724.3	846.3	894.3
75°	365.9	473.0	609.8	716.9	739.1
77.5°	284.6	380.6	495.2	543.2	550.6
80°	210.6	284.6	362.2	373.2	373.2
82.5°	140.4	195.9	225.4	229.1	225.4
85°	85.0	103.5	107.2	92.4	85.0
87.5°	29.6	29.6	18.5	11.1	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)