

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: P389277

Luminaire Tested: **22CZ2-50VHE-S-UNV-L930-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: P389277
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-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4309.6 lumens
Efficiency: N/A
Efficacy: 119.0 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

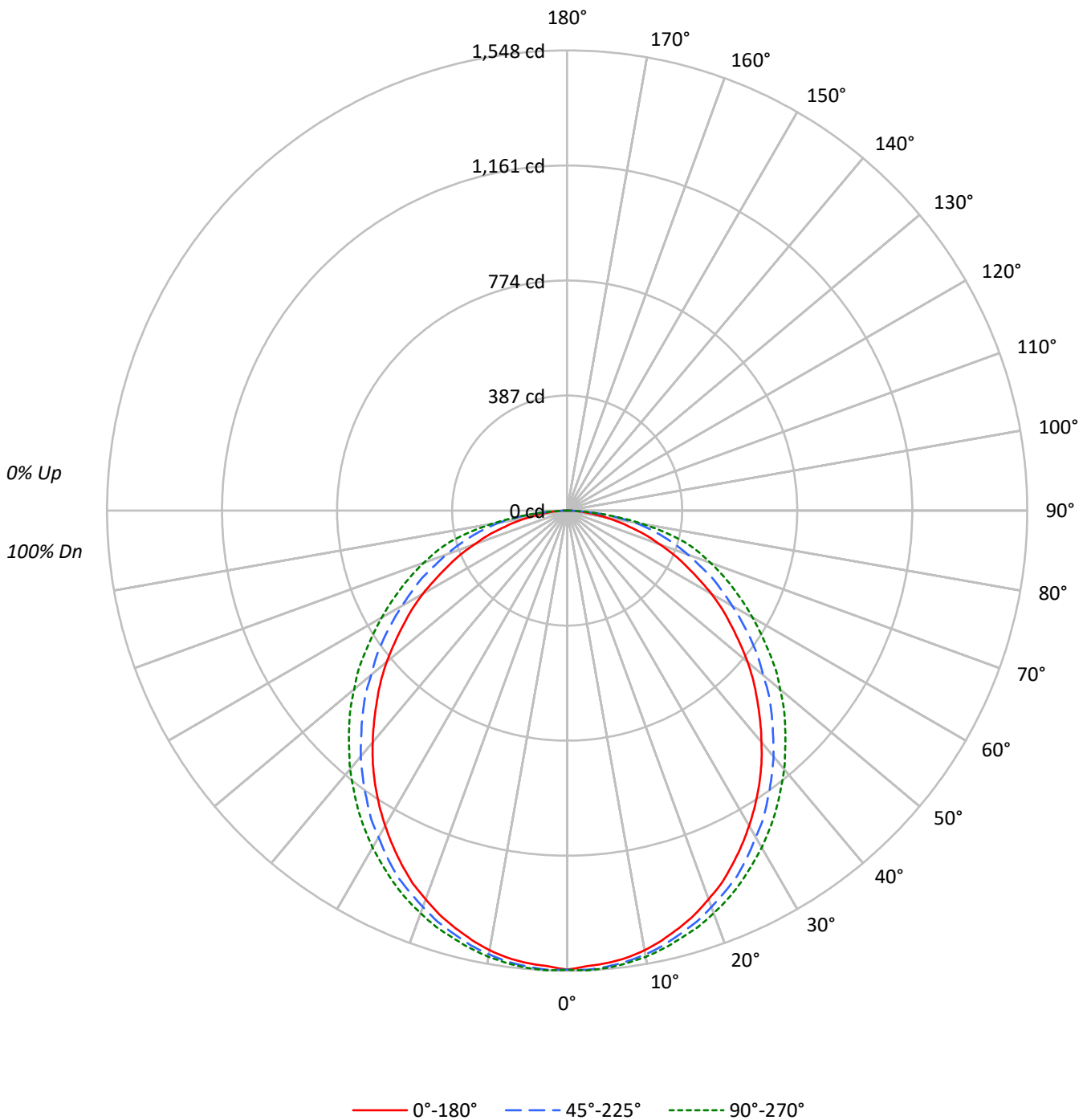
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4156	4156	4156
5°	4128	4160	4172
10°	4104	4143	4165
15°	4050	4106	4145
20°	3985	4065	4129
25°	3904	4024	4102
30°	3805	3943	4067
35°	3699	3871	4029
40°	3574	3793	3991
45°	3443	3704	3949
50°	3316	3603	3914
55°	3160	3537	3887
60°	3019	3452	3874
65°	2817	3431	3918
70°	2595	3401	4034
75°	2341	3450	4244
80°	2025	3552	3989
85°	1677	2979	2979



