

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: P390824

Luminaire Tested: **22CZ2-90VHE-RDP-UNV-L950-CD1-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: P390824
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-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: 5564.6 lumens
Efficiency: N/A
Efficacy: 81.6 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

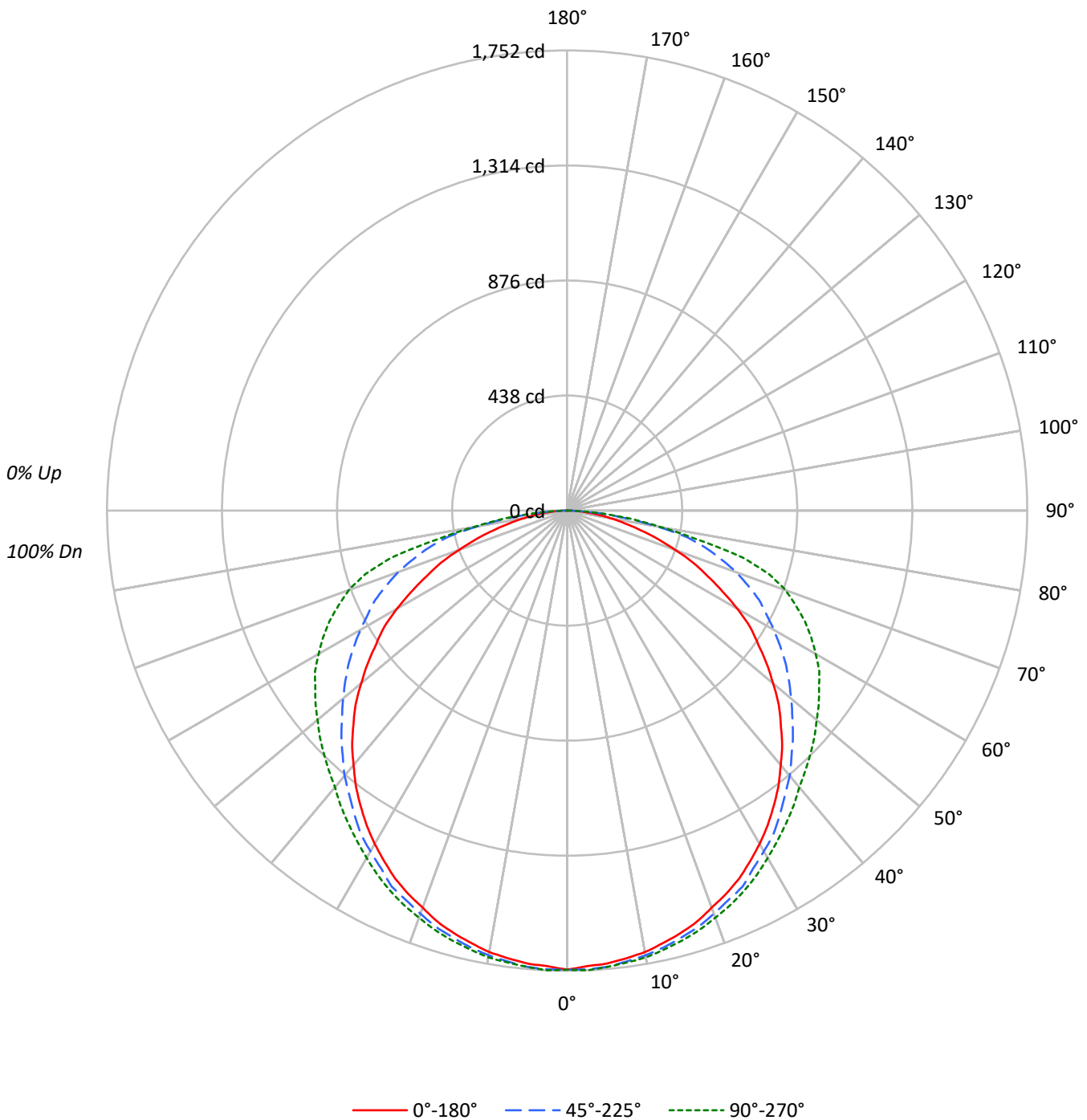
Input Watts (W): 68.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4704	4704	4704
5°	4677	4710	4710
10°	4664	4698	4720
15°	4642	4687	4721
20°	4607	4677	4724
25°	4594	4692	4740
30°	4554	4655	4744
35°	4505	4640	4774
40°	4443	4630	4832
45°	4378	4627	4985
50°	4284	4661	5192
55°	4168	4763	5492
60°	4032	4891	5882
65°	3754	5135	6360
70°	3446	5378	6957
75°	3021	5660	7193
80°	2600	5393	5645
85°	2276	3918	4298



