

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: P1036377

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036377
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P519276)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-WB-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

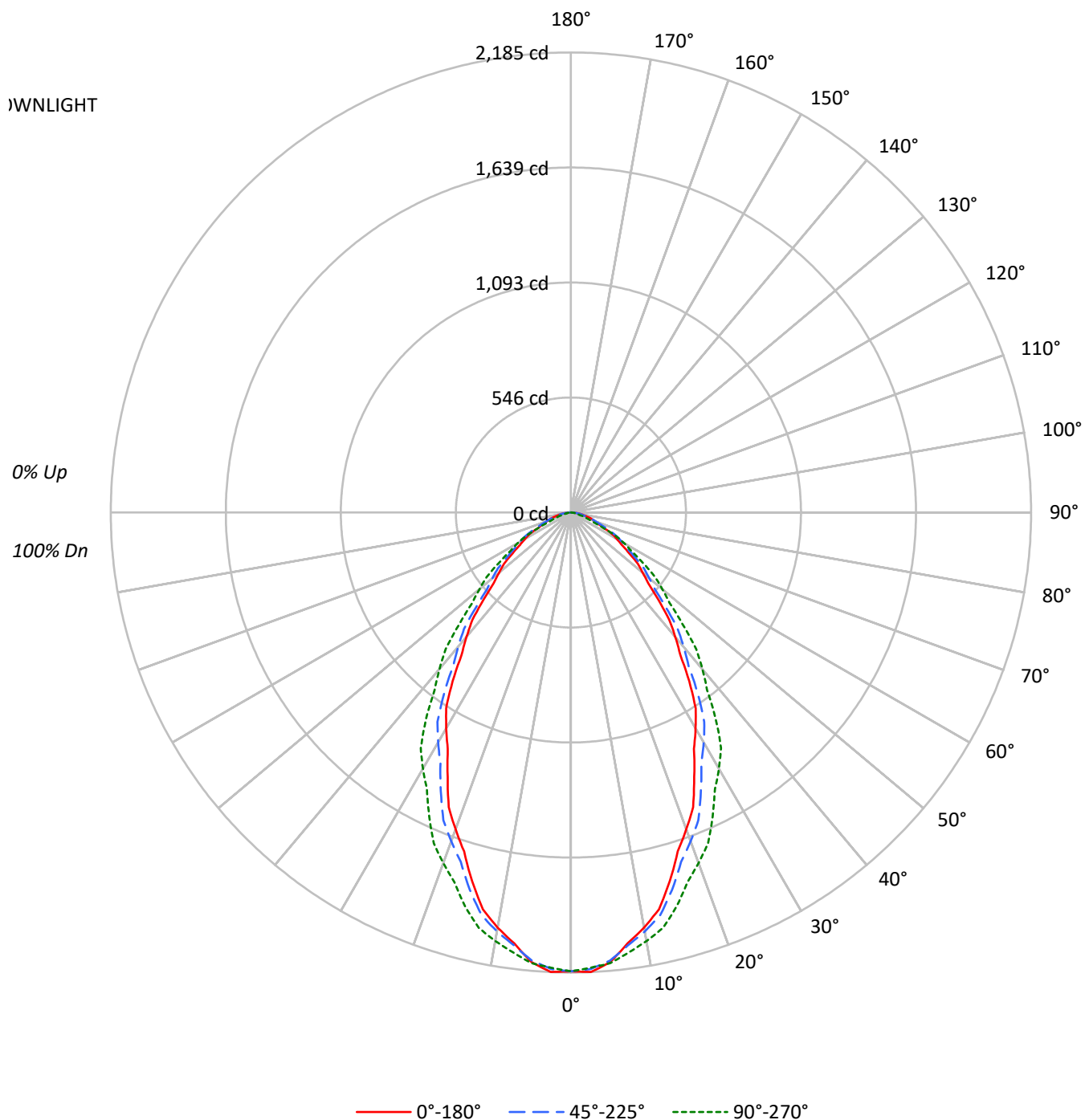
Lumens per Lamp: N/A
Luminaire Lumens: 3175.4 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1036377

CATALOG NUMBER: SQ4R-WB-100D-B2750-1D-UNV-W2A_3500K

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	111	107	104	101	109	105	102	99	101	99	96		97	95	93		94
2	103	97	91	87	101	95	90	86	92	87	84		88	85	82		85
3	96	87	81	75	94	86	80	75	83	78	73		80	76	72		78
4	89	79	72	66	87	78	71	66	76	70	65		74	68	64		71
5	83	72	65	59	81	71	64	59	69	63	58		67	62	58		66
6	78	66	59	53	76	65	58	53	64	57	53		62	56	52		61
7	73	61	53	48	71	60	53	48	59	52	48		58	52	47		56
8	68	57	49	44	67	56	49	44	55	48	44		53	48	43		52
9	64	53	45	40	63	52	45	40	51	45	40		50	44	40		49
10	61	49	42	37	60	48	42	37	48	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20106	20106	20106
5°	19855	19783	19899
10°	18758	18928	19367
15°	17316	17719	18513
20°	15725	16316	17396
25°	14105	14874	16208
30°	12613	13435	14973
35°	11028	11824	13517
40°	9281	10019	11701
45°	7659	8321	9769
50°	6393	6973	8137
55°	5429	5982	6719
60°	4641	5187	5364
65°	3696	4362	3462
70°	3275	3404	2115
75°	3030	2763	1298
80°	2795	2545	1116
85°	2519	2339	910

