

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: P1036206

Luminaire Tested: SQ4R-F-075D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036206
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-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

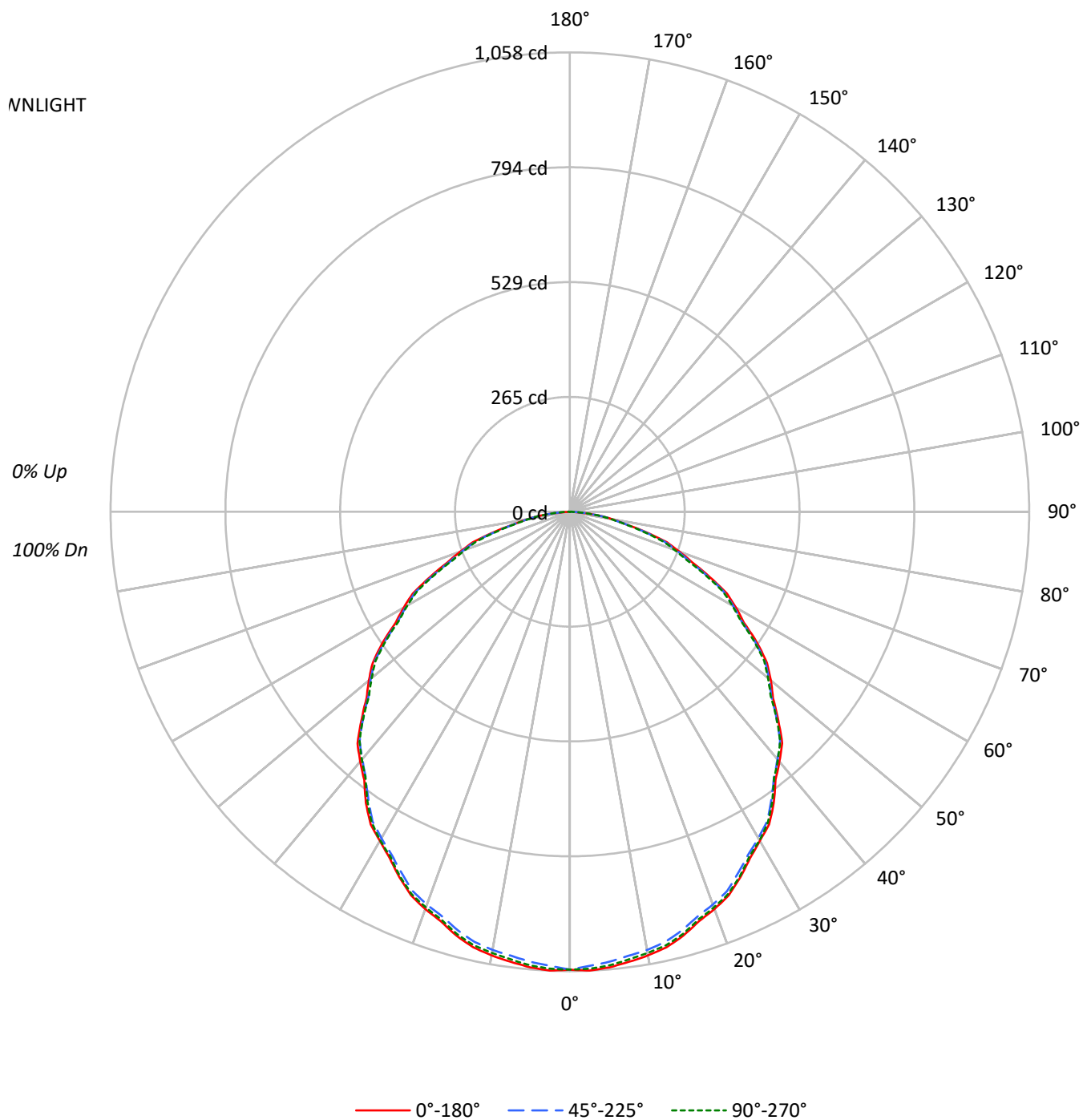
Lumens per Lamp: N/A
Luminaire Lumens: 2878.0 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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: P1036206

CATALOG NUMBER: SQ4R-F-075D-B2750-1D-UNV-W2A_3500K

Luminous Intensity Polar Plot



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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°	9728	9728	9728
5°	9753	9636	9713
10°	9720	9601	9667
15°	9654	9532	9614
20°	9562	9452	9522
25°	9455	9340	9428
30°	9324	9248	9308
35°	9223	9112	9158
40°	9046	8959	8978
45°	8858	8786	8786
50°	8672	8592	8552
55°	8471	8356	8311
60°	8154	8023	7971
65°	7765	7612	7519
70°	7235	7081	6930
75°	6488	6288	6135
80°	5249	5186	5021
85°	3123	3599	3726

