

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: P390795

Luminaire Tested: **22CZ2-90VHE-HRP-UNV-L940-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: P390795
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-90VHE-HRP-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6455.6 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

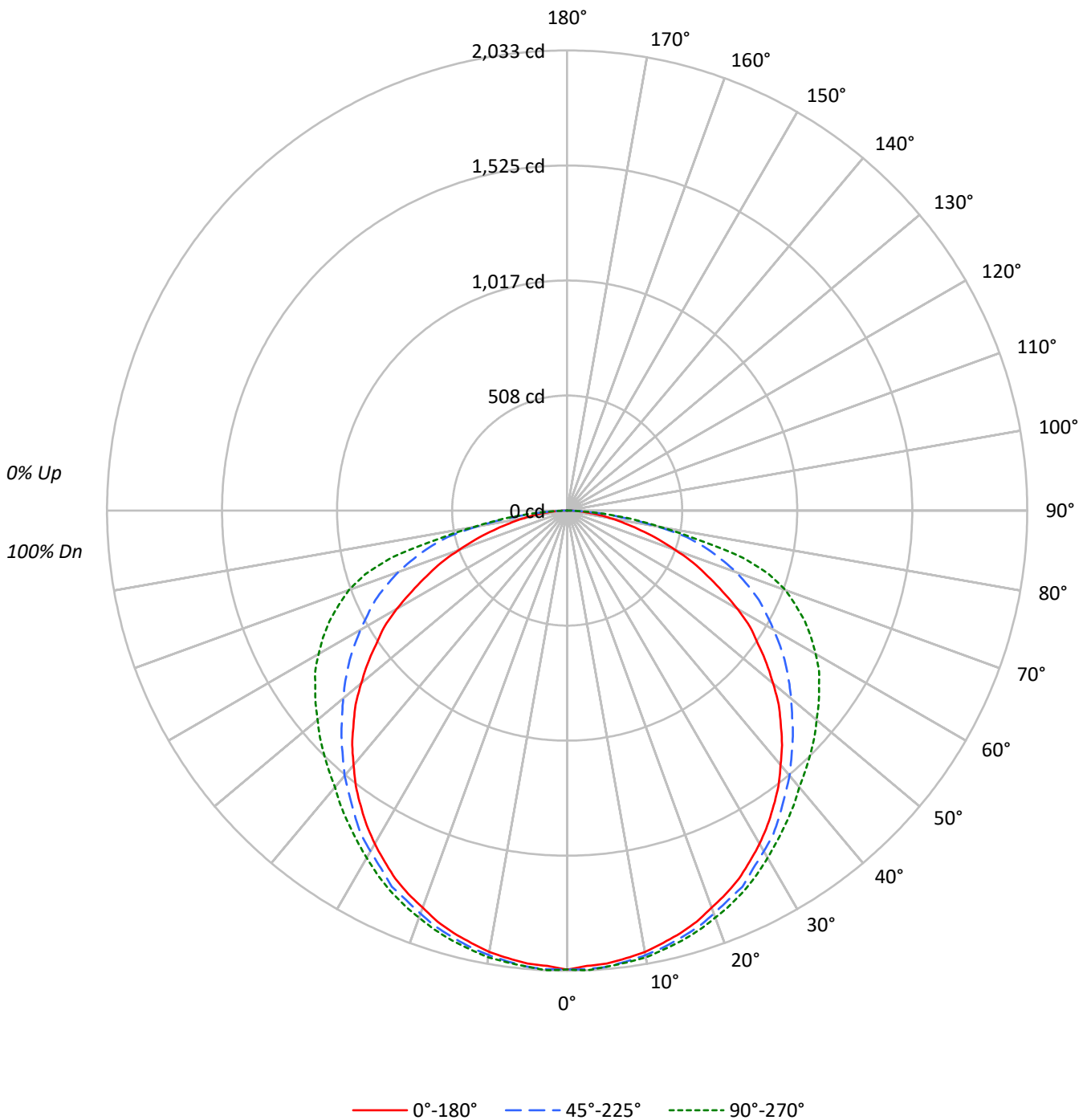
Input Watts (W): 68.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	5457	5457	5457
5°	5426	5465	5465
10°	5411	5450	5476
15°	5385	5438	5477
20°	5345	5426	5481
25°	5330	5443	5499
30°	5283	5401	5504
35°	5226	5382	5538
40°	5155	5372	5605
45°	5079	5367	5783
50°	4970	5408	6024
55°	4835	5525	6372
60°	4677	5674	6824
65°	4355	5957	7379
70°	3998	6240	8071
75°	3506	6567	8345
80°	3017	6256	6550
85°	2640	4545	4986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.8	3.0
10°-20°	550.7	8.5
20°-30°	840.3	13.0
30°-40°	1026.0	15.9
40°-50°	1097.0	17.0
50°-60°	1058.9	16.4
60°-70°	911.5	14.1
70°-80°	616.7	9.6
80°-90°	162.7	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°	1582.8	24.5
0°-40°	2608.8	40.4
0°-60°	4764.7	73.8
0°-90°	6455.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6455.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2028	2028	2028	2028	2028	
5°	2009	2014	2023	2023	2023	191
15°	1933	1938	1952	1961	1966	545
25°	1795	1805	1833	1843	1852	826
35°	1591	1605	1638	1672	1686	995
45°	1334	1358	1410	1482	1520	1030
55°	1030	1064	1178	1296	1358	923
65°	684	750	936	1083	1159	680
75°	337	446	632	760	803	362
