

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: P391877

Luminaire Tested: **24CZ2-95VHE-RDP-UNV-L940-CD1-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: P391877
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-RDP-UNV-L940-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5470.0 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

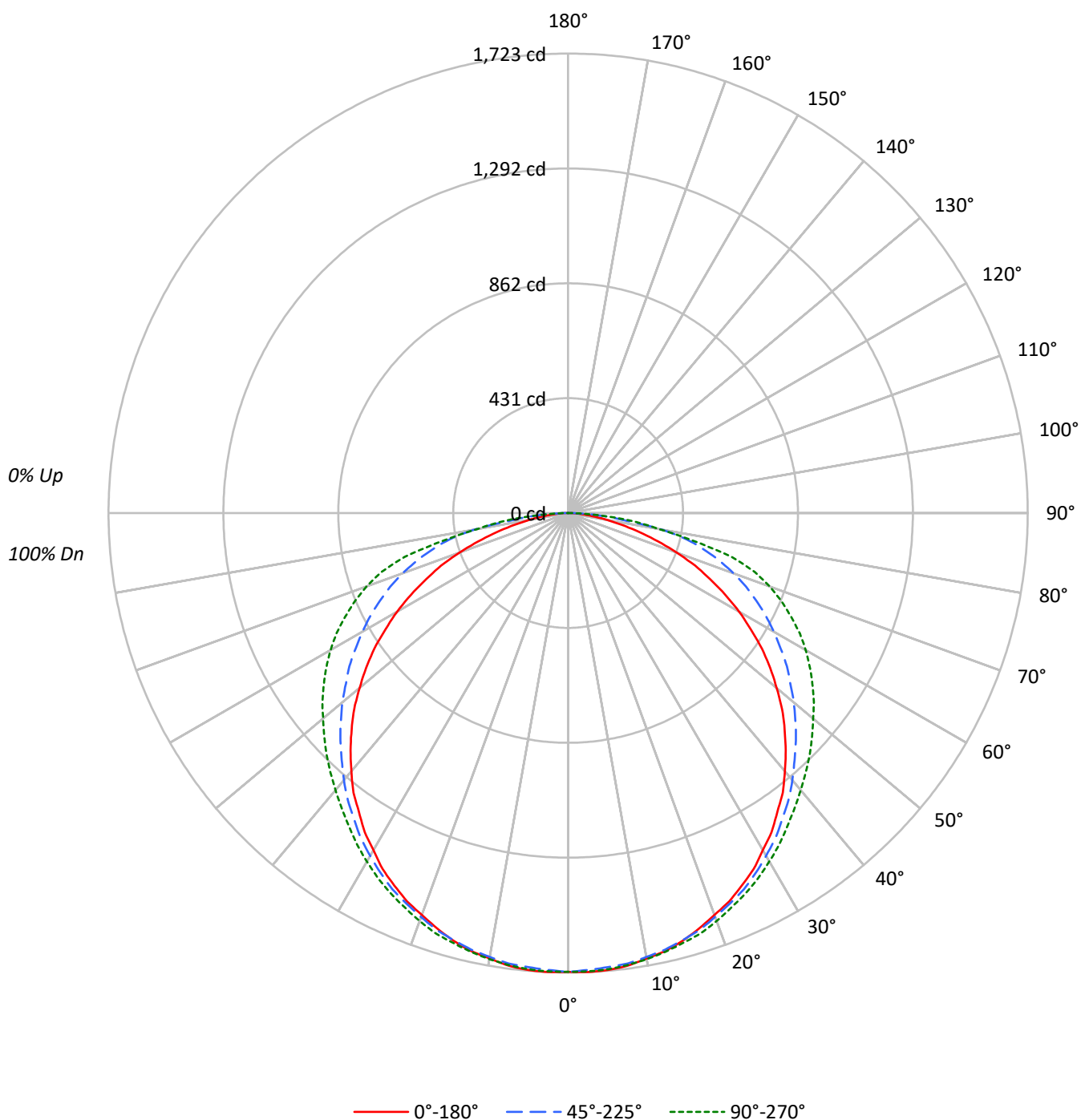
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	108	103	98	94	105	100	96	92		96	93	89			92	89	87			88
2	97	89	81	75	95	87	80	74		83	77	72			80	75	71			77
3	88	77	68	62	86	76	67	61		72	66	60			70	64	59			67
4	81	68	59	52	78	67	58	51		64	57	51			62	55	50			59
5	74	60	51	44	72	59	51	44		57	49	43			55	48	43			53
6	68	54	45	38	66	53	45	38		51	44	38			50	43	37			48
7	63	49	40	34	61	48	40	34		47	39	33			45	38	33			44
8	59	45	36	30	57	44	36	30		43	35	30			41	34	29			40
9	55	41	33	27	53	40	32	27		39	32	27			38	31	26			37
10	51	38	30	24	50	37	29	24		36	29	24			35	29	24			34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2315	2315	2315
5°	2323	2309	2320
10°	2317	2309	2321
15°	2313	2309	2324
20°	2296	2308	2331
25°	2288	2312	2336
30°	2268	2306	2344
35°	2246	2300	2353
40°	2221	2297	2383
45°	2184	2297	2437
50°	2135	2312	2510
55°	2081	2349	2622
60°	1993	2395	2767
65°	1866	2479	2937
70°	1697	2594	3159
75°	1438	2737	3301
80°	1135	2754	2670
85°	838	2095	2345



