

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: P388834

Luminaire Tested: **24CZ2-55-SQR-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: P388834
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-SWPD1-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: 4790.9 lumens
Efficiency: N/A
Efficacy: 94.9 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

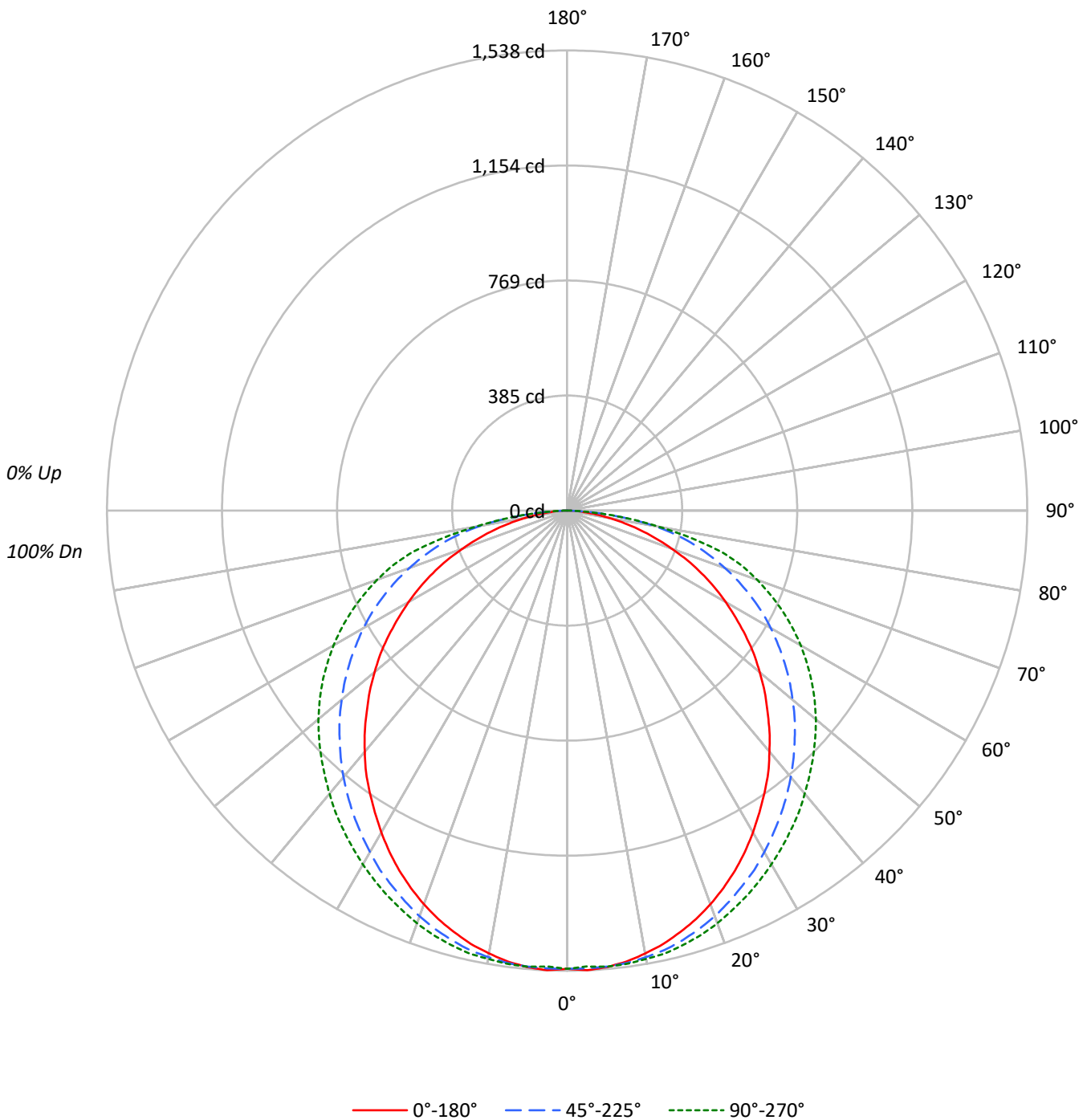
Input Watts (W): 50.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2060	2060	2060
5°	2068	2066	2066
10°	2053	2071	2079
15°	2032	2071	2093
20°	2005	2066	2102
25°	1970	2055	2109
30°	1929	2047	2121
35°	1889	2042	2141
40°	1848	2042	2170
45°	1800	2047	2213
50°	1759	2060	2272
55°	1707	2082	2342
60°	1647	2116	2427
65°	1577	2156	2528
70°	1463	2209	2657
75°	1324	2286	2780
80°	1116	2292	2390
85°	855	1734	1734



