

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: P388342

Luminaire Tested: **22CZ2-50VHE-UNV-L930-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: P388342
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: 22CZ2-50VHE-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4151.6 lumens
Efficiency: N/A
Efficacy: 114.7 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

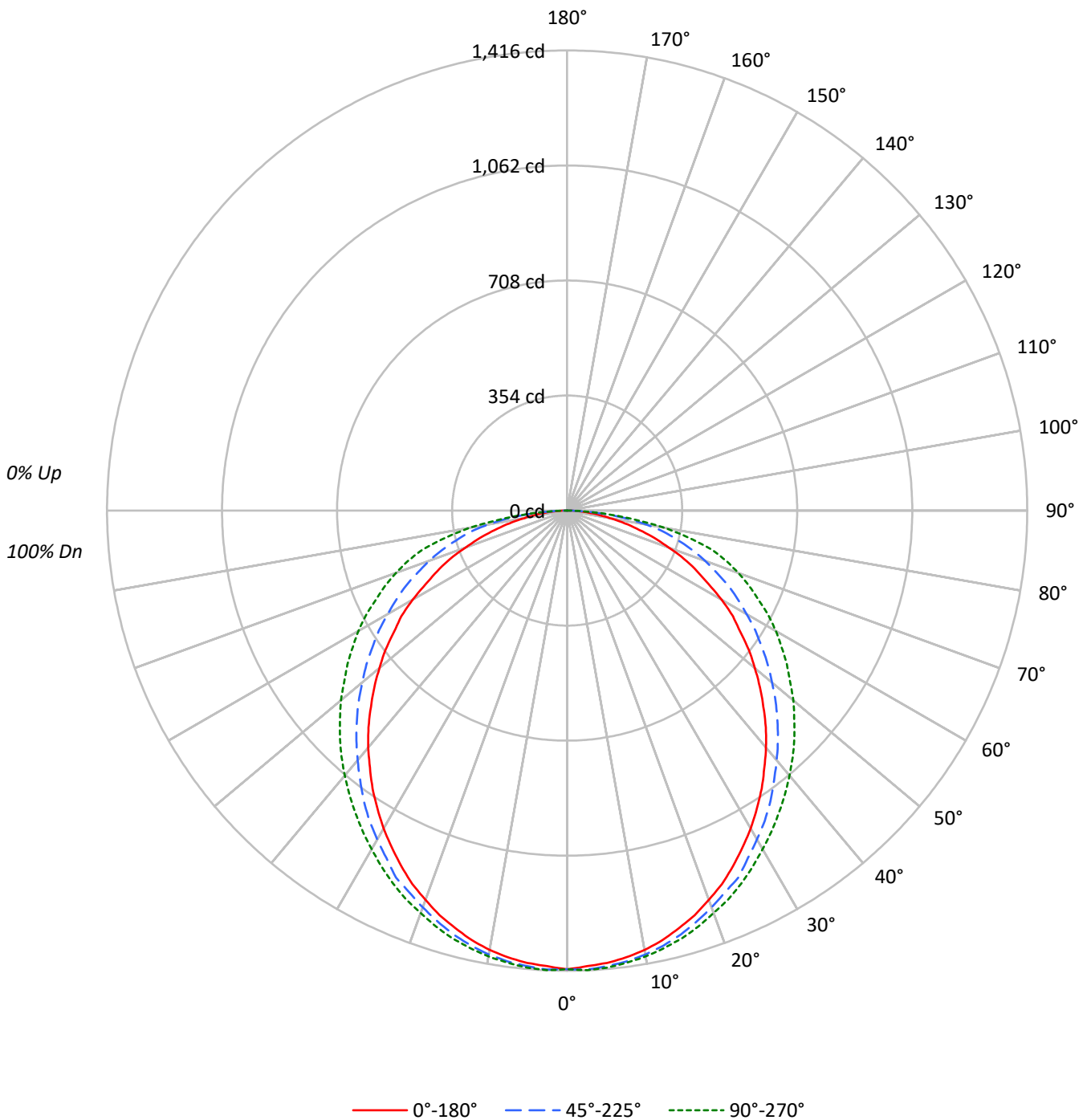
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388342

