

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: P230829

Luminaire Tested: **22CZ-LD5-32SE-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230829
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-32SE-SQP-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (56) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1905.0 lumens
Efficiency: N/A
Efficacy: 62.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

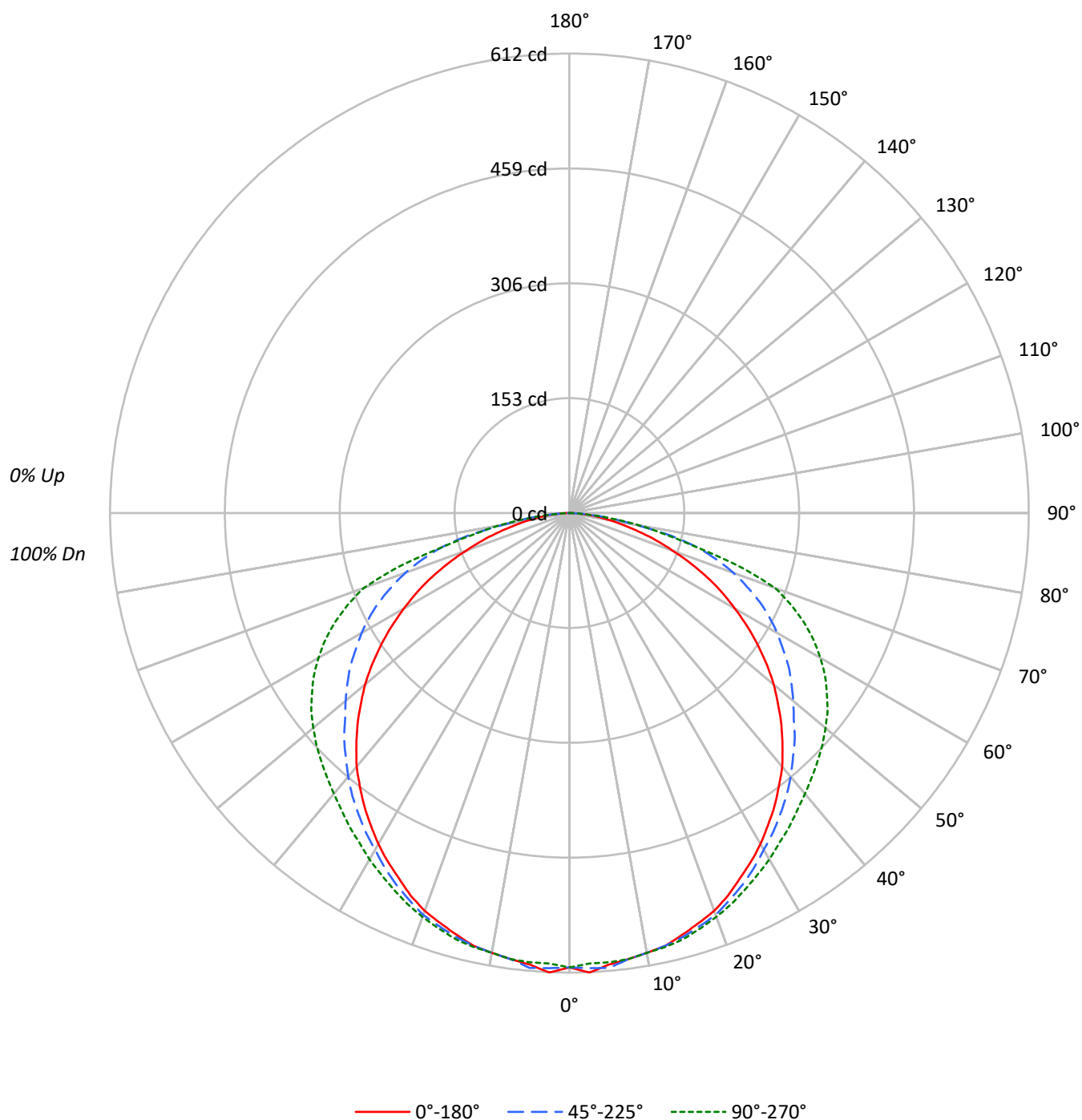
Input Watts (W): 30.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230829

CATALOG NUMBER: 22CZ-LD5-32SE-SQP-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230829

