

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-LD5-39-SQP-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 (P25713)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-39-SQP-UNV-L830-CD1-U  
Description:

Light Source: -  
Ballast/Driver: -

**Summary**

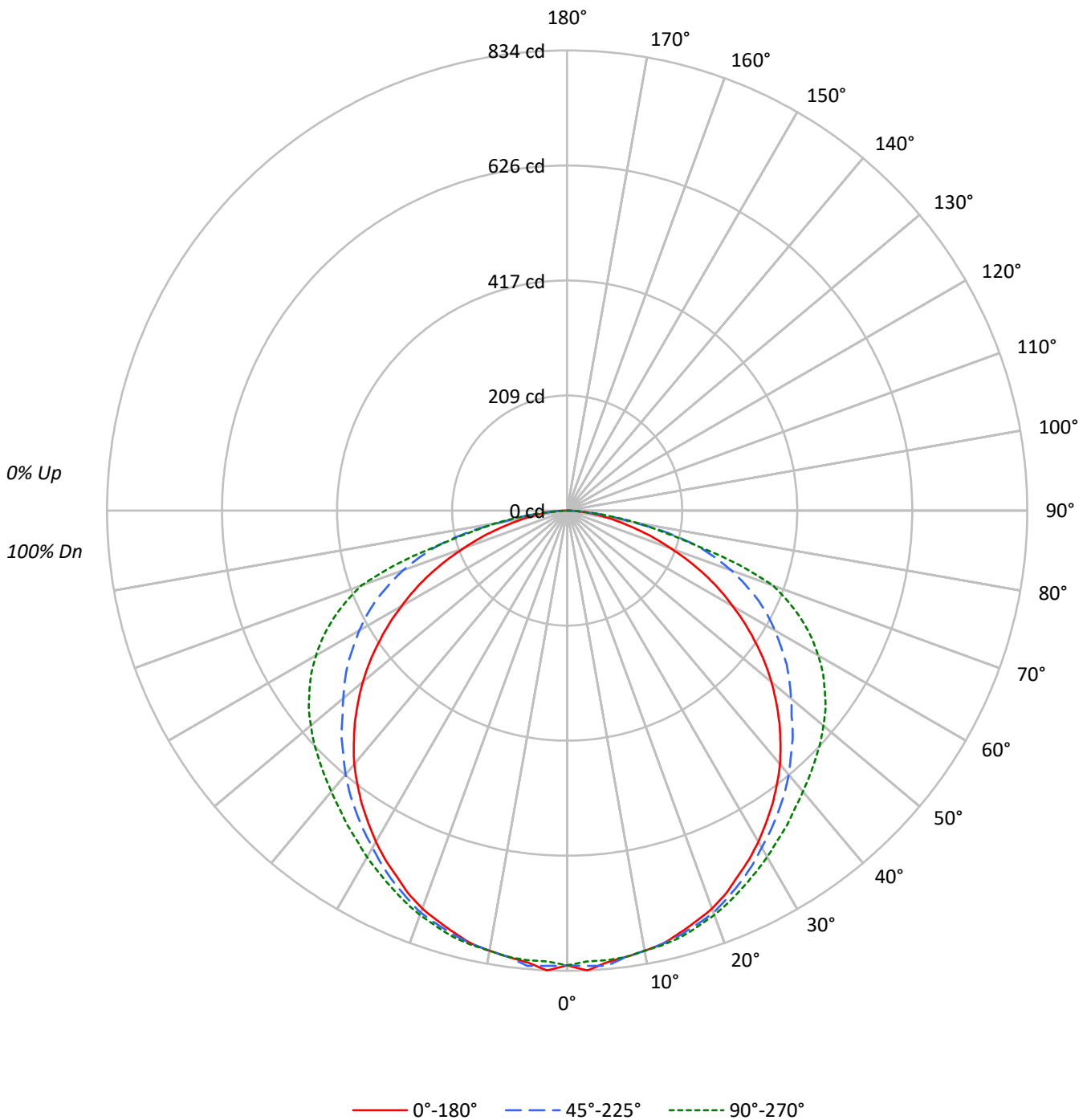
Lumens per Lamp: N/A  
Luminaire Lumens: 2594.5 lumens  
Efficiency: N/A  
Efficacy: 71.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 36.41  
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: P#  
CATALOG NUMBER: 22CZ-LD5-39-SQP-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 22CZ-LD5-39-SQP-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	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2217	2217	2217
5°	2211	2223	2200
10°	2194	2186	2194
15°	2177	2176	2199
20°	2159	2166	2193
25°	2122	2137	2186
30°	2093	2105	2190
35°	2059	2087	2206
40°	2024	2071	2242
45°	1972	2055	2308
50°	1911	2046	2396
55°	1826	2069	2497
60°	1717	2087	2604
65°	1588	2105	2700
70°	1380	2084	2746
75°	1148	1973	2084
80°	901	1314	1556
85°	633	688	713



