

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: P391466

Luminaire Tested: **24CZ2-55VHE-HRP-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: P391466
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-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3997.4 lumens
Efficiency: N/A
Efficacy: 110.7 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

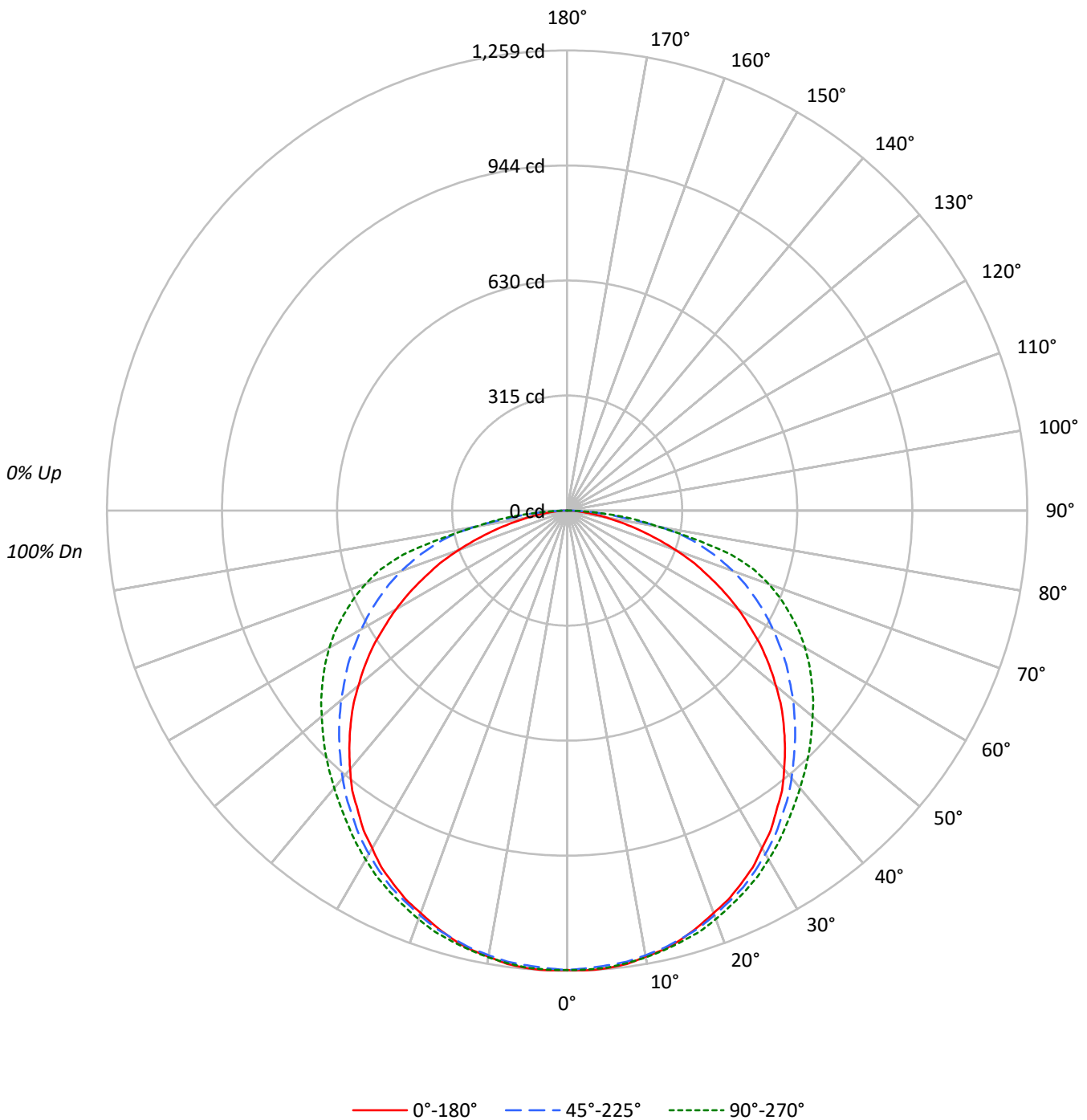
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P391466

