

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: P389285

Luminaire Tested: **22CZ2-50VHE-S-UNV-L940-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: P389285
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-50VHE-S-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4573.1 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

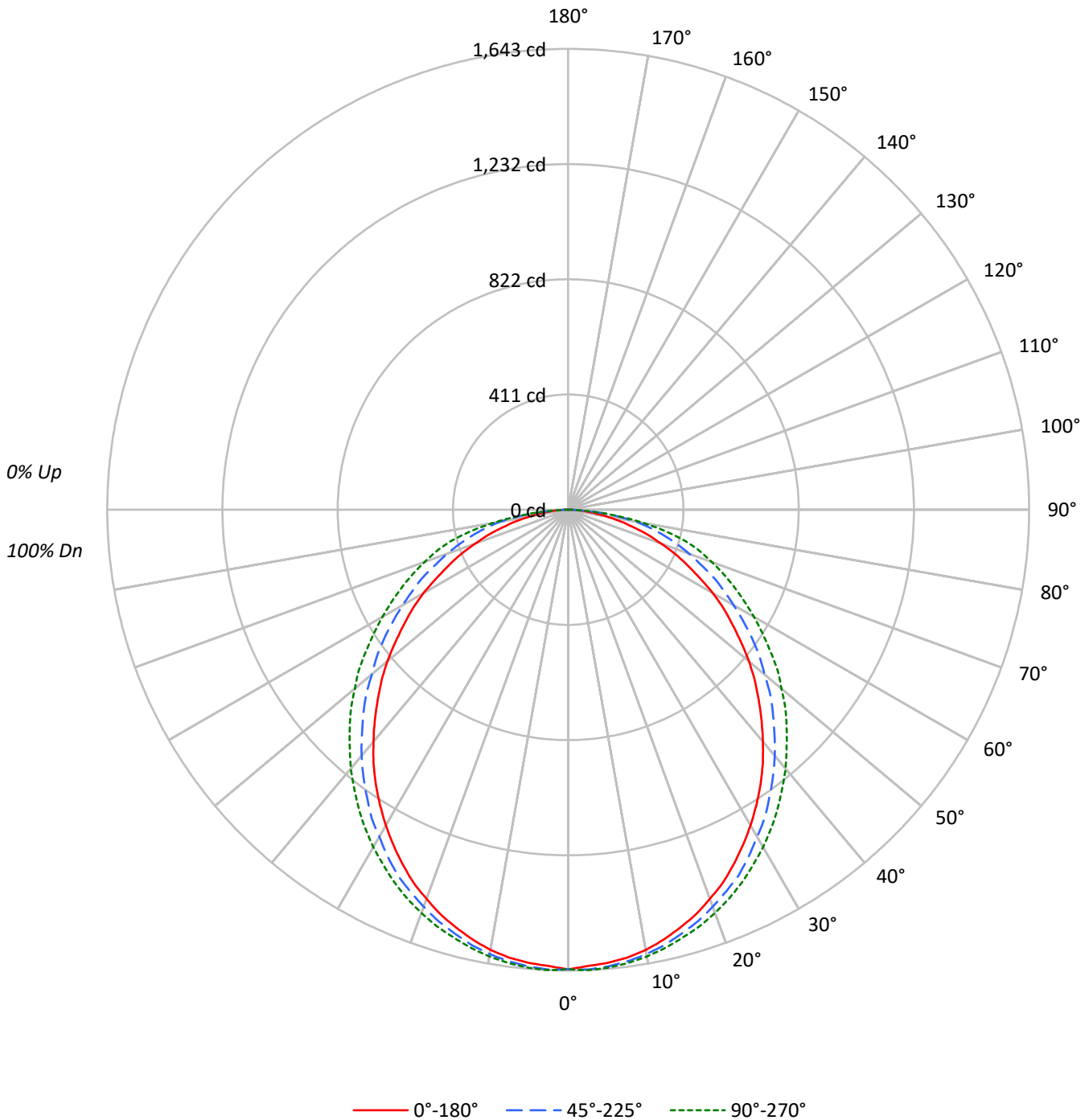
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4410	4410	4410
5°	4380	4415	4427
10°	4355	4396	4419
15°	4298	4357	4399
20°	4228	4314	4381
25°	4143	4270	4353
30°	4038	4184	4316
35°	3925	4108	4276
40°	3793	4025	4235
45°	3654	3930	4190
50°	3520	3823	4154
55°	3354	3754	4124
60°	3204	3663	4111
65°	2989	3641	4157
70°	2753	3609	4281
75°	2485	3661	4503
80°	2149	3769	4232
85°	1778	3162	3162



