

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: P1036181

Luminaire Tested: SQ4R-BB-100D-B2750-1D-UNV-W2A_3000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036181
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_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

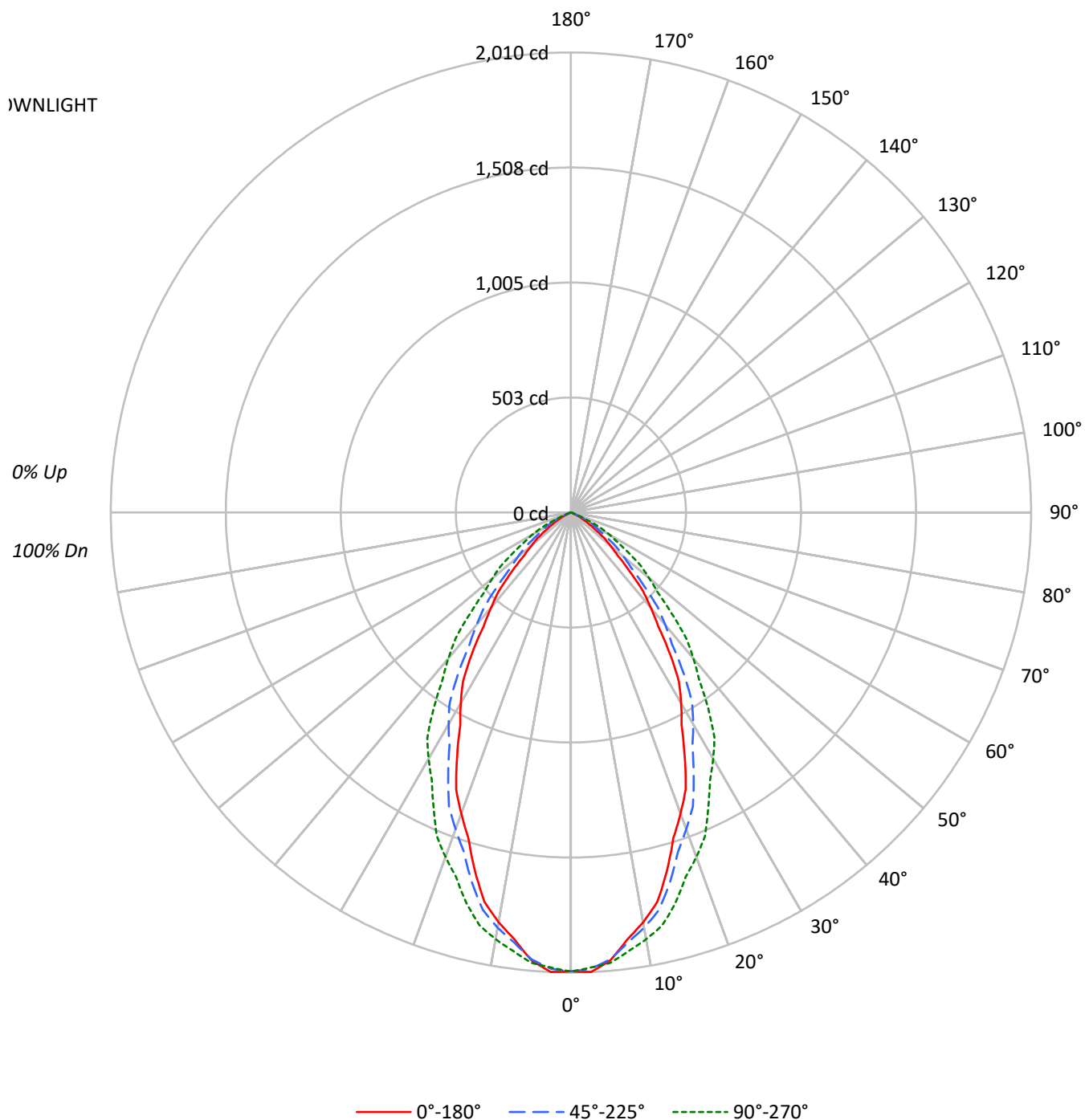
Lumens per Lamp: N/A
Luminaire Lumens: 2391.7 lumens
Efficiency: N/A
Efficacy: 68.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	18499	18499	18499
5°	18201	18156	18290
10°	17028	17257	17738
15°	15482	15973	16863
20°	13744	14456	15722
25°	11967	12914	14445
30°	10252	11377	13237
35°	8498	9658	11776
40°	6530	7724	10035
45°	4722	5848	8074
50°	3215	4356	6406
55°	2091	3151	4978
60°	1199	2220	3598
65°	317	1356	1823
70°	162	421	523
75°	71	32	0
80°	48	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8074 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.0	7.7
10°-20°	467.9	19.6
20°-30°	585.8	24.5
30°-40°	541.1	22.6
40°-50°	363.6	15.2
50°-60°	187.8	7.9
60°-70°	58.8	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°	1236.7	51.7
0°-40°	1777.7	74.3
0°-60°	2329.1	97.4
0°-90°	2391.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2391.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2005	2005	2005	2005	2005	
5°	1965	1945	1960	1967	1975	182
15°	1621	1615	1672	1728	1765	451
25°	1176	1185	1269	1356	1419	539
35°	754	774	858	958	1046	467
45°	362	384	448	535	619	284
55°	130	152	196	252	310	121
65°	14	28	62	75	84	25
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°	2005.0	2005.0	2005.0	2005.0	2005.0
2.5°	2009.5	1990.7	1995.5	1995.5	1990.2
5°	1965.2	1945.2	1960.4	1967.2	1974.9
7.5°	1882.2	1866.6	1895.6	1917.1	1932.9
10°	1817.6	1804.4	1842.0	1871.4	1893.4
12.5°	1743.2	1732.9	1778.3	1818.9	1846.8
15°	1620.9	1615.2	1672.3	1728.3	1765.4
17.5°	1489.8	1489.5	1554.5	1624.3	1668.9
20°	1399.8	1402.5	1472.4	1549.3	1601.3
22.5°	1309.7	1316.3	1390.9	1471.1	1530.8
25°	1175.5	1184.9	1268.6	1355.6	1419.0
