

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: P230806

Luminaire Tested: **22CZ-LD5-29-SQP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230806
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-LD5-29-SQP-UNV-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1767.0 lumens
Efficiency: N/A
Efficacy: 75.2 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

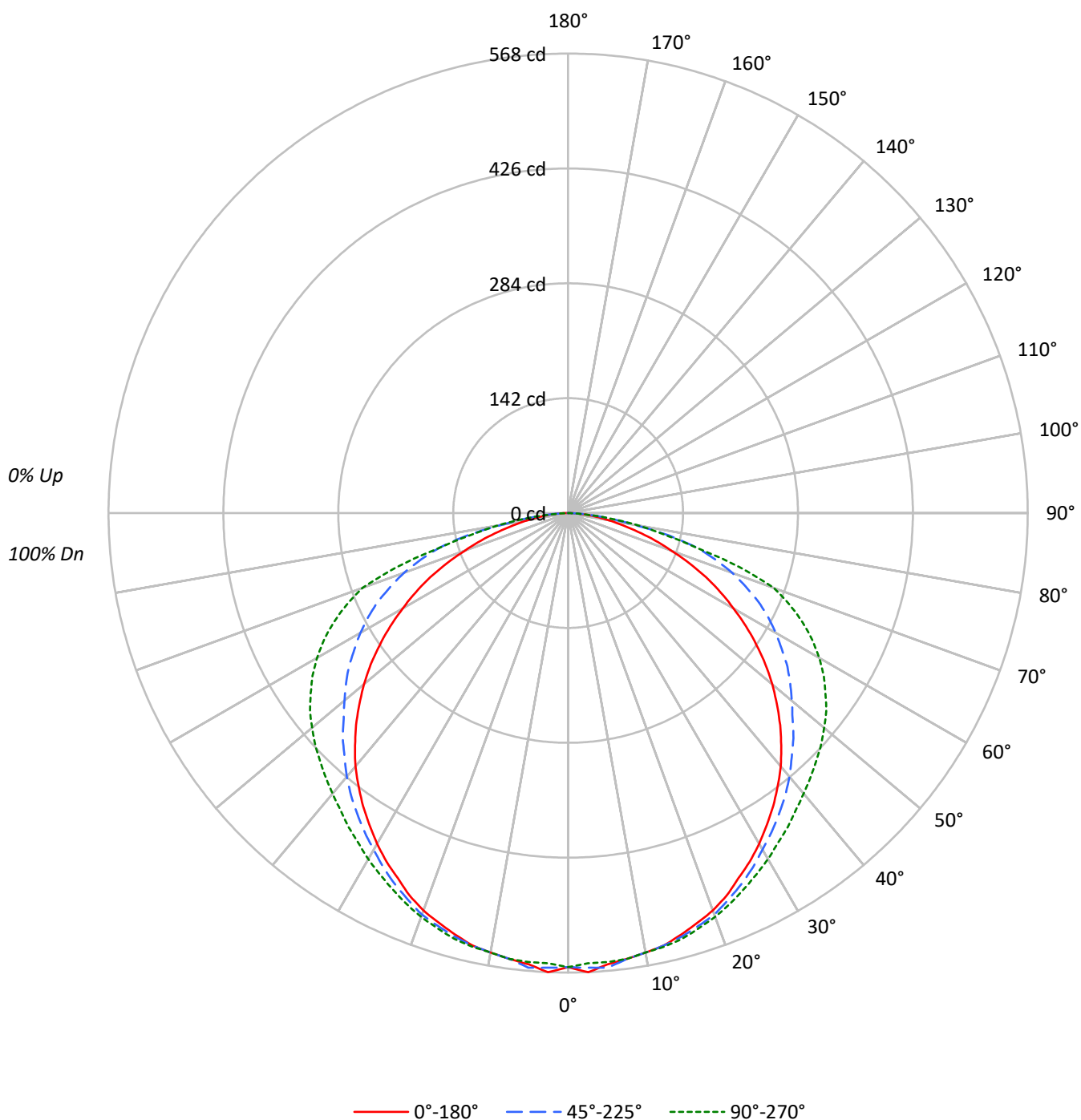
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230806