85°	86	119	147	152	162	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2027.8	2027.8	2027.8	2027.8	2027.8
2.5°	2013.6	2018.3	2027.8	2027.8	2032.6
5°	2008.8	2013.6	2023.1	2023.1	2023.1
7.5°	1994.6	1999.3	2008.8	2013.6	2013.6
10°	1980.3	1985.1	1994.6	1999.3	2004.1
12.5°	1956.6	1961.3	1975.6	1985.1	1985.1
15°	1932.8	1937.6	1951.8	1961.3	1966.1
17.5°	1904.3	1913.8	1928.1	1937.6	1942.3
20°	1866.4	1875.8	1894.8	1909.1	1913.8
22.5°	1833.1	1842.6	1861.6	1875.8	1885.3
25°	1795.1	1804.6	1833.1	1842.6	1852.1
27.5°	1747.6	1757.1	1780.9	1799.9	1814.1
30°	1700.1	1709.6	1738.1	1761.9	1771.4
32.5°	1647.9	1662.1	1695.4	1714.4	1728.6
35°	1590.9	1605.2	1638.4	1671.6	1685.9
37.5°	1533.9	1548.2	1581.4	1624.2	1643.1
40°	1467.4	1486.4	1529.2	1586.2	1595.7
42.5°	1405.7	1429.4	1467.4	1533.9	1557.7
45°	1334.5	1358.2	1410.4	1481.7	1519.7
47.5°	1268.0	1291.7	1348.7	1434.2	1481.7
50°	1187.2	1220.5	1291.7	1391.5	1438.9
52.5°	1111.3	1139.8	1234.7	1344.0	1401.0
55°	1030.5	1063.8	1177.7	1296.5	1358.2
57.5°	959.3	987.8	1116.0	1249.0	1320.2
60°	869.1	907.1	1054.3	1196.7	1268.0
62.5°	774.1	831.1	992.5	1139.8	1215.7
65°	683.9	750.3	935.5	1082.8	1158.8
67.5°	603.1	674.4	864.3	1021.0	1092.3
70°	508.1	598.4	793.1	945.0	1025.8
72.5°	422.7	522.4	712.3	864.3	935.5
75°	337.2	446.4	631.6	759.8	802.6
77.5°	261.2	365.7	541.4	579.4	584.1
80°	194.7	289.7	403.7	408.4	422.7
82.5°	133.0	204.2	261.2	284.9	289.7
85°	85.5	118.7	147.2	152.0	161.5
87.5°	38.0	42.7	52.2	47.5	47.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)