

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: P1036331

Luminaire Tested: SQ4R-PW1-050D-B50-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564826)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-050D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

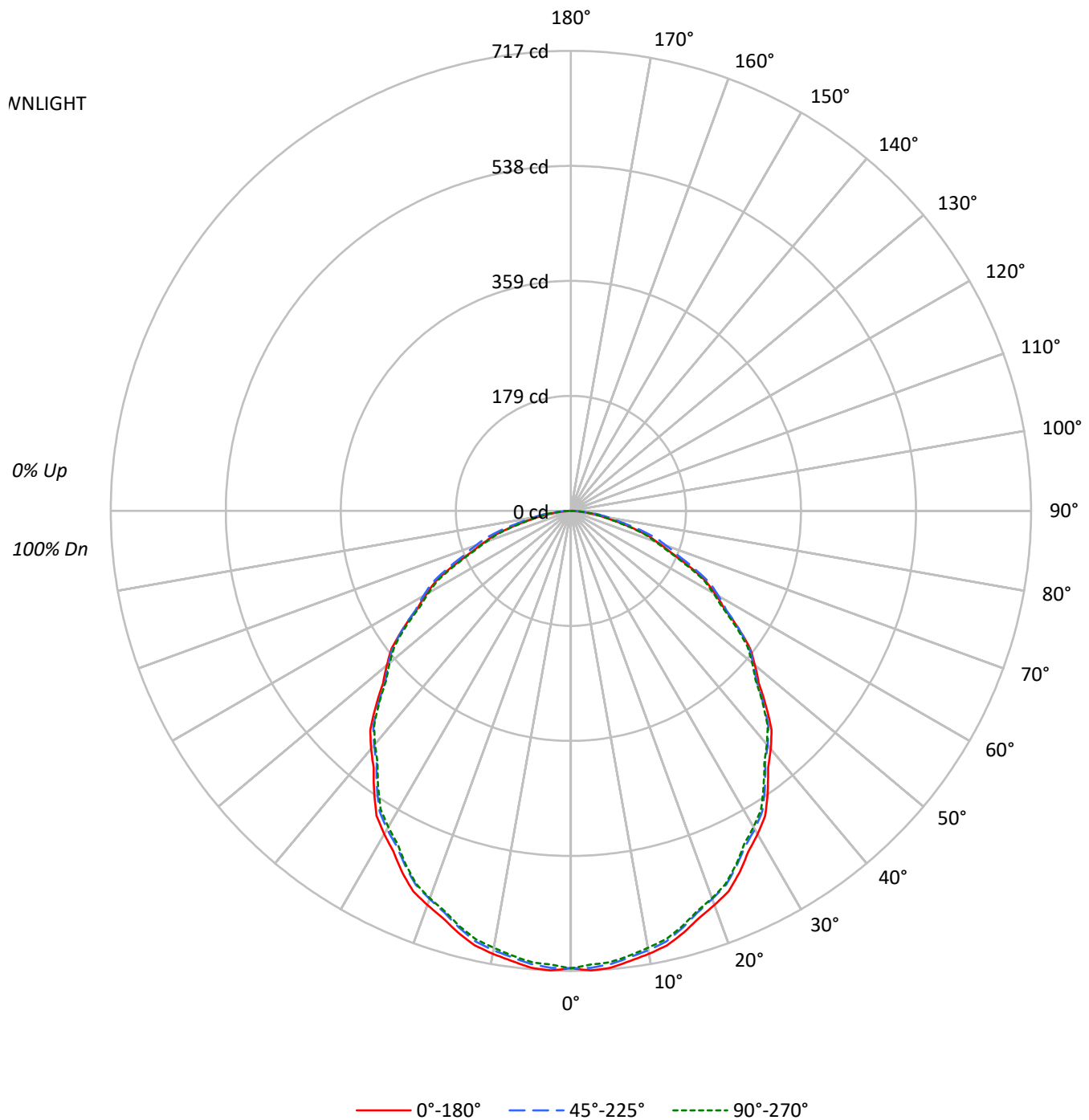
Lumens per Lamp: N/A
Luminaire Lumens: 1813.6 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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: P1036331

CATALOG NUMBER: SQ4R-PW1-050D-B50-1D-UNV

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	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	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85		
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60		
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52		
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45		
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40		
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35		
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31		
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	28		
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6576	6576	6576
5°	6619	6567	6538
10°	6566	6514	6478
15°	6497	6424	6401
20°	6419	6320	6308
25°	6330	6214	6195
30°	6196	6102	6062
35°	6020	5935	5898
40°	5832	5741	5718
45°	5605	5531	5506
50°	5372	5328	5291
55°	5122	5122	5041
60°	4811	4903	4729
65°	4399	4619	4292
70°	3879	4254	3777
75°	3315	3804	3223
80°	2572	3204	2603
85°	1662	2456	2191

