

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: P388882

Luminaire Tested: **24CZ2-55VHE-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: P388882
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: 24CZ2-55VHE-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: 4790.1 lumens
Efficiency: N/A
Efficacy: 132.7 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

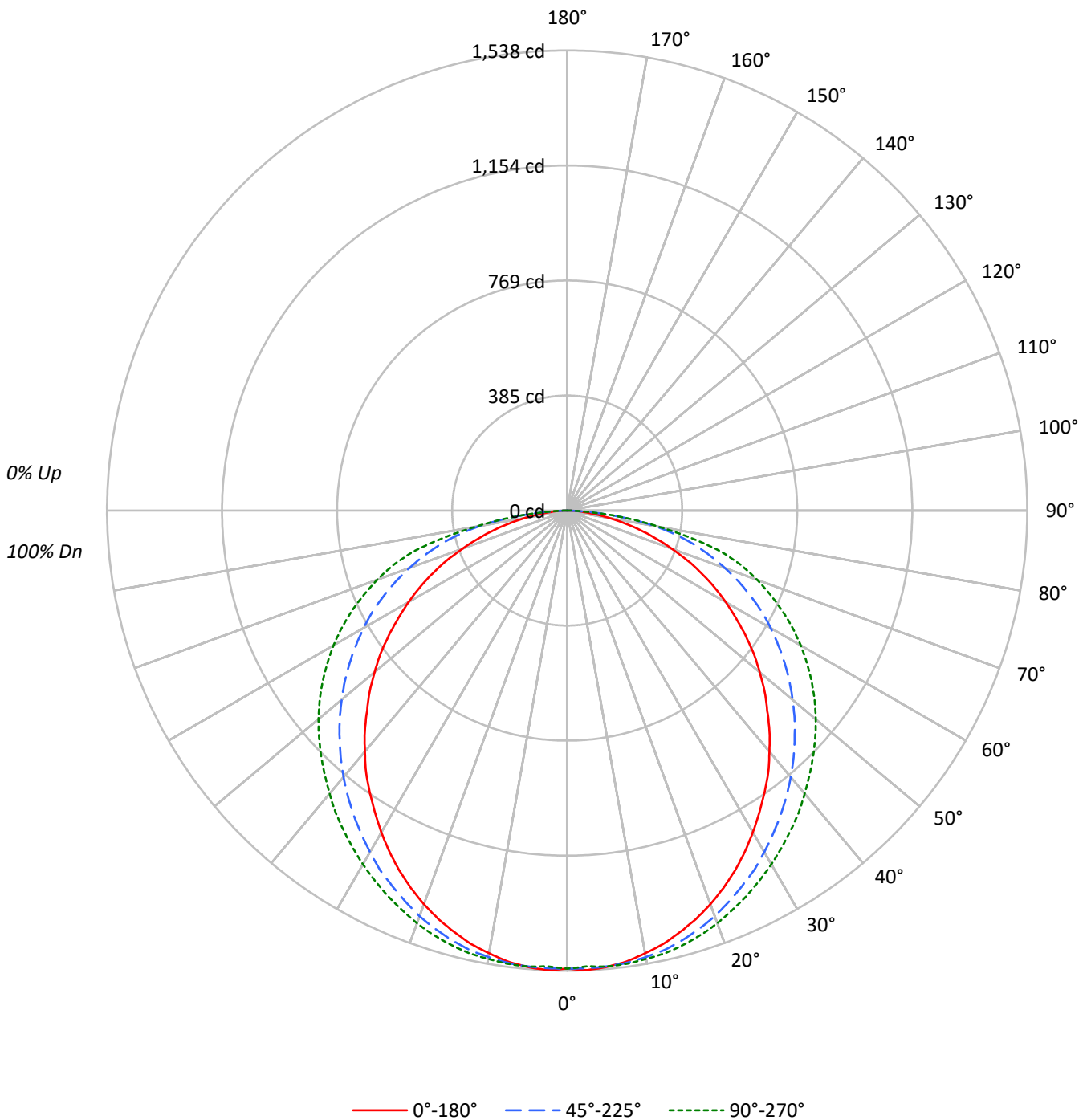
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82					82			
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67					67			
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56					56			
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47					47			
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41					41			
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35					35			
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28					28			
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25					25			
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2060	2060	2060
5°	2068	2066	2066
10°	2053	2070	2079
15°	2031	2071	2093
20°	2004	2066	2102
25°	1970	2055	2109
30°	1929	2047	2121
35°	1889	2042	2141
40°	1848	2042	2170
45°	1800	2047	2212
50°	1758	2060	2271
55°	1707	2082	2341
60°	1647	2115	2426
65°	1576	2155	2528
70°	1462	2209	2657
75°	1324	2286	2779
80°	1115	2292	2390
85°	855	1734	1734



