

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: P1036197

Luminaire Tested: SQ4R-F-050D-B2750-1D-UNV-W2A_3000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036197
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_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

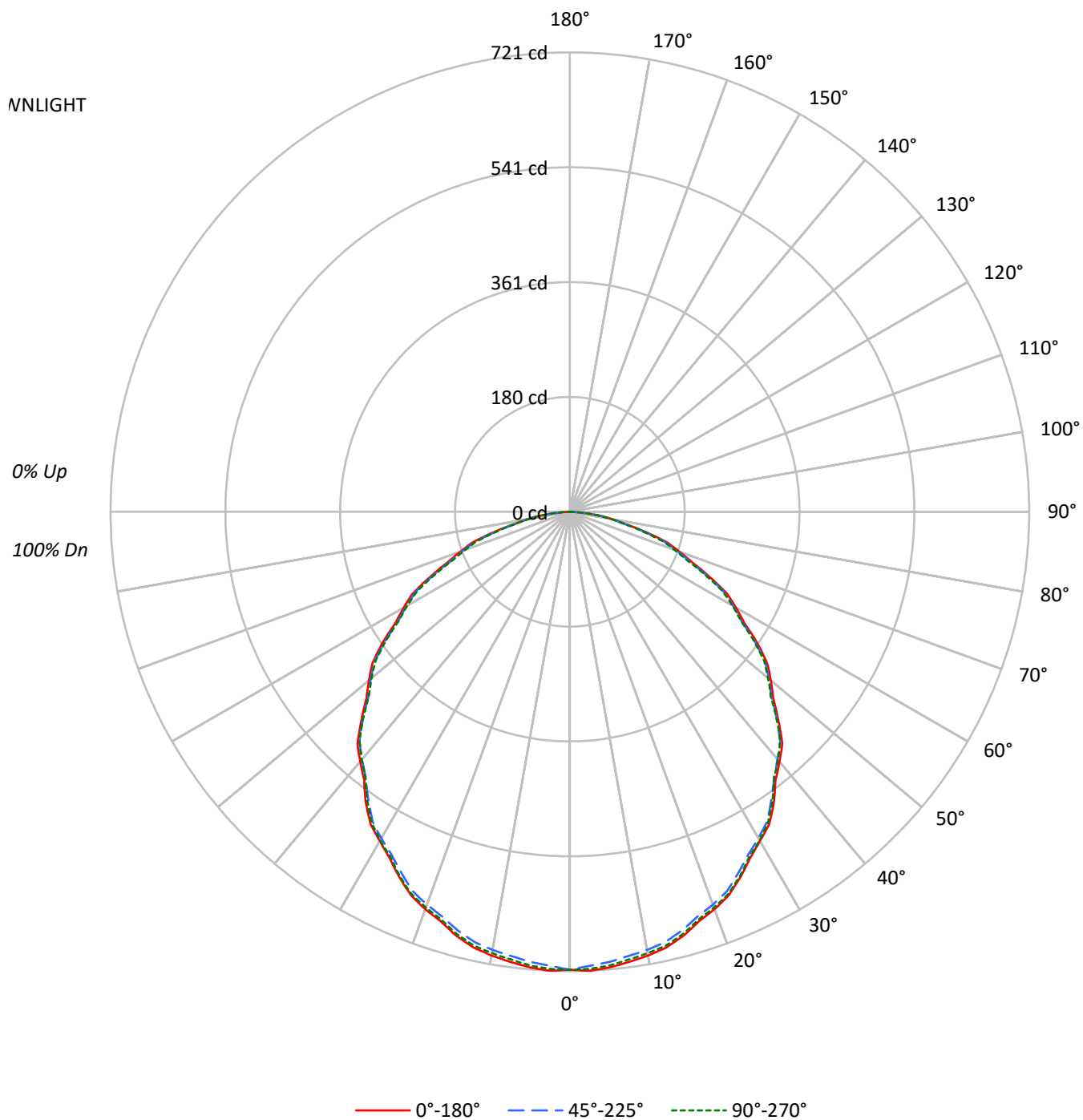
Lumens per Lamp: N/A
Luminaire Lumens: 1961.8 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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: P1036197

CATALOG NUMBER: SQ4R-F-050D-B2750-1D-UNV-W2A_3000K

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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	6632	6632	6632
5°	6649	6569	6621
10°	6625	6544	6590
15°	6580	6498	6553
20°	6518	6443	6490
25°	6445	6368	6427
30°	6356	6304	6345
35°	6287	6210	6243
40°	6167	6106	6120
45°	6039	5989	5989
50°	5911	5856	5829
55°	5773	5696	5664
60°	5558	5469	5434
65°	5292	5189	5124
70°	4934	4826	4723
75°	4424	4288	4185
80°	3581	3533	3422
85°	2128	2445	2541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 6052 cd/sqm

