

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: P391461

Luminaire Tested: **24CZ2-55VHE-HRP-UNV-L930-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: P391461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55VHE-HRP-UNV-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3806.1 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

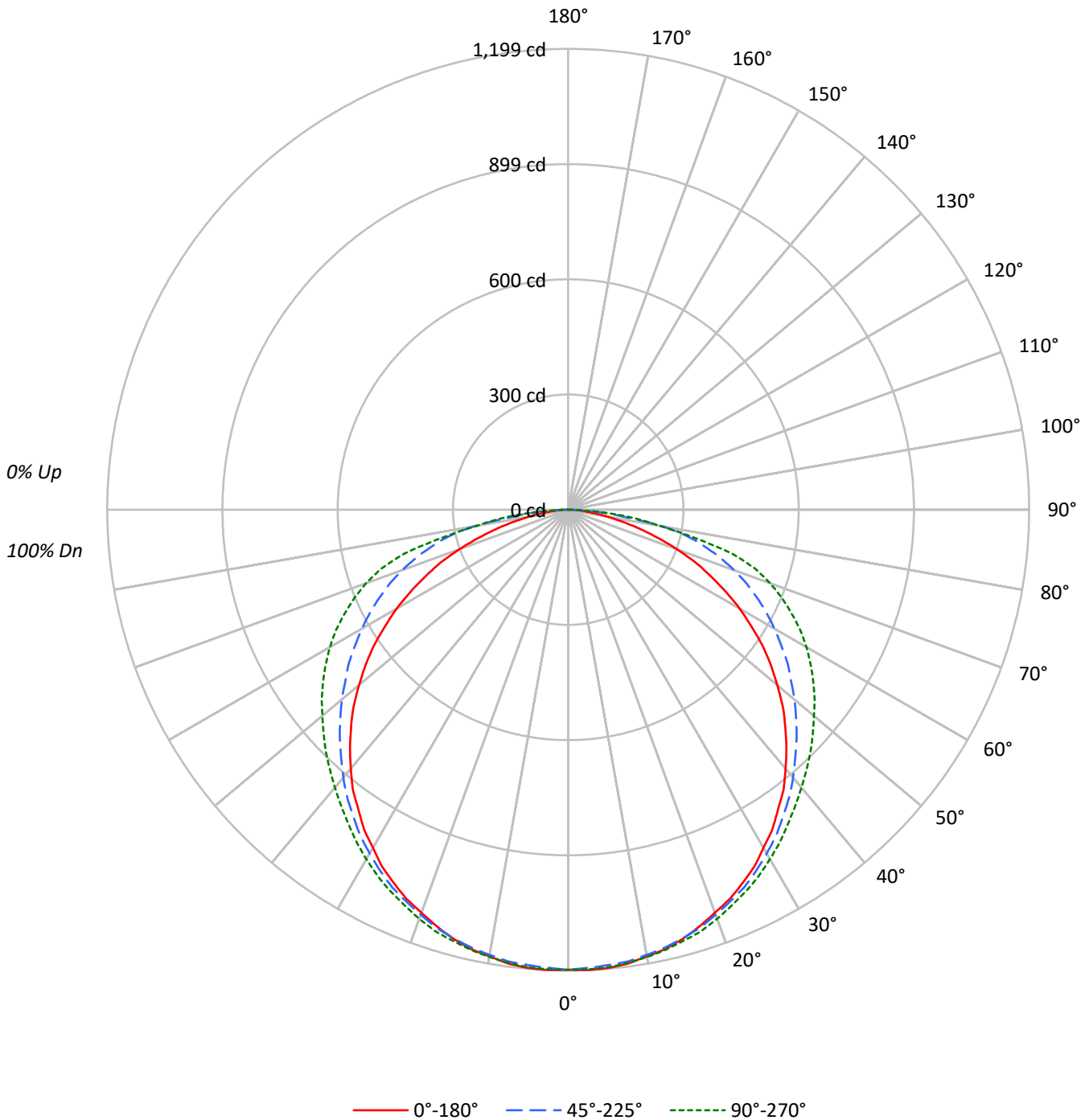
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P391461

CATALOG NUMBER: 24CZ2-55VHE-HRP-UNV-L930-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P391461