CATALOG NUMBER: 22CZ-LD5-29-SQP-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230806

CATALOG NUMBER: 22CZ-LD5-29-SQP-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	103	99	95	105	101	97	93	97	93	90		93	90	87		83
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		47
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		41
6	68	55	45	39	66	54	45	39	52	44	38		50	43	38		35
7	63	49	40	34	62	49	40	34	47	39	34		45	39	33		31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		28
9	55	41	33	27	54	41	33	27	39	32	27		38	32	27		25
10	51	38	30	24	50	37	30	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1510	1510	1510
5°	1512	1524	1505
10°	1507	1507	1507
15°	1502	1510	1518
20°	1497	1513	1521
25°	1479	1504	1524
30°	1467	1492	1535
35°	1452	1492	1555
40°	1436	1494	1591
45°	1410	1499	1650
50°	1379	1511	1729
55°	1333	1552	1822
60°	1270	1595	1928
65°	1197	1652	2036
70°	1069	1695	2127
75°	927	1698	1683
80°	787	1255	1361
85°	679	846	763



TEST NUMBER: P230806

CATALOG NUMBER: 22CZ-LD5-29-SQP-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.3	3.0
10°-20°	153.0	8.7
20°-30°	233.2	13.2
30°-40°	285.3	16.1
40°-50°	307.0	17.4
50°-60°	297.4	16.8
60°-70°	251.9	14.3
70°-80°	152.3	8.6
80°-90°	33.5	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°	439.5	24.9
0°-40°	724.9	41.0
0°-60°	1329.3	75.2
0°-90°	1767.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1767.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	560	560	564	561	557	53
15°	539	541	542	543	545	152
25°	498	501	506	510	513	230
35°	442	445	454	467	473	276
45°	370	377	394	418	434	286
55°	284	296	331	369	388	254
65°	188	209	259	300	320	185
75°	89	121	163	166	162	96
85°	22	26	27	26	25	25
90°	0	0	0	0	0	



TEST NUMBER: P230806

CATALOG NUMBER: 22CZ-LD5-29-SQP-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	561.2	561.2	561.2	561.2	561.2
2.5°	568.1	566.7	562.6	559.9	557.1
5°	559.9	559.9	564.0	561.2	557.1
7.5°	555.8	555.8	555.8	562.6	555.8
10°	551.6	553.0	551.6	557.1	551.6
12.5°	547.5	547.5	547.5	548.9	548.9
15°	539.3	540.7	542.0	543.4	544.8
17.5°	531.1	532.4	535.2	536.5	537.9
20°	522.8	524.2	528.3	528.3	531.1
22.5°	511.8	511.8	517.3	518.7	522.8
25°	498.1	500.9	506.4	510.5	513.2
27.5°	485.8	488.5	494.0	499.5	503.6
30°	472.1	474.8	480.3	488.5	494.0
32.5°	457.0	459.7	467.9	477.5	483.0
35°	441.9	444.6	454.2	466.6	473.4
37.5°	425.4	429.5	440.5	454.2	462.4
40°	408.9	413.0	425.4	440.5	452.8
42.5°	389.7	395.2	408.9	429.5	443.2
45°	370.5	377.4	393.8	418.5	433.6
47.5°	349.9	356.8	376.0	407.6	424.0
50°	329.3	337.6	360.9	395.2	413.0
52.5°	307.4	315.6	345.8	382.9	402.1
55°	284.1	296.4	330.7	369.1	388.3
57.5°	260.7	274.4	312.9	354.0	374.6
60°	236.0	252.5	296.4	337.6	358.2
62.5°	212.7	230.5	278.6	319.7	340.3
65°	188.0	208.6	259.4	300.5	319.7
67.5°	161.9	188.0	237.4	277.2	296.4
70°	135.9	166.0	215.4	252.5	270.3
72.5°	112.5	144.1	190.7	222.3	222.3
75°	89.2	120.8	163.3	166.0	161.9
77.5°	68.6	98.8	127.6	116.6	119.4
80°	50.8	75.5	81.0	85.1	87.8
82.5°	34.3	50.8	52.1	54.9	54.9
85°	22.0	26.1	27.4	26.1	24.7
87.5°	9.6	11.0	8.2	5.5	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)