

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: P388833

Luminaire Tested: **24CZ2-55-SQR-UNV-L950-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: P388833
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: 24CZ2-55-SQR-UNV-L950-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4733.2 lumens
Efficiency: N/A
Efficacy: 93.7 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

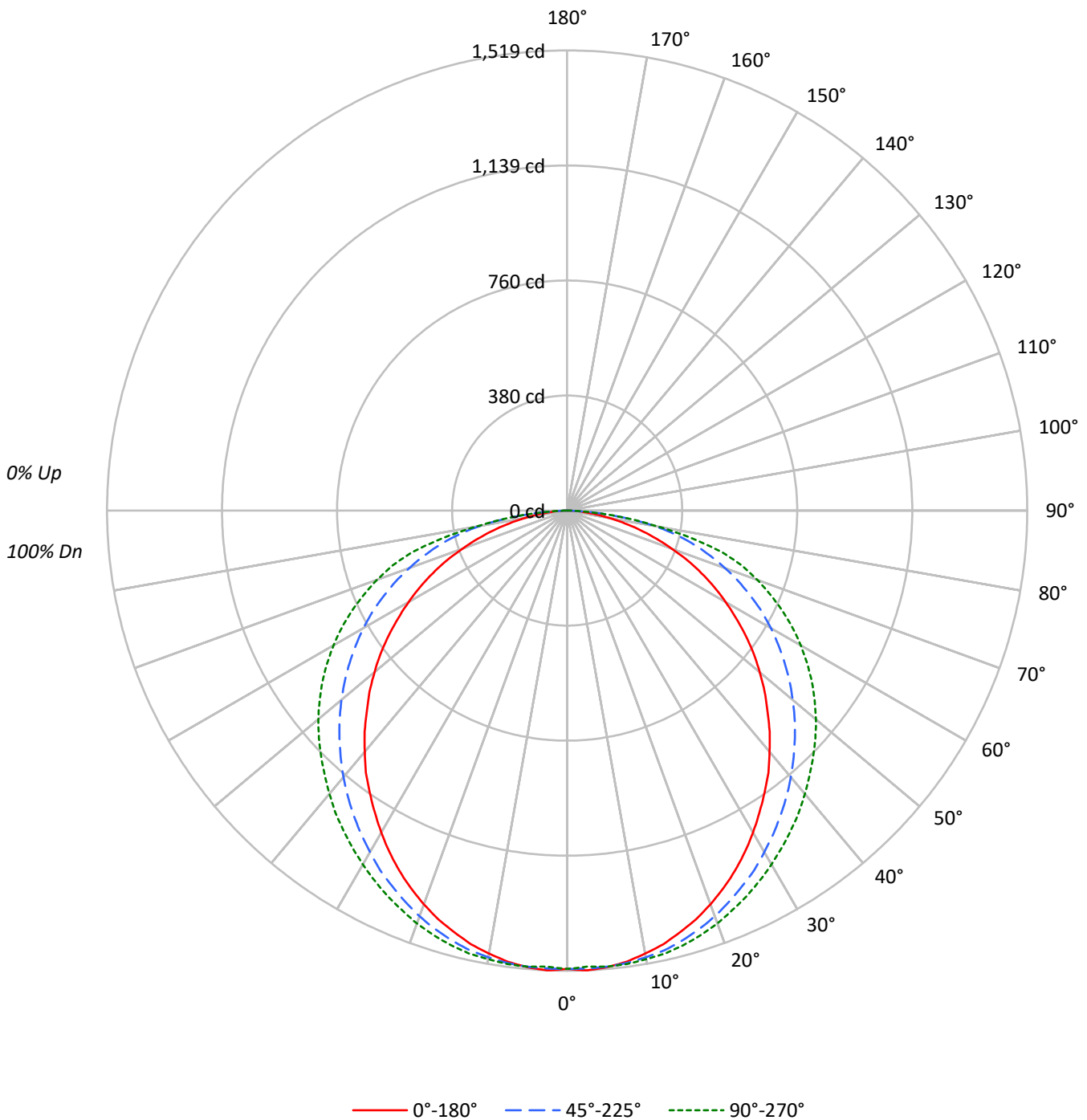
Input Watts (W): 50.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2036	2036	2036
5°	2044	2041	2041
10°	2029	2046	2054
15°	2007	2047	2068
20°	1981	2041	2077
25°	1947	2030	2084
30°	1906	2023	2096
35°	1866	2018	2115
40°	1826	2018	2144
45°	1779	2022	2186
50°	1737	2035	2244
55°	1687	2057	2313
60°	1628	2090	2397
65°	1557	2130	2498
70°	1445	2183	2626
75°	1308	2259	2746
80°	1102	2265	2362
85°	844	1714	1714



