

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: P1036186

Luminaire Tested: SQ4R-BB-100D-B40-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036186
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

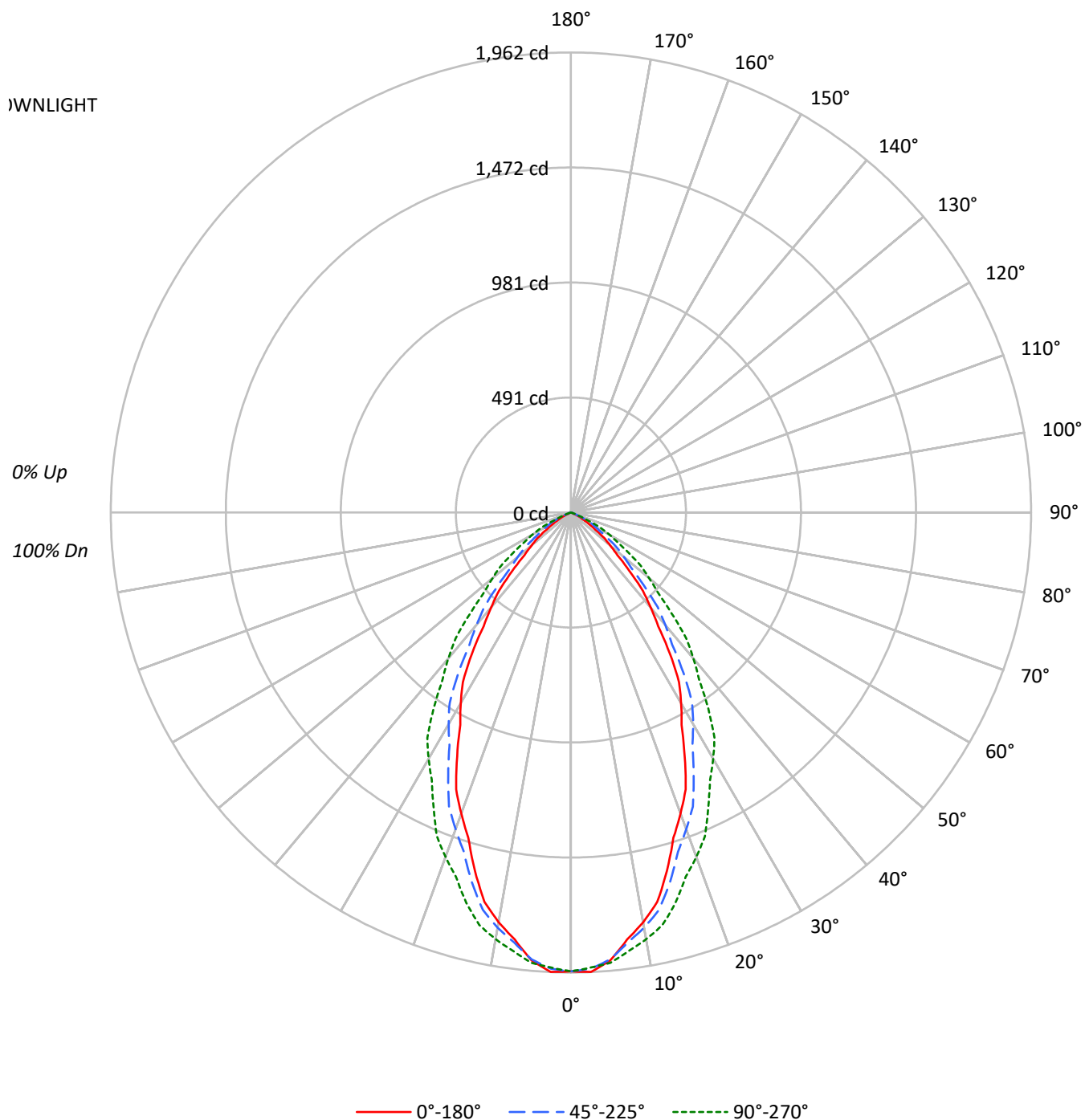
Lumens per Lamp: N/A
Luminaire Lumens: 2334.5 lumens
Efficiency: N/A
Efficacy: 66.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	18056	18056	18056
5°	17765	17722	17853
10°	16622	16844	17314
15°	15112	15591	16459
20°	13415	14111	15346
25°	11681	12606	14100
30°	10007	11104	12921
35°	8295	9427	11494
40°	6374	7538	9794
45°	4608	5707	7881
50°	3138	4251	6252
55°	2041	3076	4859
60°	1172	2168	3511
65°	308	1325	1779
70°	156	410	510
75°	68	32	0
80°	48	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.6	7.7
10°-20°	456.7	19.6
20°-30°	571.8	24.5
30°-40°	528.1	22.6
40°-50°	354.9	15.2
50°-60°	183.3	7.9
60°-70°	57.4	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°	1207.1	51.7
0°-40°	1735.2	74.3
0°-60°	2273.4	97.4
0°-90°	2334.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2334.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1957	1957	1957	1957	1957	
5°	1918	1899	1914	1920	1928	178
15°	1582	1577	1632	1687	1723	441
25°	1147	1157	1238	1323	1385	526
35°	736	755	837	935	1020	456
45°	353	374	437	523	604	277
55°	127	148	191	246	302	118
65°	14	27	61	73	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°	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	1961.5	1943.1	1947.8	1947.8	1942.6
5°	1918.2	1898.7	1913.5	1920.1	1927.7
7.5°	1837.1	1821.9	1850.2	1871.3	1886.7
10°	1774.2	1761.3	1797.9	1826.7	1848.1
12.5°	1701.5	1691.4	1735.8	1775.4	1802.7
15°	1582.1	1576.6	1632.3	1686.9	1723.2
17.5°	1454.2	1453.9	1517.4	1585.5	1629.0
20°	1366.3	1369.0	1437.2	1512.2	1563.0
22.5°	1278.4	1284.8	1357.7	1436.0	1494.2
25°	1147.4	1156.6	1238.3	1323.2	1385.1
27.5°	1021.8	1035.3	1121.2	1209.1	1284.8
