

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: P388877

Luminaire Tested: **24CZ2-55VHE-SQR-UNV-L935-CD1-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: P388877
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-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4522.8 lumens
Efficiency: N/A
Efficacy: 125.3 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

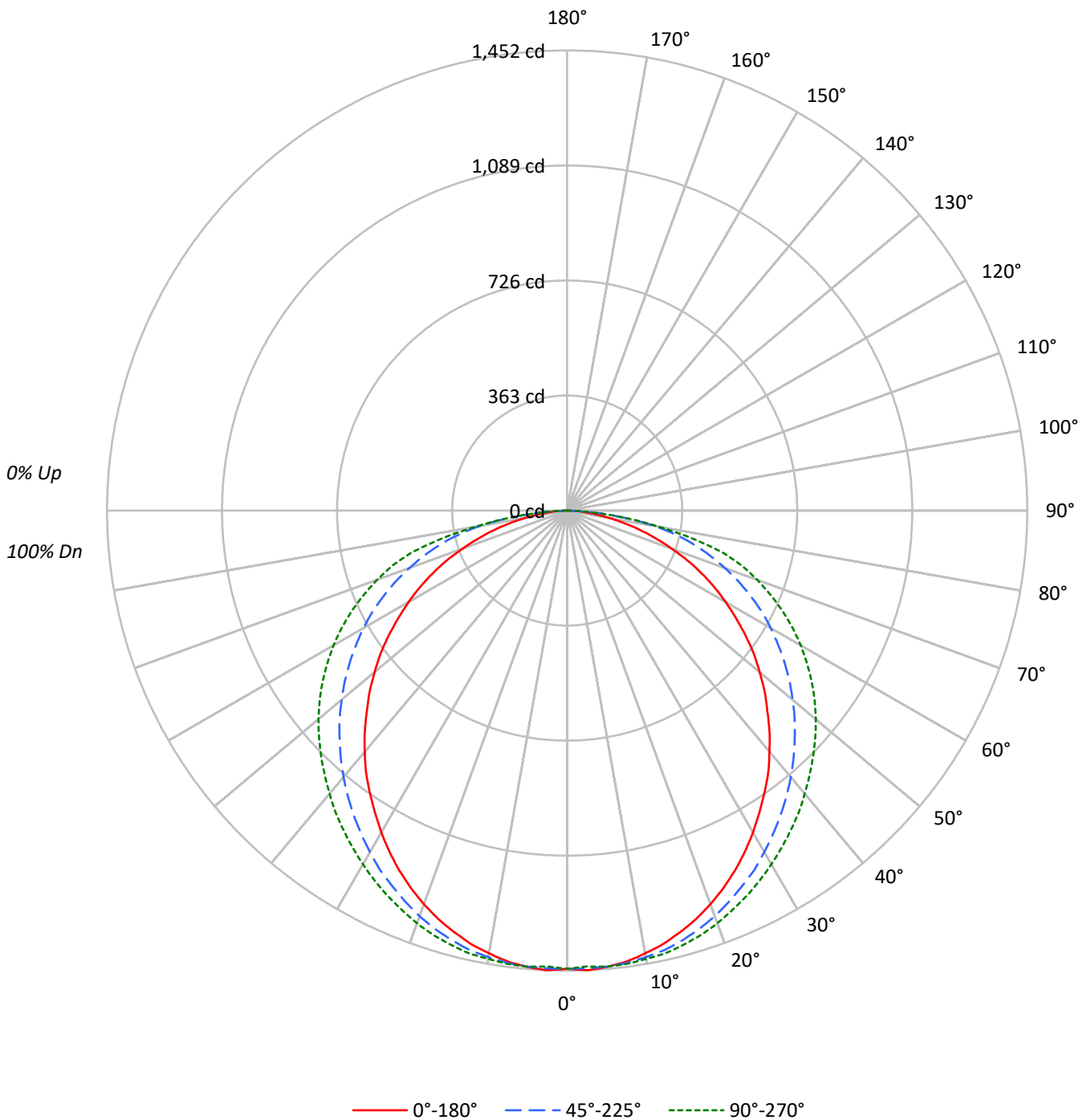
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388877

