

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: P389214

Luminaire Tested: **24CZ2-95VHE-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: P389214
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-SDWPD1-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: 7620.9 lumens
Efficiency: N/A
Efficacy: 116.2 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

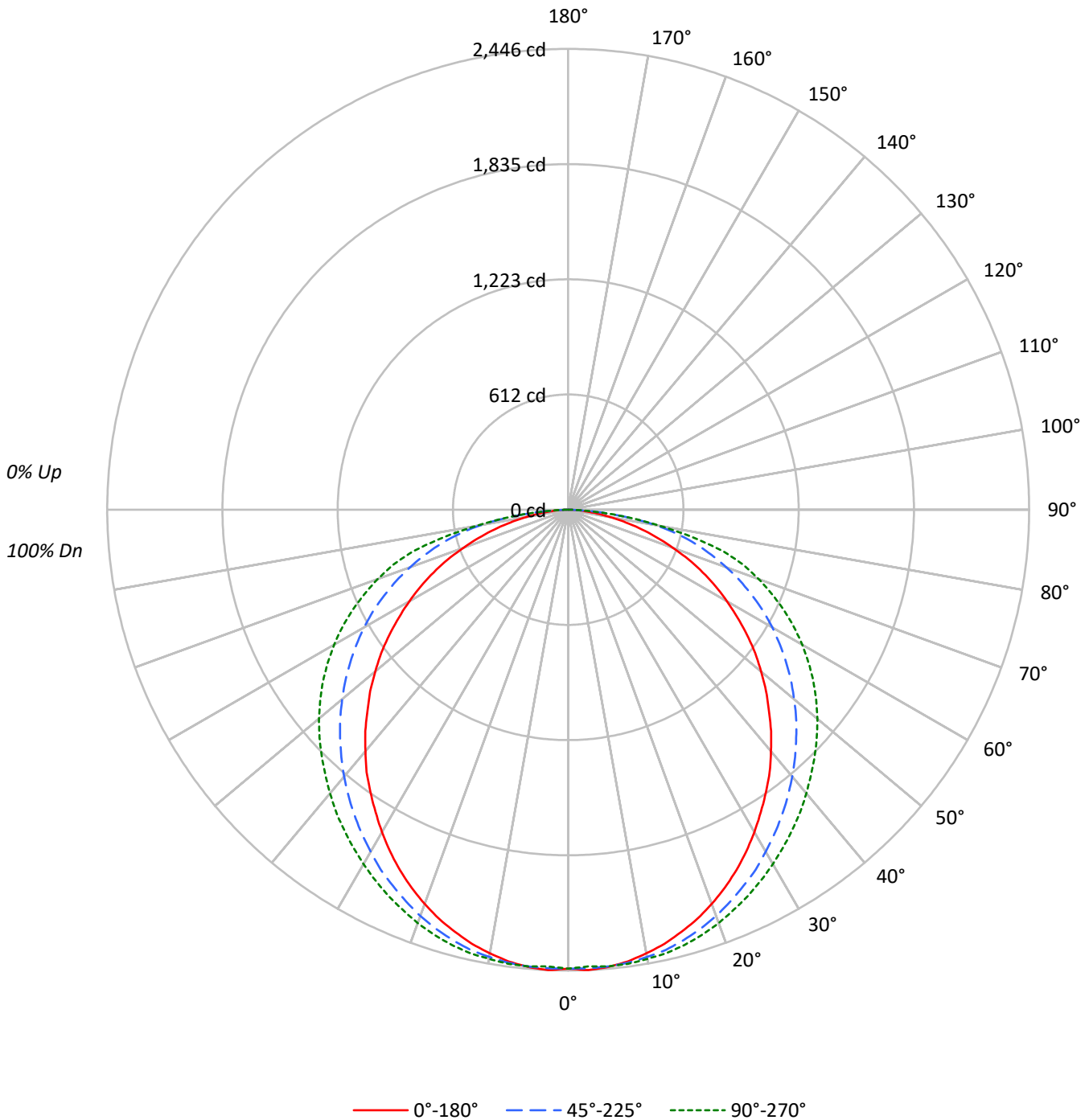
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3278	3278	3278
5°	3290	3287	3287
10°	3266	3294	3308
15°	3232	3295	3330
20°	3189	3286	3344
25°	3135	3269	3355
30°	3069	3257	3374
35°	3005	3249	3406
40°	2939	3249	3452
45°	2864	3256	3520
50°	2797	3277	3614
55°	2715	3312	3725
60°	2621	3366	3860
65°	2508	3429	4022
70°	2327	3515	4227
75°	2106	3637	4422
80°	1774	3646	3802
85°	1360	2759	2759



