

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: P390888

Luminaire Tested: **24CZ2-100VHE-HRP-UNV-L935-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: P390888
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: 24CZ2-100VHE-HRP-UNV-L935-CD1-SDWPD1-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: 7135.9 lumens
Efficiency: N/A
Efficacy: 102.5 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

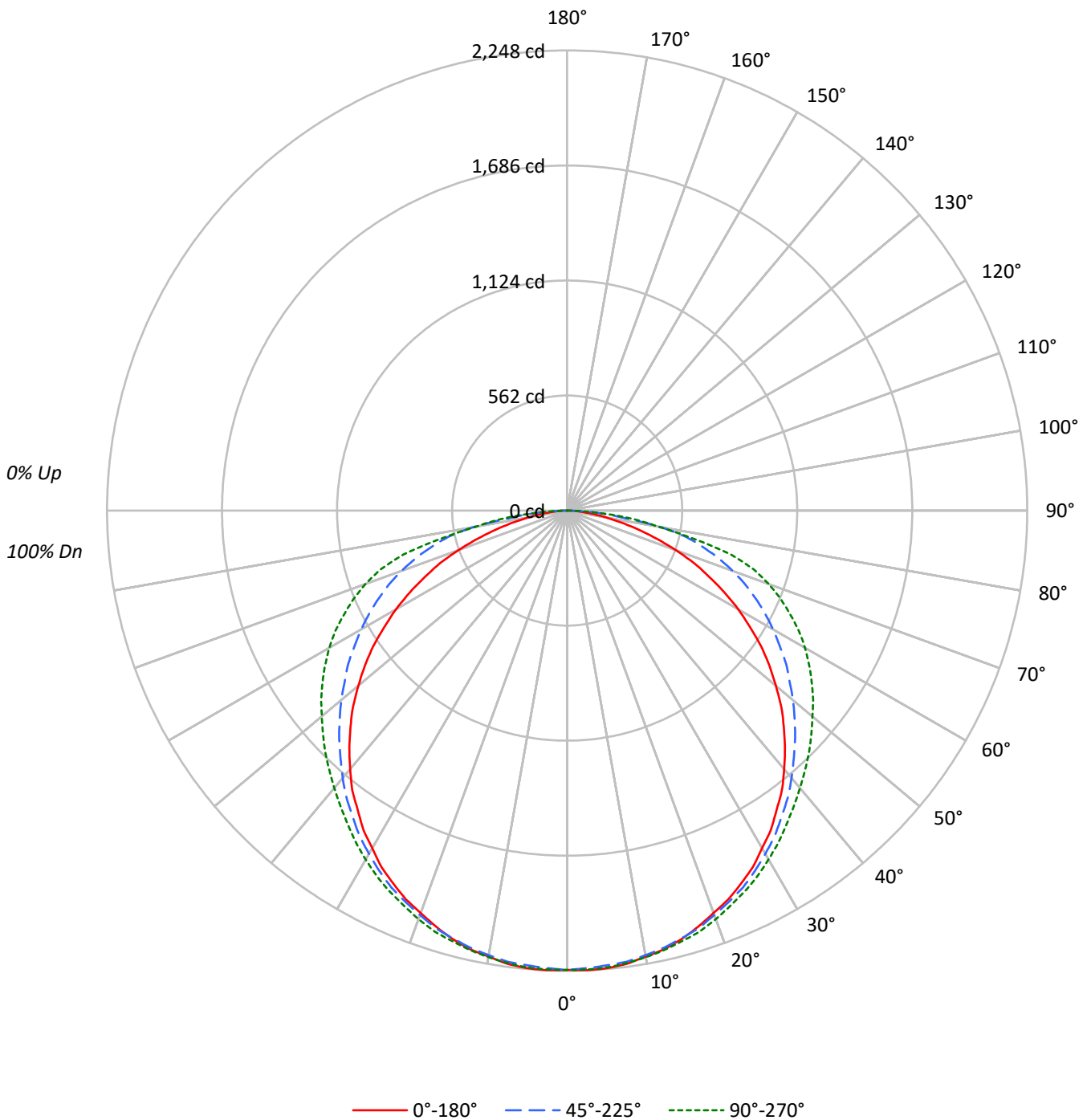
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390888

CATALOG NUMBER: 24CZ2-100VHE-HRP-UNV-L935-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390888

