

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: P390844

Luminaire Tested: **22CZ2-95VHE-HRP-UNV-L940-CD1-SWPD1-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: P390844
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-L940-CD1-SWPD1-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: 6881.7 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

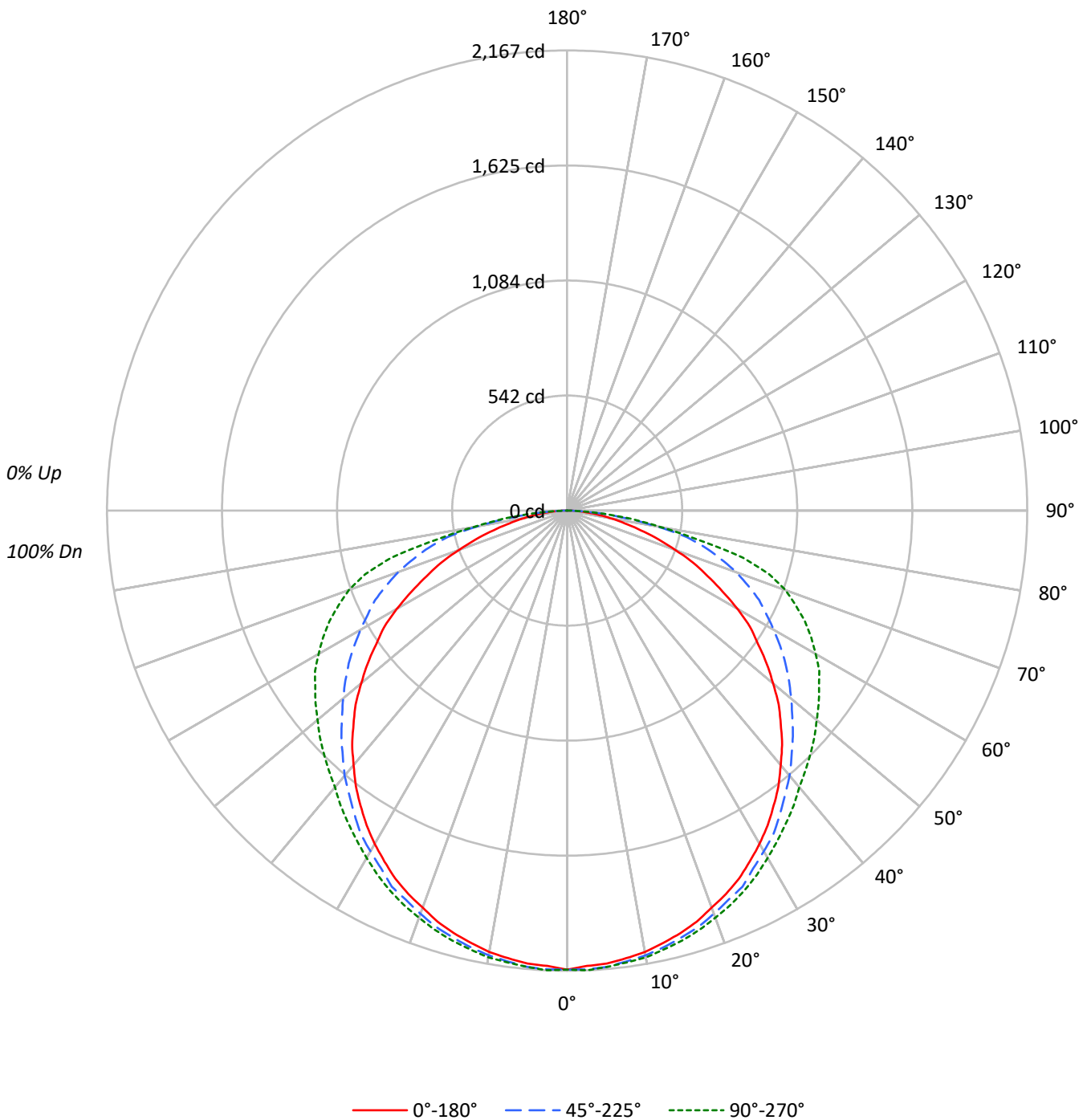
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5817	5817	5817
5°	5784	5826	5826
10°	5768	5810	5837
15°	5740	5797	5839
20°	5697	5784	5842
25°	5682	5802	5862
30°	5632	5757	5867
35°	5571	5737	5904
40°	5495	5726	5975
45°	5413	5722	6165
50°	5298	5765	6422
55°	5154	5890	6793
60°	4986	6049	7275
65°	4642	6350	7865
70°	4262	6652	8604
75°	3737	7000	8896
80°	3217	6668	6983
85°	2813	4844	5314



