

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: P387872

Luminaire Tested: **22CZ2-34HE-SQR-UNV-L940-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: P387872
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-SQR-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2777.8 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

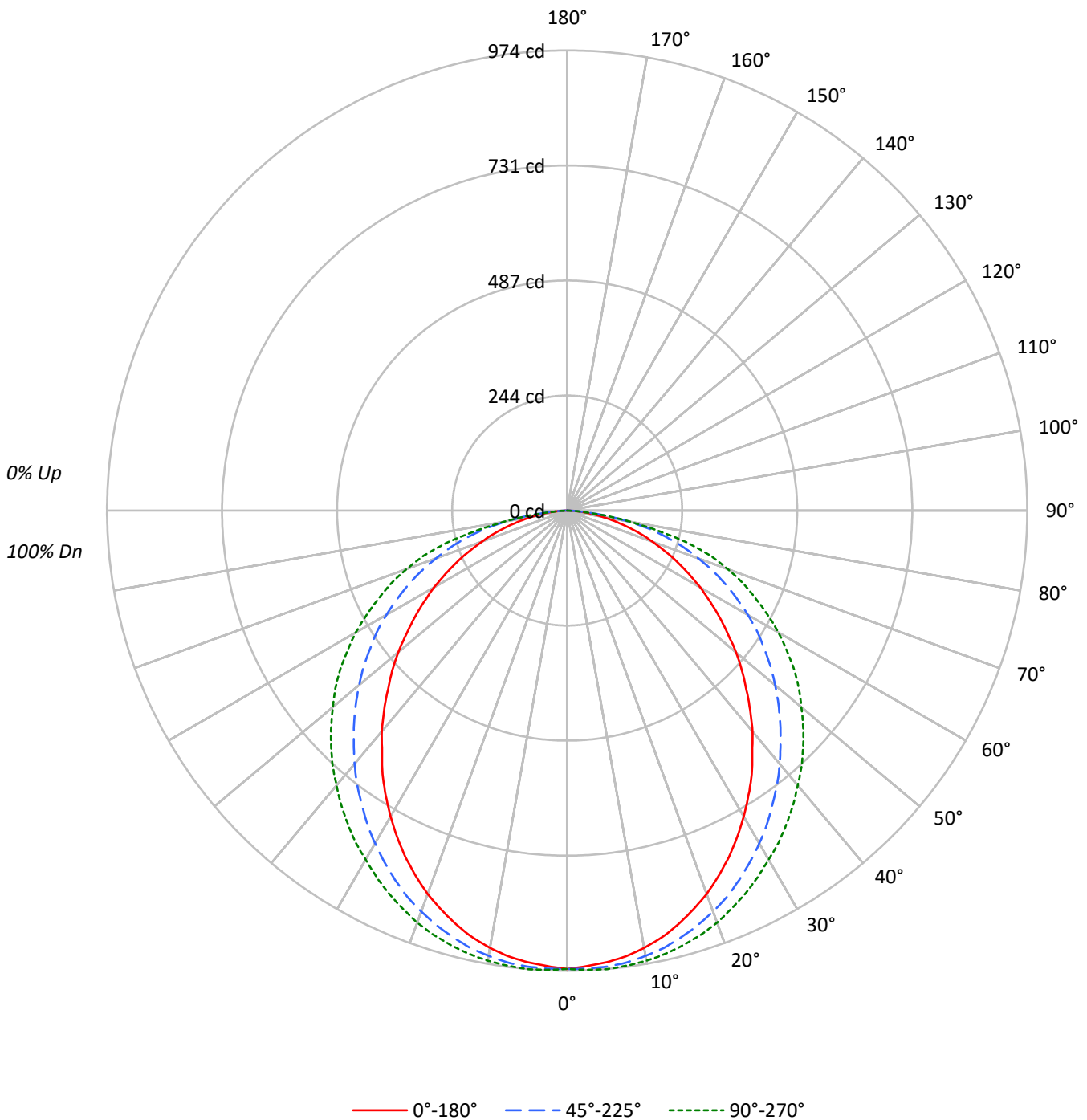
Input Watts (W): 25.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387872

