

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P1036211

Luminaire Tested: SQ4R-F-075D-B50-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036211
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P520092)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

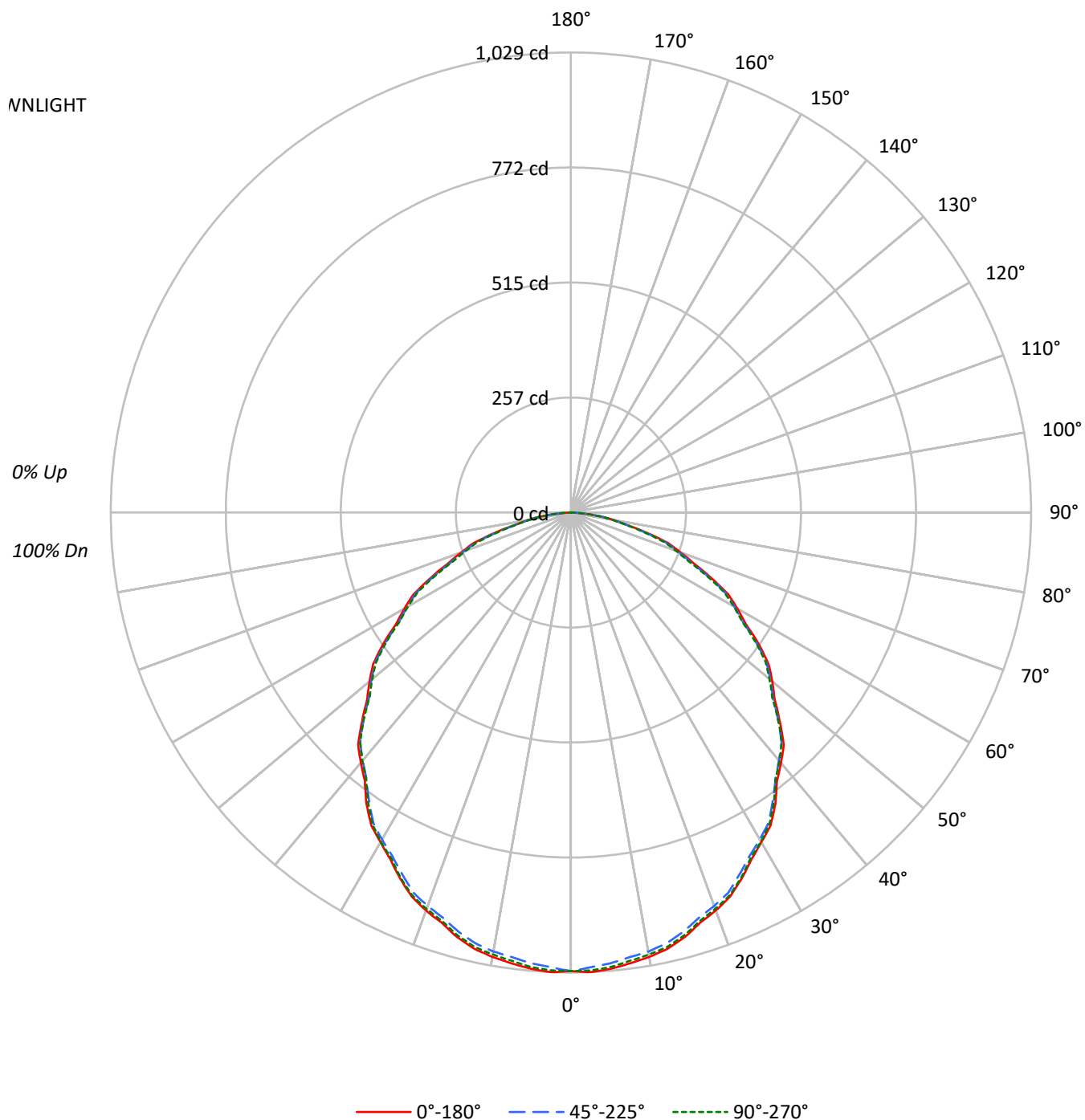
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2799.9 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.6
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: 24 FT

TEST NUMBER: P1036211
CATALOG NUMBER: SQ4R-F-075D-B50-1D-UNV

Luminous Intensity Polar Plot



TEST NUMBER: P1036211

CATALOG NUMBER: SQ4R-F-075D-B50-1D-UNV

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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	63		70
4	83	71	62	55	81	70	61	55	67	60	54		65	59	54		63
5	76	63	54	48	74	62	54	48	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9464	9464	9464
5°	9489	9374	9450
10°	9456	9340	9405
15°	9392	9274	9353
20°	9303	9196	9264
25°	9199	9087	9172
30°	9071	8997	9055
35°	8973	8864	8909
40°	8802	8716	8734
45°	8618	8548	8548
50°	8437	8359	8319
55°	8241	8130	8086
60°	7933	7805	7756
65°	7556	7405	7313
70°	7041	6887	6741
75°	6313	6121	5971
80°	5111	5042	4888
85°	3038	3493	3631

