

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: P388873

Luminaire Tested: **24CZ2-55VHE-SQR-UNV-L930-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: P388873
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-L930-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4358.8 lumens
Efficiency: N/A
Efficacy: 120.7 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

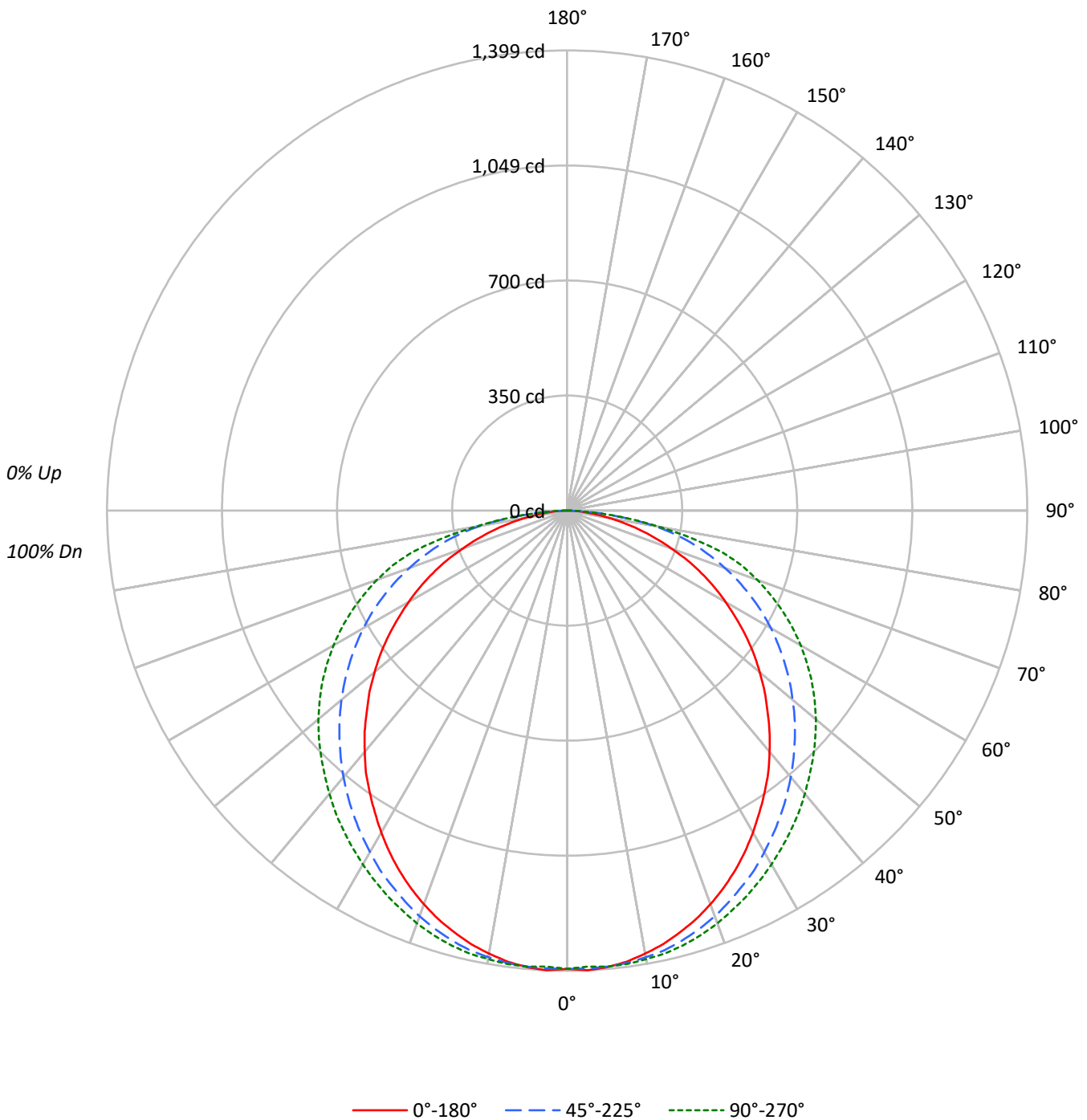
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388873

CATALOG NUMBER: 24CZ2-55VHE-SQR-UNV-L930-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388873

