

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: P1036182

Luminaire Tested: SQ4R-BB-100D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036182
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-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

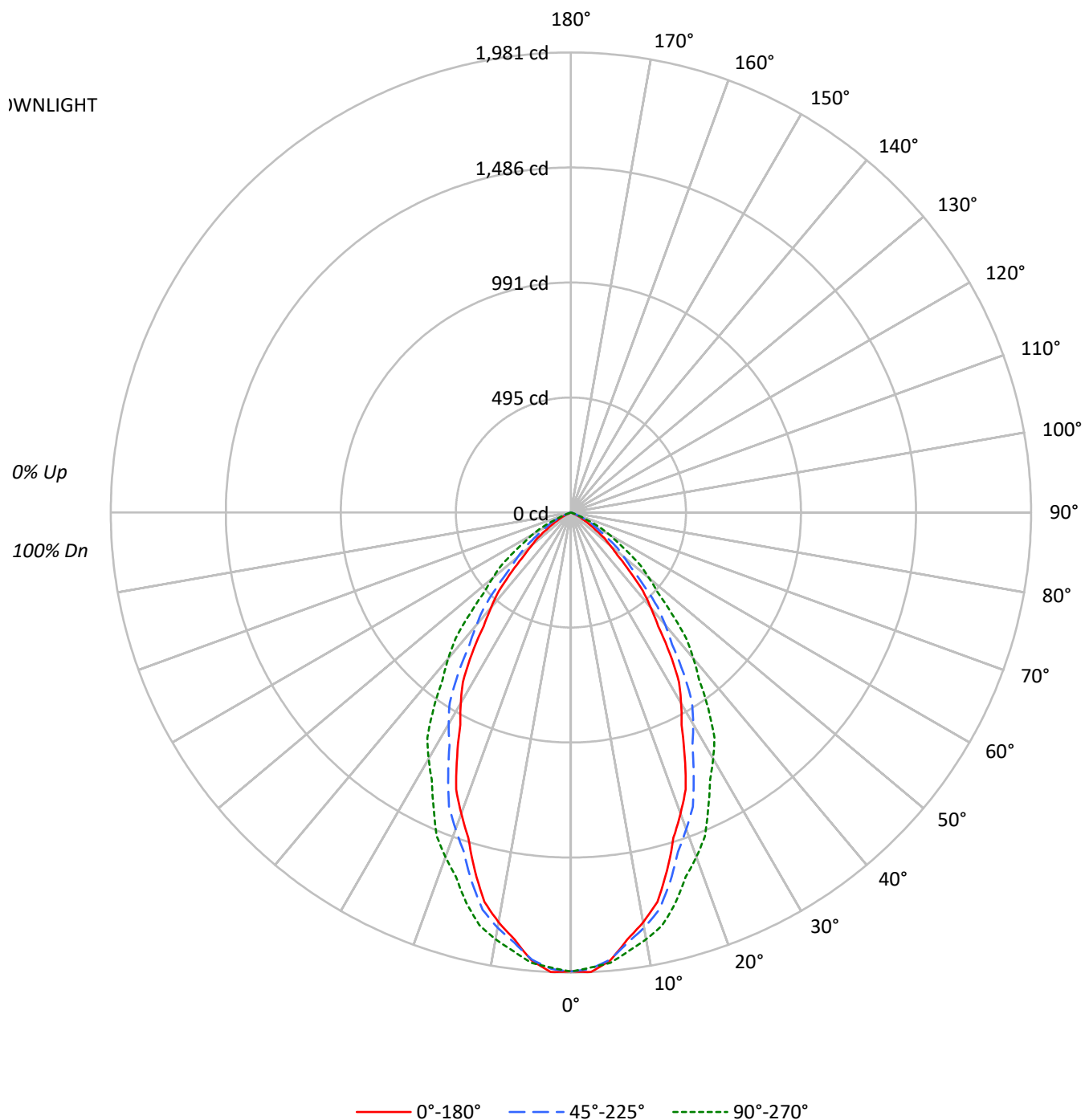
Lumens per Lamp: N/A
Luminaire Lumens: 2357.4 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91		
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82		
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74		
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	67		
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61		
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56		
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	51		
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47		
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44		
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	41		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18233	18233	18233
5°	17939	17896	18028
10°	16785	17009	17484
15°	15260	15744	16621
20°	13546	14249	15496
25°	11795	12729	14239
30°	10105	11213	13047
35°	8376	9520	11607
40°	6436	7613	9890
45°	4654	5763	7958
50°	3169	4293	6314
55°	2061	3106	4906
60°	1183	2188	3547
65°	312	1338	1797
70°	159	415	515
75°	71	32	0
80°	48	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7958 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.3	7.7
10°-20°	461.2	19.6
20°-30°	577.4	24.5
30°-40°	533.3	22.6
40°-50°	358.3	15.2
50°-60°	185.1	7.9
60°-70°	58.0	2.5
70°-80°	3.7	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°	1218.9	51.7
0°-40°	1752.2	74.3
0°-60°	2295.7	97.4
0°-90°	2357.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2357.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1976	1976	1976	1976	1976	
5°	1937	1917	1932	1939	1947	180
15°	1598	1592	1648	1704	1740	445
25°	1159	1168	1250	1336	1399	531
35°	744	763	845	945	1030	461
45°	357	378	442	528	610	280
55°	128	150	193	248	305	120
65°	14	28	61	74	82	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°	1976.2	1976.2	1976.2	1976.2	1976.2
2.5°	1980.7	1962.1	1966.9	1966.9	1961.6
5°	1937.0	1917.3	1932.3	1938.9	1946.6
7.5°	1855.2	1839.8	1868.4	1889.6	1905.2
