

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: P#

Luminaire Tested: **22CZ-LD5-29-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-29-UNV-L830-CD1-U
Description: CRUZE 2x2 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

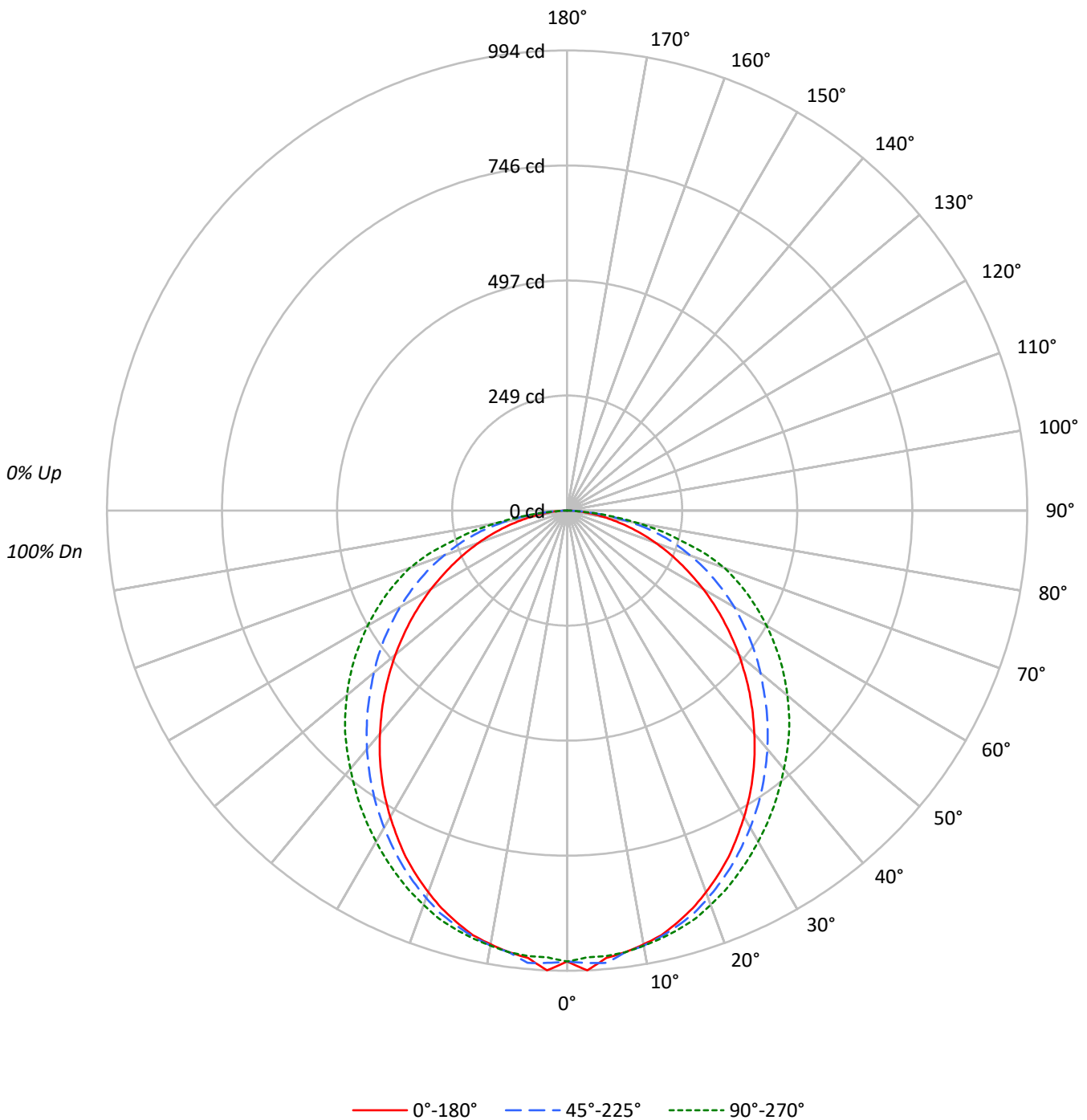
Lumens per Lamp: N/A
Luminaire Lumens: 2729.0 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (A_{in}): 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: P#
CATALOG NUMBER: 22CZ-LD5-29-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 22CZ-LD5-29-UNV-L830-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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	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	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	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°	2621	2621	2621
5°	2609	2633	2598
10°	2577	2575	2585
15°	2532	2536	2572
20°	2467	2486	2549
25°	2395	2426	2522
30°	2309	2361	2493
35°	2220	2297	2473
40°	2121	2231	2456
45°	2020	2165	2458
50°	1914	2106	2454
55°	1801	2053	2458
60°	1683	1998	2465
65°	1549	1937	2480
70°	1404	1862	2497
75°	1221	1758	2268
80°	977	1468	1858
85°	678	861	965



