

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: P230870

Luminaire Tested: **22CZ-LD5-24SE-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230870
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25714)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-24SE-RDP-UNV-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RDP LENS
Light Source: (56) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1434.0 lumens
Efficiency: N/A
Efficacy: 68.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

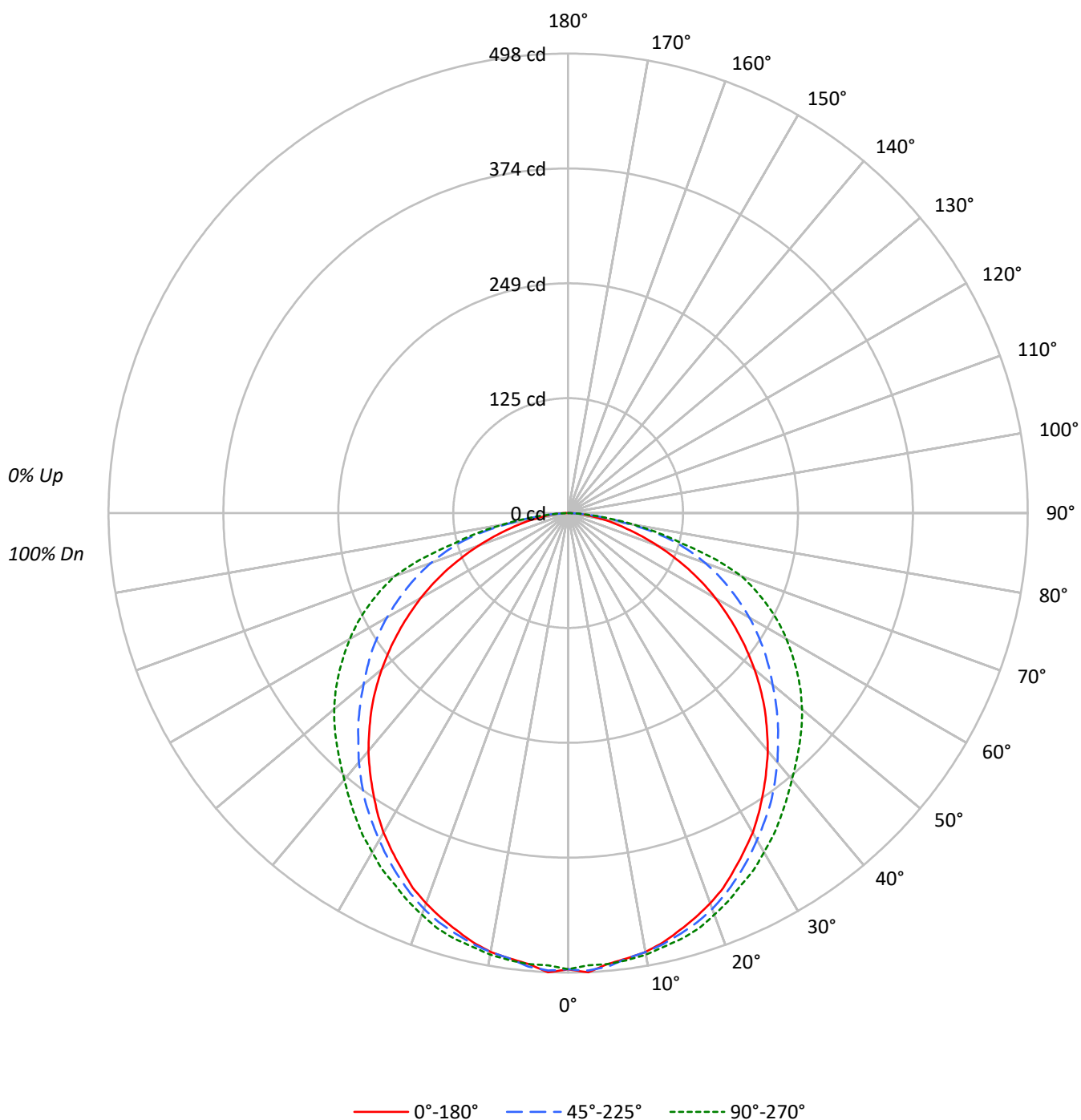
Input Watts (W): 21.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230870

CATALOG NUMBER: 22CZ-LD5-24SE-RDP-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230870

