

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: P1036187

Luminaire Tested: SQ4R-BB-100D-B50-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036187
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P518604)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-BB-100D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

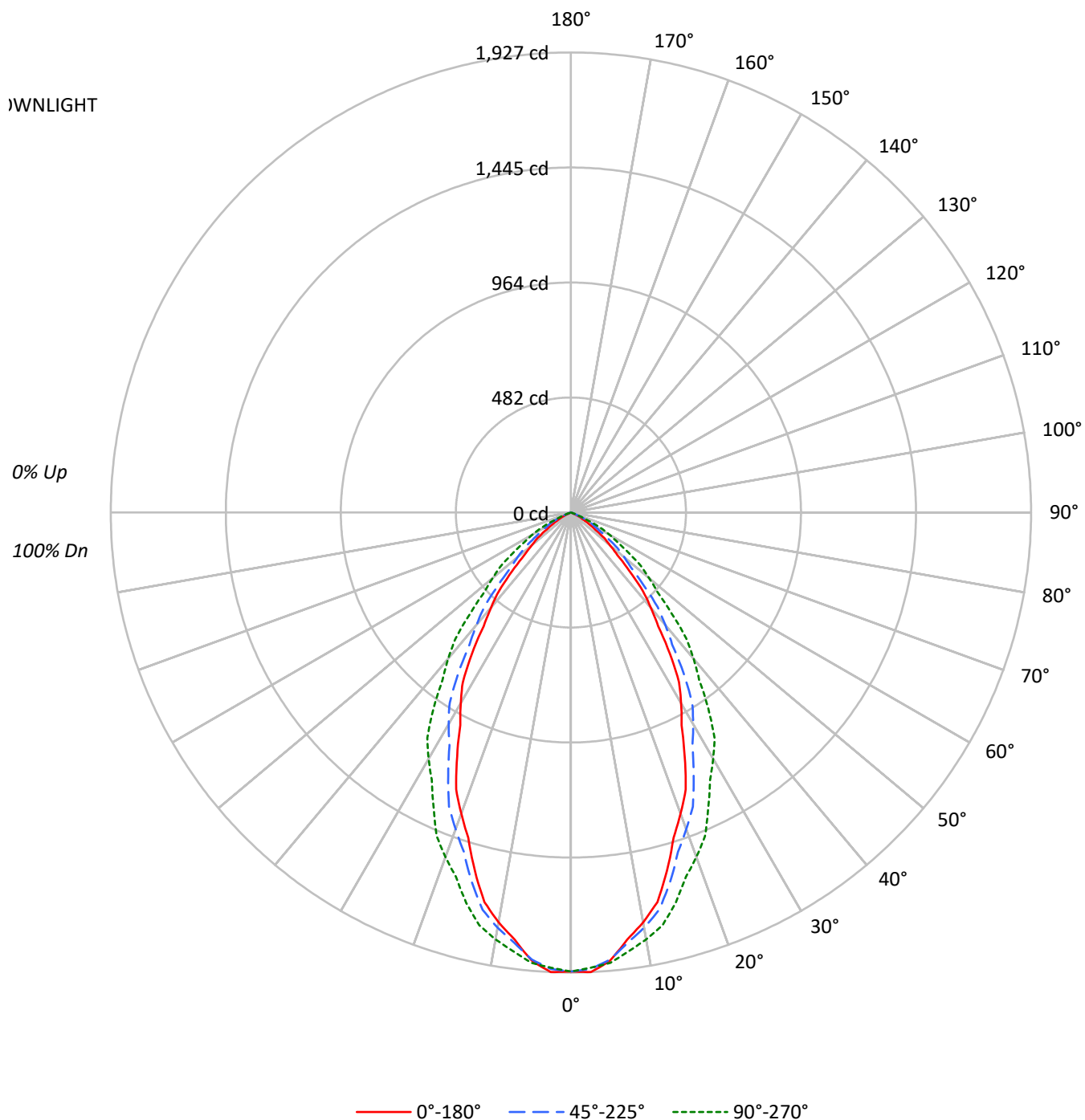
Lumens per Lamp: N/A
Luminaire Lumens: 2293.4 lumens
Efficiency: N/A
Efficacy: 65.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.9
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

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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	112	109	106	104	110	107	104	102	103	101	99		99	98	96		96
2	106	100	95	91	103	98	94	90	95	91	88		92	89	86		89
3	99	91	85	81	97	90	84	80	87	82	79		85	81	77		82
4	93	84	77	72	91	83	76	72	80	75	71		78	74	70		76
5	87	77	70	65	85	76	70	65	74	68	64		72	67	64		71
6	82	71	64	59	80	70	64	59	69	63	58		67	62	58		66
7	77	66	59	54	75	65	59	54	64	58	53		62	57	53		61
8	72	61	54	50	71	61	54	49	59	53	49		58	53	49		57
9	68	57	50	46	67	57	50	46	56	50	46		55	49	45		54
10	65	54	47	42	63	53	47	42	52	46	42		51	46	42		51