TEST NUMBER: P#

CATALOG NUMBER: 22CZ-LD5-29-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	3.4
10°-20°	261.7	9.6
20°-30°	389.3	14.3
30°-40°	460.4	16.9
40°-50°	473.2	17.3
50°-60°	432.4	15.8
60°-70°	345.9	12.7
70°-80°	217.1	8.0
80°-90°	56.6	2.1
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°	743.4	27.2
0°-40°	1203.8	44.1
0°-60°	2109.4	77.3
0°-90°	2729.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2729.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	970	970	981	974	966	92
15°	921	922	928	933	936	259
25°	826	831	844	859	869	380
35°	699	709	734	762	779	437
45°	557	572	609	654	678	430
55°	411	431	482	535	561	368
65°	269	293	350	404	431	267
75°	139	166	214	246	259	148
85°	34	44	50	49	49	40
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 22CZ-LD5-29-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	974.0	974.0	974.0	974.0	974.0
2.5°	994.0	990.0	978.0	970.0	966.1
5°	970.0	970.0	980.7	974.0	966.1
7.5°	962.1	962.1	962.1	982.0	962.1
10°	951.5	952.8	954.2	962.1	954.2
12.5°	939.6	939.6	942.2	944.9	946.2
15°	920.9	922.3	927.6	932.9	935.6
17.5°	901.1	905.1	911.7	918.3	923.6
20°	877.1	882.5	890.4	901.1	906.4
22.5°	852.0	857.3	867.9	879.8	889.1
25°	825.5	830.8	844.0	858.6	869.2
27.5°	794.9	801.5	817.5	837.3	848.0
30°	764.4	772.3	790.9	813.5	825.5
32.5°	732.5	741.9	763.0	788.3	802.8
35°	699.4	708.6	733.9	761.7	779.0
37.5°	664.8	675.4	703.4	735.2	753.7
40°	629.0	641.0	672.8	707.3	728.6
42.5°	593.2	606.5	641.0	682.1	703.4
45°	557.4	572.0	609.1	654.3	678.1
47.5°	520.2	537.4	575.9	626.3	650.3
50°	484.4	501.6	545.4	597.2	621.0
52.5°	447.3	467.1	513.6	566.7	591.8
55°	411.4	431.3	481.7	534.8	561.4
57.5°	375.5	395.5	448.5	502.9	529.5
60°	339.7	361.0	416.7	469.8	497.6
62.5°	303.9	326.4	383.5	438.0	464.5
65°	269.4	293.3	350.4	403.5	431.3
67.5°	236.2	261.4	317.2	368.9	396.8
70°	203.0	228.3	282.6	333.1	361.0
72.5°	171.2	196.4	249.5	294.6	315.9
75°	139.4	165.9	213.7	245.5	258.8
77.5°	108.8	135.4	176.5	197.7	212.3
80°	80.9	103.6	132.7	148.7	153.9
82.5°	55.8	74.3	92.9	96.9	99.6
85°	34.5	43.8	50.4	49.1	49.1
87.5°	16.0	17.3	14.6	10.6	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)