

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: P389283

Luminaire Tested: **22CZ2-50VHE-S-UNV-L940-CD1-SDWPD1-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: P389283
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-SDWPD1-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: 4461.9 lumens
Efficiency: N/A
Efficacy: 123.3 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

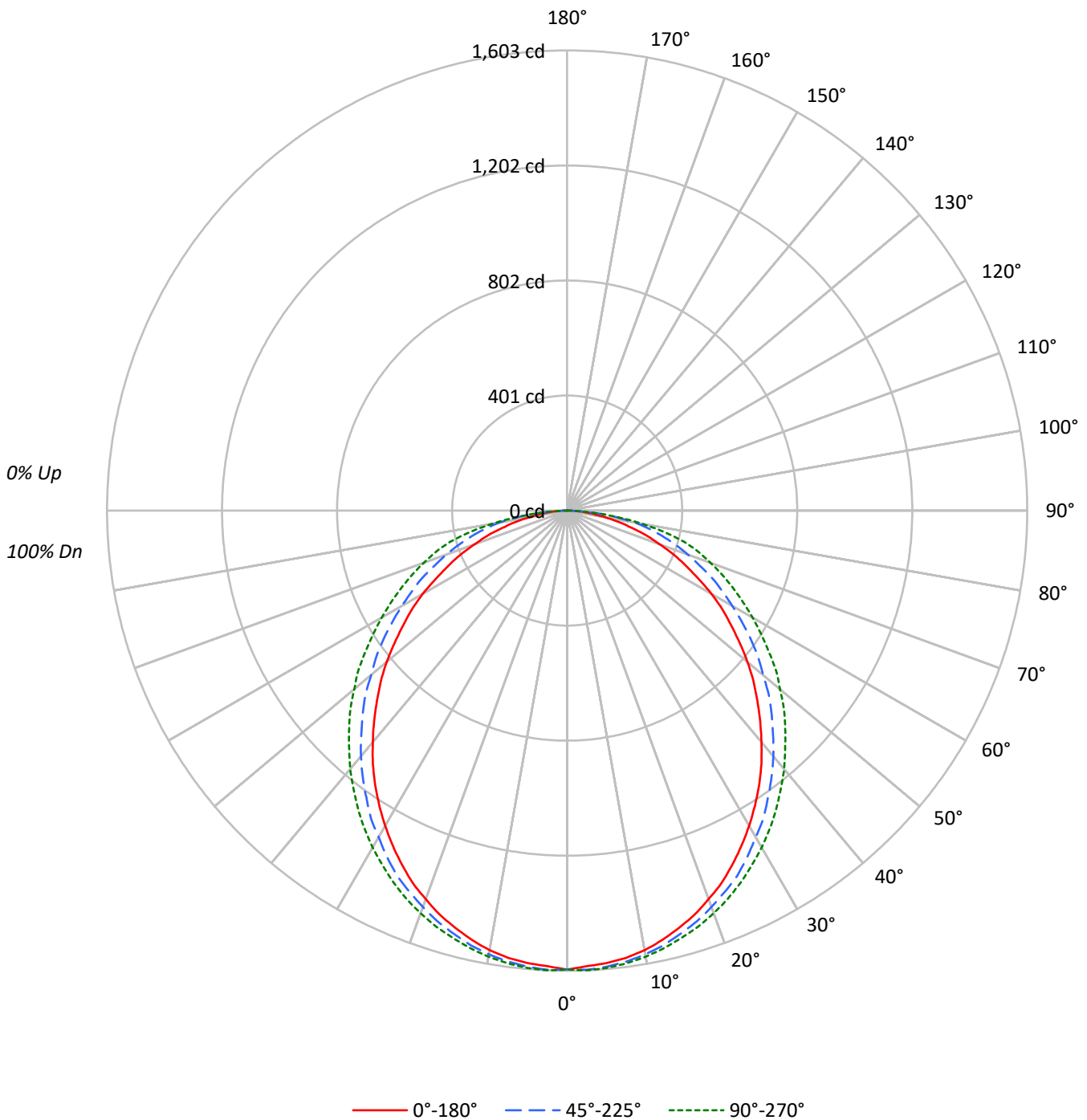
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4302	4302	4302
5°	4274	4308	4319
10°	4249	4289	4312
15°	4193	4251	4292
20°	4125	4209	4275
25°	4043	4166	4247
30°	3939	4082	4211
35°	3830	4007	4172
40°	3700	3927	4132
45°	3565	3835	4088
50°	3434	3730	4052
55°	3272	3663	4024
60°	3126	3574	4011
65°	2916	3552	4056
70°	2686	3522	4177
75°	2425	3571	4394
80°	2097	3677	4130
85°	1735	3084	3084



