

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: P388282

Luminaire Tested: **22CZ2-95VHE-SQR-UNV-L950-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: P388282  
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-L950-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8264.4 lumens  
Efficiency: N/A  
Efficacy: 113.7 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

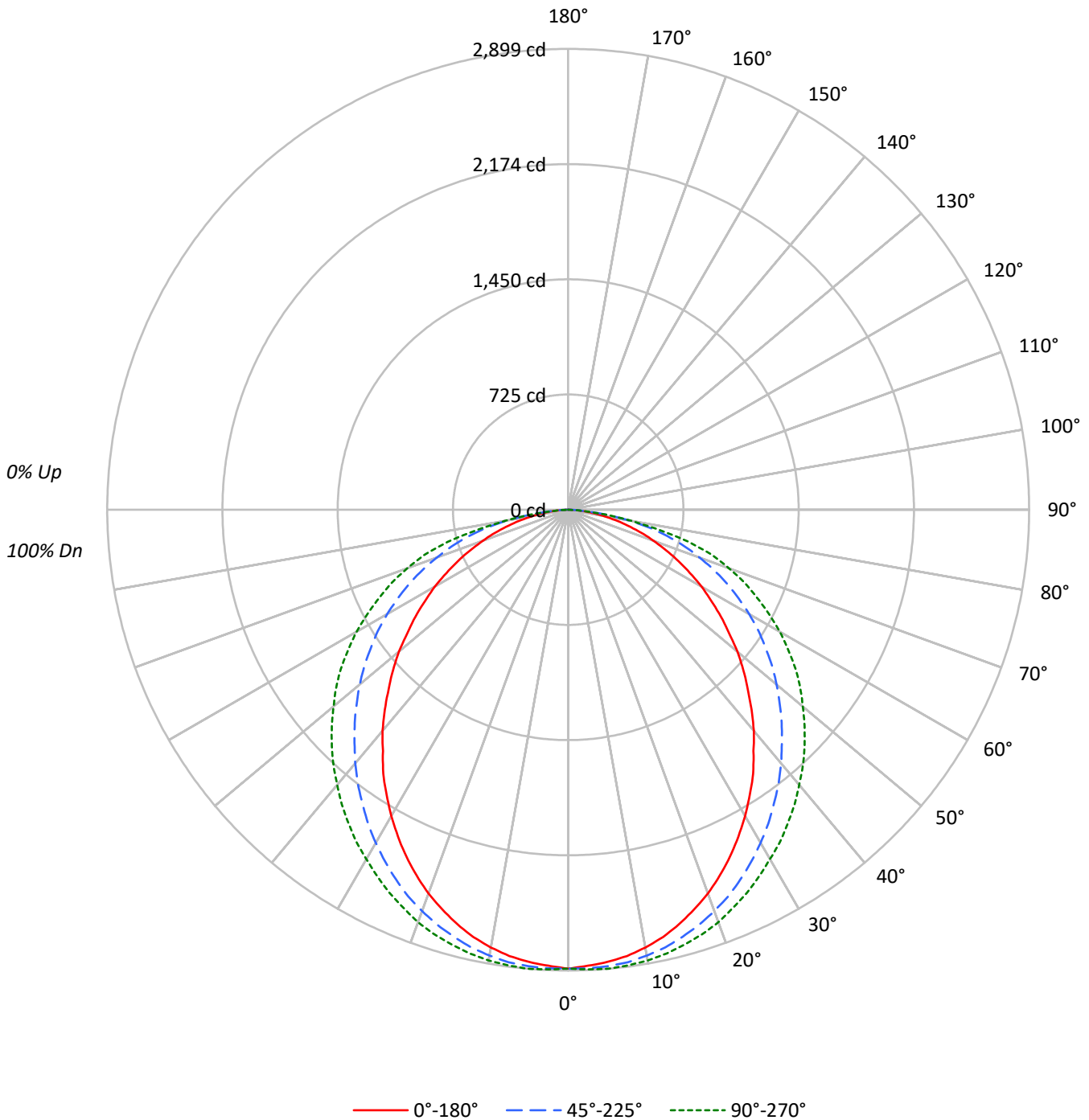
Input Watts (W): 72.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7769	7769	7769
5°	7714	7788	7830
10°	7642	7781	7867
15°	7518	7748	7890
20°	7357	7694	7908
25°	7151	7617	7896
30°	6911	7520	7886
35°	6662	7409	7912
40°	6380	7317	7937
45°	6076	7225	8001
50°	5813	7160	8063
55°	5502	7104	8189
60°	5215	7072	8275
65°	4870	7018	8342
70°	4475	6913	8456
75°	4037	6729	8157
80°	3465	5957	6140
85°	2785	3514	2785



