

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: P390814

Luminaire Tested: **22CZ2-90VHE-RDP-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: P390814
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-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5000.8 lumens
Efficiency: N/A
Efficacy: 73.3 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

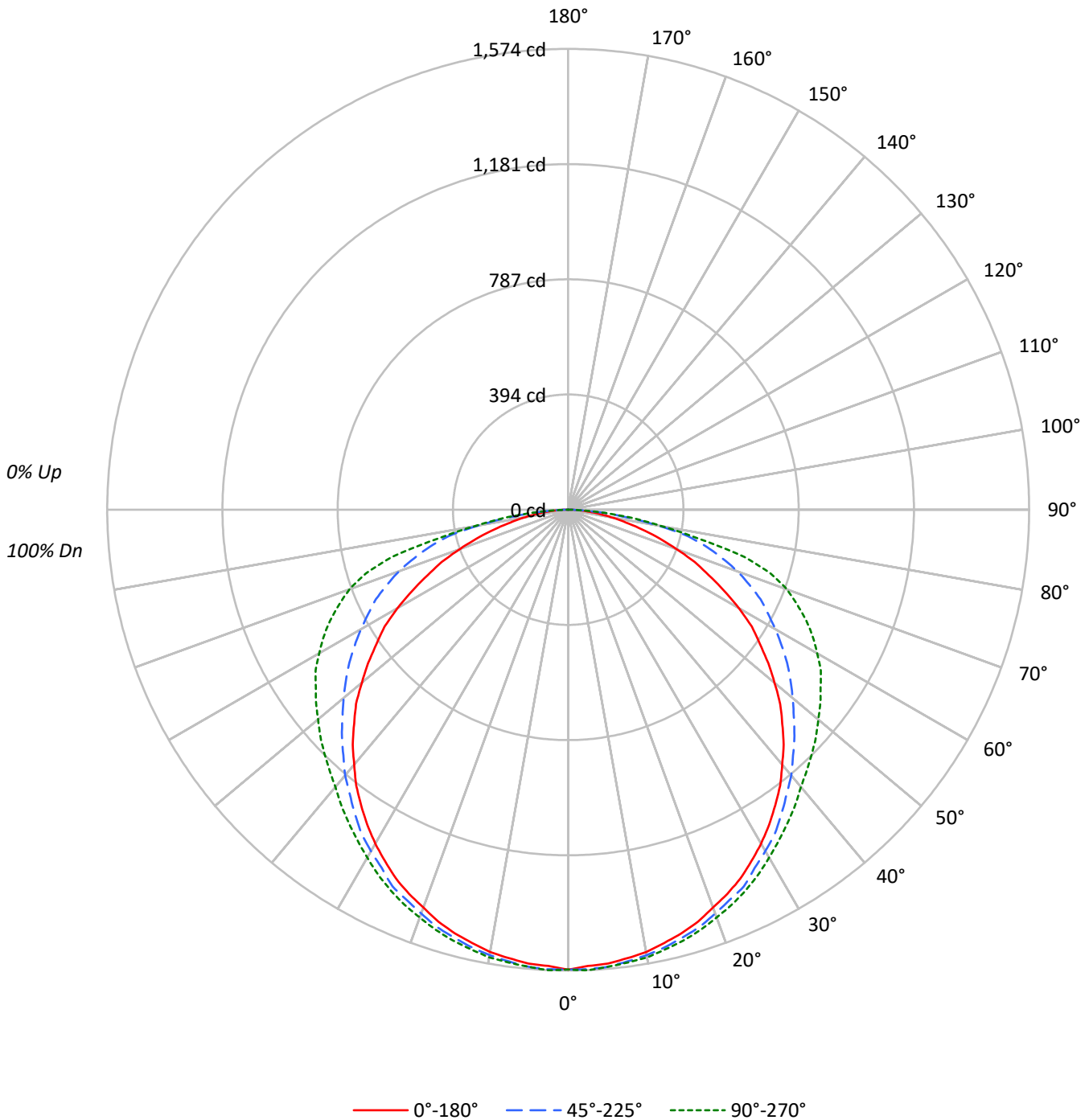
Input Watts (W): 68.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4227	4227	4227
5°	4203	4233	4233
10°	4192	4222	4242
15°	4171	4212	4243
20°	4140	4203	4245
25°	4129	4216	4260
30°	4092	4184	4264
35°	4049	4169	4290
40°	3993	4161	4342
45°	3934	4158	4480
50°	3850	4189	4667
55°	3745	4280	4936
60°	3623	4395	5286
65°	3373	4614	5715
70°	3097	4834	6252
75°	2716	5087	6464
80°	2337	4846	5074
85°	2044	3520	3863



