

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: P390286

Luminaire Tested: **22CZ2-34VHE-RDP-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: P390286  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-34VHE-RDP-UNV-L930-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1971.8 lumens  
Efficiency: N/A  
Efficacy: 78.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

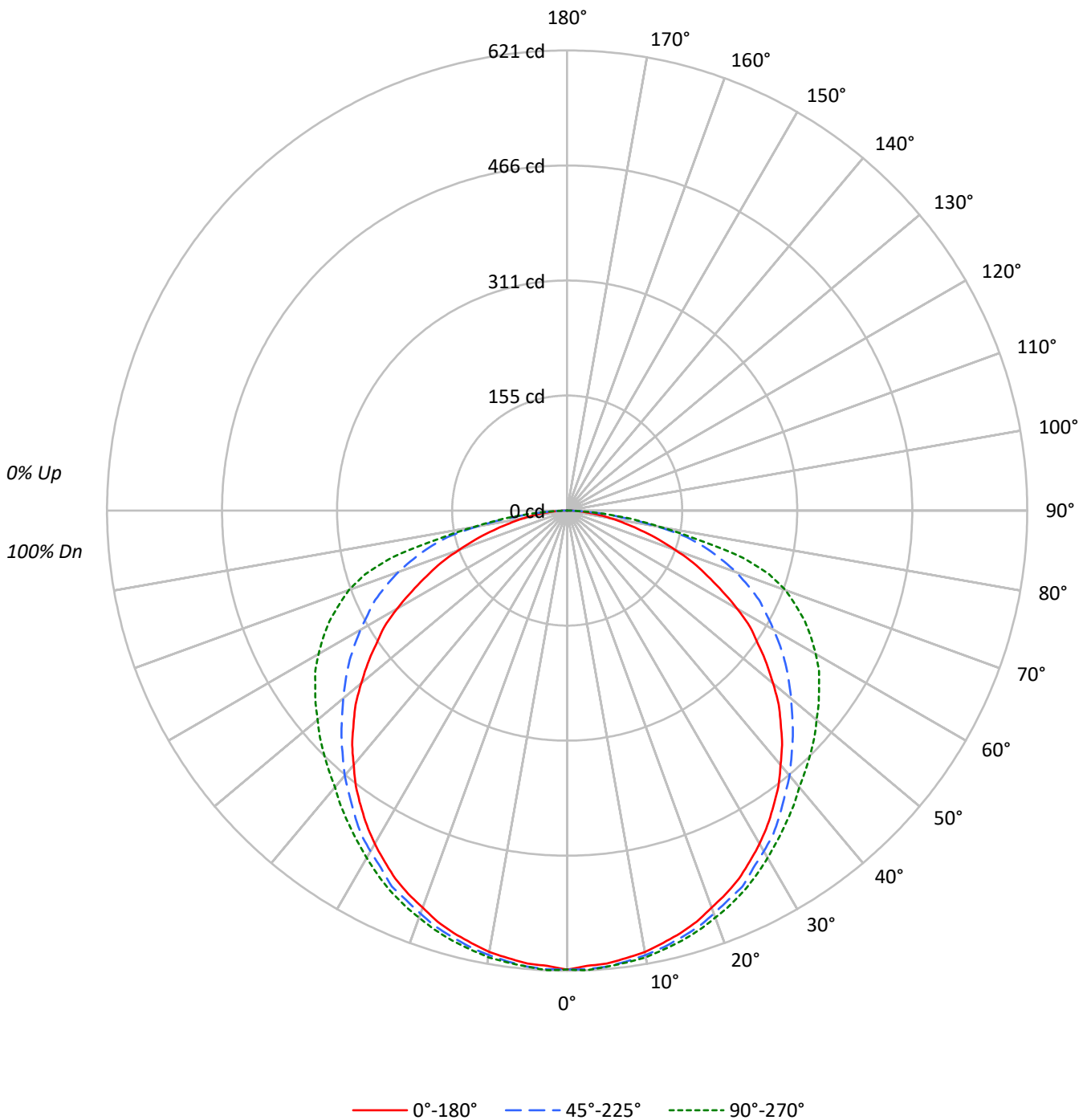
Input Watts (W): 25.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P390286