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	3.4
10°-20°	415.6	9.6
20°-30°	621.8	14.4
30°-40°	736.4	17.1
40°-50°	750.5	17.4
50°-60°	672.6	15.6
60°-70°	526.6	12.2
70°-80°	339.6	7.9
80°-90°	100.3	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°	1183.5	27.5
0°-40°	1919.9	44.5
0°-60°	3343.0	77.6
0°-90°	4309.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4309.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1544	1544	1544	1544	1544	
5°	1528	1532	1540	1542	1544	145
15°	1454	1462	1474	1486	1488	410
25°	1315	1327	1355	1373	1381	605
35°	1126	1140	1178	1214	1227	704
45°	905	925	973	1024	1038	699
55°	674	696	754	806	828	604
65°	442	468	539	591	615	439
75°	225	259	332	388	408	241
85°	54	74	96	96	96	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1544.3	1544.3	1544.3	1544.3	1544.3
2.5°	1534.2	1538.2	1546.3	1548.3	1548.3
5°	1528.2	1532.2	1540.2	1542.3	1544.3
7.5°	1518.1	1520.1	1530.2	1534.2	1536.2
10°	1502.0	1506.1	1516.1	1522.1	1524.2
12.5°	1479.9	1486.0	1498.0	1506.1	1508.1
15°	1453.8	1461.8	1473.9	1486.0	1488.0
17.5°	1425.6	1433.7	1449.8	1463.8	1467.9
20°	1391.4	1401.5	1419.6	1435.7	1441.7
22.5°	1357.3	1365.3	1387.4	1407.5	1413.6
25°	1315.0	1327.1	1355.3	1373.3	1381.4
27.5°	1270.8	1284.9	1313.0	1337.2	1345.2
30°	1224.6	1238.6	1268.8	1299.0	1309.0
32.5°	1176.3	1192.4	1228.6	1258.7	1268.8
35°	1126.0	1140.1	1178.3	1214.5	1226.6
37.5°	1073.7	1085.8	1130.0	1168.3	1180.3
40°	1017.4	1033.5	1079.8	1124.0	1136.1
42.5°	961.1	979.2	1025.5	1073.7	1085.8
45°	904.8	924.9	973.2	1023.5	1037.6
47.5°	850.6	866.6	920.9	969.2	989.3
50°	792.2	808.3	860.6	914.9	935.0
52.5°	731.9	754.0	810.3	862.6	886.7
55°	673.6	695.7	754.0	806.3	828.4
57.5°	619.3	637.4	697.7	752.0	774.1
60°	561.0	577.1	641.4	699.7	719.9
62.5°	498.7	522.8	589.2	643.4	667.6
65°	442.4	468.5	538.9	591.2	615.3
67.5°	390.1	414.2	482.6	538.9	565.0
70°	329.8	361.9	432.3	488.6	512.7
72.5°	281.5	309.7	382.0	438.3	464.5
75°	225.2	259.4	331.8	388.1	408.2
77.5°	179.0	213.1	281.5	325.7	335.8
80°	130.7	164.9	229.2	251.3	257.4
82.5°	88.5	120.6	164.9	170.9	172.9
85°	54.3	74.4	96.5	96.5	96.5
87.5°	26.1	30.2	34.2	32.2	32.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)