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5605 cd/sqm

TEST NUMBER: P1036331

CATALOG NUMBER: SQ4R-PW1-050D-B50-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.1	3.7
10°-20°	189.5	10.4
20°-30°	281.1	15.5
30°-40°	328.9	18.1
40°-50°	327.4	18.1
50°-60°	282.8	15.6
60°-70°	203.6	11.2
70°-80°	106.7	5.9
80°-90°	26.5	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°	537.7	29.6
0°-40°	866.6	47.8
0°-60°	1476.9	81.4
0°-90°	1813.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1813.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	713	713	713	713	713	
5°	715	707	709	707	706	68
15°	680	672	673	671	670	192
25°	622	611	610	607	608	286
35°	534	527	527	522	524	334
45°	430	426	424	423	422	331
55°	318	318	318	314	313	284
65°	202	208	212	203	197	200
75°	93	102	107	100	90	100
85°	16	21	23	22	21	21
90°	0	0	0	0	0	

TEST NUMBER: P1036331

CATALOG NUMBER: SQ4R-PW1-050D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	712.8	712.8	712.8	712.8	712.8
2.5°	716.9	711.0	712.8	711.3	707.8
5°	714.7	706.7	709.1	707.2	705.9
7.5°	707.4	700.1	701.7	699.7	699.1
10°	700.9	693.6	695.3	692.8	691.5
12.5°	693.4	685.5	687.3	684.6	683.9
15°	680.2	671.6	672.6	671.3	670.1
17.5°	664.8	656.1	656.2	654.3	653.9
20°	653.8	644.6	643.7	641.2	642.5
22.5°	641.8	632.0	631.2	627.7	629.4
25°	621.8	611.3	610.4	606.7	608.5
27.5°	598.6	588.4	588.4	583.1	585.0
30°	581.6	571.7	572.8	566.6	569.0
32.5°	563.5	554.6	555.1	548.9	551.5
35°	534.5	527.1	526.9	521.9	523.7
37.5°	504.8	498.3	497.2	494.4	494.9
40°	484.2	478.7	476.7	474.8	474.8
42.5°	462.6	457.6	455.5	454.1	453.7
45°	429.6	425.9	423.9	422.6	422.0
47.5°	396.9	393.5	391.8	390.9	390.2
50°	374.3	371.9	371.2	369.3	368.6
52.5°	351.8	350.2	349.6	347.2	346.5
55°	318.4	317.9	318.4	314.1	313.4
57.5°	283.7	284.8	286.7	280.8	279.3
60°	260.7	263.0	265.7	258.8	256.3
62.5°	237.0	241.0	244.6	236.6	233.1
65°	201.5	207.7	211.6	203.4	196.6
67.5°	167.5	175.1	179.7	170.8	163.2
70°	143.8	152.4	157.7	148.6	140.0
72.5°	123.2	132.8	137.1	128.5	120.0
75°	93.0	101.6	106.7	99.6	90.4
77.5°	66.0	74.1	78.4	72.2	64.5
80°	48.4	56.9	60.3	55.1	49.0
82.5°	34.3	41.5	43.7	40.6	36.4
85°	15.7	20.6	23.2	22.0	20.7
87.5°	4.0	7.4	9.5	9.5	10.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036331

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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	17.56	19.16	17.92	19.47	19.78	17.45	19.05	17.82	19.37	19.68
	3H	19.11	20.56	19.49	20.88	21.24	18.98	20.43	19.36	20.75	21.11
	4H	19.66	21.02	20.06	21.37	21.75	19.52	20.88	19.92	21.23	21.61
	6H	19.96	21.21	20.37	21.58	21.97	19.82	21.08	20.23	21.44	21.83
	8H	20.05	21.25	20.47	21.64	22.04	19.93	21.12	20.35	21.51	21.91
	12H	20.09	21.24	20.52	21.62	22.05	19.99	21.14	20.42	21.52	21.95
4H	2H	18.20	19.55	18.60	19.90	20.28	18.12	19.47	18.52	19.82	20.20
	3H	20.00	21.13	20.41	21.53	21.93	19.88	21.02	20.29	21.42	21.82
	4H	20.66	21.68	21.09	22.09	22.53	20.54	21.56	20.97	21.97	22.41
	6H	21.06	21.95	21.52	22.40	22.85	20.94	21.83	21.39	22.27	22.73
	8H	21.19	22.03	21.65	22.47	22.93	21.08	21.91	21.54	22.36	22.82
	12H	21.26	22.01	21.74	22.48	22.95	21.18	21.92	21.66	22.40	22.87
8H	4H	20.93	21.77	21.39	22.21	22.68	20.83	21.66	21.29	22.10	22.57
	6H	21.45	22.15	21.95	22.63	23.11	21.34	22.03	21.84	22.52	23.00
	8H	21.65	22.27	22.17	22.78	23.27	21.55	22.17	22.06	22.68	23.17
	12H	21.78	22.32	22.28	22.81	23.38	21.71	22.26	22.22	22.75	23.31
12H	4H	20.95	21.70	21.43	22.18	22.65	20.85	21.60	21.33	22.07	22.54
	6H	21.50	22.12	22.01	22.63	23.11	21.39	22.01	21.90	22.52	23.01
	8H	21.76	22.30	22.26	22.79	23.36	21.66	22.21	22.17	22.70	23.26