

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: P388272

Luminaire Tested: **22CZ2-95VHE-SQR-UNV-L930-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: P388272
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-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7429.6 lumens
Efficiency: N/A
Efficacy: 102.2 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

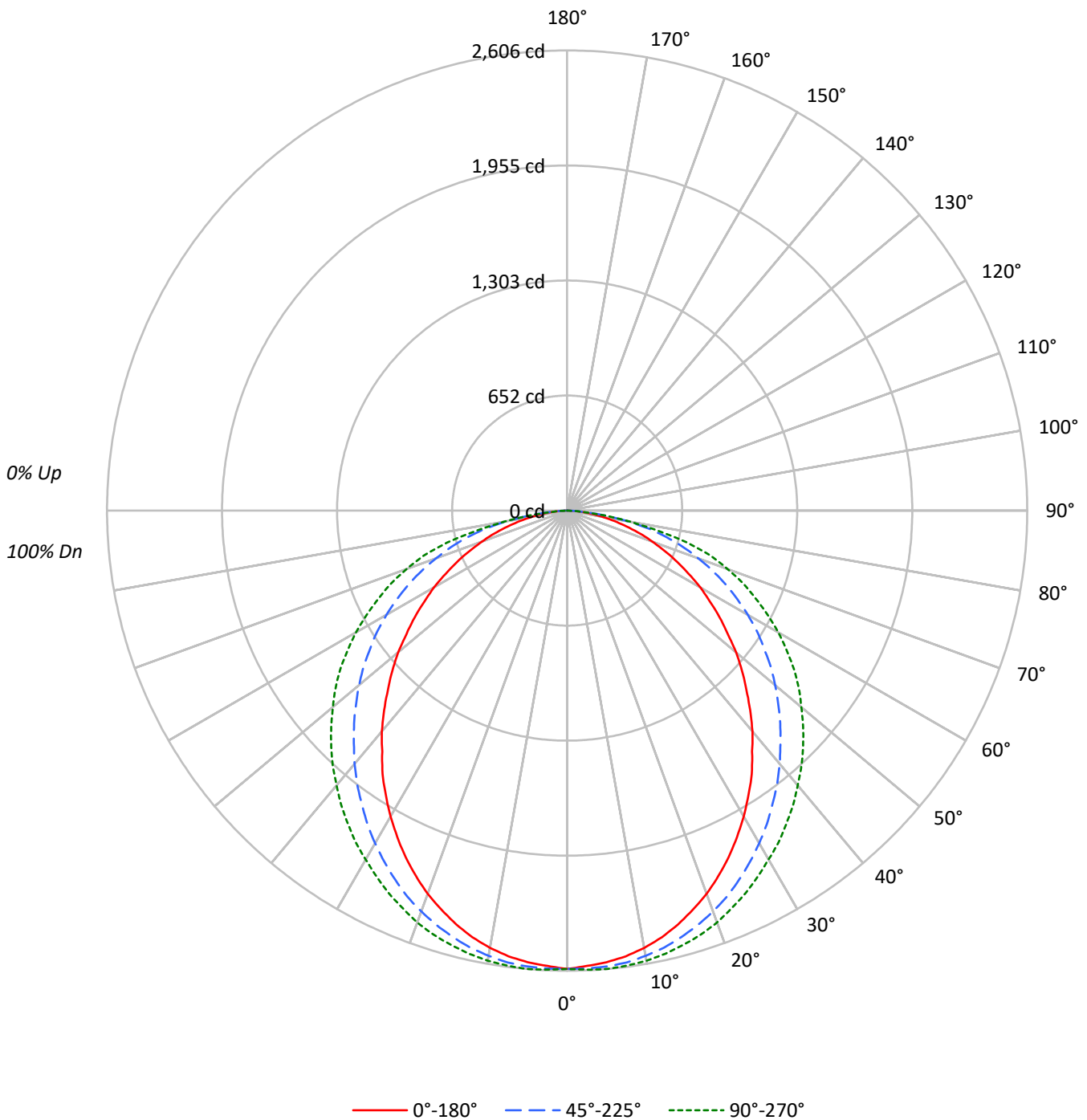
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6984	6984	6984
5°	6934	7001	7039
10°	6870	6995	7073
15°	6759	6965	7093
20°	6614	6917	7109
25°	6429	6847	7099
30°	6213	6760	7089
35°	5989	6661	7113
40°	5735	6578	7135
45°	5462	6495	7193
50°	5226	6437	7248
55°	4947	6386	7362
60°	4688	6358	7439
65°	4378	6309	7500
70°	4023	6215	7602
75°	3630	6049	7333
80°	3115	5356	5520
85°	2504	3159	2504



