

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: P390694

Luminaire Tested: **22CZ2-80VHE-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: P390694
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: 22CZ2-80VHE-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: 5596.9 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

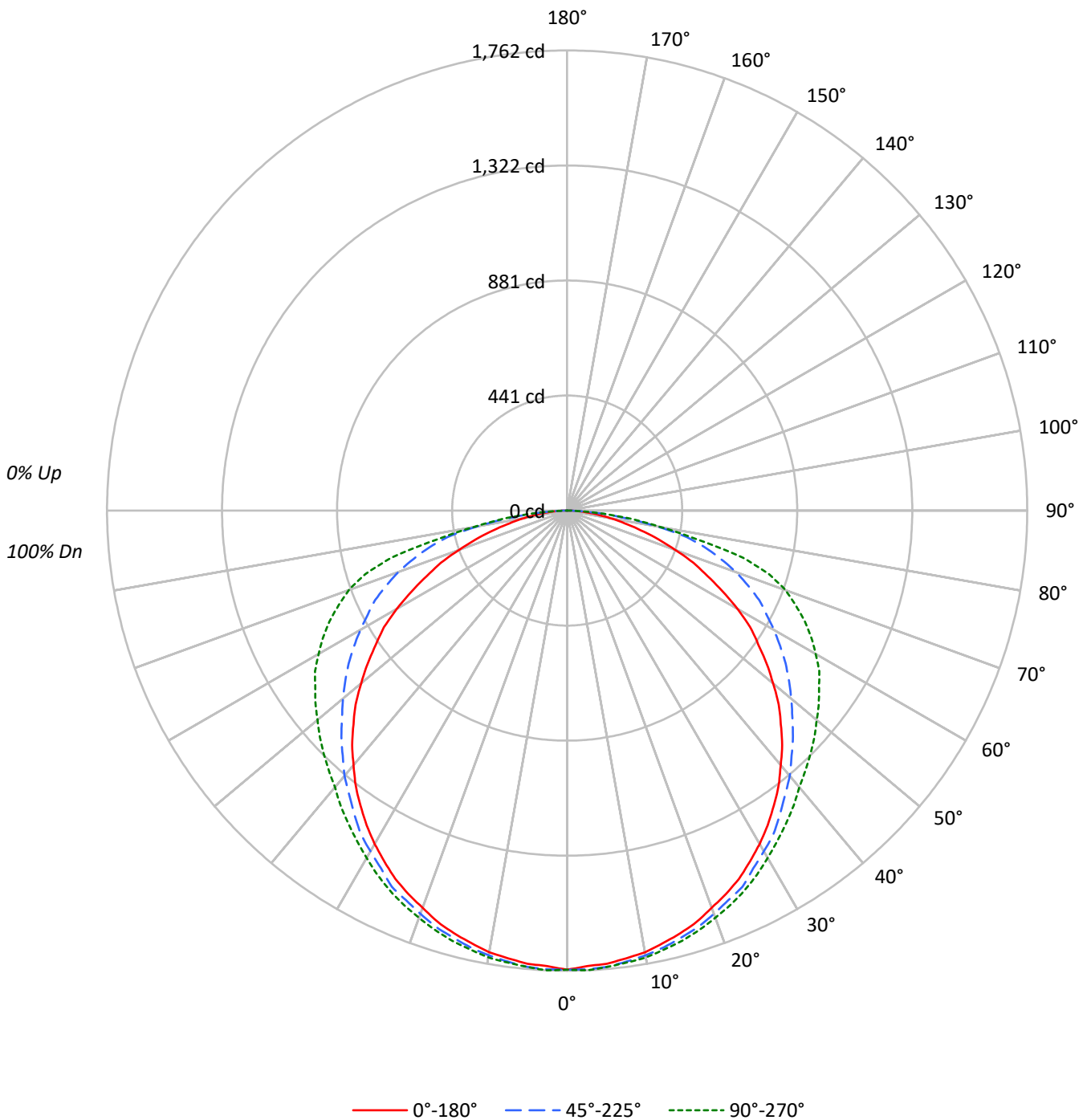
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4731	4731	4731
5°	4705	4738	4738
10°	4691	4725	4748
15°	4668	4714	4749
20°	4634	4704	4752
25°	4621	4719	4768
30°	4580	4682	4772
35°	4531	4666	4801
40°	4469	4657	4860
45°	4403	4654	5014
50°	4309	4688	5223
55°	4192	4791	5524
60°	4055	4919	5916
65°	3775	5165	6397
70°	3467	5410	6997
75°	3039	5693	7234
80°	2616	5424	5678
85°	2288	3940	4323