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.6	3.0
10°-20°	413.2	8.7
20°-30°	627.6	13.3
30°-40°	763.4	16.1
40°-50°	812.8	17.2
50°-60°	774.1	16.4
60°-70°	647.4	13.7
70°-80°	431.6	9.1
80°-90°	119.4	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°	1184.4	25.0
0°-40°	1947.8	41.2
0°-60°	3534.7	74.7
0°-90°	4733.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4733.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1513	1513	1513	1513	1513	
5°	1513	1504	1511	1511	1511	144
15°	1441	1444	1469	1480	1485	406
25°	1311	1328	1368	1391	1404	604
35°	1136	1169	1228	1269	1288	711
45°	935	985	1063	1122	1149	723
55°	719	782	877	953	986	643
65°	489	561	669	752	785	483
75°	252	331	434	508	528	267
85°	55	102	111	109	111	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1513.0	1513.0	1513.0	1513.0	1513.0
2.5°	1519.2	1508.3	1513.0	1513.0	1506.7
5°	1513.0	1503.6	1511.4	1511.4	1511.4
7.5°	1502.0	1494.2	1506.7	1509.8	1509.8
10°	1484.8	1481.7	1497.3	1502.0	1503.6
12.5°	1466.1	1464.5	1486.4	1492.6	1497.3
15°	1441.1	1444.2	1469.2	1480.1	1484.8
17.5°	1414.5	1420.7	1448.9	1464.5	1469.2
20°	1383.2	1392.6	1425.4	1441.1	1450.4
22.5°	1348.8	1362.9	1397.3	1416.1	1427.0
25°	1311.3	1328.5	1367.6	1391.0	1403.6
27.5°	1270.7	1292.6	1337.9	1364.5	1377.0
30°	1226.9	1251.9	1302.0	1333.2	1348.8
32.5°	1181.6	1211.3	1266.0	1300.4	1319.2
35°	1136.3	1169.1	1228.5	1269.1	1287.9
37.5°	1091.0	1123.8	1189.4	1233.2	1256.6
40°	1039.4	1078.5	1148.8	1197.2	1220.7
42.5°	989.4	1031.6	1106.6	1159.7	1184.7
45°	934.7	984.7	1062.8	1122.2	1148.8
47.5°	884.6	934.7	1019.1	1081.6	1111.3
50°	829.9	883.1	972.2	1040.9	1072.2
52.5°	776.8	831.5	925.3	998.7	1030.0
55°	719.0	781.5	876.8	953.4	986.2
57.5°	661.1	728.3	826.8	906.5	939.3
60°	604.9	673.6	776.8	856.5	890.9
62.5°	548.6	617.4	725.2	806.5	839.3
65°	489.2	561.1	669.0	751.8	784.6
67.5°	429.8	504.8	612.7	695.5	726.8
70°	367.3	447.0	554.9	636.1	667.4
72.5°	309.5	389.2	495.5	575.2	604.9
75°	251.6	331.4	434.5	508.0	528.3
77.5°	195.4	275.1	367.3	415.8	420.4
80°	142.2	217.3	292.3	306.3	304.8
82.5°	95.3	162.5	201.6	203.2	207.9
85°	54.7	101.6	111.0	109.4	111.0
87.5°	21.9	35.9	31.3	23.4	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)