

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: P521957

Luminaire Tested: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521957  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9249.6 lumens  
Efficiency: N/A  
Efficacy: 105.2 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: General Diffuse

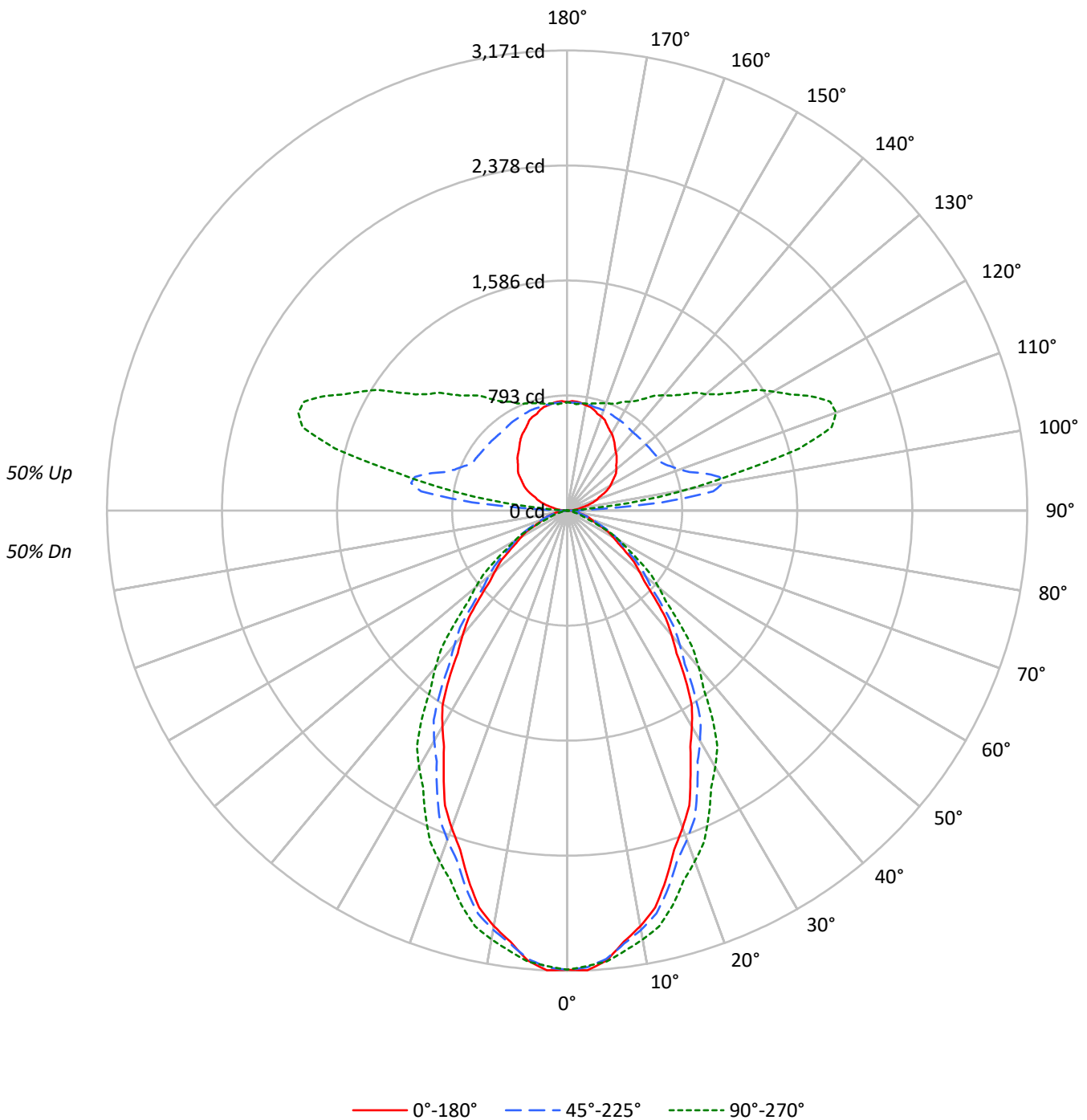
Input Watts (W): 87.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50																			
1	99	95	92	88	91	88	85	82	75	73	71	62	61	60	51	50	49	44																			
2	91	84	79	74	84	78	73	69	67	63	60	56	54	52	47	45	43	39																			
3	84	75	69	63	77	70	64	60	60	56	52	51	48	45	42	40	38	34																			
4	77	67	60	55	71	63	56	52	54	49	46	46	43	40	39	36	34	31																			
5	71	61	53	48	66	57	50	45	49	44	40	42	38	35	35	33	31	28																			
6	66	55	47	42	61	51	45	40	45	40	36	39	35	32	33	30	28	25																			
7	62	50	43	37	57	47	40	36	41	36	32	35	32	29	30	27	25	23																			
8	57	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21																			
9	54	42	35	30	50	40	33	29	35	30	26	30	26	24	26	23	21	19																			
10	50	39	32	28	47	37	31	26	32	27	24	28	24	22	25	22	19	18																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	29189	29189	29189
5°	28824	28722	28888
10°	27233	27480	28118
15°	25140	25724	26876
20°	22830	23689	25256
25°	20477	21593	23529
30°	18309	19507	21740
35°	16011	17167	19623
40°	13476	14545	16987
45°	11121	12081	14182
50°	9285	10122	11816
55°	7882	8686	9757
60°	6737	7530	7787
65°	5364	6333	5030
70°	4756	4942	3070
75°	4402	4007	1882
80°	4059	3687	1621
85°	3673	3377	1323

