

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: P389215

Luminaire Tested: **24CZ2-95VHE-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: P389215
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-SQR-UNV-L940-CD1-SWPD1-U
Description: 2x4 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: 7714.0 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

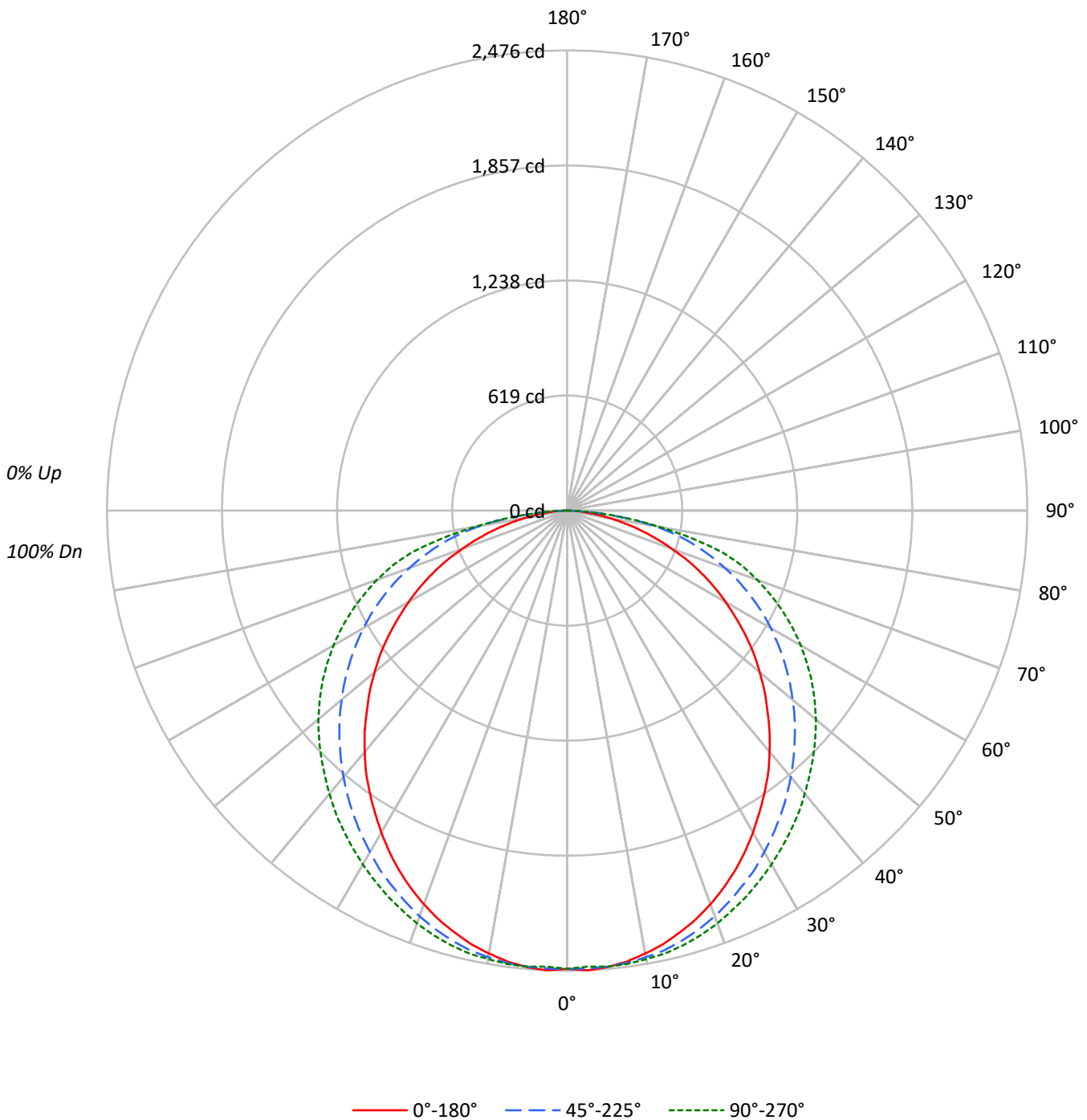
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	93	89	92	89	87	89	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3318	3318	3318
5°	3330	3327	3327
10°	3306	3334	3348
15°	3271	3335	3371
20°	3228	3326	3385
25°	3173	3309	3396
30°	3107	3297	3415
35°	3042	3289	3448
40°	2975	3289	3494
45°	2899	3296	3563
50°	2831	3316	3658
55°	2749	3352	3770
60°	2653	3407	3907
65°	2538	3471	4071
70°	2355	3557	4279
75°	2132	3681	4476
80°	1796	3691	3849
85°	1377	2793	2793



