

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: P388278

Luminaire Tested: **22CZ2-95VHE-SQR-UNV-L940-CD1-SDWPD1-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: P388278
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-SDWPD1-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: 7692.2 lumens
Efficiency: N/A
Efficacy: 105.8 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

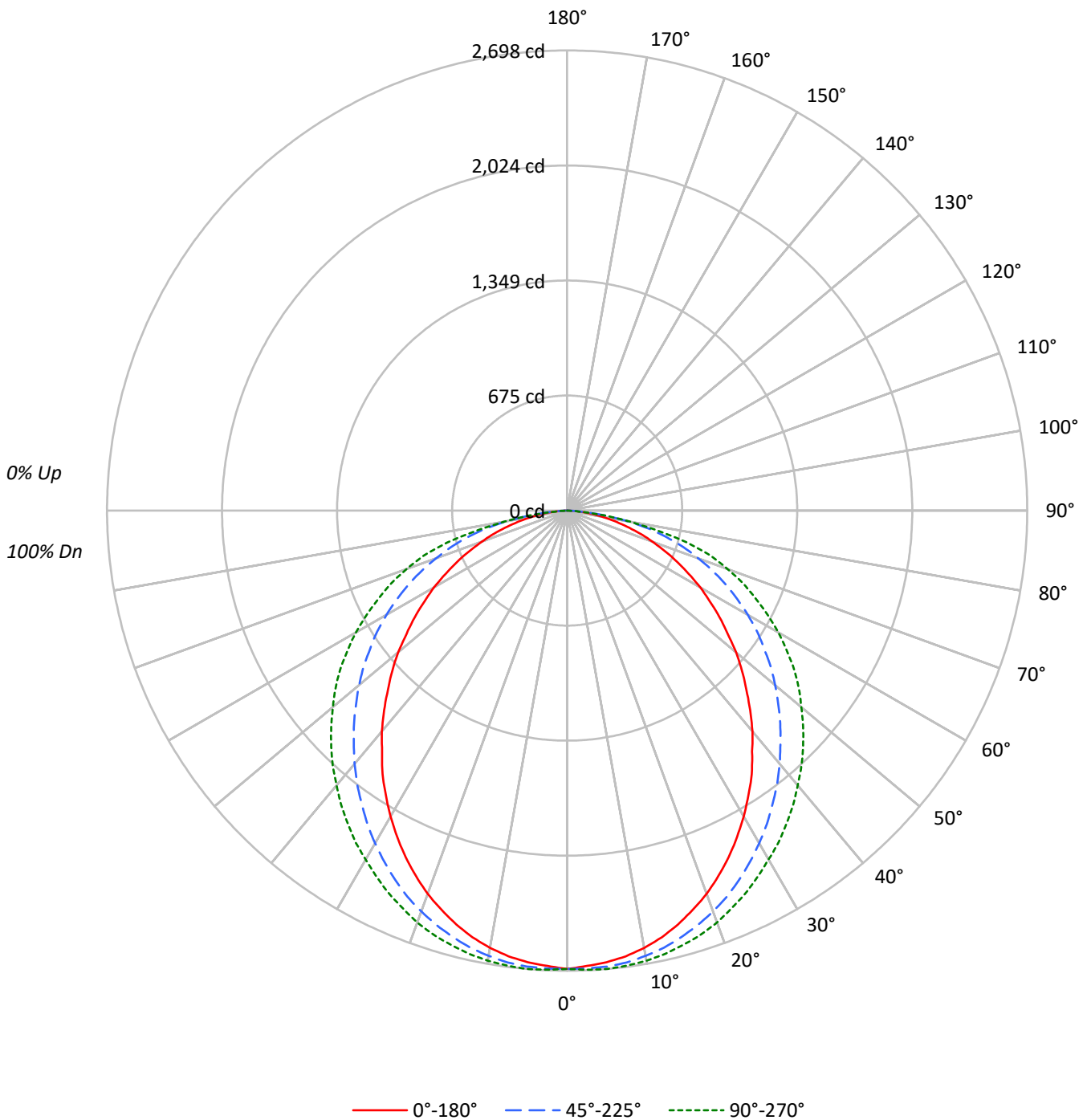
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7231	7231	7231
5°	7180	7249	7288
10°	7113	7243	7323
15°	6998	7211	7344
20°	6848	7162	7360
25°	6656	7089	7350
30°	6432	6999	7340
35°	6201	6896	7364
40°	5938	6810	7387
45°	5655	6725	7447
50°	5411	6664	7505
55°	5121	6612	7622
60°	4853	6583	7703
65°	4533	6532	7764
70°	4165	6434	7870
75°	3758	6263	7592
80°	3225	5545	5714
85°	2594	3270	2594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.7	3.3
10°-20°	728.3	9.5
20°-30°	1093.9	14.2
30°-40°	1304.6	17.0
40°-50°	1348.9	17.5
50°-60°	1240.1	16.1
60°-70°	987.3	12.8
70°-80°	603.2	7.8
80°-90°	131.1	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°	2077.0	27.0
0°-40°	3381.6	44.0
0°-60°	5970.6	77.6
0°-90°	7692.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7692.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2687	2687	2687	2687	2687	
5°	2658	2665	2683	2694	2698	252
15°	2512	2541	2588	2625	2636	707
25°	2242	2296	2388	2453	2475	1031
35°	1888	1968	2099	2209	2242	1178
45°	1486	1592	1767	1909	1957	1149
55°	1092	1212	1409	1570	1625	976
65°	712	832	1026	1168	1219	705
