

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: P391880

Luminaire Tested: **24CZ2-95VHE-RDP-UNV-L950-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: P391880
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-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5806.1 lumens
Efficiency: N/A
Efficacy: 88.5 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

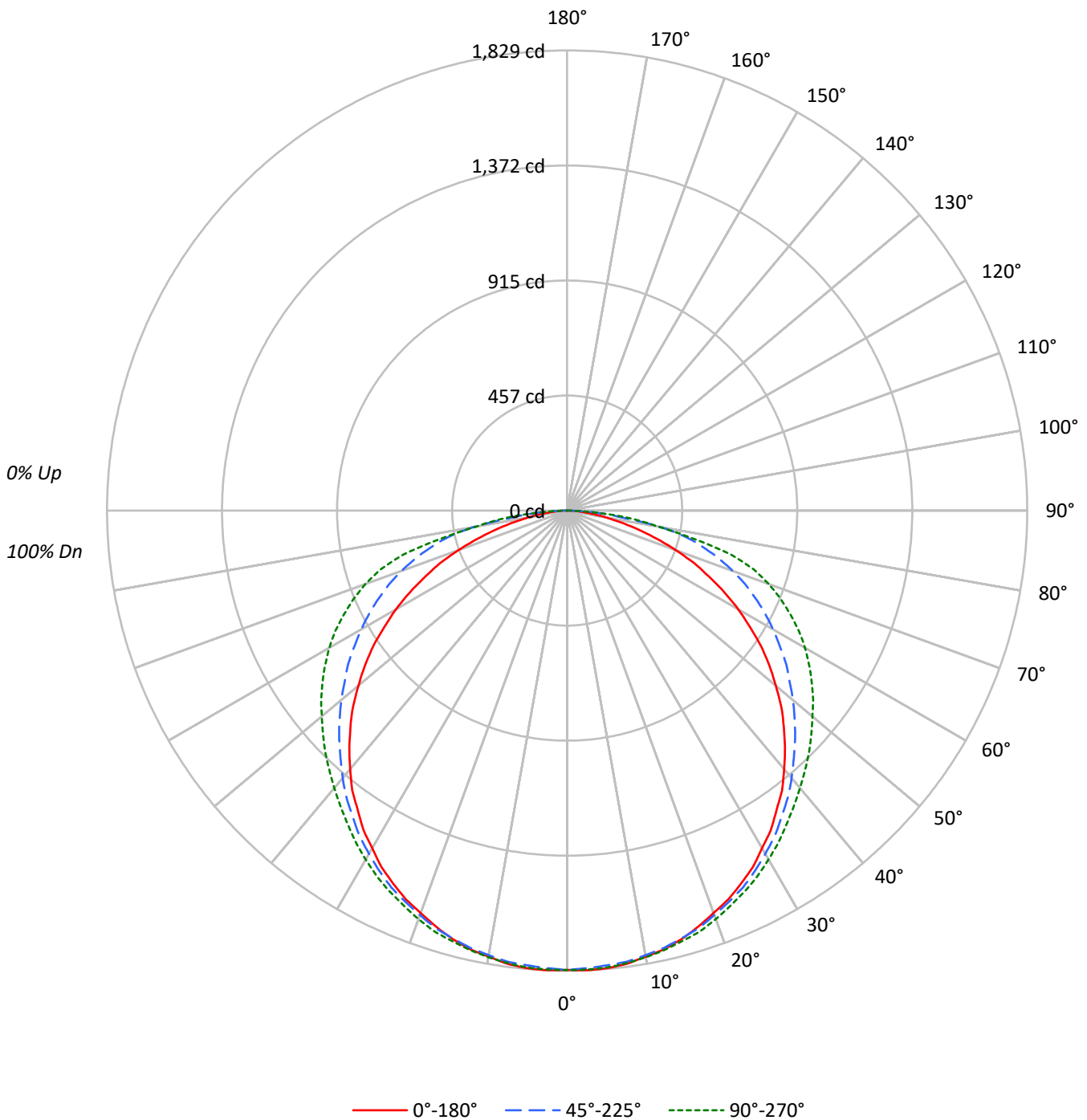
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2457	2457	2457
5°	2466	2450	2462
10°	2459	2451	2463
15°	2455	2451	2467
20°	2437	2449	2474
25°	2428	2454	2480
30°	2407	2447	2488
35°	2384	2441	2498
40°	2357	2438	2529
45°	2318	2439	2586
50°	2267	2453	2664
55°	2209	2493	2783
60°	2116	2542	2937
65°	1981	2631	3117
70°	1801	2753	3353
75°	1527	2904	3503
80°	1205	2923	2834
85°	889	2223	2490



