

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: P390823

Luminaire Tested: **22CZ2-90VHE-RDP-UNV-L950-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: P390823
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-RDP-UNV-L950-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5495.5 lumens
Efficiency: N/A
Efficacy: 80.6 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

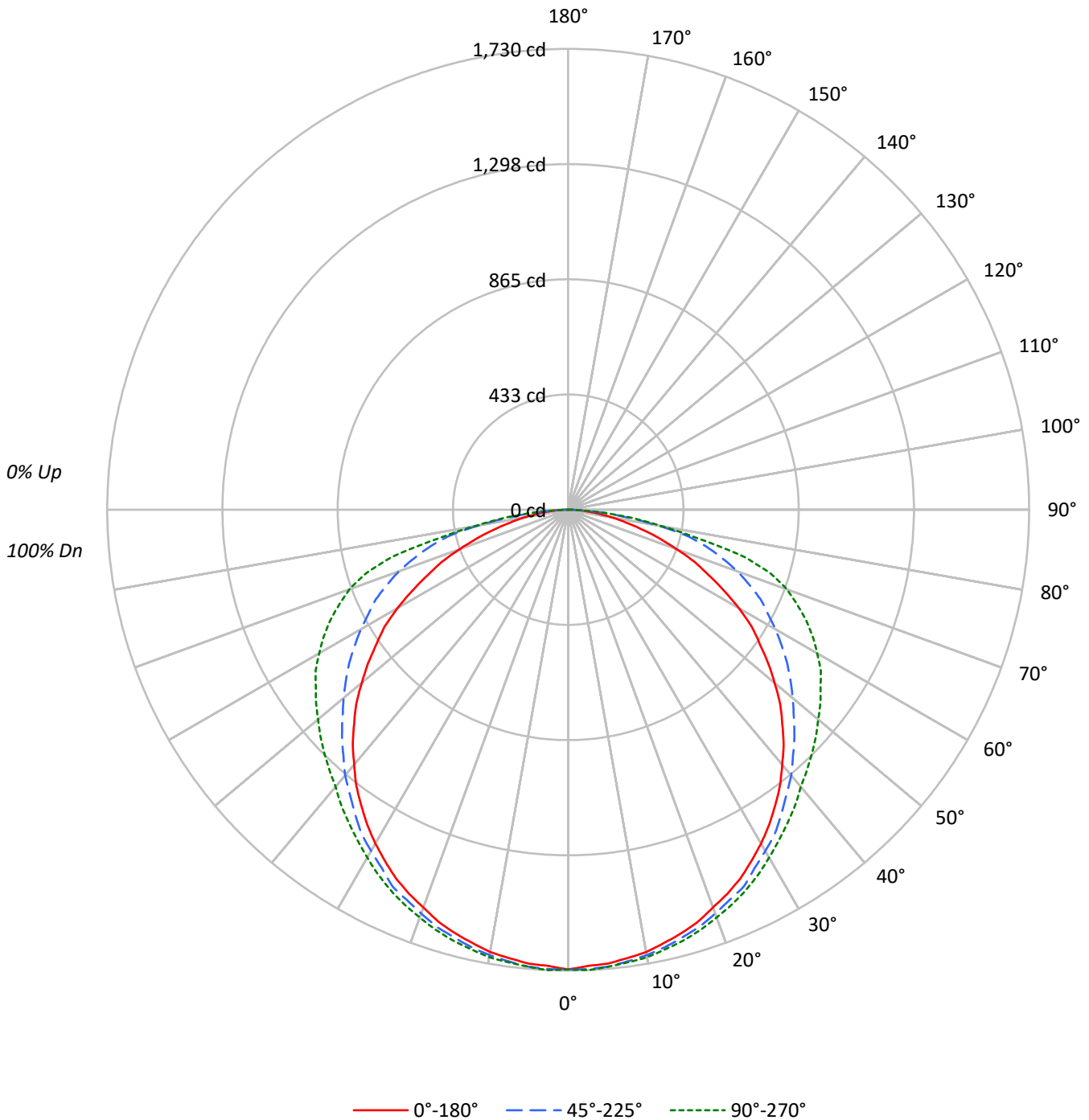
Input Watts (W): 68.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4645	4645	4645
5°	4619	4652	4652
10°	4606	4639	4662
15°	4584	4629	4663
20°	4550	4619	4666
25°	4537	4633	4681
30°	4497	4598	4685
35°	4449	4582	4715
40°	4388	4573	4771
45°	4323	4569	4923
50°	4231	4603	5128
55°	4116	4704	5424
60°	3982	4830	5809
65°	3706	5071	6281
70°	3404	5312	6870
75°	2984	5591	7103
80°	2569	5325	5576
85°	2248	3869	4245