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	3.0
10°-20°	477.5	8.5
20°-30°	728.5	13.0
30°-40°	889.5	15.9
40°-50°	951.1	17.0
50°-60°	918.0	16.4
60°-70°	790.2	14.1
70°-80°	534.7	9.6
80°-90°	141.1	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°	1372.3	24.5
0°-40°	2261.8	40.4
0°-60°	4130.9	73.8
0°-90°	5596.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5596.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1742	1746	1754	1754	1754	165
15°	1676	1680	1692	1700	1705	473
25°	1556	1565	1589	1598	1606	716
35°	1379	1392	1420	1449	1462	863
45°	1157	1178	1223	1285	1318	893
55°	894	922	1021	1124	1178	801
65°	593	650	811	939	1005	590
75°	292	387	548	659	696	314
85°	74	103	128	132	140	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1758.1	1758.1	1758.1	1758.1	1758.1
2.5°	1745.7	1749.8	1758.1	1758.1	1762.2
5°	1741.6	1745.7	1754.0	1754.0	1754.0
7.5°	1729.3	1733.4	1741.6	1745.7	1745.7
10°	1716.9	1721.0	1729.3	1733.4	1737.5
12.5°	1696.3	1700.4	1712.8	1721.0	1721.0
15°	1675.7	1679.9	1692.2	1700.4	1704.6
17.5°	1651.0	1659.3	1671.6	1679.9	1684.0
20°	1618.1	1626.3	1642.8	1655.2	1659.3
22.5°	1589.3	1597.5	1614.0	1626.3	1634.6
25°	1556.3	1564.6	1589.3	1597.5	1605.7
27.5°	1515.2	1523.4	1544.0	1560.5	1572.8
30°	1474.0	1482.2	1506.9	1527.5	1535.7
32.5°	1428.7	1441.1	1469.9	1486.3	1498.7
35°	1379.3	1391.6	1420.5	1449.3	1461.6
37.5°	1329.9	1342.2	1371.1	1408.1	1424.6
40°	1272.2	1288.7	1325.8	1375.2	1383.4
42.5°	1218.7	1239.3	1272.2	1329.9	1350.5
45°	1157.0	1177.5	1222.8	1284.6	1317.5
47.5°	1099.3	1119.9	1169.3	1243.4	1284.6
50°	1029.3	1058.1	1119.9	1206.4	1247.5
52.5°	963.4	988.2	1070.5	1165.2	1214.6
55°	893.5	922.3	1021.1	1124.0	1177.5
57.5°	831.7	856.4	967.6	1082.8	1144.6
60°	753.5	786.4	914.0	1037.6	1099.3
62.5°	671.1	720.5	860.5	988.2	1054.0
65°	592.9	650.5	811.1	938.7	1004.6
67.5°	522.9	584.7	749.3	885.2	947.0
70°	440.6	518.8	687.6	819.3	889.3
72.5°	366.4	452.9	617.6	749.3	811.1
75°	292.3	387.0	547.6	658.8	695.8
77.5°	226.5	317.0	469.4	502.3	506.4
80°	168.8	251.2	350.0	354.1	366.4
82.5°	115.3	177.0	226.5	247.0	251.2
85°	74.1	102.9	127.6	131.8	140.0
87.5°	32.9	37.1	45.3	41.2	41.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)