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.1	3.0
10°-20°	673.4	8.7
20°-30°	1022.9	13.3
30°-40°	1244.2	16.1
40°-50°	1324.6	17.2
50°-60°	1261.7	16.4
60°-70°	1055.1	13.7
70°-80°	703.5	9.1
80°-90°	194.6	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°	1930.3	25.0
0°-40°	3174.5	41.2
0°-60°	5760.8	74.7
0°-90°	7714.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7714.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2466	2466	2466	2466	2466	
5°	2466	2450	2463	2463	2463	234
15°	2349	2354	2394	2412	2420	662
25°	2137	2165	2229	2267	2288	984
35°	1852	1905	2002	2068	2099	1159
45°	1523	1605	1732	1829	1872	1178
55°	1172	1274	1429	1554	1607	1048
65°	797	914	1090	1225	1279	788
75°	410	540	708	828	861	434
85°	89	166	181	178	181	108
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2465.8	2465.8	2465.8	2465.8	2465.8
2.5°	2476.0	2458.1	2465.8	2465.8	2455.6
5°	2465.8	2450.5	2463.2	2463.2	2463.2
7.5°	2447.9	2435.2	2455.6	2460.7	2460.7
10°	2419.9	2414.8	2440.3	2447.9	2450.5
12.5°	2389.4	2386.8	2422.5	2432.7	2440.3
15°	2348.6	2353.7	2394.4	2412.3	2419.9
17.5°	2305.3	2315.5	2361.3	2386.8	2394.4
20°	2254.3	2269.6	2323.1	2348.6	2363.9
22.5°	2198.3	2221.2	2277.3	2307.8	2325.7
25°	2137.2	2165.2	2228.9	2267.1	2287.5
27.5°	2070.9	2106.6	2180.5	2223.8	2244.2
30°	1999.6	2040.4	2121.9	2172.8	2198.3
32.5°	1925.7	1974.1	2063.3	2119.3	2149.9
35°	1851.9	1905.4	2002.2	2068.4	2099.0
37.5°	1778.0	1831.5	1938.5	2009.8	2048.0
40°	1693.9	1757.6	1872.3	1951.2	1989.4
42.5°	1612.4	1681.2	1803.5	1890.1	1930.8
45°	1523.3	1604.8	1732.2	1828.9	1872.3
47.5°	1441.8	1523.3	1660.8	1762.7	1811.1
50°	1352.6	1439.2	1584.4	1696.5	1747.4
52.5°	1266.0	1355.2	1508.0	1627.7	1678.7
55°	1171.8	1273.6	1429.0	1553.8	1607.3
57.5°	1077.5	1187.0	1347.5	1477.4	1530.9
60°	985.8	1097.9	1266.0	1395.9	1452.0
62.5°	894.1	1006.2	1181.9	1314.4	1367.9
65°	797.3	914.5	1090.2	1225.2	1278.7
67.5°	700.5	822.8	998.5	1133.5	1184.5
70°	598.6	728.5	904.3	1036.7	1087.7
72.5°	504.4	634.3	807.5	937.4	985.8
75°	410.1	540.0	708.1	827.9	861.0
77.5°	318.4	448.3	598.6	677.6	685.2
80°	231.8	354.1	476.3	499.3	496.7
82.5°	155.4	264.9	328.6	331.1	338.8
85°	89.2	165.6	180.9	178.3	180.9
87.5°	35.7	58.6	50.9	38.2	38.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)