

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: P391726

Luminaire Tested: **24CZ2-80VHE-RDP-UNV-L930-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: P391726
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: 24CZ2-80VHE-RDP-UNV-L930-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4454.4 lumens
Efficiency: N/A
Efficacy: 82.8 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

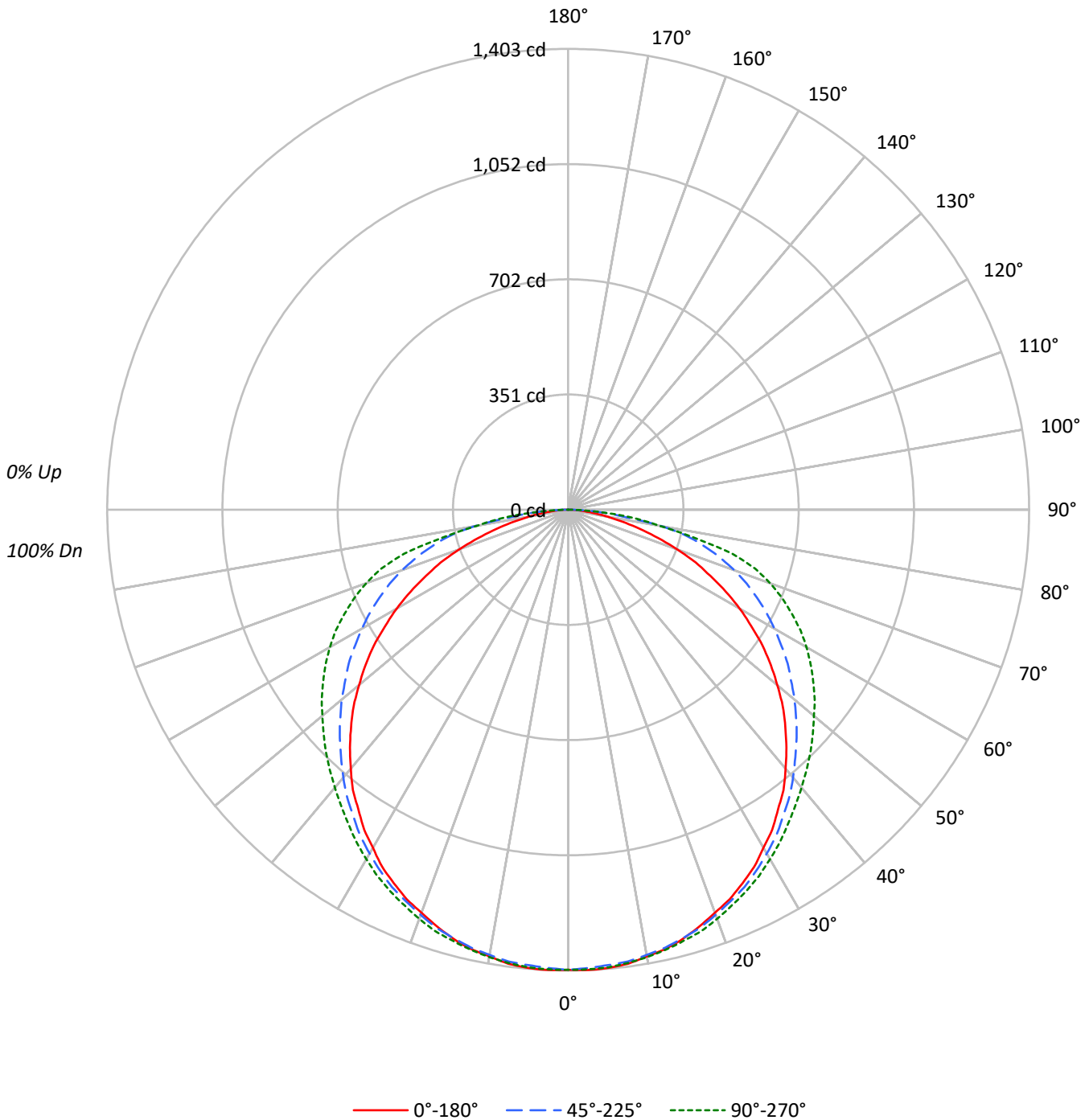
Input Watts (W): 53.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1885	1885	1885
5°	1892	1880	1889
10°	1887	1881	1890
15°	1884	1880	1893
20°	1870	1879	1898
25°	1863	1883	1902
30°	1847	1878	1908
35°	1829	1873	1916
40°	1808	1870	1940
45°	1778	1871	1984
50°	1739	1882	2044
55°	1695	1913	2135
60°	1623	1950	2253
65°	1519	2019	2392
70°	1382	2112	2573
75°	1172	2228	2688
80°	924	2242	2174
85°	682	1706	1910