CATALOG NUMBER: 22CZ-LD5-32SE-SQP-UNV-L935-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	108	103	99	95	105	101	97	93		97	93	90			93	90	87			89
2	98	89	82	76	95	87	81	75		84	78	73			80	76	71			77
3	89	78	69	62	86	76	68	62		73	66	61			70	64	59			68
4	81	68	59	52	79	67	58	52		64	57	51			62	56	50			60
5	74	61	52	45	72	60	51	44		58	50	44			56	49	43			54
6	68	55	45	39	66	54	45	39		52	44	38			50	43	38			48
7	63	49	40	34	62	49	40	34		47	39	34			45	39	33			44
8	59	45	36	30	57	44	36	30		43	35	30			42	35	30			40
9	55	41	33	27	54	41	33	27		39	32	27			38	32	27			37
10	51	38	30	24	50	37	30	24		36	29	24			35	29	24			35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1628	1628	1628
5°	1630	1642	1622
10°	1625	1625	1625
15°	1620	1628	1636
20°	1614	1631	1639
25°	1594	1621	1643
30°	1581	1609	1655
35°	1565	1609	1677
40°	1549	1611	1715
45°	1520	1616	1779
50°	1487	1629	1864
55°	1437	1673	1964
60°	1370	1720	2078
65°	1291	1780	2195
70°	1153	1828	2293
75°	1000	1830	1815
80°	848	1353	1468
85°	732	914	821



TEST NUMBER: P230829

CATALOG NUMBER: 22CZ-LD5-32SE-SQP-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	3.0
10°-20°	165.0	8.7
20°-30°	251.4	13.2
30°-40°	307.6	16.1
40°-50°	331.0	17.4
50°-60°	320.6	16.8
60°-70°	271.6	14.3
70°-80°	164.2	8.6
80°-90°	36.1	1.9
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°	473.9	24.9
0°-40°	781.5	41.0
0°-60°	1433.1	75.2
0°-90°	1905.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1905.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	605	605	605	605	605	
5°	604	604	608	605	601	57
15°	581	583	584	586	587	164
25°	537	540	546	550	553	248
35°	476	479	490	503	510	298
45°	399	407	425	451	468	308
55°	306	320	356	398	419	274
65°	203	225	280	324	345	200
75°	96	130	176	179	175	103
85°	24	28	30	28	27	27
90°	0	0	0	0	0	



TEST NUMBER: P230829

CATALOG NUMBER: 22CZ-LD5-32SE-SQP-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	605.1	605.1	605.1	605.1	605.1
2.5°	612.5	611.0	606.6	603.6	600.6
5°	603.6	603.6	608.0	605.1	600.6
7.5°	599.2	599.2	599.2	606.6	599.2
10°	594.7	596.2	594.7	600.6	594.7
12.5°	590.3	590.3	590.3	591.8	591.8
15°	581.4	582.9	584.4	585.8	587.3
17.5°	572.5	574.0	577.0	578.4	579.9
20°	563.7	565.1	569.6	569.6	572.5
22.5°	551.8	551.8	557.7	559.2	563.7
25°	537.0	540.0	545.9	550.3	553.3
27.5°	523.7	526.7	532.6	538.5	542.9
30°	508.9	511.9	517.8	526.7	532.6
32.5°	492.6	495.6	504.5	514.8	520.8
35°	476.4	479.3	489.7	503.0	510.4
37.5°	458.6	463.1	474.9	489.7	498.6
40°	440.9	445.3	458.6	474.9	488.2
42.5°	420.2	426.1	440.9	463.1	477.8
45°	399.4	406.8	424.6	451.2	467.5
47.5°	377.2	384.6	405.4	439.4	457.1
50°	355.1	363.9	389.1	426.1	445.3
52.5°	331.4	340.3	372.8	412.8	433.5
55°	306.2	319.6	356.5	398.0	418.7
57.5°	281.1	295.9	337.3	381.7	403.9
60°	254.5	272.2	319.6	363.9	386.1
62.5°	229.3	248.5	300.3	344.7	366.9
65°	202.7	224.9	279.6	324.0	344.7
67.5°	174.6	202.7	255.9	298.8	319.6
70°	146.5	179.0	232.3	272.2	291.4
72.5°	121.3	155.3	205.6	239.7	239.7
75°	96.2	130.2	176.0	179.0	174.6
77.5°	74.0	106.5	137.6	125.7	128.7
80°	54.7	81.4	87.3	91.7	94.7
82.5°	37.0	54.7	56.2	59.2	59.2
85°	23.7	28.1	29.6	28.1	26.6
87.5°	10.4	11.8	8.9	5.9	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)