

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: P390837

Luminaire Tested: **22CZ2-95VHE-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: P390837
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: 22CZ2-95VHE-HRP-UNV-L930-CD1-SDWPD1-U
Description: 2x2 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: 6566.7 lumens
Efficiency: N/A
Efficacy: 90.3 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

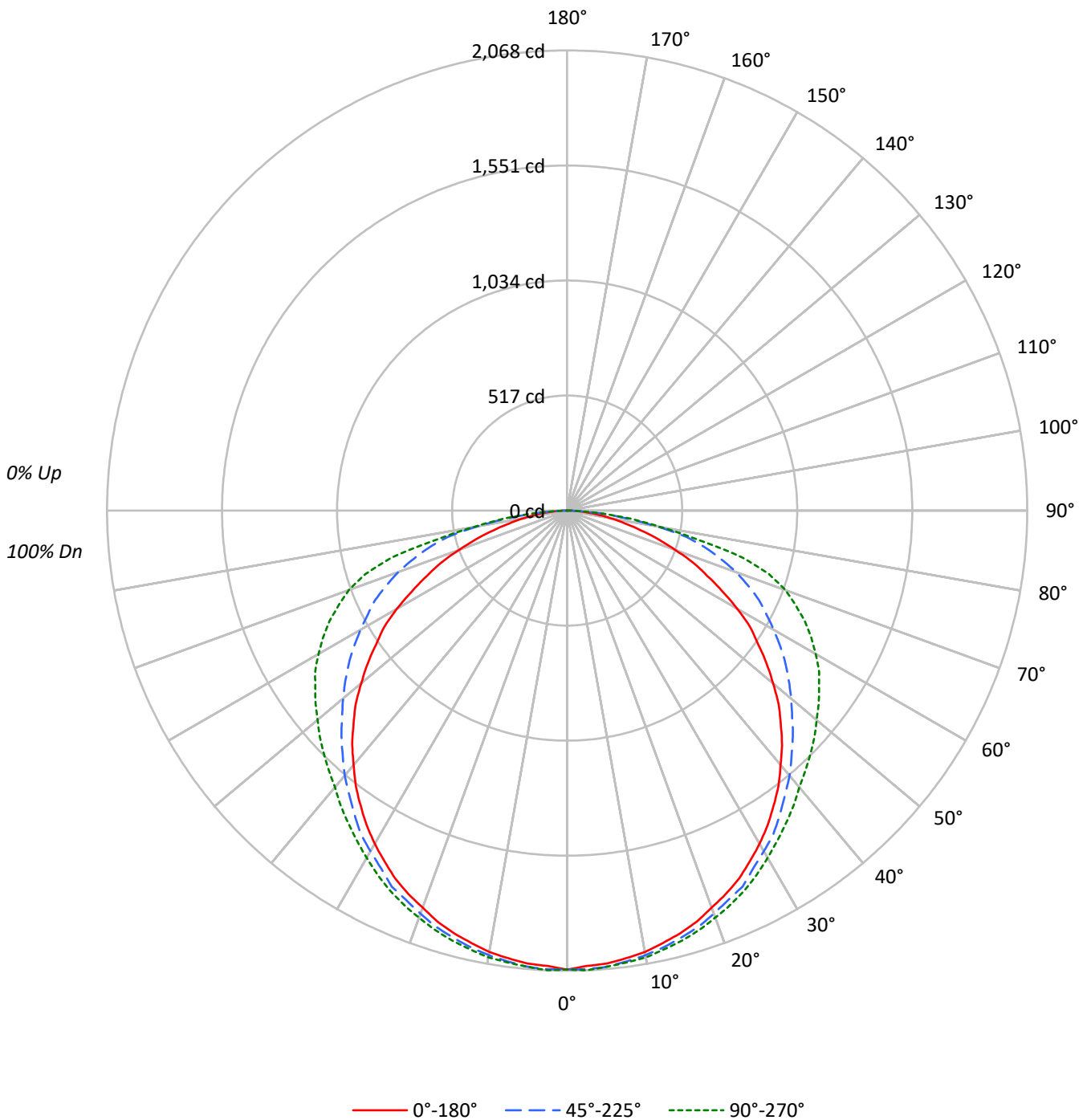
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5551	5551	5551
5°	5520	5559	5559
10°	5504	5544	5570
15°	5477	5531	5572
20°	5437	5520	5575
25°	5422	5537	5594
30°	5374	5494	5599
35°	5316	5475	5634
40°	5244	5464	5702
45°	5166	5460	5883
50°	5056	5501	6128
55°	4918	5621	6482
60°	4758	5772	6942
65°	4429	6060	7505
70°	4067	6347	8209
75°	3566	6680	8488
80°	3070	6363	6662
85°	2686	4625	5070



