

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: P388393

Luminaire Tested: **22CZ2-60VHE-UNV-L935-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: P388393
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-60VHE-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5101.8 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

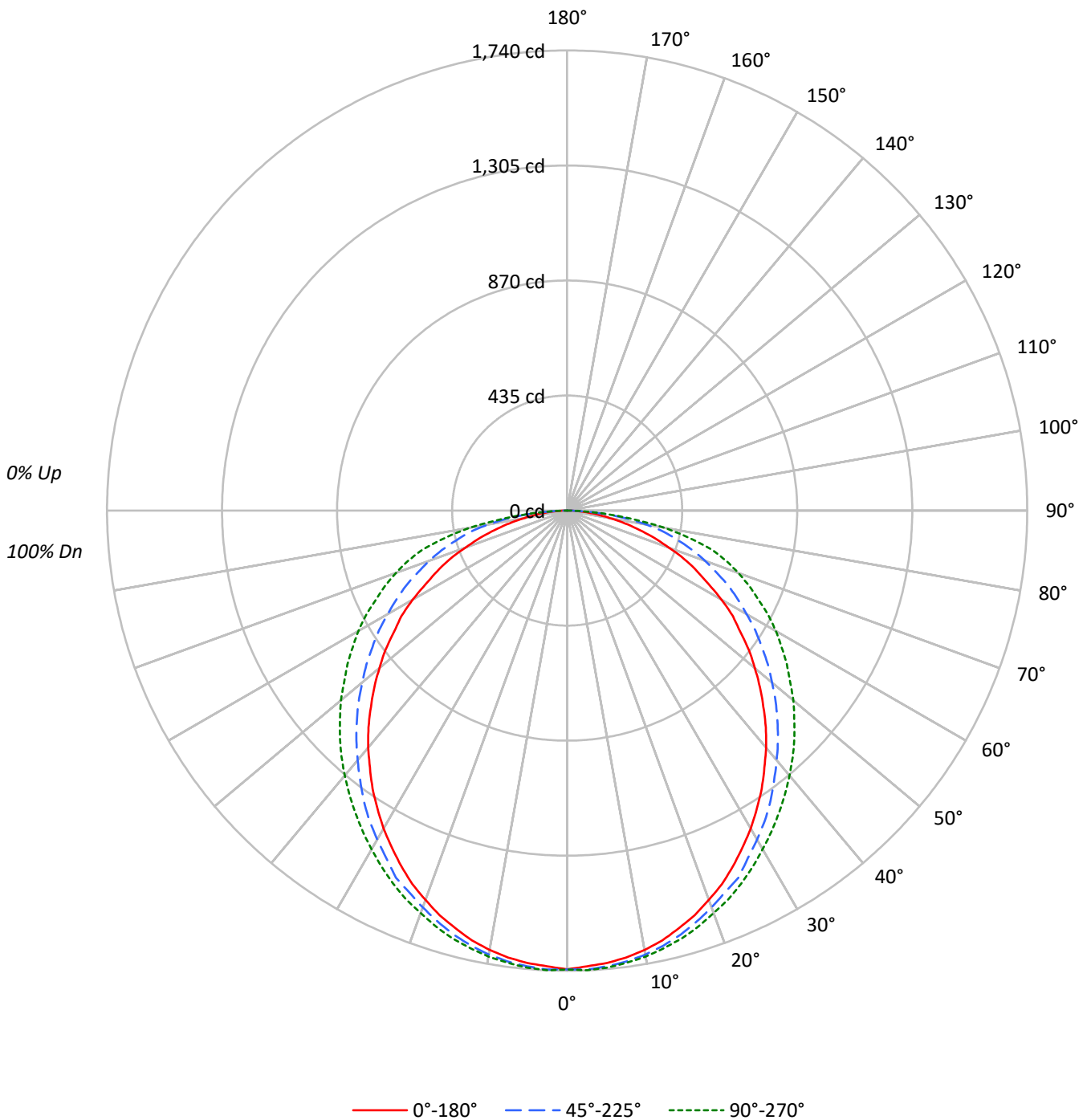
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4668	4668	4668
5°	4638	4672	4686
10°	4610	4658	4678
15°	4553	4623	4665
20°	4486	4572	4637
25°	4405	4547	4622
30°	4314	4462	4594
35°	4214	4404	4585
40°	4110	4330	4594
45°	3994	4280	4624
50°	3878	4235	4677
55°	3745	4216	4758
60°	3634	4216	4905
65°	3453	4284	5083
70°	3220	4365	5412
75°	2950	4515	5846
80°	2568	4708	5757
85°	2248	4187	4573