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.2	3.0
10°-20°	469.6	8.6
20°-30°	718.1	13.1
30°-40°	877.9	16.0
40°-50°	935.7	17.1
50°-60°	894.6	16.4
60°-70°	757.9	13.9
70°-80°	509.3	9.3
80°-90°	143.7	2.6
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°	1350.9	24.7
0°-40°	2228.8	40.7
0°-60°	4059.1	74.2
0°-90°	5470.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5470.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1720	1720	1720	1720	1720	
5°	1720	1717	1709	1717	1717	163
15°	1660	1660	1658	1671	1669	468
25°	1541	1546	1557	1571	1574	710
35°	1367	1378	1400	1427	1433	857
45°	1148	1167	1207	1259	1281	885
55°	887	920	1001	1080	1118	790
65°	586	646	779	882	922	582
75°	277	377	526	616	635	296
85°	54	111	136	146	152	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1720.2	1720.2	1720.2	1720.2	1720.2
2.5°	1722.9	1722.9	1714.7	1720.2	1720.2
5°	1720.2	1717.4	1709.3	1717.4	1717.4
7.5°	1712.0	1709.3	1703.9	1712.0	1709.3
10°	1695.7	1695.7	1690.3	1698.5	1698.5
12.5°	1682.2	1679.5	1676.7	1687.6	1684.9
15°	1660.5	1660.5	1657.8	1671.3	1668.6
17.5°	1633.3	1636.1	1638.8	1649.6	1652.3
20°	1603.5	1608.9	1611.6	1627.9	1627.9
22.5°	1576.4	1579.1	1584.5	1600.8	1600.8
25°	1541.1	1546.5	1557.4	1570.9	1573.6
27.5°	1505.8	1508.5	1522.1	1541.1	1543.8
30°	1459.7	1467.8	1484.1	1505.8	1508.5
32.5°	1419.0	1427.1	1446.1	1467.8	1473.3
35°	1367.4	1378.3	1400.0	1427.1	1432.6
37.5°	1321.3	1329.5	1356.6	1386.4	1394.6
40°	1264.3	1280.6	1307.8	1343.0	1356.6
42.5°	1207.4	1223.6	1256.2	1302.3	1318.6
45°	1147.7	1166.7	1207.4	1258.9	1280.6
47.5°	1088.0	1109.7	1155.8	1215.5	1239.9
50°	1020.2	1047.3	1104.3	1172.1	1199.2
52.5°	955.0	987.6	1050.0	1126.0	1161.2
55°	887.2	919.8	1001.2	1079.8	1117.8
57.5°	811.2	854.7	944.2	1033.7	1074.4
60°	740.7	781.4	889.9	987.6	1028.3
62.5°	664.7	719.0	835.7	938.8	979.5
65°	586.0	645.7	778.7	881.8	922.5
67.5°	515.5	580.6	721.7	824.8	865.5
70°	431.4	512.8	659.3	762.4	803.1
72.5°	352.7	442.2	594.2	694.6	732.6
75°	276.7	377.1	526.4	615.9	634.9
77.5°	206.2	312.0	455.8	493.8	480.2
80°	146.5	249.6	355.4	336.4	344.6
82.5°	95.0	189.9	219.8	249.6	257.8
85°	54.3	111.2	135.7	146.5	151.9
87.5°	24.4	40.7	54.3	54.3	51.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)