

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: P389279

Luminaire Tested: **22CZ2-50VHE-S-UNV-L930-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: P389279
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-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: 4417.0 lumens
Efficiency: N/A
Efficacy: 122.0 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

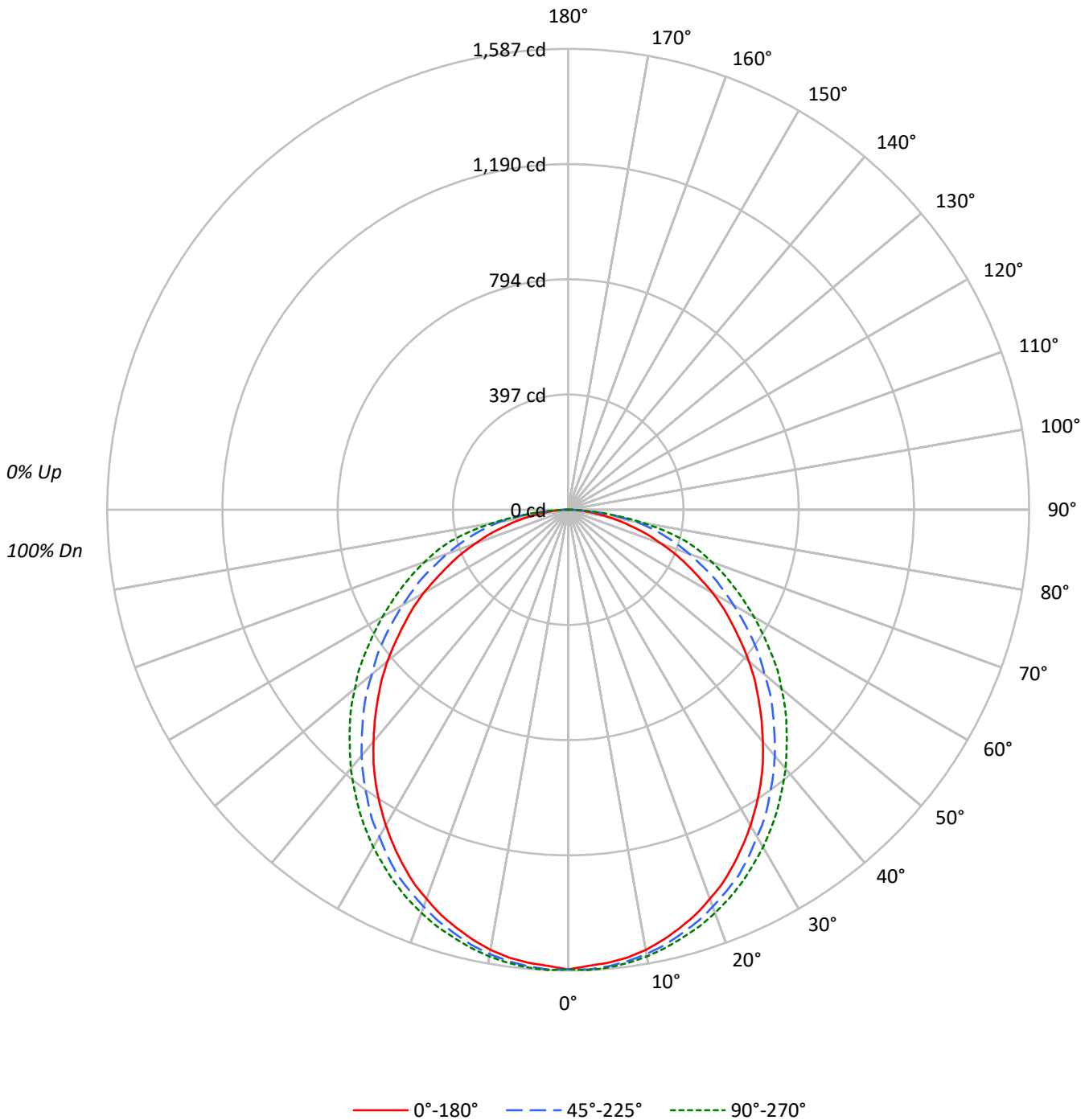
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20				20			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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83	83	
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69	69	
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58	58	
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49	49	
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43	43	
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37	37	
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33	33	
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30	30	
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27	27	
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24	24	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4259	4259	4259
5°	4231	4264	4275
10°	4207	4246	4268
15°	4151	4208	4249
20°	4084	4167	4231
25°	4002	4124	4204
30°	3900	4041	4169
35°	3791	3967	4130
40°	3663	3888	4090
45°	3529	3796	4047
50°	3399	3693	4012
55°	3239	3626	3984
60°	3095	3538	3971
65°	2887	3517	4015
70°	2659	3486	4135
75°	2400	3535	4350
80°	2077	3640	4088
85°	1717	3054	3054