10°	1791.6	1778.5	1815.5	1844.6	1866.2
12.5°	1718.2	1708.0	1752.8	1792.8	1820.3
15°	1597.6	1592.0	1648.3	1703.5	1740.1
17.5°	1468.4	1468.1	1532.2	1601.0	1645.0
20°	1379.7	1382.4	1451.3	1527.1	1578.3
22.5°	1290.9	1297.4	1371.0	1450.0	1508.9
25°	1158.6	1167.9	1250.4	1336.1	1398.7
27.5°	1031.8	1045.5	1132.2	1221.0	1297.4
30°	948.5	964.3	1052.5	1146.1	1224.7
32.5°	866.4	885.5	971.4	1070.6	1150.4
35°	743.7	762.6	845.2	944.6	1030.5
37.5°	617.1	635.3	716.0	814.1	906.9
40°	534.4	554.9	632.1	726.9	821.2
42.5°	459.5	480.1	552.4	645.7	734.8
45°	356.7	378.1	441.7	527.7	609.9
47.5°	271.5	294.5	350.4	428.3	503.3
50°	220.8	244.2	299.1	367.7	439.9
52.5°	180.3	203.1	252.6	317.1	383.1
55°	128.1	149.5	193.1	248.1	305.0
57.5°	88.6	107.2	146.1	191.8	236.6
60°	64.1	81.8	118.6	155.6	192.2
62.5°	42.7	58.9	94.8	123.4	147.9
65°	14.3	27.5	61.3	73.8	82.3
67.5°	7.3	8.6	32.0	34.0	36.8
70°	5.9	5.9	15.4	16.2	19.1
72.5°	4.1	4.1	6.1	7.8	8.4
75°	2.0	2.0	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	10.02	11.25	10.39	11.56	11.88	14.60	15.83	14.97	16.14	16.46
	3H	9.90	10.98	10.28	11.31	11.68	14.58	15.66	14.96	15.99	16.36
	4H	9.82	10.82	10.22	11.17	11.56	14.50	15.50	14.90	15.85	16.23
	6H	9.73	10.65	10.15	11.02	11.42	14.41	15.32	14.82	15.70	16.09
	8H	9.69	10.55	10.12	10.94	11.35	14.36	15.23	14.79	15.62	16.02
	12H	9.64	10.47	10.07	10.85	11.28	14.31	15.14	14.75	15.52	15.95
4H	2H	10.38	11.39	10.79	11.74	12.12	14.54	15.54	14.94	15.89	16.28
	3H	10.27	11.08	10.69	11.49	11.89	14.52	15.32	14.93	15.73	16.13
	4H	10.18	10.90	10.62	11.32	11.76	14.42	15.14	14.85	15.56	16.00
	6H	10.09	10.71	10.56	11.15	11.62	14.33	14.94	14.79	15.39	15.86
	8H	10.03	10.60	10.50	11.05	11.52	14.26	14.84	14.74	15.29	15.76
	12H	9.98	10.48	10.46	10.96	11.44	14.21	14.71	14.70	15.20	15.68
8H	4H	10.04	10.61	10.51	11.06	11.53	14.27	14.84	14.74	15.29	15.76
	6H	9.93	10.39	10.43	10.89	11.37	14.16	14.62	14.66	15.12	15.60
	8H	9.86	10.28	10.39	10.80	11.29	14.09	14.50	14.61	15.02	15.52
	12H	9.81	10.18	10.33	10.67	11.25	14.04	14.40	14.55	14.90	15.48
12H	4H	9.98	10.49	10.47	10.97	11.45	14.21	14.72	14.70	15.20	15.68
	6H	9.86	10.28	10.38	10.79	11.29	14.09	14.50	14.61	15.02	15.52
	8H	9.81	10.18	10.33	10.67	11.25	14.04	14.40	14.55	14.90	15.48

END OF REPORT