CATALOG NUMBER: 24CZ2-55VHE-SQR-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388877

CATALOG NUMBER: 24CZ2-55VHE-SQR-UNV-L935-CD1-U

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°	1945	1945	1945
5°	1953	1951	1951
10°	1938	1955	1963
15°	1918	1956	1976
20°	1892	1950	1985
25°	1860	1940	1991
30°	1821	1933	2002
35°	1783	1928	2021
40°	1744	1928	2049
45°	1699	1932	2089
50°	1660	1945	2144
55°	1612	1966	2211
60°	1555	1998	2291
65°	1488	2035	2387
70°	1381	2086	2509
75°	1250	2158	2624
80°	1053	2164	2256
85°	807	1636	1636



TEST NUMBER: P388877

CATALOG NUMBER: 24CZ2-55VHE-SQR-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	3.0
10°-20°	394.8	8.7
20°-30°	599.7	13.3
30°-40°	729.5	16.1
40°-50°	776.7	17.2
50°-60°	739.7	16.4
60°-70°	618.6	13.7
70°-80°	412.5	9.1
80°-90°	114.1	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°	1131.8	25.0
0°-40°	1861.2	41.2
0°-60°	3377.6	74.7
0°-90°	4522.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4522.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1446	1437	1444	1444	1444	137
15°	1377	1380	1404	1414	1419	388
25°	1253	1270	1307	1329	1341	577
35°	1086	1117	1174	1213	1231	679
45°	893	941	1016	1072	1098	690
55°	687	747	838	911	942	614
65°	468	536	639	718	750	462
75°	240	317	415	485	505	255
85°	52	97	106	104	106	63
90°	0	0	0	0	0	



TEST NUMBER: P388877

CATALOG NUMBER: 24CZ2-55VHE-SQR-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1445.7	1445.7	1445.7	1445.7	1445.7
2.5°	1451.7	1441.2	1445.7	1445.7	1439.7
5°	1445.7	1436.7	1444.2	1444.2	1444.2
7.5°	1435.3	1427.8	1439.7	1442.7	1442.7
10°	1418.8	1415.8	1430.8	1435.3	1436.7
12.5°	1400.9	1399.4	1420.3	1426.3	1430.8
15°	1377.0	1380.0	1403.9	1414.3	1418.8
17.5°	1351.6	1357.6	1384.5	1399.4	1403.9
20°	1321.7	1330.7	1362.1	1377.0	1386.0
22.5°	1288.9	1302.3	1335.2	1353.1	1363.6
25°	1253.0	1269.5	1306.8	1329.2	1341.2
27.5°	1214.2	1235.1	1278.4	1303.8	1315.8
30°	1172.4	1196.3	1244.1	1274.0	1288.9
32.5°	1129.1	1157.5	1209.7	1242.6	1260.5
35°	1085.8	1117.1	1173.9	1212.7	1230.6
37.5°	1042.5	1073.8	1136.6	1178.4	1200.8
40°	993.2	1030.5	1097.7	1144.0	1166.4
42.5°	945.4	985.7	1057.4	1108.2	1132.1
45°	893.1	940.9	1015.6	1072.3	1097.7
47.5°	845.3	893.1	973.8	1033.5	1061.9
50°	793.0	843.8	929.0	994.7	1024.5
52.5°	742.3	794.5	884.2	954.3	984.2
55°	687.0	746.7	837.9	911.0	942.4
57.5°	631.8	696.0	790.1	866.2	897.6
60°	578.0	643.7	742.3	818.4	851.3
62.5°	524.2	589.9	693.0	770.6	802.0
65°	467.5	536.2	639.2	718.4	749.7
67.5°	410.7	482.4	585.5	664.6	694.5
70°	351.0	427.1	530.2	607.9	637.7
72.5°	295.7	371.9	473.4	549.6	578.0
75°	240.5	316.6	415.2	485.4	504.8
77.5°	186.7	262.9	351.0	397.3	401.8
80°	135.9	207.6	279.3	292.7	291.2
82.5°	91.1	155.3	192.7	194.2	198.6
85°	52.3	97.1	106.0	104.5	106.0
87.5°	20.9	34.4	29.9	22.4	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)