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	273.7	3.3
10°-20°	782.5	9.5
20°-30°	1175.3	14.2
30°-40°	1401.7	17.0
40°-50°	1449.2	17.5
50°-60°	1332.4	16.1
60°-70°	1060.7	12.8
70°-80°	648.0	7.8
80°-90°	140.9	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°	2231.5	27.0
0°-40°	3633.2	44.0
0°-60°	6414.8	77.6
0°-90°	8264.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8264.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2887	2887	2887	2887	2887	
5°	2856	2863	2883	2895	2899	271
15°	2699	2730	2781	2820	2832	760
25°	2408	2467	2565	2636	2659	1108
35°	2028	2114	2255	2373	2408	1265
45°	1596	1710	1898	2052	2102	1235
55°	1173	1302	1514	1687	1746	1049
65°	765	894	1102	1255	1310	758
75°	388	502	647	761	784	414
85°	90	110	114	98	90	104
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2887.0	2887.0	2887.0	2887.0	2887.0
2.5°	2871.3	2875.2	2887.0	2894.8	2894.8
5°	2855.6	2863.4	2883.0	2894.8	2898.7
7.5°	2832.0	2843.8	2871.3	2887.0	2890.9
10°	2796.7	2812.4	2847.7	2871.3	2879.1
12.5°	2753.6	2777.1	2820.3	2851.7	2859.5
15°	2698.7	2730.1	2781.0	2820.3	2832.0
17.5°	2635.9	2675.1	2737.9	2785.0	2800.7
20°	2569.2	2608.5	2686.9	2741.8	2761.4
22.5°	2490.8	2541.8	2632.0	2694.8	2710.4
25°	2408.4	2467.2	2565.3	2635.9	2659.4
27.5°	2318.2	2388.8	2494.7	2581.0	2600.6
30°	2224.1	2298.6	2420.2	2514.3	2537.9
32.5°	2126.0	2212.3	2341.7	2447.6	2479.0
35°	2027.9	2114.2	2255.4	2373.1	2408.4
37.5°	1914.2	2016.2	2173.1	2294.7	2337.8
40°	1816.1	1914.2	2082.8	2216.2	2259.4
42.5°	1706.3	1812.2	1988.7	2133.8	2184.8
45°	1596.5	1710.2	1898.5	2051.5	2102.5
47.5°	1494.5	1608.2	1804.3	1965.2	2016.2
50°	1388.6	1506.2	1710.2	1875.0	1925.9
52.5°	1274.8	1404.3	1616.1	1780.8	1839.6
55°	1172.8	1302.3	1514.1	1686.7	1745.5
57.5°	1066.9	1200.3	1419.9	1584.7	1639.6
60°	968.9	1098.3	1314.0	1474.9	1537.6
62.5°	862.9	996.3	1208.1	1365.0	1423.9
65°	764.9	894.3	1102.2	1255.2	1310.1
67.5°	666.8	796.3	992.4	1137.5	1200.3
70°	568.8	698.2	878.6	1019.8	1074.8
72.5°	482.5	596.2	768.8	898.3	949.2
75°	388.3	502.1	647.2	761.0	784.5
77.5°	302.0	404.0	525.6	576.6	584.5
80°	223.6	302.0	384.4	396.2	396.2
82.5°	149.1	207.9	239.3	243.2	239.3
85°	90.2	109.8	113.8	98.1	90.2
87.5°	31.4	31.4	19.6	11.8	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)