CATALOG NUMBER: 22CZ2-34HE-SQR-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387872

CATALOG NUMBER: 22CZ2-34HE-SQR-UNV-L940-CD1-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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2611	2611	2611
5°	2593	2618	2632
10°	2569	2616	2644
15°	2527	2604	2652
20°	2473	2586	2658
25°	2404	2560	2654
30°	2323	2528	2651
35°	2239	2490	2659
40°	2144	2459	2668
45°	2042	2428	2689
50°	1954	2406	2710
55°	1849	2388	2753
60°	1752	2377	2781
65°	1637	2359	2804
70°	1504	2323	2842
75°	1357	2261	2742
80°	1164	2002	2064
85°	936	1179	936



TEST NUMBER: P387872

CATALOG NUMBER: 22CZ2-34HE-SQR-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	3.3
10°-20°	263.0	9.5
20°-30°	395.0	14.2
30°-40°	471.1	17.0
40°-50°	487.1	17.5
50°-60°	447.8	16.1
60°-70°	356.5	12.8
70°-80°	217.8	7.8
80°-90°	47.3	1.7
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°	750.0	27.0
0°-40°	1221.2	44.0
0°-60°	2156.1	77.6
0°-90°	2777.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2777.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	960	962	969	973	974	91
15°	907	918	935	948	952	255
25°	810	829	862	886	894	372
35°	682	711	758	798	810	425
45°	537	575	638	690	707	415
55°	394	438	509	567	587	353
65°	257	301	370	422	440	255
75°	130	169	218	256	264	139
85°	30	37	38	33	30	35
90°	0	0	0	0	0	



TEST NUMBER: P387872

CATALOG NUMBER: 22CZ2-34HE-SQR-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.4	970.4	970.4	970.4	970.4
2.5°	965.1	966.4	970.4	973.0	973.0
5°	959.8	962.4	969.0	973.0	974.3
7.5°	951.9	955.8	965.1	970.4	971.7
10°	940.0	945.3	957.2	965.1	967.7
12.5°	925.5	933.4	947.9	958.5	961.1
15°	907.1	917.6	934.8	947.9	951.9
17.5°	886.0	899.2	920.3	936.1	941.3
20°	863.6	876.7	903.1	921.6	928.2
22.5°	837.2	854.3	884.7	905.8	911.0
25°	809.5	829.3	862.2	886.0	893.9
27.5°	779.2	802.9	838.5	867.5	874.1
30°	747.5	772.6	813.5	845.1	853.0
32.5°	714.6	743.6	787.1	822.7	833.2
35°	681.6	710.6	758.1	797.6	809.5
37.5°	643.4	677.7	730.4	771.3	785.8
40°	610.4	643.4	700.1	744.9	759.4
42.5°	573.5	609.1	668.4	717.2	734.4
45°	536.6	574.8	638.1	689.5	706.7
47.5°	502.3	540.5	606.5	660.5	677.7
50°	466.7	506.3	574.8	630.2	647.3
52.5°	428.5	472.0	543.2	598.6	618.3
55°	394.2	437.7	508.9	566.9	586.7
57.5°	358.6	403.4	477.3	532.6	551.1
60°	325.6	369.2	441.7	495.7	516.8
62.5°	290.1	334.9	406.1	458.8	478.6
65°	257.1	300.6	370.5	421.9	440.4
67.5°	224.1	267.6	333.6	382.3	403.4
70°	191.2	234.7	295.3	342.8	361.2
72.5°	162.2	200.4	258.4	301.9	319.1
75°	130.5	168.8	217.5	255.8	263.7
77.5°	101.5	135.8	176.7	193.8	196.4
80°	75.1	101.5	129.2	133.2	133.2
82.5°	50.1	69.9	80.4	81.7	80.4
85°	30.3	36.9	38.2	33.0	30.3
87.5°	10.5	10.5	6.6	4.0	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)