

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: P390838

Luminaire Tested: **22CZ2-95VHE-HRP-UNV-L930-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: P390838
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-SWPD1-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: 6646.8 lumens
Efficiency: N/A
Efficacy: 91.4 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

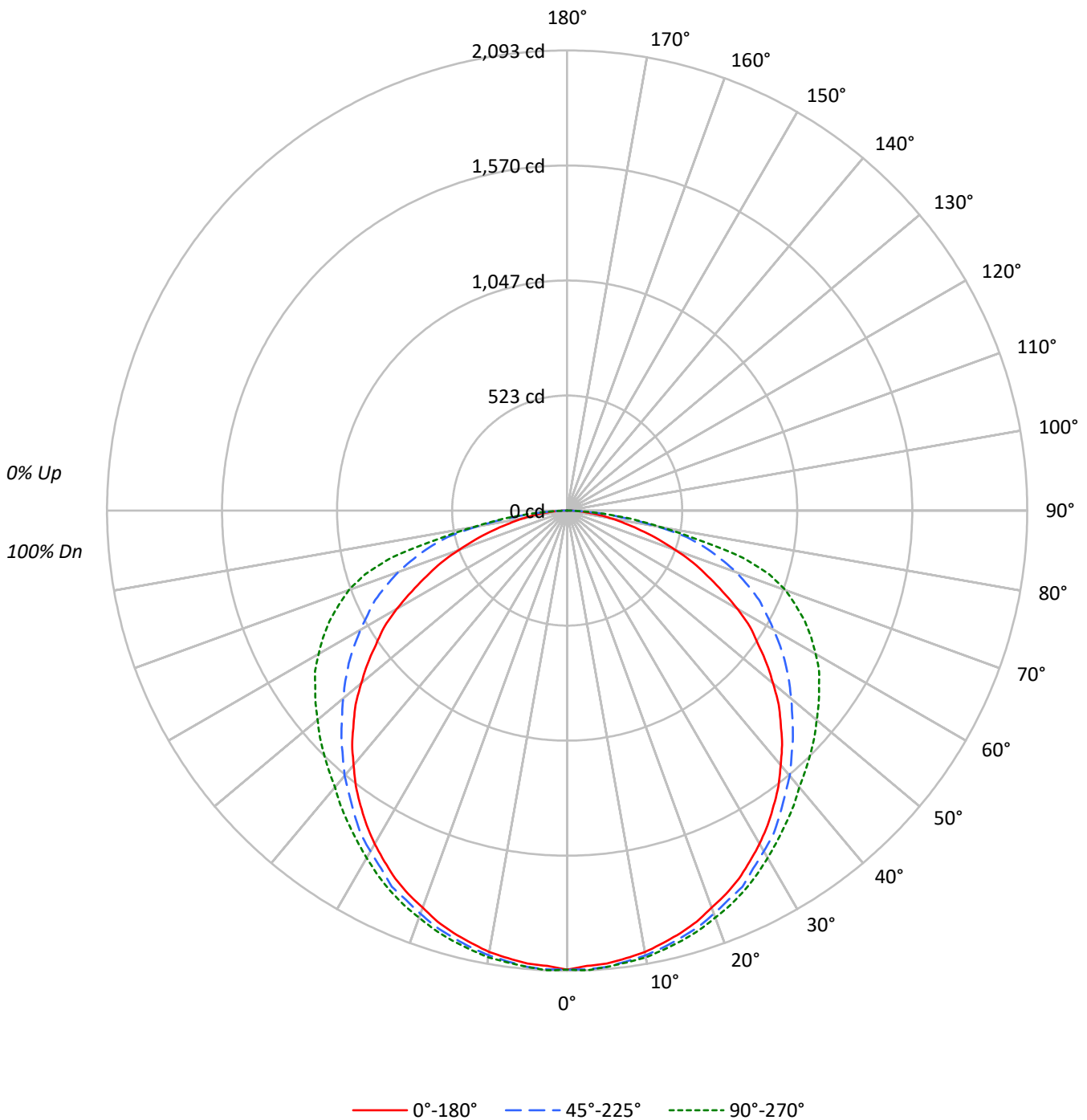
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5618	5618	5618
5°	5587	5627	5627
10°	5572	5611	5638
15°	5544	5599	5640
20°	5503	5587	5643
25°	5488	5604	5662
30°	5439	5561	5667
35°	5381	5542	5702
40°	5308	5531	5771
45°	5229	5527	5955
50°	5117	5568	6203
55°	4978	5689	6561
60°	4816	5842	7026
65°	4483	6134	7597
70°	4116	6425	8310
75°	3610	6761	8591
80°	3107	6440	6744
85°	2717	4681	5132