CATALOG NUMBER: 22CZ-LD5-24SE-RDP-UNV-L940-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	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			100
1	108	104	99	95	106	101	97	94		97	94	91			93	90	88			83
2	98	90	83	77	96	88	81	76		84	79	74			81	77	73			69
3	89	79	70	64	87	77	69	63		74	67	62			71	66	61			57
4	82	69	60	54	79	68	60	53		66	58	52			63	57	52			49
5	75	62	53	46	73	61	52	46		59	51	45			57	50	45			42
6	69	56	47	40	67	55	46	40		53	45	40			51	44	39			37
7	64	50	42	35	62	50	41	35		48	40	35			47	40	35			32
8	60	46	37	31	58	45	37	31		44	37	31			43	36	31			29
9	56	42	34	28	54	42	34	28		40	33	28			39	33	28			26
10	52	39	31	26	51	38	31	26		37	30	25			36	30	25			23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1330	1330	1330
5°	1325	1333	1325
10°	1320	1320	1328
15°	1304	1314	1330
20°	1289	1308	1326
25°	1266	1291	1319
30°	1243	1272	1319
35°	1211	1258	1320
40°	1182	1239	1325
45°	1147	1223	1349
50°	1104	1211	1385
55°	1051	1215	1423
60°	992	1221	1470
65°	915	1228	1523
70°	810	1242	1570
75°	688	1238	1337
80°	572	996	1113
85°	497	670	642



TEST NUMBER: P230870

CATALOG NUMBER: 22CZ-LD5-24SE-RDP-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.7	3.3
10°-20°	133.2	9.3
20°-30°	200.5	14.0
30°-40°	240.2	16.8
40°-50°	250.5	17.5
50°-60°	233.2	16.3
60°-70°	189.4	13.2
70°-80°	114.1	8.0
80°-90°	26.2	1.8
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°	380.4	26.5
0°-40°	620.6	43.3
0°-60°	1104.3	77.0
0°-90°	1434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1434.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	491	491	493	494	491	47
15°	468	470	472	474	477	132
25°	426	429	435	440	444	196
35°	369	373	383	394	402	231
45°	302	307	321	342	354	232
55°	224	234	259	287	303	200
65°	144	159	193	223	239	142
75°	66	88	119	127	129	71
85°	16	20	22	21	21	19
90°	0	0	0	0	0	



TEST NUMBER: P230870

CATALOG NUMBER: 22CZ-LD5-24SE-RDP-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	494.4	494.4	494.4	494.4	494.4
2.5°	498.2	497.2	496.3	493.4	490.6
5°	490.6	490.6	493.4	494.4	490.6
7.5°	486.8	486.8	486.8	490.6	488.7
10°	483.0	483.0	483.0	485.9	485.9
12.5°	476.4	477.4	478.3	479.3	481.2
15°	467.9	469.8	471.7	474.5	477.4
17.5°	459.4	461.3	465.1	467.9	471.7
20°	450.0	451.9	456.6	459.4	463.2
22.5°	439.6	440.5	446.2	450.0	454.7
25°	426.3	429.2	434.8	440.5	444.3
27.5°	413.1	415.9	422.5	430.1	435.8
30°	399.9	402.7	409.3	418.8	424.4
32.5°	384.7	388.5	396.1	407.4	414.0
35°	368.7	373.4	382.8	394.2	401.8
37.5°	352.6	357.3	367.7	381.9	389.5
40°	336.5	341.3	352.6	367.7	377.2
42.5°	318.6	324.2	336.5	354.5	365.8
45°	301.5	307.2	321.4	342.2	354.5
47.5°	282.6	289.3	305.3	329.0	343.1
50°	263.7	271.3	289.3	315.7	330.9
52.5°	243.9	252.4	274.1	301.5	317.6
55°	224.0	233.5	259.0	287.4	303.4
57.5°	204.2	214.6	242.9	272.2	288.3
60°	184.3	195.7	226.9	257.1	273.2
62.5°	164.5	176.8	209.9	240.1	257.1
65°	143.7	158.8	192.8	223.1	239.2
67.5°	122.9	140.8	175.8	205.1	220.3
70°	103.0	122.9	157.9	185.3	199.5
72.5°	84.1	104.9	139.0	162.6	168.3
75°	66.2	87.9	119.1	126.7	128.6
77.5°	51.0	70.9	94.5	96.4	101.1
80°	36.9	53.9	64.3	70.0	71.8
82.5°	25.5	36.9	42.5	43.5	44.4
85°	16.1	19.9	21.7	20.8	20.8
87.5°	8.5	7.6	6.6	4.7	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)