CATALOG NUMBER: 24CZ2-55VHE-SQR-UNV-L930-CD1-SWPD1-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°	1875	1875	1875
5°	1882	1880	1880
10°	1868	1884	1892
15°	1849	1885	1905
20°	1824	1880	1913
25°	1793	1870	1919
30°	1755	1863	1930
35°	1719	1858	1948
40°	1681	1858	1974
45°	1638	1862	2013
50°	1600	1874	2067
55°	1553	1894	2130
60°	1499	1925	2208
65°	1434	1961	2301
70°	1330	2010	2418
75°	1205	2080	2529
80°	1015	2086	2175
85°	778	1578	1578



TEST NUMBER: P388873

CATALOG NUMBER: 24CZ2-55VHE-SQR-UNV-L930-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.3	3.0
10°-20°	380.5	8.7
20°-30°	578.0	13.3
30°-40°	703.0	16.1
40°-50°	748.5	17.2
50°-60°	712.9	16.4
60°-70°	596.2	13.7
70°-80°	397.5	9.1
80°-90°	110.0	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°	1090.7	25.0
0°-40°	1793.7	41.2
0°-60°	3255.1	74.7
0°-90°	4358.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4358.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1393	1393	1393	1393	1393	
5°	1393	1385	1392	1392	1392	132
15°	1327	1330	1353	1363	1367	374
25°	1208	1223	1259	1281	1292	556
35°	1046	1077	1131	1169	1186	655
45°	861	907	979	1033	1058	665
55°	662	720	808	878	908	592
65°	450	517	616	692	723	445
75°	232	305	400	468	486	245
85°	50	94	102	101	102	61
90°	0	0	0	0	0	



TEST NUMBER: P388873

CATALOG NUMBER: 24CZ2-55VHE-SQR-UNV-L930-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.3	1393.3	1393.3	1393.3	1393.3
2.5°	1399.0	1389.0	1393.3	1393.3	1387.5
5°	1393.3	1384.6	1391.8	1391.8	1391.8
7.5°	1383.2	1376.0	1387.5	1390.4	1390.4
10°	1367.4	1364.5	1378.9	1383.2	1384.6
12.5°	1350.1	1348.7	1368.8	1374.6	1378.9
15°	1327.1	1330.0	1353.0	1363.1	1367.4
17.5°	1302.6	1308.4	1334.3	1348.7	1353.0
20°	1273.8	1282.5	1312.7	1327.1	1335.7
22.5°	1242.2	1255.1	1286.8	1304.0	1314.1
25°	1207.6	1223.4	1259.4	1281.0	1292.5
27.5°	1170.2	1190.3	1232.1	1256.5	1268.1
30°	1129.9	1152.9	1199.0	1227.8	1242.2
32.5°	1088.1	1115.5	1165.9	1197.5	1214.8
35°	1046.4	1076.6	1131.3	1168.7	1186.0
37.5°	1004.7	1034.9	1095.3	1135.6	1157.2
40°	957.2	993.1	1057.9	1102.5	1124.1
42.5°	911.1	950.0	1019.1	1068.0	1091.0
45°	860.7	906.8	978.8	1033.4	1057.9
47.5°	814.7	860.7	938.5	996.0	1023.4
50°	764.3	813.2	895.3	958.6	987.4
52.5°	715.4	765.7	852.1	919.7	948.5
55°	662.1	719.7	807.5	878.0	908.2
57.5°	608.8	670.7	761.4	834.8	865.0
60°	557.0	620.4	715.4	788.8	820.4
62.5°	505.2	568.5	667.9	742.7	772.9
65°	450.5	516.7	616.0	692.3	722.6
67.5°	395.8	464.9	564.2	640.5	669.3
70°	338.2	411.7	511.0	585.8	614.6
72.5°	285.0	358.4	456.3	529.7	557.0
75°	231.7	305.1	400.1	467.8	486.5
77.5°	179.9	253.3	338.2	382.9	387.2
80°	131.0	200.1	269.2	282.1	280.7
82.5°	87.8	149.7	185.7	187.1	191.4
85°	50.4	93.6	102.2	100.8	102.2
87.5°	20.2	33.1	28.8	21.6	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)