CATALOG NUMBER: 22CZ2-34VHE-RDP-UNV-L930-CD1-SWPD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P390286

CATALOG NUMBER: 22CZ2-34VHE-RDP-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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1667	1667	1667
5°	1657	1669	1669
10°	1653	1665	1673
15°	1645	1661	1673
20°	1633	1657	1674
25°	1628	1662	1680
30°	1614	1650	1681
35°	1596	1644	1691
40°	1574	1641	1712
45°	1551	1639	1767
50°	1518	1652	1840
55°	1477	1688	1947
60°	1428	1733	2084
65°	1330	1820	2253
70°	1221	1906	2465
75°	1071	2006	2548
80°	922	1911	2001
85°	806	1389	1522



TEST NUMBER: P390286

CATALOG NUMBER: 22CZ2-34VHE-RDP-UNV-L930-CD1-SWPD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.6	3.0
10°-20°	168.2	8.5
20°-30°	256.7	13.0
30°-40°	313.4	15.9
40°-50°	335.1	17.0
50°-60°	323.4	16.4
60°-70°	278.4	14.1
70°-80°	188.4	9.6
80°-90°	49.7	2.5
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°	483.5	24.5
0°-40°	796.8	40.4
0°-60°	1455.3	73.8
0°-90°	1971.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1971.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	619	619	619	619	619	
5°	614	615	618	618	618	58
15°	590	592	596	599	600	167
25°	548	551	560	563	566	252
35°	486	490	500	511	515	304
45°	408	415	431	453	464	315
55°	315	325	360	396	415	282
65°	209	229	286	331	354	208
75°	103	136	193	232	245	111
85°	26	36	45	46	49	29
90°	0	0	0	0	0	



TEST NUMBER: P390286

CATALOG NUMBER: 22CZ2-34VHE-RDP-UNV-L930-CD1-SWPD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	619.4	619.4	619.4	619.4	619.4
2.5°	615.0	616.5	619.4	619.4	620.8
5°	613.6	615.0	617.9	617.9	617.9
7.5°	609.2	610.7	613.6	615.0	615.0
10°	604.9	606.3	609.2	610.7	612.1
12.5°	597.6	599.1	603.4	606.3	606.3
15°	590.4	591.8	596.2	599.1	600.5
17.5°	581.7	584.6	588.9	591.8	593.3
20°	570.1	573.0	578.8	583.1	584.6
22.5°	559.9	562.8	568.6	573.0	575.9
25°	548.3	551.2	559.9	562.8	565.7
27.5°	533.8	536.7	543.9	549.8	554.1
30°	519.3	522.2	530.9	538.1	541.0
32.5°	503.3	507.7	517.8	523.6	528.0
35°	485.9	490.3	500.4	510.6	514.9
37.5°	468.5	472.9	483.0	496.1	501.9
40°	448.2	454.0	467.1	484.5	487.4
42.5°	429.4	436.6	448.2	468.5	475.8
45°	407.6	414.9	430.8	452.6	464.2
47.5°	387.3	394.5	412.0	438.1	452.6
50°	362.6	372.8	394.5	425.0	439.5
52.5°	339.4	348.1	377.1	410.5	427.9
55°	314.8	324.9	359.7	396.0	414.9
57.5°	293.0	301.7	340.9	381.5	403.2
60°	265.4	277.1	322.0	365.5	387.3
62.5°	236.4	253.8	303.2	348.1	371.3
65°	208.9	229.2	285.8	330.7	353.9
67.5°	184.2	206.0	264.0	311.9	333.6
70°	155.2	182.8	242.2	288.7	313.3
72.5°	129.1	159.6	217.6	264.0	285.8
75°	103.0	136.3	192.9	232.1	245.1
77.5°	79.8	111.7	165.4	177.0	178.4
80°	59.5	88.5	123.3	124.7	129.1
82.5°	40.6	62.4	79.8	87.0	88.5
85°	26.1	36.3	45.0	46.4	49.3
87.5°	11.6	13.1	16.0	14.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)