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.4	3.0
10°-20°	418.2	8.7
20°-30°	635.3	13.3
30°-40°	772.7	16.1
40°-50°	822.7	17.2
50°-60°	783.6	16.4
60°-70°	655.3	13.7
70°-80°	436.9	9.1
80°-90°	120.9	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°	1198.9	25.0
0°-40°	1971.6	41.2
0°-60°	3577.8	74.7
0°-90°	4790.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4790.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1531	1531	1531	1531	1531	
5°	1531	1522	1530	1530	1530	145
15°	1459	1462	1487	1498	1503	411
25°	1327	1345	1384	1408	1421	611
35°	1150	1183	1244	1285	1304	720
45°	946	997	1076	1136	1163	731
55°	728	791	888	965	998	651
65°	495	568	677	761	794	489
75°	255	335	440	514	535	270
85°	55	103	112	111	112	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1531.4	1531.4	1531.4	1531.4	1531.4
2.5°	1537.7	1526.7	1531.4	1531.4	1525.1
5°	1531.4	1521.9	1529.8	1529.8	1529.8
7.5°	1520.3	1512.4	1525.1	1528.2	1528.2
10°	1502.9	1499.8	1515.6	1520.3	1521.9
12.5°	1483.9	1482.4	1504.5	1510.8	1515.6
15°	1458.6	1461.8	1487.1	1498.2	1502.9
17.5°	1431.7	1438.1	1466.5	1482.4	1487.1
20°	1400.1	1409.6	1442.8	1458.6	1468.1
22.5°	1365.3	1379.5	1414.3	1433.3	1444.4
25°	1327.3	1344.7	1384.3	1408.0	1420.7
27.5°	1286.2	1308.3	1354.2	1381.1	1393.8
30°	1241.9	1267.2	1317.8	1349.5	1365.3
32.5°	1196.0	1226.1	1281.4	1316.2	1335.2
35°	1150.1	1183.4	1243.5	1284.6	1303.6
37.5°	1104.3	1137.5	1203.9	1248.2	1272.0
40°	1052.0	1091.6	1162.8	1211.8	1235.6
42.5°	1001.4	1044.1	1120.1	1173.9	1199.2
45°	946.1	996.7	1075.8	1135.9	1162.8
47.5°	895.4	946.1	1031.5	1094.8	1124.8
50°	840.1	893.8	984.0	1053.6	1085.3
52.5°	786.3	841.6	936.6	1010.9	1042.6
55°	727.7	791.0	887.5	965.0	998.3
57.5°	669.2	737.2	836.9	917.6	950.8
60°	612.2	681.9	786.3	867.0	901.8
62.5°	555.3	624.9	734.1	816.3	849.5
65°	495.2	567.9	677.1	761.0	794.2
67.5°	435.1	511.0	620.2	704.0	735.6
70°	371.8	452.5	561.6	643.9	675.5
72.5°	313.2	393.9	501.5	582.2	612.2
75°	254.7	335.4	439.8	514.2	534.7
77.5°	197.8	278.4	371.8	420.8	425.6
80°	144.0	219.9	295.8	310.1	308.5
82.5°	96.5	164.5	204.1	205.7	210.4
85°	55.4	102.8	112.3	110.7	112.3
87.5°	22.1	36.4	31.6	23.7	23.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)