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.9	3.0
10°-20°	382.4	8.6
20°-30°	584.8	13.1
30°-40°	714.9	16.0
40°-50°	762.0	17.1
50°-60°	728.5	16.4
60°-70°	617.2	13.9
70°-80°	414.8	9.3
80°-90°	117.0	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°	1100.1	24.7
0°-40°	1815.0	40.7
0°-60°	3305.5	74.2
0°-90°	4454.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4454.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1401	1401	1401	1401	1401	
5°	1401	1399	1392	1399	1399	133
15°	1352	1352	1350	1361	1359	381
25°	1255	1259	1268	1279	1282	578
35°	1114	1122	1140	1162	1167	698
45°	935	950	983	1025	1043	721
55°	722	749	815	879	910	643
65°	477	526	634	718	751	474
75°	225	307	429	502	517	241
85°	44	91	110	119	124	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1400.8	1400.8	1400.8	1400.8	1400.8
2.5°	1403.0	1403.0	1396.4	1400.8	1400.8
5°	1400.8	1398.6	1391.9	1398.6	1398.6
7.5°	1394.2	1391.9	1387.5	1394.2	1391.9
10°	1380.9	1380.9	1376.5	1383.1	1383.1
12.5°	1369.8	1367.6	1365.4	1374.3	1372.1
15°	1352.2	1352.2	1350.0	1361.0	1358.8
17.5°	1330.1	1332.3	1334.5	1343.3	1345.5
20°	1305.8	1310.2	1312.4	1325.7	1325.7
22.5°	1283.7	1285.9	1290.3	1303.6	1303.6
25°	1255.0	1259.4	1268.2	1279.3	1281.5
27.5°	1226.2	1228.4	1239.5	1255.0	1257.2
30°	1188.7	1195.3	1208.6	1226.2	1228.4
32.5°	1155.5	1162.2	1177.6	1195.3	1199.7
35°	1113.6	1122.4	1140.1	1162.2	1166.6
37.5°	1076.0	1082.6	1104.7	1129.0	1135.6
40°	1029.6	1042.9	1064.9	1093.7	1104.7
42.5°	983.2	996.5	1023.0	1060.5	1073.8
45°	934.6	950.1	983.2	1025.2	1042.9
47.5°	886.0	903.7	941.2	989.8	1009.7
50°	830.7	852.8	899.2	954.5	976.6
52.5°	777.7	804.2	855.1	916.9	945.6
55°	722.5	749.0	815.3	879.4	910.3
57.5°	660.6	696.0	768.9	841.8	874.9
60°	603.2	636.3	724.7	804.2	837.4
62.5°	541.3	585.5	680.5	764.5	797.6
65°	477.2	525.8	634.1	718.1	751.2
67.5°	419.8	472.8	587.7	671.7	704.8
70°	351.3	417.6	536.9	620.9	654.0
72.5°	287.2	360.1	483.9	565.6	596.5
75°	225.4	307.1	428.6	501.5	517.0
77.5°	167.9	254.1	371.2	402.1	391.1
80°	119.3	203.3	289.4	274.0	280.6
82.5°	77.3	154.7	179.0	203.3	209.9
85°	44.2	90.6	110.5	119.3	123.7
87.5°	19.9	33.1	44.2	44.2	42.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)