75°	361	467	602	708	730	385
85°	84	102	106	91	84	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2687.1	2687.1	2687.1	2687.1	2687.1
2.5°	2672.5	2676.1	2687.1	2694.4	2694.4
5°	2657.9	2665.2	2683.4	2694.4	2698.0
7.5°	2636.0	2646.9	2672.5	2687.1	2690.7
10°	2603.1	2617.7	2650.6	2672.5	2679.8
12.5°	2562.9	2584.8	2625.0	2654.2	2661.5
15°	2511.8	2541.0	2588.5	2625.0	2636.0
17.5°	2453.4	2489.9	2548.3	2592.1	2606.8
20°	2391.3	2427.9	2500.9	2552.0	2570.2
22.5°	2318.3	2365.8	2449.8	2508.2	2522.8
25°	2241.7	2296.4	2387.7	2453.4	2475.3
27.5°	2157.7	2223.4	2322.0	2402.3	2420.6
30°	2070.1	2139.4	2252.6	2340.2	2362.1
32.5°	1978.8	2059.1	2179.6	2278.2	2307.4
35°	1887.5	1967.8	2099.3	2208.8	2241.7
37.5°	1781.6	1876.6	2022.6	2135.8	2175.9
40°	1690.4	1781.6	1938.6	2062.8	2102.9
42.5°	1588.1	1686.7	1851.0	1986.1	2033.6
45°	1485.9	1591.8	1767.0	1909.4	1956.9
47.5°	1391.0	1496.9	1679.4	1829.1	1876.6
50°	1292.4	1401.9	1591.8	1745.1	1792.6
52.5°	1186.5	1307.0	1504.2	1657.5	1712.3
55°	1091.6	1212.1	1409.3	1569.9	1624.7
57.5°	993.0	1117.2	1321.6	1475.0	1526.1
60°	901.8	1022.3	1223.1	1372.7	1431.2
62.5°	803.2	927.3	1124.5	1270.5	1325.3
65°	711.9	832.4	1025.9	1168.3	1219.4
67.5°	620.7	741.1	923.7	1058.8	1117.2
70°	529.4	649.9	817.8	949.2	1000.3
72.5°	449.1	554.9	715.6	836.1	883.5
75°	361.4	467.3	602.4	708.3	730.2
77.5°	281.1	376.0	489.2	536.7	544.0
80°	208.1	281.1	357.8	368.7	368.7
82.5°	138.7	193.5	222.7	226.4	222.7
85°	84.0	102.2	105.9	91.3	84.0
87.5°	29.2	29.2	18.3	11.0	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)