CATALOG NUMBER: 24CZ2-55VHE-HRP-UNV-L930-CD1-SDWPD1-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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1610	1610	1610
5°	1617	1606	1614
10°	1612	1607	1615
15°	1609	1607	1617
20°	1598	1606	1622
25°	1592	1609	1626
30°	1578	1604	1631
35°	1563	1600	1637
40°	1545	1598	1658
45°	1520	1599	1696
50°	1486	1608	1747
55°	1448	1634	1825
60°	1387	1666	1925
65°	1298	1725	2044
70°	1181	1805	2198
75°	1001	1904	2297
80°	790	1916	1858
85°	584	1457	1632



TEST NUMBER: P391461

CATALOG NUMBER: 24CZ2-55VHE-HRP-UNV-L930-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	3.0
10°-20°	326.8	8.6
20°-30°	499.7	13.1
30°-40°	610.9	16.0
40°-50°	651.1	17.1
50°-60°	622.5	16.4
60°-70°	527.3	13.9
70°-80°	354.4	9.3
80°-90°	100.0	2.6
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°	940.0	24.7
0°-40°	1550.8	40.7
0°-60°	2824.4	74.2
0°-90°	3806.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3806.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1197	1197	1197	1197	1197	
5°	1197	1195	1189	1195	1195	114
15°	1155	1155	1154	1163	1161	326
25°	1072	1076	1084	1093	1095	494
35°	952	959	974	993	997	596
45°	799	812	840	876	891	616
55°	617	640	697	751	778	550
65°	408	449	542	614	642	405
75°	193	262	366	428	442	206
85°	38	77	94	102	106	47
90°	0	0	0	0	0	



TEST NUMBER: P391461

CATALOG NUMBER: 24CZ2-55VHE-HRP-UNV-L930-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1196.9	1196.9	1196.9	1196.9	1196.9
2.5°	1198.8	1198.8	1193.1	1196.9	1196.9
5°	1196.9	1195.0	1189.4	1195.0	1195.0
7.5°	1191.2	1189.4	1185.6	1191.2	1189.4
10°	1179.9	1179.9	1176.1	1181.8	1181.8
12.5°	1170.5	1168.6	1166.7	1174.3	1172.4
15°	1155.4	1155.4	1153.5	1162.9	1161.0
17.5°	1136.5	1138.4	1140.3	1147.8	1149.7
20°	1115.7	1119.5	1121.4	1132.7	1132.7
22.5°	1096.9	1098.7	1102.5	1113.8	1113.8
25°	1072.3	1076.1	1083.6	1093.1	1095.0
27.5°	1047.8	1049.7	1059.1	1072.3	1074.2
30°	1015.7	1021.3	1032.7	1047.8	1049.7
32.5°	987.4	993.0	1006.2	1021.3	1025.1
35°	951.5	959.0	974.1	993.0	996.8
37.5°	919.4	925.1	943.9	964.7	970.4
40°	879.7	891.1	910.0	934.5	943.9
42.5°	840.1	851.4	874.1	906.2	917.5
45°	798.6	811.8	840.1	876.0	891.1
47.5°	757.0	772.1	804.2	845.8	862.8
50°	709.8	728.7	768.4	815.6	834.4
52.5°	664.5	687.2	730.6	783.5	808.0
55°	617.3	640.0	696.6	751.4	777.8
57.5°	564.5	594.7	657.0	719.3	747.6
60°	515.4	543.7	619.2	687.2	715.5
62.5°	462.5	500.3	581.5	653.2	681.5
65°	407.8	449.3	541.8	613.6	641.9
67.5°	358.7	404.0	502.2	573.9	602.2
70°	300.2	356.8	458.8	530.5	558.8
72.5°	245.4	307.7	413.4	483.3	509.7
75°	192.6	262.4	366.2	428.5	441.8
77.5°	143.5	217.1	317.2	343.6	334.2
80°	101.9	173.7	247.3	234.1	239.8
82.5°	66.1	132.2	152.9	173.7	179.3
85°	37.8	77.4	94.4	101.9	105.7
87.5°	17.0	28.3	37.8	37.8	35.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)