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	3.4
10°-20°	441.0	9.6
20°-30°	659.9	14.4
30°-40°	781.5	17.1
40°-50°	796.4	17.4
50°-60°	713.8	15.6
60°-70°	558.8	12.2
70°-80°	360.4	7.9
80°-90°	106.4	2.3
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°	1255.8	27.5
0°-40°	2037.3	44.5
0°-60°	3547.5	77.6
0°-90°	4573.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4573.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1639	1639	1639	1639	1639	
5°	1622	1626	1634	1637	1639	154
15°	1543	1551	1564	1577	1579	435
25°	1395	1408	1438	1457	1466	642
35°	1195	1210	1250	1289	1302	747
45°	960	982	1033	1086	1101	742
55°	715	738	800	856	879	641
65°	469	497	572	627	653	466
75°	239	275	352	412	433	256
85°	58	79	102	102	102	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1638.7	1638.7	1638.7	1638.7	1638.7
2.5°	1628.0	1632.3	1640.8	1643.0	1643.0
5°	1621.6	1625.9	1634.4	1636.6	1638.7
7.5°	1610.9	1613.1	1623.7	1628.0	1630.1
10°	1593.9	1598.1	1608.8	1615.2	1617.3
12.5°	1570.4	1576.8	1589.6	1598.1	1600.3
15°	1542.7	1551.2	1564.0	1576.8	1578.9
17.5°	1512.8	1521.3	1538.4	1553.3	1557.6
20°	1476.5	1487.2	1506.4	1523.5	1529.9
22.5°	1440.2	1448.8	1472.3	1493.6	1500.0
25°	1395.4	1408.2	1438.1	1457.3	1465.9
27.5°	1348.5	1363.4	1393.3	1418.9	1427.4
30°	1299.4	1314.4	1346.4	1378.4	1389.0
32.5°	1248.2	1265.3	1303.7	1335.7	1346.4
35°	1194.9	1209.8	1250.4	1288.8	1301.6
37.5°	1139.4	1152.2	1199.1	1239.7	1252.5
40°	1079.7	1096.7	1145.8	1192.7	1205.5
42.5°	1019.9	1039.1	1088.2	1139.4	1152.2
45°	960.2	981.5	1032.7	1086.1	1101.0
47.5°	902.6	919.6	977.2	1028.4	1049.8
50°	840.7	857.7	913.2	970.8	992.2
52.5°	776.7	800.1	859.9	915.4	941.0
55°	714.8	738.3	800.1	855.6	879.1
57.5°	657.2	676.4	740.4	798.0	821.5
60°	595.3	612.4	680.7	742.5	763.9
62.5°	529.2	554.8	625.2	682.8	708.4
65°	469.4	497.2	571.8	627.3	652.9
67.5°	413.9	439.5	512.1	571.8	599.6
70°	349.9	384.1	458.7	518.5	544.1
72.5°	298.7	328.6	405.4	465.1	492.9
75°	239.0	275.2	352.1	411.8	433.1
77.5°	189.9	226.2	298.7	345.7	356.3
80°	138.7	175.0	243.2	266.7	273.1
82.5°	93.9	128.0	175.0	181.4	183.5
85°	57.6	78.9	102.4	102.4	102.4
87.5°	27.7	32.0	36.3	34.1	34.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)