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.2	3.0
10°-20°	665.3	8.7
20°-30°	1010.5	13.3
30°-40°	1229.2	16.1
40°-50°	1308.7	17.2
50°-60°	1246.4	16.4
60°-70°	1042.4	13.7
70°-80°	695.0	9.1
80°-90°	192.3	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°	1907.0	25.0
0°-40°	3136.2	41.2
0°-60°	5691.3	74.7
0°-90°	7620.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7620.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2436	2436	2436	2436	2436	
5°	2436	2421	2434	2434	2434	231
15°	2320	2325	2366	2383	2391	654
25°	2111	2139	2202	2240	2260	972
35°	1830	1882	1978	2043	2074	1145
45°	1505	1585	1711	1807	1850	1163
55°	1158	1258	1412	1535	1588	1035
65°	788	903	1077	1210	1263	778
75°	405	534	700	818	851	429
85°	88	164	179	176	179	106
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2436.0	2436.0	2436.0	2436.0	2436.0
2.5°	2446.1	2428.5	2436.0	2436.0	2425.9
5°	2436.0	2420.9	2433.5	2433.5	2433.5
7.5°	2418.4	2405.8	2425.9	2431.0	2431.0
10°	2390.7	2385.7	2410.8	2418.4	2420.9
12.5°	2360.5	2358.0	2393.2	2403.3	2410.8
15°	2320.2	2325.3	2365.5	2383.2	2390.7
17.5°	2277.5	2287.5	2332.8	2358.0	2365.5
20°	2227.1	2242.2	2295.1	2320.2	2335.3
22.5°	2171.8	2194.4	2249.8	2280.0	2297.6
25°	2111.4	2139.1	2202.0	2239.7	2259.9
27.5°	2045.9	2081.2	2154.2	2196.9	2217.1
30°	1975.5	2015.7	2096.3	2146.6	2171.8
32.5°	1902.5	1950.3	2038.4	2093.8	2124.0
35°	1829.5	1882.4	1978.0	2043.4	2073.6
37.5°	1756.5	1809.4	1915.1	1985.5	2023.3
40°	1673.5	1736.4	1849.7	1927.7	1965.4
42.5°	1593.0	1660.9	1781.7	1867.3	1907.5
45°	1504.9	1585.4	1711.2	1806.9	1849.7
47.5°	1424.4	1504.9	1640.8	1741.4	1789.3
50°	1336.3	1421.8	1565.3	1676.0	1726.3
52.5°	1250.7	1338.8	1489.8	1608.1	1658.4
55°	1157.6	1258.3	1411.8	1535.1	1587.9
57.5°	1064.5	1172.7	1331.2	1459.6	1512.4
60°	973.9	1084.6	1250.7	1379.1	1434.4
62.5°	883.3	994.0	1167.7	1298.5	1351.4
65°	787.7	903.4	1077.1	1210.5	1263.3
67.5°	692.0	812.8	986.5	1119.9	1170.2
70°	591.4	719.7	893.4	1024.2	1074.6
72.5°	498.3	626.6	797.7	926.1	973.9
75°	405.2	533.5	699.6	817.9	850.6
77.5°	314.6	442.9	591.4	669.4	676.9
80°	229.0	349.8	470.6	493.2	490.7
82.5°	153.5	261.7	324.6	327.2	334.7
85°	88.1	163.6	178.7	176.2	178.7
87.5°	35.2	57.9	50.3	37.7	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)