CATALOG NUMBER: 24CZ2-100VHE-HRP-UNV-L935-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°	3019	3019	3019
5°	3031	3012	3026
10°	3022	3013	3027
15°	3017	3012	3032
20°	2995	3010	3041
25°	2985	3016	3048
30°	2958	3008	3058
35°	2930	3000	3070
40°	2897	2996	3108
45°	2849	2997	3179
50°	2786	3015	3275
55°	2715	3064	3421
60°	2600	3124	3610
65°	2434	3234	3831
70°	2214	3384	4122
75°	1877	3570	4305
80°	1481	3593	3483
85°	1093	2732	3060



TEST NUMBER: P390888

CATALOG NUMBER: 24CZ2-100VHE-HRP-UNV-L935-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.9	3.0
10°-20°	612.6	8.6
20°-30°	936.8	13.1
30°-40°	1145.3	16.0
40°-50°	1220.6	17.1
50°-60°	1167.1	16.4
60°-70°	988.7	13.9
70°-80°	664.5	9.3
80°-90°	187.4	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°	1762.3	24.7
0°-40°	2907.6	40.7
0°-60°	5295.3	74.2
0°-90°	7135.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7135.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2244	2244	2244	2244	2244	
5°	2244	2240	2230	2240	2240	213
15°	2166	2166	2163	2180	2177	611
25°	2010	2018	2032	2049	2053	927
35°	1784	1798	1826	1862	1869	1118
45°	1497	1522	1575	1642	1671	1155
55°	1157	1200	1306	1409	1458	1031
65°	764	842	1016	1150	1203	759
75°	361	492	687	804	828	387
85°	71	145	177	191	198	88
90°	0	0	0	0	0	



TEST NUMBER: P390888

CATALOG NUMBER: 24CZ2-100VHE-HRP-UNV-L935-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2244.0	2244.0	2244.0	2244.0	2244.0
2.5°	2247.6	2247.6	2237.0	2244.0	2244.0
5°	2244.0	2240.5	2229.9	2240.5	2240.5
7.5°	2233.4	2229.9	2222.8	2233.4	2229.9
10°	2212.2	2212.2	2205.1	2215.7	2215.7
12.5°	2194.5	2190.9	2187.4	2201.6	2198.0
15°	2166.2	2166.2	2162.6	2180.3	2176.8
17.5°	2130.8	2134.3	2137.9	2152.0	2155.5
20°	2091.8	2098.9	2102.5	2123.7	2123.7
22.5°	2056.4	2060.0	2067.1	2088.3	2088.3
25°	2010.4	2017.5	2031.7	2049.4	2052.9
27.5°	1964.4	1968.0	1985.7	2010.4	2014.0
30°	1904.2	1914.9	1936.1	1964.4	1968.0
32.5°	1851.2	1861.8	1886.5	1914.9	1921.9
35°	1783.9	1798.1	1826.4	1861.8	1868.9
37.5°	1723.7	1734.4	1769.7	1808.7	1819.3
40°	1649.4	1670.6	1706.0	1752.0	1769.7
42.5°	1575.1	1596.3	1638.8	1699.0	1720.2
45°	1497.2	1522.0	1575.1	1642.3	1670.6
47.5°	1419.3	1447.7	1507.8	1585.7	1617.5
50°	1330.8	1366.2	1440.6	1529.1	1564.5
52.5°	1245.9	1288.4	1369.8	1468.9	1514.9
55°	1157.4	1199.9	1306.1	1408.7	1458.3
57.5°	1058.3	1114.9	1231.7	1348.5	1401.6
60°	966.3	1019.4	1161.0	1288.4	1341.5
62.5°	867.2	938.0	1090.2	1224.7	1277.8
65°	764.5	842.4	1015.8	1150.3	1203.4
67.5°	672.5	757.5	941.5	1076.0	1129.1
70°	562.8	669.0	860.1	994.6	1047.7
72.5°	460.1	576.9	775.1	906.1	955.7
75°	361.0	492.0	686.7	803.5	828.2
77.5°	269.0	407.0	594.6	644.2	626.5
80°	191.1	325.6	463.7	438.9	449.5
82.5°	123.9	247.8	286.7	325.6	336.3
85°	70.8	145.1	177.0	191.1	198.2
87.5°	31.9	53.1	70.8	70.8	67.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)