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.7	3.4
10°-20°	426.0	9.6
20°-30°	637.3	14.4
30°-40°	754.8	17.1
40°-50°	769.2	17.4
50°-60°	689.4	15.6
60°-70°	539.8	12.2
70°-80°	348.1	7.9
80°-90°	102.8	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°	1213.0	27.5
0°-40°	1967.7	44.5
0°-60°	3426.4	77.6
0°-90°	4417.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4417.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1566	1570	1579	1581	1583	149
15°	1490	1498	1511	1523	1525	420
25°	1348	1360	1389	1408	1416	620
35°	1154	1168	1208	1245	1257	721
45°	927	948	998	1049	1063	716
55°	690	713	773	826	849	619
65°	453	480	552	606	631	450
75°	231	266	340	398	418	247
85°	56	76	99	99	99	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1582.7	1582.7	1582.7	1582.7	1582.7
2.5°	1572.4	1576.6	1584.8	1586.9	1586.9
5°	1566.3	1570.4	1578.6	1580.7	1582.7
7.5°	1556.0	1558.0	1568.3	1572.4	1574.5
10°	1539.5	1543.6	1553.9	1560.1	1562.1
12.5°	1516.8	1523.0	1535.3	1543.6	1545.7
15°	1490.0	1498.3	1510.6	1523.0	1525.0
17.5°	1461.2	1469.4	1485.9	1500.3	1504.4
20°	1426.1	1436.4	1455.0	1471.5	1477.6
22.5°	1391.1	1399.3	1422.0	1442.6	1448.8
25°	1347.8	1360.2	1389.0	1407.6	1415.8
27.5°	1302.5	1316.9	1345.7	1370.5	1378.7
30°	1255.1	1269.5	1300.4	1331.3	1341.6
32.5°	1205.6	1222.1	1259.2	1290.1	1300.4
35°	1154.1	1168.5	1207.7	1244.8	1257.1
37.5°	1100.5	1112.9	1158.2	1197.4	1209.7
40°	1042.8	1059.3	1106.7	1152.0	1164.4
42.5°	985.1	1003.6	1051.0	1100.5	1112.9
45°	927.4	948.0	997.5	1049.0	1063.4
47.5°	871.7	888.2	943.9	993.3	1013.9
50°	812.0	828.5	882.1	937.7	958.3
52.5°	750.2	772.8	830.5	884.1	908.8
55°	690.4	713.1	772.8	826.4	849.1
57.5°	634.7	653.3	715.1	770.8	793.4
60°	575.0	591.5	657.4	717.2	737.8
62.5°	511.1	535.8	603.8	659.5	684.2
65°	453.4	480.2	552.3	605.9	630.6
67.5°	399.8	424.5	494.6	552.3	579.1
70°	338.0	371.0	443.1	500.8	525.5
72.5°	288.5	317.4	391.6	449.3	476.1
75°	230.8	265.9	340.0	397.7	418.4
77.5°	183.4	218.5	288.5	333.9	344.2
80°	134.0	169.0	234.9	257.6	263.8
82.5°	90.7	123.7	169.0	175.2	177.2
85°	55.6	76.3	98.9	98.9	98.9
87.5°	26.8	30.9	35.0	33.0	33.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)