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.0	3.3
10°-20°	703.5	9.5
20°-30°	1056.6	14.2
30°-40°	1260.1	17.0
40°-50°	1302.8	17.5
50°-60°	1197.8	16.1
60°-70°	953.6	12.8
70°-80°	582.6	7.8
80°-90°	126.6	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°	2006.1	27.0
0°-40°	3266.2	44.0
0°-60°	5766.8	77.6
0°-90°	7429.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7429.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2595	2595	2595	2595	2595	
5°	2567	2574	2592	2602	2606	243
15°	2426	2454	2500	2535	2546	683
25°	2165	2218	2306	2370	2391	996
35°	1823	1901	2028	2133	2165	1137
45°	1435	1538	1707	1844	1890	1110
55°	1054	1171	1361	1516	1569	943
65°	688	804	991	1128	1178	681
75°	349	451	582	684	705	372
85°	81	99	102	88	81	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2595.3	2595.3	2595.3	2595.3	2595.3
2.5°	2581.2	2584.8	2595.3	2602.4	2602.4
5°	2567.1	2574.2	2591.8	2602.4	2605.9
7.5°	2546.0	2556.5	2581.2	2595.3	2598.9
10°	2514.2	2528.3	2560.1	2581.2	2588.3
12.5°	2475.4	2496.6	2535.4	2563.6	2570.7
15°	2426.1	2454.3	2500.1	2535.4	2546.0
17.5°	2369.7	2404.9	2461.3	2503.7	2517.8
20°	2309.7	2345.0	2415.5	2464.9	2482.5
22.5°	2239.2	2285.0	2366.1	2422.6	2436.7
25°	2165.1	2218.0	2306.2	2369.7	2390.8
27.5°	2084.0	2147.5	2242.7	2320.3	2337.9
30°	1999.4	2066.4	2175.7	2260.3	2281.5
32.5°	1911.2	1988.8	2105.2	2200.4	2228.6
35°	1823.1	1900.7	2027.6	2133.4	2165.1
37.5°	1720.8	1812.5	1953.6	2062.9	2101.7
40°	1632.7	1720.8	1872.5	1992.3	2031.1
42.5°	1533.9	1629.1	1787.8	1918.3	1964.1
45°	1435.2	1537.5	1706.7	1844.2	1890.1
47.5°	1343.5	1445.8	1622.1	1766.7	1812.5
50°	1248.3	1354.1	1537.5	1685.6	1731.4
52.5°	1146.0	1262.4	1452.8	1600.9	1653.8
55°	1054.4	1170.7	1361.1	1516.3	1569.2
57.5°	959.1	1079.0	1276.5	1424.6	1474.0
60°	871.0	987.4	1181.3	1325.9	1382.3
62.5°	775.8	895.7	1086.1	1227.1	1280.0
65°	687.6	804.0	990.9	1128.4	1177.8
67.5°	599.5	715.8	892.1	1022.6	1079.0
70°	511.3	627.7	789.9	916.8	966.2
72.5°	433.7	536.0	691.1	807.5	853.4
75°	349.1	451.4	581.8	684.1	705.3
77.5°	271.5	363.2	472.5	518.4	525.4
80°	201.0	271.5	345.6	356.2	356.2
82.5°	134.0	186.9	215.1	218.6	215.1
85°	81.1	98.7	102.3	88.2	81.1
87.5°	28.2	28.2	17.6	10.6	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)