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

Luminous Intensity Polar Plot





TEST NUMBER: P391466

CATALOG NUMBER: 24CZ2-55VHE-HRP-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	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°	1691	1691	1691
5°	1698	1687	1695
10°	1693	1688	1696
15°	1690	1688	1699
20°	1678	1686	1703
25°	1672	1690	1707
30°	1657	1685	1713
35°	1641	1680	1720
40°	1623	1679	1741
45°	1596	1679	1781
50°	1560	1689	1834
55°	1521	1716	1916
60°	1457	1750	2022
65°	1364	1812	2146
70°	1240	1895	2309
75°	1051	2000	2412
80°	830	2012	1951
85°	613	1530	1714



TEST NUMBER: P391466

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.2	3.0
10°-20°	343.2	8.6
20°-30°	524.8	13.1
30°-40°	641.6	16.0
40°-50°	683.8	17.1
50°-60°	653.8	16.4
60°-70°	553.8	13.9
70°-80°	372.2	9.3
80°-90°	105.0	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°	987.2	24.7
0°-40°	1628.8	40.7
0°-60°	2966.3	74.2
0°-90°	3997.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3997.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1257	1257	1257	1257	1257	
5°	1257	1255	1249	1255	1255	119
15°	1213	1213	1212	1221	1219	342
25°	1126	1130	1138	1148	1150	519
35°	999	1007	1023	1043	1047	626
45°	839	853	882	920	936	647
55°	648	672	732	789	817	577
65°	428	472	569	644	674	425
75°	202	276	385	450	464	217
85°	40	81	99	107	111	49
90°	0	0	0	0	0	



TEST NUMBER: P391466

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1257.1	1257.1	1257.1	1257.1	1257.1
2.5°	1259.1	1259.1	1253.1	1257.1	1257.1
5°	1257.1	1255.1	1249.1	1255.1	1255.1
7.5°	1251.1	1249.1	1245.2	1251.1	1249.1
10°	1239.2	1239.2	1235.3	1241.2	1241.2
12.5°	1229.3	1227.3	1225.3	1233.3	1231.3
15°	1213.4	1213.4	1211.5	1221.4	1219.4
17.5°	1193.6	1195.6	1197.6	1205.5	1207.5
20°	1171.8	1175.8	1177.8	1189.7	1189.7
22.5°	1152.0	1154.0	1157.9	1169.8	1169.8
25°	1126.2	1130.2	1138.1	1148.0	1150.0
27.5°	1100.4	1102.4	1112.3	1126.2	1128.2
30°	1066.7	1072.7	1084.6	1100.4	1102.4
32.5°	1037.0	1042.9	1056.8	1072.7	1076.6
35°	999.3	1007.2	1023.1	1042.9	1046.9
37.5°	965.6	971.6	991.4	1013.2	1019.1
40°	924.0	935.9	955.7	981.5	991.4
42.5°	882.3	894.2	918.0	951.7	963.6
45°	838.7	852.6	882.3	920.0	935.9
47.5°	795.1	810.9	844.7	888.3	906.1
50°	745.5	765.3	807.0	856.6	876.4
52.5°	697.9	721.7	767.3	822.8	848.6
55°	648.4	672.2	731.6	789.1	816.9
57.5°	592.8	624.6	690.0	755.4	785.2
60°	541.3	571.0	650.3	721.7	751.5
62.5°	485.8	525.4	610.7	686.0	715.8
65°	428.3	471.9	569.1	644.4	674.1
67.5°	376.7	424.3	527.4	602.8	632.5
70°	315.3	374.7	481.8	557.2	586.9
72.5°	257.8	323.2	434.2	507.6	535.3
75°	202.2	275.6	384.7	450.1	464.0
77.5°	150.7	228.0	333.1	360.9	350.9
80°	107.1	182.4	259.7	245.9	251.8
82.5°	69.4	138.8	160.6	182.4	188.4
85°	39.7	81.3	99.1	107.1	111.0
87.5°	17.8	29.7	39.7	39.7	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)