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.5	3.0
10°-20°	587.1	8.5
20°-30°	895.7	13.0
30°-40°	1093.7	15.9
40°-50°	1169.4	17.0
50°-60°	1128.7	16.4
60°-70°	971.7	14.1
70°-80°	657.4	9.6
80°-90°	173.5	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°	1687.3	24.5
0°-40°	2781.0	40.4
0°-60°	5079.2	73.8
0°-90°	6881.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6881.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2162	2162	2162	2162	2162	
5°	2141	2146	2157	2157	2157	203
15°	2060	2066	2081	2091	2096	581
25°	1914	1924	1954	1964	1974	881
35°	1696	1711	1746	1782	1797	1061
45°	1422	1448	1504	1580	1620	1098
55°	1098	1134	1256	1382	1448	984
65°	729	800	997	1154	1235	725
75°	359	476	673	810	856	386
85°	91	127	157	162	172	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2161.7	2161.7	2161.7	2161.7	2161.7
2.5°	2146.5	2151.5	2161.7	2161.7	2166.7
5°	2141.4	2146.5	2156.6	2156.6	2156.6
7.5°	2126.2	2131.3	2141.4	2146.5	2146.5
10°	2111.0	2116.1	2126.2	2131.3	2136.3
12.5°	2085.7	2090.8	2106.0	2116.1	2116.1
15°	2060.4	2065.5	2080.7	2090.8	2095.9
17.5°	2030.0	2040.2	2055.4	2065.5	2070.5
20°	1989.5	1999.7	2019.9	2035.1	2040.2
22.5°	1954.1	1964.2	1984.5	1999.7	2009.8
25°	1913.6	1923.7	1954.1	1964.2	1974.4
27.5°	1863.0	1873.1	1898.4	1918.7	1933.9
30°	1812.4	1822.5	1852.9	1878.2	1888.3
32.5°	1756.7	1771.9	1807.3	1827.5	1842.7
35°	1695.9	1711.1	1746.5	1782.0	1797.2
37.5°	1635.2	1650.4	1685.8	1731.4	1751.6
40°	1564.3	1584.5	1630.1	1690.9	1701.0
42.5°	1498.5	1523.8	1564.3	1635.2	1660.5
45°	1422.5	1447.9	1503.5	1579.5	1620.0
47.5°	1351.7	1377.0	1437.7	1528.9	1579.5
50°	1265.6	1301.0	1377.0	1483.3	1533.9
52.5°	1184.6	1215.0	1316.2	1432.7	1493.4
55°	1098.5	1134.0	1255.5	1382.0	1447.9
57.5°	1022.6	1053.0	1189.7	1331.4	1407.4
60°	926.4	966.9	1123.9	1275.7	1351.7
62.5°	825.2	885.9	1058.0	1215.0	1296.0
65°	729.0	799.9	997.3	1154.2	1235.2
67.5°	642.9	718.9	921.4	1088.4	1164.4
70°	541.7	637.9	845.4	1007.4	1093.5
72.5°	450.6	556.9	759.4	921.4	997.3
75°	359.4	475.9	673.3	810.0	855.6
77.5°	278.4	389.8	577.1	617.6	622.7
80°	207.6	308.8	430.3	435.4	450.6
82.5°	141.7	217.7	278.4	303.7	308.8
85°	91.1	126.6	156.9	162.0	172.1
87.5°	40.5	45.6	55.7	50.6	50.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)