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 8878 cd/sqm

TEST NUMBER: P1036206

CATALOG NUMBER: SQ4R-F-075D-B2750-1D-UNV-W2A_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.5	3.5
10°-20°	283.3	9.8
20°-30°	425.6	14.8
30°-40°	508.0	17.7
40°-50°	520.5	18.1
50°-60°	464.2	16.1
60°-70°	345.7	12.0
70°-80°	187.7	6.5
80°-90°	43.4	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°	808.4	28.1
0°-40°	1316.4	45.7
0°-60°	2301.1	80.0
0°-90°	2878.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2878.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1053	1052	1040	1050	1049	100
15°	1011	1008	998	1006	1006	285
25°	929	926	918	923	926	428
35°	819	816	809	809	813	511
45°	679	680	673	672	673	524
55°	527	527	520	515	517	469
65°	356	354	349	344	344	352
75°	182	180	176	174	172	192
85°	30	32	34	35	35	42
90°	0	0	0	0	0	

TEST NUMBER: P1036206

CATALOG NUMBER: SQ4R-F-075D-B2750-1D-UNV-W2A_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1054.4	1054.4	1054.4	1054.4	1054.4
2.5°	1057.7	1055.6	1046.6	1054.4	1053.4
5°	1053.1	1051.7	1040.4	1050.2	1048.8
7.5°	1045.4	1042.8	1031.5	1041.3	1039.8
10°	1037.5	1034.6	1024.8	1033.2	1031.9
12.5°	1027.4	1025.7	1014.8	1023.2	1022.8
15°	1010.7	1007.8	997.9	1006.5	1006.5
17.5°	988.7	987.1	977.3	985.4	984.6
20°	973.9	971.2	962.7	969.8	969.8
22.5°	956.0	954.3	945.9	951.7	952.8
25°	928.8	926.1	917.5	923.3	926.1
27.5°	898.9	896.8	889.7	893.3	895.3
30°	875.2	875.2	868.1	869.6	873.7
32.5°	853.8	853.8	845.6	847.0	849.0
35°	818.9	816.0	809.0	809.0	813.1
37.5°	778.0	776.7	772.2	771.4	772.6
40°	751.1	749.7	743.9	745.4	745.4
42.5°	723.9	722.5	716.7	714.8	717.0
45°	678.9	680.4	673.4	671.9	673.4
47.5°	634.8	634.8	629.0	625.1	627.3
50°	604.2	604.2	598.6	595.8	595.8
52.5°	572.6	573.6	566.8	563.0	564.1
55°	526.6	526.6	519.5	515.3	516.7
57.5°	475.7	475.7	468.7	464.4	466.9
60°	441.9	441.9	434.8	430.5	432.0
62.5°	408.0	408.0	401.0	396.7	396.9
65°	355.7	354.4	348.7	344.4	344.4
67.5°	305.4	301.8	297.6	291.9	291.9
70°	268.2	266.8	262.5	256.9	256.9
72.5°	234.3	231.8	227.5	223.1	223.1
75°	182.0	180.5	176.4	173.7	172.1
77.5°	130.4	129.4	129.0	125.1	126.2
80°	98.8	98.8	97.6	94.5	94.5
82.5°	70.6	71.6	69.2	68.5	67.4
85°	29.5	32.3	34.0	35.2	35.2
87.5°	5.8	8.9	7.9	9.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036206

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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	19.49	21.12	19.85	21.43	21.74	19.33	20.95	19.69	21.27	21.58
	3H	21.23	22.70	21.61	23.03	23.39	21.02	22.49	21.40	22.82	23.18
	4H	21.89	23.27	22.28	23.62	23.99	21.65	23.04	22.05	23.39	23.76
	6H	22.26	23.54	22.67	23.90	24.29	22.02	23.30	22.43	23.67	24.06
	8H	22.38	23.60	22.81	23.99	24.39	22.14	23.37	22.57	23.76	24.15
	12H	22.43	23.61	22.86	23.99	24.42	22.21	23.38	22.64	23.76	24.19
4H	2H	20.11	21.49	20.51	21.84	22.22	19.98	21.37	20.38	21.71	22.09
	3H	22.08	23.24	22.49	23.64	24.04	21.91	23.06	22.31	23.46	23.86
	4H	22.84	23.89	23.27	24.30	24.74	22.64	23.69	23.07	24.10	24.53
	6H	23.32	24.23	23.77	24.67	25.13	23.11	24.02	23.56	24.46	24.92
	8H	23.49	24.34	23.95	24.78	25.25	23.27	24.12	23.73	24.56	25.03
	12H	23.57	24.34	24.05	24.81	25.28	23.37	24.13	23.85	24.61	25.08
8H	4H	23.10	23.96	23.56	24.40	24.86	22.92	23.77	23.38	24.22	24.68
	6H	23.68	24.39	24.18	24.88	25.35	23.49	24.20	23.98	24.69	25.16
	8H	23.91	24.55	24.42	25.06	25.54	23.71	24.35	24.22	24.86	25.34
	12H	24.05	24.61	24.55	25.10	25.66	23.87	24.43	24.38	24.92	25.48
12H	4H	23.12	23.89	23.60	24.36	24.83	22.94	23.71	23.42	24.19	24.66
	6H	23.72	24.36	24.23	24.86	25.35	23.53	24.17	24.04	24.68	25.16
	8H	24.00	24.56	24.51	25.05	25.61	23.81	24.37	24.32	24.86	25.42

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

7 of 7