

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: P391783

Luminaire Tested: **24CZ2-85VHE-RDP-UNV-L950-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: P391783
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: 24CZ2-85VHE-RDP-UNV-L950-CD1-SWPD1-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: 5179.4 lumens
Efficiency: N/A
Efficacy: 89.5 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

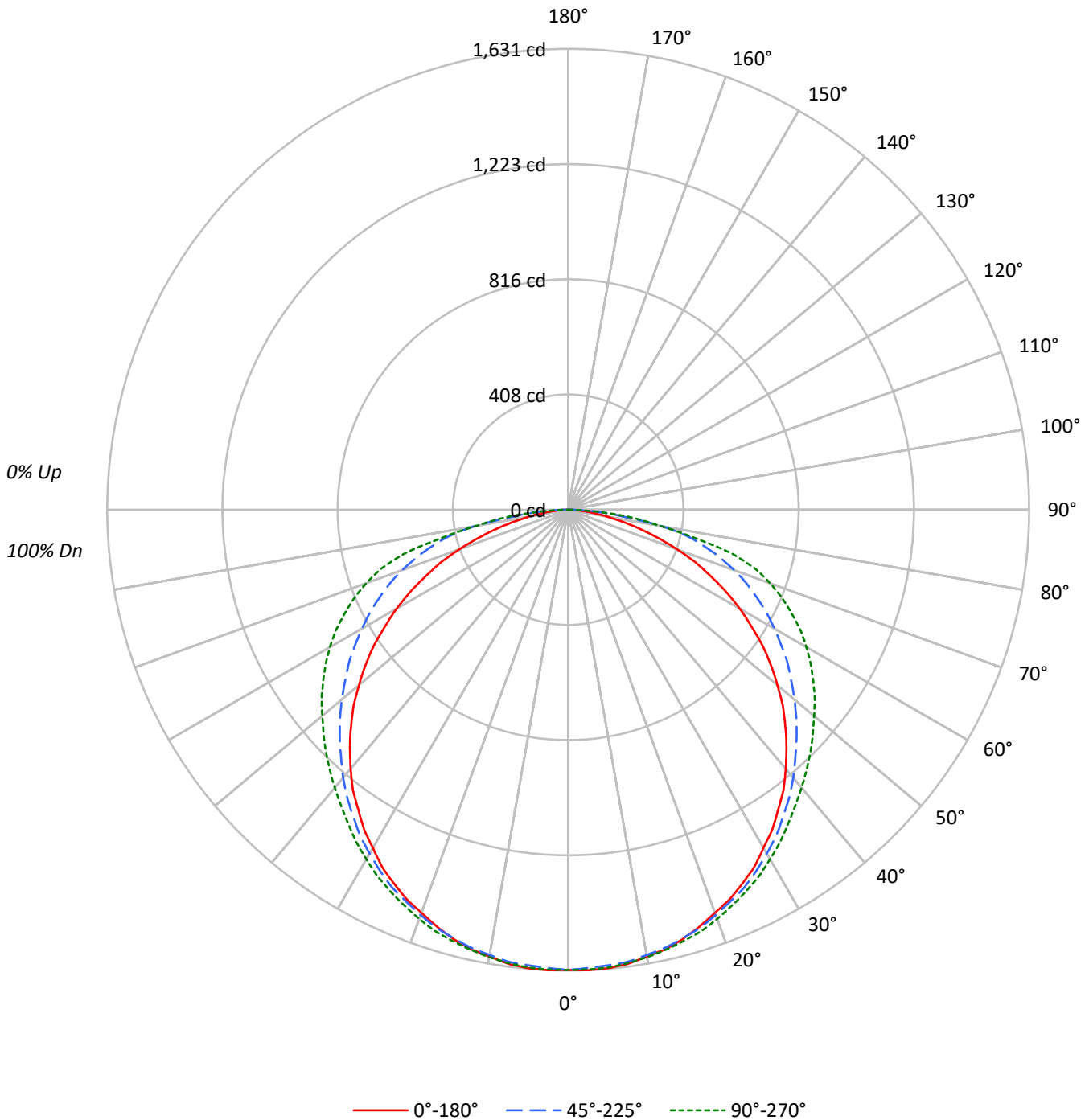
Input Watts (W): 57.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2192	2192	2192
5°	2200	2186	2196
10°	2194	2187	2197
15°	2190	2187	2201
20°	2174	2185	2207
25°	2166	2189	2212
30°	2147	2183	2219
35°	2127	2177	2228
40°	2103	2175	2256
45°	2068	2175	2307
50°	2022	2189	2377
55°	1971	2224	2483
60°	1887	2267	2620
65°	1767	2347	2781
70°	1607	2456	2991
75°	1362	2591	3125
80°	1075	2607	2528
85°	794	1984	2221