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.6	3.0
10°-20°	426.6	8.5
20°-30°	650.9	13.0
30°-40°	794.8	15.9
40°-50°	849.8	17.0
50°-60°	820.2	16.4
60°-70°	706.1	14.1
70°-80°	477.7	9.6
80°-90°	126.1	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°	1226.1	24.5
0°-40°	2020.9	40.4
0°-60°	3690.9	73.8
0°-90°	5000.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5000.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1571	1571	1571	1571	1571	
5°	1556	1560	1567	1567	1567	148
15°	1497	1501	1512	1519	1523	422
25°	1391	1398	1420	1427	1435	640
35°	1232	1243	1269	1295	1306	771
45°	1034	1052	1093	1148	1177	798
55°	798	824	912	1004	1052	715
65°	530	581	725	839	898	527
75°	261	346	489	589	622	280
85°	66	92	114	118	125	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1570.8	1570.8	1570.8	1570.8	1570.8
2.5°	1559.8	1563.5	1570.8	1570.8	1574.5
5°	1556.1	1559.8	1567.2	1567.2	1567.2
7.5°	1545.1	1548.8	1556.1	1559.8	1559.8
10°	1534.1	1537.7	1545.1	1548.8	1552.4
12.5°	1515.7	1519.3	1530.4	1537.7	1537.7
15°	1497.3	1500.9	1512.0	1519.3	1523.0
17.5°	1475.2	1482.5	1493.6	1500.9	1504.6
20°	1445.8	1453.1	1467.8	1478.9	1482.5
22.5°	1420.0	1427.4	1442.1	1453.1	1460.5
25°	1390.6	1397.9	1420.0	1427.4	1434.7
27.5°	1353.8	1361.1	1379.5	1394.3	1405.3
30°	1317.0	1324.4	1346.4	1364.8	1372.2
32.5°	1276.5	1287.6	1313.3	1328.0	1339.1
35°	1232.4	1243.4	1269.2	1294.9	1306.0
37.5°	1188.2	1199.3	1225.0	1258.1	1272.9
40°	1136.7	1151.5	1184.6	1228.7	1236.1
42.5°	1088.9	1107.3	1136.7	1188.2	1206.6
45°	1033.7	1052.1	1092.6	1147.8	1177.2
47.5°	982.2	1000.6	1044.8	1111.0	1147.8
50°	919.7	945.4	1000.6	1077.9	1114.7
52.5°	860.8	882.9	956.5	1041.1	1085.2
55°	798.3	824.0	912.3	1004.3	1052.1
57.5°	743.1	765.2	864.5	967.5	1022.7
60°	673.2	702.6	816.7	927.1	982.2
62.5°	599.6	643.8	768.9	882.9	941.8
65°	529.7	581.2	724.7	838.8	897.6
67.5°	467.2	522.4	669.5	790.9	846.1
70°	393.6	463.5	614.4	732.1	794.6
72.5°	327.4	404.7	551.8	669.5	724.7
75°	261.2	345.8	489.3	588.6	621.7
77.5°	202.3	283.3	419.4	448.8	452.5
80°	150.8	224.4	312.7	316.4	327.4
82.5°	103.0	158.2	202.3	220.7	224.4
85°	66.2	92.0	114.0	117.7	125.1
87.5°	29.4	33.1	40.5	36.8	36.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)