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9769 cd/sqm

TEST NUMBER: P1036377

CATALOG NUMBER: SQ4R-WB-100D-B2750-1D-UNV-W2A_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.9	6.3
10°-20°	519.9	16.4
20°-30°	673.4	21.2
30°-40°	659.4	20.8
40°-50°	504.8	15.9
50°-60°	336.3	10.6
60°-70°	183.5	5.8
70°-80°	76.5	2.4
80°-90°	21.6	0.7
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°	1393.2	43.9
0°-40°	2052.6	64.6
0°-60°	2893.7	91.1
0°-90°	3175.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3175.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2179	2179	2179	2179	2179	
5°	2144	2122	2136	2141	2149	199
15°	1813	1806	1855	1906	1938	506
25°	1386	1389	1461	1525	1592	637
35°	979	984	1050	1121	1200	609
45°	587	598	638	686	749	458
55°	338	352	372	386	418	306
65°	169	183	200	175	159	176
75°	85	85	78	53	36	91
85°	24	24	22	14	9	27
90°	0	0	0	0	0	

TEST NUMBER: P1036377

CATALOG NUMBER: SQ4R-WB-100D-B2750-1D-UNV-W2A_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2179.2	2179.2	2179.2	2179.2	2179.2
2.5°	2184.6	2165.1	2170.1	2169.9	2163.8
5°	2143.8	2122.2	2136.1	2141.0	2148.6
7.5°	2064.2	2047.9	2073.3	2091.9	2107.0
10°	2002.2	1988.3	2020.4	2047.7	2067.2
12.5°	1930.4	1918.5	1958.6	1994.9	2020.7
15°	1812.9	1806.4	1855.1	1905.6	1938.2
17.5°	1687.3	1684.1	1739.9	1798.8	1840.6
20°	1601.6	1600.7	1661.8	1723.3	1771.8
22.5°	1515.2	1517.2	1581.5	1645.4	1700.7
25°	1385.6	1389.3	1461.1	1524.8	1592.1
27.5°	1265.7	1267.4	1341.4	1408.7	1480.6
30°	1183.9	1188.4	1261.1	1330.8	1405.5
32.5°	1102.1	1107.4	1178.7	1250.5	1326.7
35°	979.1	983.9	1049.8	1120.7	1200.1
37.5°	852.4	858.9	917.6	984.2	1062.6
40°	770.6	780.1	831.9	894.9	971.5
42.5°	691.8	703.5	751.5	811.3	880.3
45°	587.0	598.3	637.7	686.0	748.7
47.5°	496.8	509.7	540.1	581.7	635.1
50°	445.4	457.8	485.8	516.5	566.9
52.5°	400.4	412.6	437.5	461.3	504.4
55°	337.5	351.5	371.9	386.1	417.7
57.5°	285.9	299.3	315.6	321.9	341.1
60°	251.5	266.5	281.1	280.4	290.7
62.5°	220.2	232.9	247.4	237.2	237.9
65°	169.3	183.4	199.8	174.7	158.6
67.5°	136.8	139.6	156.8	121.8	102.8
70°	121.4	121.4	126.2	94.3	78.4
72.5°	107.0	107.0	102.7	76.6	60.0
75°	85.0	85.0	77.5	53.2	36.4
77.5°	65.6	65.0	59.3	39.6	26.4
80°	52.6	52.6	47.9	31.4	21.0
82.5°	41.1	41.1	37.0	24.5	15.6
85°	23.8	23.8	22.1	14.3	8.6
87.5°	8.4	8.4	7.5	4.5	3.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036377

CATALOG NUMBER: SQ4R-WB-100D-B2750-1D-UNV-W2A_3500K

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	16.17	17.55	16.54	17.86	18.18	16.80	18.17	17.16	18.49	18.80
	3H	17.15	18.37	17.53	18.70	19.06	17.26	18.48	17.64	18.81	19.17
	4H	17.59	18.73	17.99	19.08	19.46	17.34	18.48	17.74	18.83	19.21
	6H	17.90	18.95	18.31	19.31	19.71	17.35	18.40	17.76	18.77	19.16
	8H	18.03	19.02	18.46	19.41	19.82	17.34	18.34	17.77	18.73	19.13
	12H	18.11	19.06	18.54	19.44	19.87	17.33	18.28	17.76	18.66	19.09
4H	2H	16.66	17.81	17.07	18.16	18.54	17.18	18.32	17.58	18.67	19.06
	3H	17.83	18.77	18.24	19.17	19.57	17.82	18.75	18.23	19.15	19.56
	4H	18.36	19.20	18.80	19.62	20.06	17.95	18.79	18.38	19.21	19.65
	6H	18.79	19.51	19.25	19.96	20.42	18.02	18.74	18.48	19.19	19.65
	8H	18.96	19.64	19.43	20.09	20.56	18.03	18.71	18.50	19.15	19.62
	12H	19.09	19.69	19.57	20.17	20.64	18.03	18.63	18.51	19.11	19.58
8H	4H	18.47	19.15	18.94	19.60	20.07	18.10	18.77	18.56	19.22	19.69
	6H	19.01	19.57	19.51	20.06	20.54	18.24	18.80	18.74	19.29	19.77
	8H	19.27	19.77	19.79	20.28	20.78	18.30	18.79	18.82	19.31	19.80
	12H	19.48	19.92	19.99	20.41	20.98	18.33	18.77	18.85	19.27	19.84
12H	4H	18.46	19.05	18.94	19.54	20.01	18.10	18.70	18.59	19.18	19.66
	6H	19.02	19.51	19.54	20.03	20.52	18.28	18.78	18.80	19.29	19.78
	8H	19.33	19.77	19.85	20.27	20.84	18.39	18.83	18.90	19.32	19.89