

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: P1036198

Luminaire Tested: SQ4R-F-050D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036198
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-050D-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

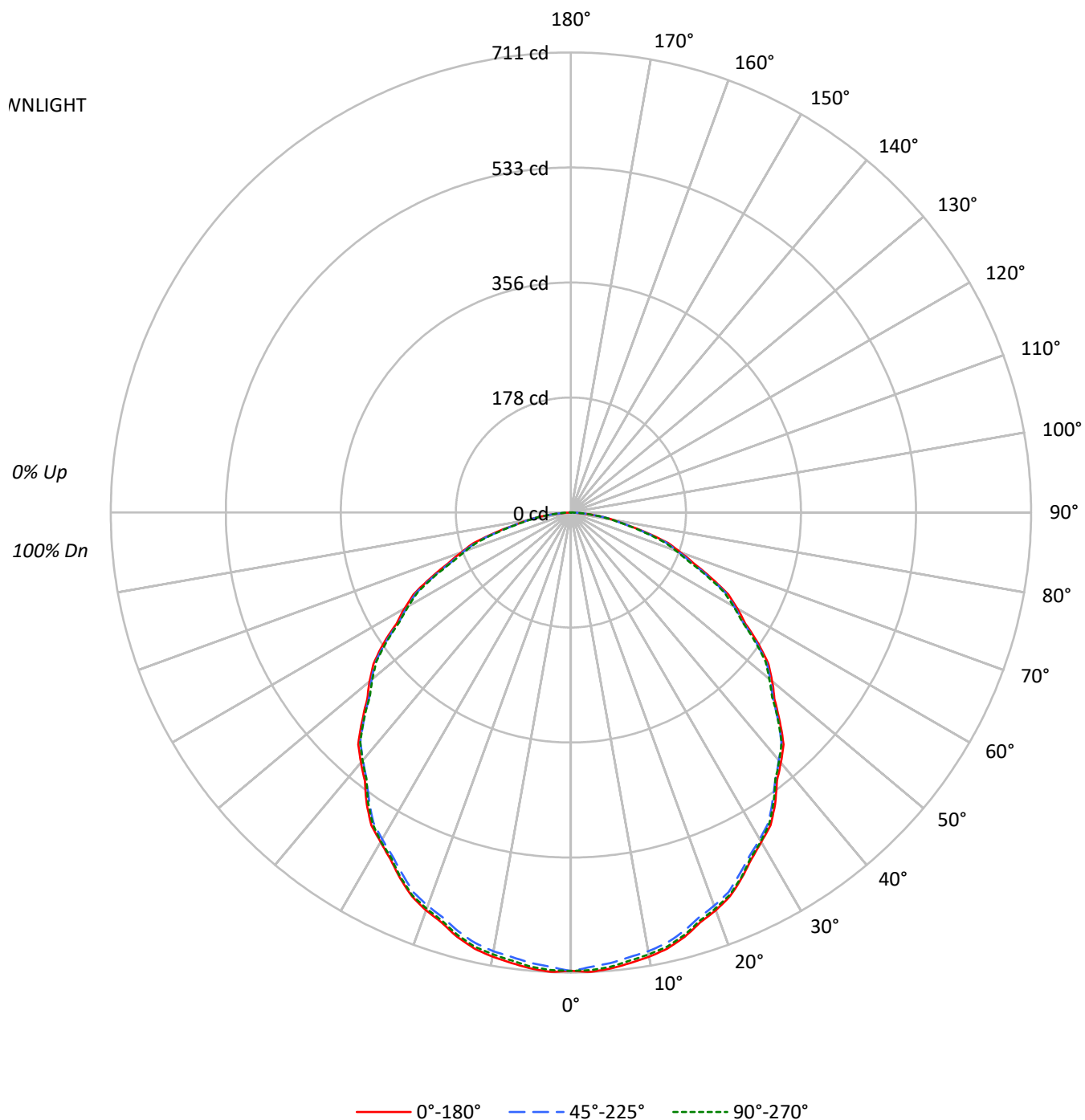
Lumens per Lamp: N/A
Luminaire Lumens: 1933.7 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.8
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: P1036198

CATALOG NUMBER: SQ4R-F-050D-B2750-1D-UNV-W2A_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1036198

CATALOG NUMBER: SQ4R-F-050D-B2750-1D-UNV-W2A_3500K

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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64		73	67	63		70	65	61	59
4	83	71	62	55	81	70	61	55	67	60	54		65	59	54		63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47		58	52	46		56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6537	6537	6537
5°	6553	6475	6527
10°	6530	6450	6495
15°	6486	6404	6460
20°	6425	6350	6397
25°	6352	6276	6335
30°	6264	6213	6254
35°	6196	6122	6153
40°	6077	6020	6032
45°	5952	5903	5903
50°	5826	5773	5744
55°	5691	5615	5583
60°	5479	5390	5355
65°	5218	5115	5050
70°	4864	4756	4656
75°	4360	4228	4124
80°	3528	3485	3374
85°	2096	2414	2509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 5965 cd/sqm