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.5	3.0
10°-20°	567.1	8.5
20°-30°	865.2	13.0
30°-40°	1056.4	15.9
40°-50°	1129.5	17.0
50°-60°	1090.2	16.4
60°-70°	938.5	14.1
70°-80°	635.0	9.6
80°-90°	167.5	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°	1629.7	24.5
0°-40°	2686.1	40.4
0°-60°	4905.8	73.8
0°-90°	6646.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6646.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2088	2088	2088	2088	2088	
5°	2068	2073	2083	2083	2083	196
15°	1990	1995	2010	2019	2024	561
25°	1848	1858	1887	1897	1907	851
35°	1638	1653	1687	1721	1736	1025
45°	1374	1398	1452	1526	1565	1061
55°	1061	1095	1213	1335	1398	951
65°	704	773	963	1115	1193	700
75°	347	460	650	782	826	372
85°	88	122	152	156	166	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2087.9	2087.9	2087.9	2087.9	2087.9
2.5°	2073.2	2078.1	2087.9	2087.9	2092.8
5°	2068.3	2073.2	2083.0	2083.0	2083.0
7.5°	2053.6	2058.5	2068.3	2073.2	2073.2
10°	2039.0	2043.9	2053.6	2058.5	2063.4
12.5°	2014.5	2019.4	2034.1	2043.9	2043.9
15°	1990.1	1995.0	2009.6	2019.4	2024.3
17.5°	1960.7	1970.5	1985.2	1995.0	1999.9
20°	1921.6	1931.4	1951.0	1965.6	1970.5
22.5°	1887.4	1897.2	1916.7	1931.4	1941.2
25°	1848.3	1858.1	1887.4	1897.2	1907.0
27.5°	1799.4	1809.2	1833.6	1853.2	1867.8
30°	1750.5	1760.3	1789.6	1814.1	1823.8
32.5°	1696.7	1711.4	1745.6	1765.2	1779.8
35°	1638.0	1652.7	1686.9	1721.2	1735.8
37.5°	1579.4	1594.0	1628.2	1672.3	1691.8
40°	1510.9	1530.5	1574.5	1633.1	1642.9
42.5°	1447.3	1471.8	1510.9	1579.4	1603.8
45°	1374.0	1398.4	1452.2	1525.6	1564.7
47.5°	1305.5	1330.0	1388.7	1476.7	1525.6
50°	1222.4	1256.6	1330.0	1432.7	1481.6
52.5°	1144.2	1173.5	1271.3	1383.8	1442.4
55°	1061.1	1095.3	1212.6	1334.9	1398.4
57.5°	987.7	1017.0	1149.1	1286.0	1359.3
60°	894.8	933.9	1085.5	1232.2	1305.5
62.5°	797.0	855.7	1021.9	1173.5	1251.7
65°	704.1	772.6	963.3	1114.8	1193.1
67.5°	621.0	694.3	889.9	1051.3	1124.6
70°	523.2	616.1	816.6	973.0	1056.2
72.5°	435.2	537.9	733.4	889.9	963.3
75°	347.2	459.6	650.3	782.3	826.3
77.5°	268.9	376.5	557.4	596.5	601.4
80°	200.5	298.3	415.6	420.5	435.2
82.5°	136.9	210.3	268.9	293.4	298.3
85°	88.0	122.2	151.6	156.5	166.2
87.5°	39.1	44.0	53.8	48.9	48.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)