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.2	3.0
10°-20°	498.5	8.6
20°-30°	762.3	13.1
30°-40°	931.8	16.0
40°-50°	993.2	17.1
50°-60°	949.6	16.4
60°-70°	804.4	13.9
70°-80°	540.6	9.3
80°-90°	152.5	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°	1433.9	24.7
0°-40°	2365.8	40.7
0°-60°	4308.5	74.2
0°-90°	5806.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5806.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1826	1826	1826	1826	1826	
5°	1826	1823	1814	1823	1823	173
15°	1762	1762	1760	1774	1771	497
25°	1636	1642	1653	1668	1670	754
35°	1452	1463	1486	1515	1521	909
45°	1218	1238	1282	1336	1359	940
55°	942	976	1063	1146	1186	839
65°	622	685	826	936	979	618
75°	294	400	559	654	674	315
85°	58	118	144	156	161	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1825.9	1825.9	1825.9	1825.9	1825.9
2.5°	1828.7	1828.7	1820.1	1825.9	1825.9
5°	1825.9	1823.0	1814.3	1823.0	1823.0
7.5°	1817.2	1814.3	1808.6	1817.2	1814.3
10°	1799.9	1799.9	1794.2	1802.8	1802.8
12.5°	1785.5	1782.7	1779.8	1791.3	1788.4
15°	1762.5	1762.5	1759.6	1774.0	1771.1
17.5°	1733.7	1736.6	1739.5	1751.0	1753.9
20°	1702.0	1707.8	1710.7	1727.9	1727.9
22.5°	1673.2	1676.1	1681.9	1699.1	1699.1
25°	1635.8	1641.5	1653.1	1667.5	1670.3
27.5°	1598.3	1601.2	1615.6	1635.8	1638.7
30°	1549.4	1558.0	1575.3	1598.3	1601.2
32.5°	1506.2	1514.8	1535.0	1558.0	1563.8
35°	1451.5	1463.0	1486.0	1514.8	1520.6
37.5°	1402.5	1411.1	1439.9	1471.6	1480.3
40°	1342.0	1359.3	1388.1	1425.5	1439.9
42.5°	1281.6	1298.8	1333.4	1382.3	1399.6
45°	1218.2	1238.4	1281.6	1336.3	1359.3
47.5°	1154.8	1177.9	1226.8	1290.2	1316.1
50°	1082.8	1111.6	1172.1	1244.1	1272.9
52.5°	1013.7	1048.3	1114.5	1195.2	1232.6
55°	941.7	976.3	1062.7	1146.2	1186.5
57.5°	861.1	907.2	1002.2	1097.2	1140.4
60°	786.2	829.4	944.6	1048.3	1091.5
62.5°	705.6	763.2	887.0	996.4	1039.6
65°	622.1	685.4	826.5	936.0	979.2
67.5°	547.2	616.3	766.1	875.5	918.7
70°	457.9	544.3	699.8	809.3	852.4
72.5°	374.4	469.4	630.7	737.3	777.6
75°	293.7	400.3	558.7	653.7	673.9
77.5°	218.9	331.2	483.8	524.1	509.7
80°	155.5	265.0	377.3	357.1	365.7
82.5°	100.8	201.6	233.3	265.0	273.6
85°	57.6	118.1	144.0	155.5	161.3
87.5°	25.9	43.2	57.6	57.6	54.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)