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.2	3.4
10°-20°	430.3	9.6
20°-30°	643.8	14.4
30°-40°	762.4	17.1
40°-50°	777.0	17.4
50°-60°	696.4	15.6
60°-70°	545.3	12.2
70°-80°	351.6	7.9
80°-90°	103.9	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°	1225.3	27.5
0°-40°	1987.7	44.5
0°-60°	3461.2	77.6
0°-90°	4461.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4461.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1599	1599	1599	1599	1599	
5°	1582	1586	1595	1597	1599	150
15°	1505	1514	1526	1538	1540	424
25°	1362	1374	1403	1422	1430	627
35°	1166	1180	1220	1257	1270	729
45°	937	958	1008	1060	1074	723
55°	697	720	781	835	858	625
65°	458	485	558	612	637	455
75°	233	269	344	402	423	250
85°	56	77	100	100	100	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1598.8	1598.8	1598.8	1598.8	1598.8
2.5°	1588.4	1592.6	1600.9	1603.0	1603.0
5°	1582.2	1586.3	1594.7	1596.8	1598.8
7.5°	1571.8	1573.9	1584.3	1588.4	1590.5
10°	1555.1	1559.3	1569.7	1575.9	1578.0
12.5°	1532.2	1538.5	1551.0	1559.3	1561.4
15°	1505.2	1513.5	1526.0	1538.5	1540.5
17.5°	1476.0	1484.3	1501.0	1515.6	1519.7
20°	1440.6	1451.0	1469.8	1486.4	1492.7
22.5°	1405.2	1413.6	1436.5	1457.3	1463.5
25°	1361.5	1374.0	1403.1	1421.9	1430.2
27.5°	1315.7	1330.3	1359.4	1384.4	1392.7
30°	1267.8	1282.4	1313.6	1344.9	1355.3
32.5°	1217.9	1234.5	1272.0	1303.2	1313.6
35°	1165.8	1180.4	1219.9	1257.4	1269.9
37.5°	1111.7	1124.2	1170.0	1209.5	1222.0
40°	1053.4	1070.1	1117.9	1163.7	1176.2
42.5°	995.1	1013.8	1061.7	1111.7	1124.2
45°	936.8	957.6	1007.6	1059.6	1074.2
47.5°	880.6	897.3	953.5	1003.4	1024.3
50°	820.2	836.9	891.0	947.2	968.0
52.5°	757.8	780.7	839.0	893.1	918.1
55°	697.4	720.3	780.7	834.8	857.7
57.5°	641.2	659.9	722.4	778.6	801.5
60°	580.8	597.5	664.1	724.5	745.3
62.5°	516.3	541.3	610.0	666.2	691.2
65°	458.0	485.1	557.9	612.1	637.0
67.5°	403.9	428.9	499.6	557.9	585.0
70°	341.4	374.7	447.6	505.9	530.9
72.5°	291.5	320.6	395.5	453.8	480.9
75°	233.2	268.6	343.5	401.8	422.6
77.5°	185.3	220.7	291.5	337.3	347.7
80°	135.3	170.7	237.3	260.2	266.5
82.5°	91.6	124.9	170.7	177.0	179.0
85°	56.2	77.0	99.9	99.9	99.9
87.5°	27.1	31.2	35.4	33.3	33.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)