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.1	3.0
10°-20°	560.2	8.5
20°-30°	854.7	13.0
30°-40°	1043.6	15.9
40°-50°	1115.9	17.0
50°-60°	1077.1	16.4
60°-70°	927.2	14.1
70°-80°	627.3	9.6
80°-90°	165.5	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°	1610.1	24.5
0°-40°	2653.7	40.4
0°-60°	4846.7	73.8
0°-90°	6566.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6566.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2063	2063	2063	2063	2063	
5°	2043	2048	2058	2058	2058	194
15°	1966	1971	1985	1995	2000	555
25°	1826	1836	1865	1874	1884	840
35°	1618	1633	1667	1700	1715	1013
45°	1357	1382	1435	1507	1546	1048
55°	1048	1082	1198	1319	1382	939
65°	696	763	952	1101	1179	692
75°	343	454	642	773	816	368
85°	87	121	150	155	164	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2062.7	2062.7	2062.7	2062.7	2062.7
2.5°	2048.2	2053.1	2062.7	2062.7	2067.5
5°	2043.4	2048.2	2057.9	2057.9	2057.9
7.5°	2028.9	2033.7	2043.4	2048.2	2048.2
10°	2014.4	2019.2	2028.9	2033.7	2038.6
12.5°	1990.3	1995.1	2009.6	2019.2	2019.2
15°	1966.1	1970.9	1985.4	1995.1	1999.9
17.5°	1937.1	1946.8	1961.3	1970.9	1975.8
20°	1898.5	1908.1	1927.5	1941.9	1946.8
22.5°	1864.7	1874.3	1893.6	1908.1	1917.8
25°	1826.0	1835.7	1864.7	1874.3	1884.0
27.5°	1777.7	1787.4	1811.5	1830.8	1845.3
30°	1729.4	1739.1	1768.0	1792.2	1801.9
32.5°	1676.3	1690.7	1724.6	1743.9	1758.4
35°	1618.3	1632.8	1666.6	1700.4	1714.9
37.5°	1560.3	1574.8	1608.6	1652.1	1671.4
40°	1492.7	1512.0	1555.5	1613.5	1623.1
42.5°	1429.9	1454.0	1492.7	1560.3	1584.5
45°	1357.4	1381.6	1434.7	1507.2	1545.8
47.5°	1289.8	1314.0	1371.9	1458.9	1507.2
50°	1207.7	1241.5	1314.0	1415.4	1463.7
52.5°	1130.4	1159.4	1256.0	1367.1	1425.1
55°	1048.3	1082.1	1198.0	1318.8	1381.6
57.5°	975.8	1004.8	1135.2	1270.5	1342.9
60°	884.0	922.7	1072.4	1217.3	1289.8
62.5°	787.4	845.4	1009.6	1159.4	1236.7
65°	695.6	763.3	951.7	1101.4	1178.7
67.5°	613.5	686.0	879.2	1038.6	1111.1
70°	516.9	608.7	806.7	961.3	1043.4
72.5°	429.9	531.4	724.6	879.2	951.7
75°	343.0	454.1	642.5	772.9	816.4
77.5°	265.7	372.0	550.7	589.3	594.2
80°	198.1	294.7	410.6	415.4	429.9
82.5°	135.3	207.7	265.7	289.8	294.7
85°	87.0	120.8	149.8	154.6	164.2
87.5°	38.6	43.5	53.1	48.3	48.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)