TEST NUMBER: P1036198

CATALOG NUMBER: SQ4R-F-050D-B2750-1D-UNV-W2A_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	3.5
10°-20°	190.4	9.8
20°-30°	285.9	14.8
30°-40°	341.3	17.7
40°-50°	349.7	18.1
50°-60°	311.9	16.1
60°-70°	232.3	12.0
70°-80°	126.1	6.5
80°-90°	29.2	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°	543.1	28.1
0°-40°	884.4	45.7
0°-60°	1546.1	80.0
0°-90°	1933.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1933.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	708	707	699	706	705	67
15°	679	677	670	676	676	191
25°	624	622	616	620	622	287
35°	550	548	544	544	546	343
45°	456	457	452	451	452	352
55°	354	354	349	346	347	315
65°	239	238	234	231	231	237
75°	122	121	119	117	116	129
85°	20	22	23	24	24	28
90°	0	0	0	0	0	

TEST NUMBER: P1036198

CATALOG NUMBER: SQ4R-F-050D-B2750-1D-UNV-W2A_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.5	708.5	708.5	708.5	708.5
2.5°	710.6	709.3	703.1	708.5	707.8
5°	707.6	706.6	699.1	705.5	704.7
7.5°	702.4	700.6	693.1	699.6	698.6
10°	697.0	695.2	688.5	694.2	693.3
12.5°	690.3	689.2	681.8	687.4	687.2
15°	679.0	677.2	670.5	676.3	676.3
17.5°	664.3	663.2	656.6	662.1	661.5
20°	654.4	652.6	646.8	651.5	651.5
22.5°	642.2	641.2	635.5	639.4	640.2
25°	624.0	622.3	616.5	620.3	622.3
27.5°	604.0	602.5	597.8	600.2	601.5
30°	588.0	588.0	583.2	584.3	587.0
32.5°	573.6	573.6	568.1	569.1	570.4
35°	550.1	548.3	543.5	543.5	546.3
37.5°	522.8	521.9	518.8	518.2	519.0
40°	504.6	503.7	499.8	500.8	500.8
42.5°	486.4	485.4	481.6	480.3	481.7
45°	456.2	457.2	452.4	451.4	452.4
47.5°	426.6	426.6	422.6	420.0	421.5
50°	405.9	405.9	402.2	400.2	400.2
52.5°	384.7	385.5	380.8	378.2	379.0
55°	353.8	353.8	349.1	346.2	347.1
57.5°	319.6	319.6	314.9	312.1	313.7
60°	296.9	296.9	292.1	289.3	290.2
62.5°	274.1	274.1	269.4	266.6	266.7
65°	239.0	238.1	234.3	231.3	231.3
67.5°	205.2	202.8	199.9	196.2	196.2
70°	180.3	179.2	176.3	172.6	172.6
72.5°	157.5	155.8	152.9	149.9	149.9
75°	122.3	121.3	118.6	116.6	115.7
77.5°	87.7	86.9	86.7	84.1	84.8
80°	66.4	66.4	65.6	63.5	63.5
82.5°	47.4	48.1	46.5	46.1	45.3
85°	19.8	21.7	22.8	23.7	23.7
87.5°	3.9	6.0	5.3	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1036198

CATALOG NUMBER: SQ4R-F-050D-B2750-1D-UNV-W2A_3500K

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	18.11	19.73	18.47	20.05	20.36	17.95	19.57	18.31	19.89	20.20
	3H	19.85	21.32	20.23	21.65	22.01	19.64	21.11	20.02	21.44	21.80
	4H	20.51	21.89	20.90	22.24	22.61	20.27	21.66	20.67	22.01	22.38
	6H	20.88	22.16	21.29	22.52	22.91	20.64	21.92	21.05	22.29	22.68
	8H	21.00	22.22	21.42	22.61	23.01	20.76	21.99	21.19	22.38	22.77
	12H	21.05	22.22	21.48	22.61	23.04	20.83	22.00	21.26	22.38	22.81
4H	2H	18.73	20.11	19.13	20.46	20.84	18.60	19.99	19.00	20.33	20.71
	3H	20.70	21.86	21.11	22.26	22.66	20.52	21.68	20.93	22.08	22.48
	4H	21.46	22.51	21.89	22.92	23.36	21.26	22.30	21.69	22.72	23.15
	6H	21.94	22.85	22.39	23.29	23.75	21.73	22.64	22.18	23.08	23.54
	8H	22.11	22.96	22.57	23.40	23.87	21.89	22.74	22.35	23.18	23.65
	12H	22.19	22.95	22.67	23.43	23.90	21.99	22.75	22.47	23.23	23.70
8H	4H	21.72	22.58	22.18	23.02	23.48	21.54	22.39	22.00	22.84	23.30
	6H	22.30	23.01	22.79	23.50	23.97	22.11	22.82	22.60	23.31	23.78
	8H	22.53	23.17	23.04	23.68	24.16	22.33	22.97	22.84	23.48	23.96
	12H	22.66	23.23	23.17	23.72	24.28	22.49	23.05	23.00	23.54	24.10
12H	4H	21.74	22.51	22.22	22.98	23.45	21.56	22.33	22.04	22.81	23.27
	6H	22.34	22.97	22.85	23.48	23.97	22.15	22.79	22.66	23.29	23.78
	8H	22.62	23.18	23.13	23.67	24.23	22.43	22.99	22.94	23.48	24.04