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.3	3.0
10°-20°	474.7	8.5
20°-30°	724.3	13.0
30°-40°	884.4	15.9
40°-50°	945.6	17.0
50°-60°	912.7	16.4
60°-70°	785.7	14.1
70°-80°	531.6	9.6
80°-90°	140.2	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°	1364.4	24.5
0°-40°	2248.7	40.4
0°-60°	4107.1	73.8
0°-90°	5564.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5564.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1748	1748	1748	1748	1748	
5°	1732	1736	1744	1744	1744	164
15°	1666	1670	1682	1691	1695	470
25°	1547	1556	1580	1588	1596	712
35°	1371	1384	1412	1441	1453	858
45°	1150	1171	1216	1277	1310	888
55°	888	917	1015	1118	1171	796
65°	590	647	806	933	999	586
75°	291	385	544	655	692	312
85°	74	102	127	131	139	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1747.9	1747.9	1747.9	1747.9	1747.9
2.5°	1735.7	1739.8	1747.9	1747.9	1752.0
5°	1731.6	1735.7	1743.8	1743.8	1743.8
7.5°	1719.3	1723.4	1731.6	1735.7	1735.7
10°	1707.0	1711.1	1719.3	1723.4	1727.5
12.5°	1686.5	1690.6	1702.9	1711.1	1711.1
15°	1666.1	1670.2	1682.4	1690.6	1694.7
17.5°	1641.5	1649.7	1662.0	1670.2	1674.3
20°	1608.8	1616.9	1633.3	1645.6	1649.7
22.5°	1580.1	1588.3	1604.7	1616.9	1625.1
25°	1547.4	1555.5	1580.1	1588.3	1596.5
27.5°	1506.4	1514.6	1535.1	1551.4	1563.7
30°	1465.5	1473.7	1498.2	1518.7	1526.9
32.5°	1420.5	1432.7	1461.4	1477.8	1490.0
35°	1371.3	1383.6	1412.3	1440.9	1453.2
37.5°	1322.2	1334.5	1363.1	1400.0	1416.4
40°	1264.9	1281.3	1318.1	1367.2	1375.4
42.5°	1211.7	1232.2	1264.9	1322.2	1342.7
45°	1150.3	1170.7	1215.8	1277.2	1309.9
47.5°	1093.0	1113.4	1162.6	1236.2	1277.2
50°	1023.4	1052.0	1113.4	1199.4	1240.3
52.5°	957.9	982.4	1064.3	1158.5	1207.6
55°	888.3	917.0	1015.2	1117.5	1170.7
57.5°	826.9	851.5	962.0	1076.6	1138.0
60°	749.1	781.9	908.8	1031.6	1093.0
62.5°	667.2	716.4	855.5	982.4	1047.9
65°	589.5	646.8	806.4	933.3	998.8
67.5°	519.9	581.3	745.0	880.1	941.5
70°	438.0	515.8	683.6	814.6	884.2
72.5°	364.3	450.3	614.0	745.0	806.4
75°	290.6	384.8	544.4	655.0	691.8
77.5°	225.1	315.2	466.7	499.4	503.5
80°	167.8	249.7	348.0	352.0	364.3
82.5°	114.6	176.0	225.1	245.6	249.7
85°	73.7	102.3	126.9	131.0	139.2
87.5°	32.7	36.8	45.0	40.9	40.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)