TEST NUMBER: P#

CATALOG NUMBER: 22CZ-LD5-39-SQP-UNV-L830-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.2	3.0
10°-20°	224.7	8.7
20°-30°	342.4	13.2
30°-40°	419.0	16.1
40°-50°	450.8	17.4
50°-60°	436.7	16.8
60°-70°	369.9	14.3
70°-80°	223.6	8.6
80°-90°	49.1	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°	645.4	24.9
0°-40°	1064.3	41.0
0°-60°	1951.8	75.2
0°-90°	2594.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2594.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	824	824	824	824	824	
5°	822	822	828	824	818	78
15°	792	794	796	798	800	224
25°	731	735	744	750	754	338
35°	649	653	667	685	695	406
45°	544	554	578	615	637	419
55°	417	435	486	542	570	373
65°	276	306	381	441	470	272
75°	131	177	240	244	238	141
85°	32	38	40	38	36	36
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 22CZ-LD5-39-SQP-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	824.0	824.0	824.0	824.0	824.0
2.5°	834.1	832.1	826.1	822.0	818.0
5°	822.0	822.0	828.1	824.0	818.0
7.5°	816.0	816.0	816.0	826.1	816.0
10°	810.0	812.0	810.0	818.0	810.0
12.5°	803.9	803.9	803.9	806.0	806.0
15°	791.8	793.8	795.8	797.9	799.9
17.5°	779.8	781.8	785.7	787.8	789.8
20°	767.7	769.7	775.7	775.7	779.8
22.5°	751.5	751.5	759.6	761.6	767.7
25°	731.4	735.4	743.5	749.6	753.5
27.5°	713.3	717.2	725.3	733.4	739.5
30°	693.1	697.1	705.2	717.2	725.3
32.5°	671.0	675.0	687.0	701.2	709.2
35°	648.8	652.8	666.9	685.0	695.1
37.5°	624.6	630.6	646.8	666.9	679.0
40°	600.4	606.5	624.6	646.8	664.9
42.5°	572.2	580.3	600.4	630.6	650.8
45°	544.0	554.0	578.3	614.6	636.7
47.5°	513.8	523.8	552.0	598.4	622.6
50°	483.6	495.6	529.9	580.3	606.5
52.5°	451.3	463.4	507.8	562.1	590.3
55°	417.0	435.2	485.5	542.0	570.2
57.5°	382.8	403.0	459.4	519.8	550.0
60°	346.6	370.7	435.2	495.6	525.8
62.5°	312.3	338.5	409.0	469.5	499.7
65°	276.1	306.3	380.8	441.3	469.5
67.5°	237.8	276.1	348.6	407.0	435.2
70°	199.5	243.8	316.3	370.7	396.9
72.5°	165.2	211.6	280.1	326.4	326.4
75°	131.0	177.3	239.8	243.8	237.8
77.5°	100.7	145.1	187.3	171.3	175.3
80°	74.6	110.8	118.8	124.9	128.9
82.5°	50.3	74.6	76.6	80.6	80.6
85°	32.2	38.3	40.3	38.3	36.3
87.5°	14.1	16.2	12.1	8.1	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)