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17738	17738	17738
5°	17452	17411	17539
10°	16329	16548	17010
15°	14846	15317	16170
20°	13179	13862	15076
25°	11475	12384	13852
30°	9831	10909	12694
35°	8149	9262	11292
40°	6262	7406	9622
45°	4528	5607	7743
50°	3083	4177	6142
55°	2004	3021	4773
60°	1151	2129	3451
65°	303	1301	1749
70°	154	402	502
75°	68	32	0
80°	48	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7743 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.5	7.7
10°-20°	448.7	19.6
20°-30°	561.7	24.5
30°-40°	518.8	22.6
40°-50°	348.6	15.2
50°-60°	180.1	7.9
60°-70°	56.4	2.5
70°-80°	3.6	0.2
80°-90°	0.1	0.0
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°	1185.9	51.7
0°-40°	1704.7	74.3
0°-60°	2233.4	97.4
0°-90°	2293.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2293.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1923	1923	1923	1923	1923	
5°	1884	1865	1880	1886	1894	175
15°	1554	1549	1604	1657	1693	433
25°	1127	1136	1216	1300	1361	517
35°	724	742	822	919	1003	448
45°	347	368	430	513	593	273
55°	125	146	188	241	297	116
65°	14	27	60	72	80	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1922.6	1922.6	1922.6	1922.6	1922.6
2.5°	1927.0	1908.9	1913.6	1913.6	1908.4
5°	1884.4	1865.3	1879.9	1886.3	1893.8
7.5°	1804.8	1789.9	1817.7	1838.4	1853.5
10°	1743.0	1730.3	1766.3	1794.6	1815.6
12.5°	1671.6	1661.7	1705.3	1744.2	1771.0
15°	1554.3	1548.8	1603.6	1657.3	1692.9
17.5°	1428.6	1428.3	1490.7	1557.6	1600.4
20°	1342.3	1344.9	1411.9	1485.6	1535.5
22.5°	1255.9	1262.2	1333.8	1410.7	1467.9
25°	1127.2	1136.2	1216.5	1299.9	1360.7
27.5°	1003.8	1017.1	1101.5	1187.8	1262.2
30°	922.8	938.1	1024.0	1115.0	1191.5
32.5°	842.9	861.5	945.1	1041.5	1119.2
35°	723.5	741.9	822.3	919.0	1002.6
37.5°	600.3	618.1	696.6	792.0	882.3
40°	519.9	539.9	614.9	707.2	798.9
42.5°	447.1	467.1	537.4	628.1	714.9
45°	347.0	367.9	429.7	513.4	593.4
47.5°	264.1	286.6	340.9	416.7	489.6
50°	214.8	237.5	291.0	357.8	427.9
52.5°	175.5	197.5	245.7	308.5	372.7
55°	124.6	145.5	187.8	241.3	296.7
57.5°	86.2	104.2	142.1	186.6	230.2
60°	62.4	79.6	115.4	151.4	187.0
62.5°	41.5	57.3	92.3	120.1	143.9
65°	13.9	26.8	59.6	71.8	80.1
67.5°	7.1	8.4	31.1	33.0	35.8
70°	5.7	5.7	14.9	15.8	18.6
72.5°	4.0	4.0	5.9	7.6	8.2
75°	1.9	1.9	0.9	0.0	0.0
77.5°	0.9	0.9	0.9	0.0	0.0
80°	0.9	0.9	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

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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	9.92	11.15	10.29	11.46	11.78	14.51	15.74	14.87	16.05	16.36
	3H	9.80	10.88	10.18	11.21	11.58	14.48	15.56	14.86	15.89	16.26
	4H	9.72	10.72	10.12	11.07	11.46	14.40	15.40	14.80	15.75	16.14
	6H	9.63	10.55	10.05	10.92	11.32	14.31	15.23	14.73	15.60	16.00
	8H	9.59	10.45	10.02	10.84	11.25	14.26	15.13	14.70	15.52	15.93
	12H	9.54	10.37	9.97	10.75	11.18	14.22	15.04	14.65	15.43	15.86
4H	2H	10.28	11.29	10.69	11.64	12.02	14.44	15.44	14.84	15.79	16.18
	3H	10.17	10.98	10.59	11.39	11.79	14.42	15.23	14.83	15.64	16.04
	4H	10.08	10.80	10.51	11.22	11.66	14.32	15.04	14.76	15.46	15.91
	6H	9.99	10.61	10.46	11.05	11.52	14.23	14.85	14.70	15.30	15.77
	8H	9.93	10.50	10.40	10.95	11.42	14.17	14.74	14.64	15.19	15.66
	12H	9.88	10.38	10.36	10.86	11.34	14.12	14.62	14.60	15.10	15.58
8H	4H	9.94	10.51	10.41	10.96	11.43	14.17	14.74	14.64	15.19	15.67
	6H	9.83	10.29	10.33	10.79	11.27	14.06	14.52	14.56	15.02	15.51
	8H	9.76	10.18	10.29	10.70	11.19	13.99	14.41	14.52	14.93	15.42
	12H	9.71	10.08	10.23	10.57	11.15	13.94	14.31	14.46	14.80	15.38
12H	4H	9.88	10.39	10.37	10.87	11.35	14.12	14.62	14.61	15.11	15.58
	6H	9.76	10.18	10.28	10.69	11.19	13.99	14.41	14.52	14.93	15.42
	8H	9.71	10.08	10.23	10.57	11.15	13.94	14.31	14.46	14.80	15.38

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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