27.5°	1046.8	1060.7	1148.7	1238.7	1316.3
30°	962.3	978.3	1067.9	1162.8	1242.5
32.5°	879.0	898.4	985.6	1086.1	1167.1
35°	754.5	773.7	857.5	958.4	1045.5
37.5°	626.1	644.5	726.4	825.9	920.1
40°	542.2	563.0	641.3	737.5	833.2
42.5°	466.2	487.1	560.4	655.1	745.5
45°	361.9	383.6	448.2	535.4	618.8
47.5°	275.4	298.8	355.5	434.6	510.6
50°	224.0	247.7	303.5	373.1	446.3
52.5°	183.0	206.0	256.2	321.7	388.7
55°	130.0	151.7	195.9	251.7	309.5
57.5°	89.8	108.7	148.2	194.6	240.1
60°	65.0	83.0	120.3	157.9	195.0
62.5°	43.3	59.8	96.2	125.2	150.0
65°	14.5	27.9	62.1	74.9	83.5
67.5°	7.4	8.7	32.5	34.5	37.3
70°	6.0	6.0	15.6	16.5	19.4
72.5°	4.2	4.2	6.2	7.9	8.5
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	10.07	11.30	10.43	11.61	11.93	14.65	15.88	15.02	16.20	16.51
	3H	9.94	11.03	10.32	11.36	11.72	14.63	15.71	15.01	16.04	16.41
	4H	9.87	10.87	10.27	11.22	11.61	14.55	15.55	14.95	15.90	16.29
	6H	9.78	10.70	10.20	11.07	11.46	14.46	15.38	14.87	15.75	16.14
	8H	9.73	10.60	10.16	10.99	11.40	14.41	15.28	14.84	15.67	16.07
	12H	9.69	10.51	10.12	10.89	11.33	14.36	15.19	14.80	15.57	16.00
4H	2H	10.43	11.43	10.83	11.78	12.17	14.59	15.59	14.99	15.94	16.33
	3H	10.32	11.13	10.73	11.53	11.94	14.57	15.38	14.98	15.78	16.19
	4H	10.22	10.94	10.66	11.36	11.81	14.47	15.19	14.90	15.61	16.05
	6H	10.14	10.75	10.60	11.20	11.67	14.38	14.99	14.84	15.44	15.91
	8H	10.07	10.65	10.55	11.10	11.57	14.32	14.89	14.79	15.34	15.81
	12H	10.02	10.52	10.51	11.01	11.48	14.26	14.77	14.75	15.25	15.73
8H	4H	10.08	10.66	10.55	11.10	11.58	14.32	14.89	14.79	15.34	15.81
	6H	9.97	10.44	10.48	10.94	11.42	14.21	14.67	14.71	15.17	15.65
	8H	9.90	10.32	10.43	10.84	11.33	14.14	14.55	14.66	15.07	15.57
	12H	9.85	10.22	10.37	10.72	11.29	14.09	14.45	14.60	14.95	15.53
12H	4H	10.03	10.53	10.52	11.02	11.49	14.26	14.77	14.75	15.25	15.73
	6H	9.90	10.32	10.43	10.84	11.33	14.14	14.56	14.66	15.07	15.57
	8H	9.85	10.22	10.37	10.72	11.29	14.09	14.45	14.60	14.95	15.53

END OF REPORT