CATALOG NUMBER: 22CZ2-50VHE-UNV-L930-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388342

CATALOG NUMBER: 22CZ2-50VHE-UNV-L930-CD1-SWPD1-U

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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3799	3799	3799
5°	3774	3802	3813
10°	3751	3790	3807
15°	3705	3762	3796
20°	3650	3721	3773
25°	3585	3700	3761
30°	3510	3631	3739
35°	3429	3584	3731
40°	3344	3523	3739
45°	3250	3483	3763
50°	3156	3447	3806
55°	3048	3431	3872
60°	2957	3430	3991
65°	2810	3486	4136
70°	2620	3552	4404
75°	2400	3674	4758
80°	2089	3831	4685
85°	1828	3406	3721



TEST NUMBER: P388342

CATALOG NUMBER: 22CZ2-50VHE-UNV-L930-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.5	3.2
10°-20°	380.2	9.2
20°-30°	570.8	13.7
30°-40°	682.1	16.4
40°-50°	709.3	17.1
50°-60°	657.4	15.8
60°-70°	539.2	13.0
70°-80°	364.5	8.8
80°-90°	114.5	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°	1084.6	26.1
0°-40°	1766.7	42.6
0°-60°	3133.3	75.5
0°-90°	4151.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4151.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1412	1412	1412	1412	1412	
5°	1397	1399	1408	1410	1412	133
15°	1330	1336	1350	1358	1363	375
25°	1207	1218	1246	1260	1267	556
35°	1044	1058	1091	1124	1136	652
45°	854	870	915	968	989	659
55°	650	670	731	797	825	584
65°	441	466	548	619	650	436
75°	231	270	353	425	458	245
85°	59	82	110	123	120	67
90°	0	0	0	0	0	



TEST NUMBER: P388342

CATALOG NUMBER: 22CZ2-50VHE-UNV-L930-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1411.6	1411.6	1411.6	1411.6	1411.6
2.5°	1403.4	1407.5	1413.7	1415.7	1415.7
5°	1397.3	1399.4	1407.5	1409.6	1411.6
7.5°	1387.1	1391.2	1399.4	1401.4	1403.4
10°	1372.8	1376.9	1387.1	1391.2	1393.2
12.5°	1354.4	1358.5	1370.8	1376.9	1378.9
15°	1329.9	1336.0	1350.3	1358.5	1362.6
17.5°	1305.4	1311.5	1325.8	1338.1	1342.2
20°	1274.7	1289.0	1299.3	1315.6	1317.6
22.5°	1244.1	1252.3	1270.7	1287.0	1295.2
25°	1207.3	1217.5	1246.1	1260.4	1266.6
27.5°	1168.5	1182.8	1205.3	1227.8	1235.9
30°	1129.7	1139.9	1168.5	1195.1	1203.2
32.5°	1086.8	1101.1	1131.7	1158.3	1170.6
35°	1043.9	1058.2	1090.9	1123.6	1135.8
37.5°	996.9	1013.3	1045.9	1084.8	1101.1
40°	952.0	964.2	1003.0	1050.0	1064.3
42.5°	905.0	919.3	960.1	1011.2	1027.6
45°	853.9	870.3	915.2	968.3	988.7
47.5°	804.9	821.2	870.3	923.4	947.9
50°	753.8	774.2	823.3	884.6	909.1
52.5°	704.8	723.2	778.3	841.7	864.1
55°	649.6	670.1	731.3	796.7	825.3
57.5°	604.7	619.0	686.4	753.8	782.4
60°	549.5	567.9	637.4	708.9	741.6
62.5°	490.3	520.9	592.4	666.0	698.7
65°	441.3	465.8	547.5	619.0	649.6
67.5°	390.2	416.7	496.4	572.0	606.7
70°	333.0	367.7	451.5	527.1	559.7
72.5°	281.9	318.7	404.5	478.0	512.8
75°	230.8	269.7	353.4	424.9	457.6
77.5°	181.8	224.7	306.4	361.6	382.0
80°	134.8	175.7	247.2	286.0	302.3
82.5°	94.0	128.7	181.8	202.2	206.3
85°	59.2	81.7	110.3	122.6	120.5
87.5°	26.6	32.7	40.9	44.9	42.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)