30°	939.3	954.9	1042.3	1135.0	1212.8
32.5°	858.0	876.9	962.0	1060.2	1139.2
35°	736.5	755.2	837.0	935.4	1020.5
37.5°	611.1	629.1	709.1	806.2	898.1
40°	529.2	549.6	625.9	719.8	813.2
42.5°	455.1	475.4	547.0	639.4	727.7
45°	353.2	374.4	437.4	522.6	604.0
47.5°	268.8	291.7	347.0	424.2	498.4
50°	218.6	241.8	296.2	364.2	435.6
52.5°	178.6	201.1	250.1	314.0	379.4
55°	126.9	148.1	191.2	245.7	302.1
57.5°	87.7	106.1	144.7	189.9	234.3
60°	63.5	81.0	117.5	154.1	190.3
62.5°	42.3	58.3	93.9	122.2	146.4
65°	14.1	27.2	60.7	73.1	81.5
67.5°	7.3	8.5	31.7	33.6	36.4
70°	5.8	5.8	15.2	16.1	18.9
72.5°	4.1	4.1	6.0	7.8	8.3
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	9.98	11.21	10.35	11.53	11.84	14.57	15.80	14.93	16.11	16.43
	3H	9.86	10.94	10.24	11.27	11.64	14.54	15.62	14.92	15.95	16.32
	4H	9.78	10.79	10.19	11.14	11.52	14.46	15.46	14.86	15.81	16.20
	6H	9.70	10.61	10.11	10.99	11.38	14.37	15.29	14.79	15.66	16.06
	8H	9.65	10.51	10.08	10.91	11.31	14.32	15.19	14.76	15.58	15.99
	12H	9.60	10.43	10.03	10.81	11.24	14.28	15.10	14.71	15.49	15.92
4H	2H	10.35	11.35	10.75	11.70	12.09	14.50	15.50	14.91	15.85	16.24
	3H	10.24	11.04	10.65	11.45	11.85	14.48	15.29	14.89	15.70	16.10
	4H	10.14	10.86	10.58	11.28	11.73	14.38	15.10	14.82	15.52	15.97
	6H	10.05	10.67	10.52	11.12	11.59	14.29	14.91	14.76	15.36	15.83
	8H	9.99	10.57	10.46	11.01	11.49	14.23	14.80	14.70	15.25	15.73
	12H	9.94	10.44	10.43	10.93	11.40	14.18	14.68	14.67	15.17	15.64
8H	4H	10.00	10.57	10.47	11.02	11.49	14.23	14.81	14.70	15.25	15.73
	6H	9.89	10.36	10.40	10.85	11.34	14.12	14.59	14.63	15.08	15.57
	8H	9.82	10.24	10.35	10.76	11.25	14.05	14.47	14.58	14.99	15.48
	12H	9.77	10.14	10.29	10.64	11.21	14.00	14.37	14.52	14.87	15.44
12H	4H	9.95	10.45	10.43	10.93	11.41	14.18	14.68	14.67	15.17	15.64
	6H	9.82	10.24	10.35	10.76	11.25	14.05	14.47	14.58	14.99	15.48
	8H	9.77	10.14	10.29	10.64	11.21	14.00	14.37	14.52	14.87	15.44

END OF REPORT