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	3.0
10°-20°	444.7	8.6
20°-30°	680.0	13.1
30°-40°	831.3	16.0
40°-50°	886.0	17.1
50°-60°	847.1	16.4
60°-70°	717.6	13.9
70°-80°	482.3	9.3
80°-90°	136.0	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°	1279.1	24.7
0°-40°	2110.4	40.7
0°-60°	3843.5	74.2
0°-90°	5179.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5179.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1629	1629	1629	1629	1629	
5°	1629	1626	1618	1626	1626	155
15°	1572	1572	1570	1582	1580	443
25°	1459	1464	1475	1488	1490	673
35°	1295	1305	1326	1351	1356	811
45°	1087	1105	1143	1192	1213	838
55°	840	871	948	1022	1058	748
65°	555	611	737	835	874	551
75°	262	357	498	583	601	281
85°	51	105	128	139	144	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1628.8	1628.8	1628.8	1628.8	1628.8
2.5°	1631.3	1631.3	1623.6	1628.8	1628.8
5°	1628.8	1626.2	1618.5	1626.2	1626.2
7.5°	1621.1	1618.5	1613.4	1621.1	1618.5
10°	1605.7	1605.7	1600.5	1608.2	1608.2
12.5°	1592.8	1590.2	1587.7	1597.9	1595.4
15°	1572.3	1572.3	1569.7	1582.5	1580.0
17.5°	1546.6	1549.1	1551.7	1562.0	1564.5
20°	1518.3	1523.4	1526.0	1541.4	1541.4
22.5°	1492.6	1495.2	1500.3	1515.7	1515.7
25°	1459.2	1464.4	1474.6	1487.5	1490.0
27.5°	1425.8	1428.4	1441.2	1459.2	1461.8
30°	1382.1	1389.9	1405.3	1425.8	1428.4
32.5°	1343.6	1351.3	1369.3	1389.9	1395.0
35°	1294.8	1305.1	1325.6	1351.3	1356.5
37.5°	1251.1	1258.8	1284.5	1312.8	1320.5
40°	1197.2	1212.6	1238.3	1271.7	1284.5
42.5°	1143.2	1158.6	1189.5	1233.1	1248.6
45°	1086.7	1104.7	1143.2	1192.0	1212.6
47.5°	1030.2	1050.7	1094.4	1150.9	1174.1
50°	966.0	991.7	1045.6	1109.8	1135.5
52.5°	904.3	935.1	994.2	1066.2	1099.6
55°	840.1	870.9	948.0	1022.5	1058.4
57.5°	768.1	809.2	894.0	978.8	1017.3
60°	701.3	739.9	842.6	935.1	973.7
62.5°	629.4	680.8	791.3	888.9	927.4
65°	554.9	611.4	737.3	834.9	873.5
67.5°	488.1	549.8	683.4	781.0	819.5
70°	408.5	485.5	624.3	721.9	760.4
72.5°	334.0	418.8	562.6	657.7	693.6
75°	262.0	357.1	498.4	583.2	601.2
77.5°	195.2	295.4	431.6	467.6	454.7
80°	138.7	236.4	336.5	318.6	326.3
82.5°	89.9	179.8	208.1	236.4	244.1
85°	51.4	105.3	128.5	138.7	143.9
87.5°	23.1	38.5	51.4	51.4	48.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)