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.3	3.0
10°-20°	418.2	8.7
20°-30°	635.2	13.3
30°-40°	772.6	16.1
40°-50°	822.6	17.2
50°-60°	783.4	16.4
60°-70°	655.2	13.7
70°-80°	436.8	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°	1198.7	25.0
0°-40°	1971.3	41.2
0°-60°	3577.3	74.7
0°-90°	4790.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4790.1	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°	1458	1462	1487	1498	1503	411
25°	1327	1344	1384	1408	1420	611
35°	1150	1183	1243	1284	1303	720
45°	946	996	1076	1136	1163	731
55°	728	791	887	965	998	650
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°	1531.1	1531.1	1531.1	1531.1	1531.1
2.5°	1537.5	1526.4	1531.1	1531.1	1524.8
5°	1531.1	1521.7	1529.6	1529.6	1529.6
7.5°	1520.1	1512.2	1524.8	1528.0	1528.0
10°	1502.7	1499.5	1515.3	1520.1	1521.7
12.5°	1483.7	1482.1	1504.3	1510.6	1515.3
15°	1458.4	1461.6	1486.9	1497.9	1502.7
17.5°	1431.5	1437.8	1466.3	1482.1	1486.9
20°	1399.9	1409.4	1442.6	1458.4	1467.9
22.5°	1365.1	1379.3	1414.1	1433.1	1444.2
25°	1327.1	1344.5	1384.0	1407.8	1420.4
27.5°	1286.0	1308.1	1354.0	1380.9	1393.5
30°	1241.7	1267.0	1317.6	1349.2	1365.1
32.5°	1195.8	1225.9	1281.2	1316.0	1335.0
35°	1149.9	1183.2	1243.3	1284.4	1303.4
37.5°	1104.1	1137.3	1203.7	1248.0	1271.7
40°	1051.9	1091.4	1162.6	1211.6	1235.4
42.5°	1001.3	1044.0	1119.9	1173.7	1199.0
45°	945.9	996.5	1075.6	1135.7	1162.6
47.5°	895.3	945.9	1031.3	1094.6	1124.6
50°	839.9	893.7	983.9	1053.5	1085.1
52.5°	786.1	841.5	936.4	1010.7	1042.4
55°	727.6	790.9	887.4	964.9	998.1
57.5°	669.1	737.1	836.8	917.4	950.6
60°	612.1	681.7	786.1	866.8	901.6
62.5°	555.2	624.8	733.9	816.2	849.4
65°	495.1	567.9	677.0	760.8	794.0
67.5°	435.0	510.9	620.1	703.9	735.5
70°	371.7	452.4	561.5	643.8	675.4
72.5°	313.2	393.9	501.4	582.1	612.1
75°	254.7	335.3	439.7	514.1	534.6
77.5°	197.7	278.4	371.7	420.7	425.5
80°	143.9	219.9	295.8	310.0	308.4
82.5°	96.5	164.5	204.0	205.6	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)