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 8636 cd/sqm

TEST NUMBER: P1036211

CATALOG NUMBER: SQ4R-F-075D-B50-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	3.5
10°-20°	275.6	9.8
20°-30°	414.0	14.8
30°-40°	494.2	17.7
40°-50°	506.4	18.1
50°-60°	451.6	16.1
60°-70°	336.3	12.0
70°-80°	182.6	6.5
80°-90°	42.3	1.5
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°	786.4	28.1
0°-40°	1280.6	45.7
0°-60°	2238.7	80.0
0°-90°	2799.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2799.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1026	1026	1026	1026	1026	
5°	1025	1023	1012	1022	1020	97
15°	983	980	971	979	979	277
25°	904	901	893	898	901	416
35°	797	794	787	787	791	497
45°	660	662	655	654	655	510
55°	512	512	505	501	503	456
65°	346	345	339	335	335	343
75°	177	176	172	169	168	187
85°	29	31	33	34	34	41
90°	0	0	0	0	0	

TEST NUMBER: P1036211

CATALOG NUMBER: SQ4R-F-075D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1025.8	1025.8	1025.8	1025.8	1025.8
2.5°	1029.0	1026.9	1018.2	1025.8	1024.9
5°	1024.6	1023.1	1012.2	1021.7	1020.4
7.5°	1017.0	1014.5	1003.5	1013.0	1011.6
10°	1009.3	1006.6	997.0	1005.1	1003.9
12.5°	999.5	997.9	987.2	995.4	995.1
15°	983.3	980.5	970.9	979.2	979.2
17.5°	961.9	960.3	950.8	958.7	957.9
20°	947.5	944.9	936.6	943.5	943.5
22.5°	930.0	928.4	920.2	925.8	927.0
25°	903.6	901.0	892.6	898.2	901.0
27.5°	874.5	872.4	865.6	869.1	871.0
30°	851.5	851.5	844.5	846.0	850.0
32.5°	830.6	830.6	822.6	824.1	826.0
35°	796.7	793.9	787.0	787.0	791.0
37.5°	756.9	755.6	751.2	750.5	751.6
40°	730.8	729.3	723.7	725.2	725.2
42.5°	704.3	702.9	697.3	695.5	697.5
45°	660.5	661.9	655.1	653.7	655.1
47.5°	617.6	617.6	612.0	608.2	610.2
50°	587.8	587.8	582.4	579.6	579.6
52.5°	557.0	558.1	551.4	547.7	548.8
55°	512.3	512.3	505.4	501.3	502.7
57.5°	462.8	462.8	456.0	451.8	454.2
60°	429.9	429.9	423.0	418.8	420.3
62.5°	396.9	396.9	390.1	386.0	386.1
65°	346.1	344.8	339.2	335.0	335.0
67.5°	297.1	293.6	289.5	284.0	284.0
70°	261.0	259.5	255.3	249.9	249.9
72.5°	227.9	225.5	221.3	217.1	217.1
75°	177.1	175.6	171.7	169.0	167.5
77.5°	126.9	125.9	125.5	121.7	122.8
80°	96.2	96.2	94.9	92.0	92.0
82.5°	68.6	69.7	67.3	66.6	65.6
85°	28.7	31.4	33.0	34.3	34.3
87.5°	5.6	8.7	7.7	8.9	8.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036211

CATALOG NUMBER: SQ4R-F-075D-B50-1D-UNV

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.39	21.02	19.76	21.34	21.65	19.23	20.86	19.60	21.17	21.49
	3H	21.14	22.61	21.51	22.93	23.29	20.93	22.40	21.30	22.72	23.08
	4H	21.79	23.17	22.19	23.52	23.90	21.56	22.94	21.96	23.29	23.67
	6H	22.16	23.44	22.57	23.81	24.20	21.93	23.21	22.34	23.57	23.96
	8H	22.29	23.51	22.71	23.90	24.30	22.05	23.27	22.47	23.66	24.06
	12H	22.34	23.51	22.77	23.89	24.32	22.11	23.29	22.54	23.67	24.10
4H	2H	20.01	21.40	20.41	21.75	22.12	19.89	21.27	20.29	21.62	21.99
	3H	21.99	23.15	22.40	23.54	23.94	21.81	22.97	22.22	23.36	23.76
	4H	22.75	23.79	23.18	24.21	24.64	22.54	23.59	22.97	24.00	24.44
	6H	23.22	24.14	23.68	24.58	25.03	23.01	23.93	23.47	24.37	24.82
	8H	23.39	24.25	23.85	24.69	25.15	23.17	24.03	23.63	24.47	24.93
	12H	23.47	24.24	23.95	24.72	25.19	23.27	24.04	23.75	24.51	24.98
8H	4H	23.01	23.86	23.47	24.30	24.77	22.82	23.68	23.29	24.12	24.59
	6H	23.59	24.30	24.08	24.78	25.26	23.39	24.10	23.89	24.59	25.07
	8H	23.82	24.45	24.33	24.96	25.45	23.62	24.25	24.13	24.76	25.25
	12H	23.95	24.51	24.46	25.00	25.56	23.77	24.33	24.28	24.83	25.39
12H	4H	23.03	23.79	23.51	24.27	24.74	22.85	23.62	23.33	24.09	24.56
	6H	23.62	24.26	24.13	24.77	25.25	23.44	24.07	23.95	24.58	25.07
	8H	23.91	24.47	24.41	24.96	25.52	23.71	24.27	24.22	24.77	25.33