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.3	3.0
10°-20°	468.8	8.5
20°-30°	715.3	13.0
30°-40°	873.4	15.9
40°-50°	933.9	17.0
50°-60°	901.4	16.4
60°-70°	775.9	14.1
70°-80°	525.0	9.6
80°-90°	138.5	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°	1347.4	24.5
0°-40°	2220.8	40.4
0°-60°	4056.1	73.8
0°-90°	5495.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5495.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1710	1714	1722	1722	1722	162
15°	1645	1649	1662	1670	1674	464
25°	1528	1536	1560	1569	1577	703
35°	1354	1366	1395	1423	1435	847
45°	1136	1156	1201	1261	1294	877
55°	877	906	1003	1104	1156	786
65°	582	639	796	922	986	579
75°	287	380	538	647	683	308
85°	73	101	125	129	138	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1726.2	1726.2	1726.2	1726.2	1726.2
2.5°	1714.1	1718.1	1726.2	1726.2	1730.3
5°	1710.1	1714.1	1722.2	1722.2	1722.2
7.5°	1697.9	1702.0	1710.1	1714.1	1714.1
10°	1685.8	1689.8	1697.9	1702.0	1706.0
12.5°	1665.6	1669.6	1681.8	1689.8	1689.8
15°	1645.4	1649.4	1661.5	1669.6	1673.7
17.5°	1621.1	1629.2	1641.3	1649.4	1653.5
20°	1588.8	1596.9	1613.0	1625.2	1629.2
22.5°	1560.5	1568.6	1584.7	1596.9	1605.0
25°	1528.1	1536.2	1560.5	1568.6	1576.7
27.5°	1487.7	1495.8	1516.0	1532.2	1544.3
30°	1447.3	1455.4	1479.6	1499.8	1507.9
32.5°	1402.8	1414.9	1443.2	1459.4	1471.5
35°	1354.3	1366.4	1394.7	1423.0	1435.2
37.5°	1305.8	1317.9	1346.2	1382.6	1398.8
40°	1249.2	1265.4	1301.7	1350.3	1358.3
42.5°	1196.6	1216.9	1249.2	1305.8	1326.0
45°	1136.0	1156.2	1200.7	1261.3	1293.7
47.5°	1079.4	1099.6	1148.1	1220.9	1261.3
50°	1010.7	1039.0	1099.6	1184.5	1224.9
52.5°	946.0	970.2	1051.1	1144.1	1192.6
55°	877.3	905.6	1002.6	1103.7	1156.2
57.5°	816.6	840.9	950.0	1063.2	1123.9
60°	739.8	772.2	897.5	1018.8	1079.4
62.5°	659.0	707.5	844.9	970.2	1034.9
65°	582.1	638.7	796.4	921.7	986.4
67.5°	513.4	574.1	735.8	869.2	929.8
70°	432.6	509.4	675.1	804.5	873.2
72.5°	359.8	444.7	606.4	735.8	796.4
75°	287.0	380.0	537.7	646.8	683.2
77.5°	222.3	311.3	460.9	493.2	497.3
80°	165.8	246.6	343.6	347.7	359.8
82.5°	113.2	173.8	222.3	242.6	246.6
85°	72.8	101.1	125.3	129.4	137.5
87.5°	32.3	36.4	44.5	40.4	40.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)