TEST NUMBER: P1036197

CATALOG NUMBER: SQ4R-F-050D-B2750-1D-UNV-W2A_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	3.5
10°-20°	193.1	9.8
20°-30°	290.1	14.8
30°-40°	346.3	17.7
40°-50°	354.8	18.1
50°-60°	316.4	16.1
60°-70°	235.7	12.0
70°-80°	127.9	6.5
80°-90°	29.6	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°	551.0	28.1
0°-40°	897.3	45.7
0°-60°	1568.6	80.0
0°-90°	1961.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1961.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	718	717	709	716	715	68
15°	689	687	680	686	686	194
25°	633	631	626	629	631	292
35°	558	556	551	551	554	348
45°	463	464	459	458	459	357
55°	359	359	354	351	352	320
65°	242	242	238	235	235	240
75°	124	123	120	118	117	131
85°	20	22	23	24	24	29
90°	0	0	0	0	0	

TEST NUMBER: P1036197

CATALOG NUMBER: SQ4R-F-050D-B2750-1D-UNV-W2A_3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	718.8	718.8	718.8	718.8	718.8
2.5°	721.0	719.6	713.3	718.8	718.1
5°	717.9	716.9	709.3	715.8	714.9
7.5°	712.6	710.8	703.2	709.8	708.8
10°	707.2	705.3	698.5	704.3	703.4
12.5°	700.3	699.2	691.7	697.4	697.3
15°	688.9	687.0	680.3	686.1	686.1
17.5°	673.9	672.8	666.2	671.7	671.1
20°	663.9	662.1	656.2	661.0	661.0
22.5°	651.6	650.5	644.7	648.7	649.5
25°	633.1	631.3	625.5	629.3	631.3
27.5°	612.8	611.3	606.5	608.9	610.3
30°	596.6	596.6	591.7	592.8	595.6
32.5°	582.0	582.0	576.3	577.4	578.7
35°	558.2	556.3	551.4	551.4	554.3
37.5°	530.4	529.5	526.4	525.8	526.6
40°	512.0	511.0	507.0	508.1	508.1
42.5°	493.5	492.4	488.6	487.3	488.8
45°	462.8	463.8	459.0	458.0	459.0
47.5°	432.8	432.8	428.8	426.1	427.6
50°	411.8	411.8	408.0	406.1	406.1
52.5°	390.3	391.1	386.3	383.7	384.5
55°	358.9	358.9	354.1	351.3	352.1
57.5°	324.3	324.3	319.5	316.6	318.3
60°	301.2	301.2	296.4	293.5	294.5
62.5°	278.1	278.1	273.3	270.4	270.5
65°	242.4	241.6	237.7	234.7	234.7
67.5°	208.2	205.7	202.8	199.1	199.1
70°	182.9	181.8	178.9	175.1	175.1
72.5°	159.7	158.1	155.1	152.1	152.1
75°	124.1	123.1	120.3	118.3	117.4
77.5°	89.0	88.2	88.0	85.3	86.1
80°	67.4	67.4	66.5	64.4	64.4
82.5°	48.1	48.8	47.2	46.8	46.0
85°	20.1	22.0	23.1	24.0	24.0
87.5°	4.0	6.1	5.4	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036197

CATALOG NUMBER: SQ4R-F-050D-B2750-1D-UNV-W2A_3000K

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	18.16	19.79	18.52	20.10	20.41	18.00	19.62	18.36	19.94	20.25
	3H	19.90	21.37	20.28	21.70	22.06	19.69	21.16	20.07	21.49	21.85
	4H	20.56	21.94	20.95	22.29	22.66	20.32	21.71	20.72	22.06	22.43
	6H	20.93	22.21	21.34	22.57	22.96	20.69	21.97	21.10	22.34	22.73
	8H	21.05	22.27	21.48	22.66	23.06	20.81	22.04	21.24	22.43	22.82
	12H	21.10	22.28	21.53	22.66	23.09	20.88	22.05	21.31	22.43	22.86
4H	2H	18.78	20.16	19.18	20.51	20.89	18.65	20.04	19.05	20.38	20.76
	3H	20.75	21.91	21.16	22.31	22.71	20.57	21.73	20.98	22.13	22.53
	4H	21.51	22.56	21.94	22.97	23.41	21.31	22.35	21.74	22.77	23.20
	6H	21.99	22.90	22.44	23.34	23.80	21.78	22.69	22.23	23.13	23.59
	8H	22.16	23.01	22.62	23.45	23.92	21.94	22.79	22.40	23.23	23.70
	12H	22.24	23.01	22.72	23.48	23.95	22.04	22.80	22.52	23.28	23.75
8H	4H	21.77	22.63	22.23	23.07	23.53	21.59	22.44	22.05	22.89	23.35
	6H	22.35	23.06	22.85	23.55	24.02	22.16	22.87	22.65	23.36	23.83
	8H	22.58	23.22	23.09	23.73	24.21	22.38	23.02	22.89	23.53	24.01
	12H	22.72	23.28	23.22	23.77	24.33	22.54	23.10	23.05	23.59	24.15
12H	4H	21.79	22.56	22.27	23.03	23.50	21.61	22.38	22.09	22.86	23.32
	6H	22.39	23.03	22.90	23.53	24.02	22.20	22.84	22.71	23.34	23.83
	8H	22.67	23.23	23.18	23.72	24.28	22.48	23.04	22.99	23.53	24.09