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.1	3.2
10°-20°	467.3	9.2
20°-30°	701.5	13.7
30°-40°	838.2	16.4
40°-50°	871.6	17.1
50°-60°	807.8	15.8
60°-70°	662.6	13.0
70°-80°	447.9	8.8
80°-90°	140.8	2.8
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°	1332.8	26.1
0°-40°	2171.0	42.6
0°-60°	3850.5	75.5
0°-90°	5101.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5101.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1735	1735	1735	1735	1735	
5°	1717	1720	1730	1732	1735	163
15°	1634	1642	1659	1669	1674	461
25°	1484	1496	1531	1549	1556	683
35°	1283	1300	1341	1381	1396	802
45°	1049	1069	1125	1190	1215	810
55°	798	823	899	979	1014	717
65°	542	572	673	761	798	536
75°	284	331	434	522	562	301
85°	73	100	136	151	148	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1734.7	1734.7	1734.7	1734.7	1734.7
2.5°	1724.7	1729.7	1737.2	1739.7	1739.7
5°	1717.1	1719.6	1729.7	1732.2	1734.7
7.5°	1704.6	1709.6	1719.6	1722.2	1724.7
10°	1687.0	1692.0	1704.6	1709.6	1712.1
12.5°	1664.4	1669.4	1684.5	1692.0	1694.5
15°	1634.3	1641.8	1659.4	1669.4	1674.5
17.5°	1604.2	1611.7	1629.3	1644.3	1649.4
20°	1566.5	1584.1	1596.6	1616.7	1619.2
22.5°	1528.9	1538.9	1561.5	1581.6	1591.6
25°	1483.7	1496.2	1531.4	1548.9	1556.5
27.5°	1436.0	1453.5	1481.2	1508.8	1518.8
30°	1388.3	1400.8	1436.0	1468.6	1478.6
32.5°	1335.5	1353.1	1390.8	1423.4	1438.5
35°	1282.8	1300.4	1340.6	1380.7	1395.8
37.5°	1225.1	1245.2	1285.3	1333.0	1353.1
40°	1169.9	1184.9	1232.6	1290.4	1307.9
42.5°	1112.1	1129.7	1179.9	1242.7	1262.7
45°	1049.4	1069.4	1124.7	1189.9	1215.0
47.5°	989.1	1009.2	1069.4	1134.7	1164.8
50°	926.3	951.5	1011.7	1087.0	1117.1
52.5°	866.1	888.7	956.5	1034.3	1061.9
55°	798.3	823.4	898.7	979.1	1014.2
57.5°	743.1	760.7	843.5	926.3	961.5
60°	675.3	697.9	783.3	871.1	911.3
62.5°	602.5	640.2	728.0	818.4	858.6
65°	542.3	572.4	672.8	760.7	798.3
67.5°	479.5	512.1	610.0	702.9	745.6
70°	409.2	451.9	554.8	647.7	687.9
72.5°	346.4	391.6	497.1	587.4	630.1
75°	283.7	331.4	434.3	522.2	562.3
77.5°	223.4	276.1	376.6	444.3	469.5
80°	165.7	215.9	303.8	351.5	371.5
82.5°	115.5	158.2	223.4	248.5	253.6
85°	72.8	100.4	135.6	150.6	148.1
87.5°	32.6	40.2	50.2	55.2	52.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)