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 14182 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	290.2	3.1
10°-20°	754.8	8.2
20°-30°	977.7	10.6
30°-40°	957.4	10.4
40°-50°	732.8	7.9
50°-60°	488.3	5.3
60°-70°	266.5	2.9
70°-80°	111.0	1.2
80°-90°	31.4	0.3
90°-100°	340.3	3.7
100°-110°	968.4	10.5
110°-120°	927.8	10.0
120°-130°	734.4	7.9
130°-140°	589.4	6.4
140°-150°	461.5	5.0
150°-160°	337.6	3.7
160°-170°	209.1	2.3
170°-180°	71.0	0.8
0°-30°	2022.6	21.9
0°-40°	2980.0	32.2
0°-60°	4201.1	45.4
0°-90°	4610.0	49.8
90°-120°	2236.6	24.2
90°-150°	4021.8	43.5
90°-180°	4640.0	50.2
0°-180°	9249.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3164	3164	3164	3164	3164	
5°	3112	3081	3101	3108	3119	290
15°	2632	2622	2693	2766	2814	735
25°	2012	2017	2121	2214	2311	925
35°	1422	1428	1524	1627	1742	884
45°	852	869	926	996	1087	665
55°	490	510	540	560	607	444
65°	246	266	290	254	230	255
75°	124	124	112	77	53	132
85°	35	35	32	21	12	38
90°	0	0	0	0	0	3
95°	37	147	659	228	141	42
105°	150	228	987	1743	1657	159
115°	280	338	748	1585	1862	275
125°	395	438	714	1185	1417	353
135°	483	523	706	1001	1132	373
145°	569	599	711	866	944	356
155°	650	666	728	783	815	301
165°	718	721	737	753	764	202
175°	753	748	746	741	736	71
180°	747	747	747	747	747	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3163.7	3163.7	3163.7	3163.7	3163.7
2.5°	3171.4	3143.2	3150.3	3150.1	3141.5
5°	3112.3	3081.1	3101.2	3108.4	3119.2
7.5°	2996.8	2973.2	3009.9	3037.0	3059.0
10°	2906.9	2886.5	2933.2	2972.7	3001.3
12.5°	2802.5	2785.4	2843.3	2896.3	2933.5
15°	2632.0	2622.5	2693.1	2766.3	2813.8
17.5°	2449.6	2445.0	2525.9	2611.4	2672.3
20°	2325.2	2323.9	2412.7	2501.7	2572.3
22.5°	2199.7	2202.7	2296.1	2388.7	2469.0
25°	2011.5	2016.9	2121.1	2213.6	2311.3
27.5°	1837.4	1839.8	1947.6	2045.2	2149.5
30°	1718.6	1725.4	1831.0	1932.0	2040.6
32.5°	1599.7	1607.6	1711.1	1815.5	1926.2
35°	1421.5	1428.3	1524.2	1626.8	1742.2
37.5°	1237.7	1246.9	1332.1	1429.1	1542.6
40°	1118.9	1132.4	1207.7	1299.1	1410.4
42.5°	1004.5	1021.3	1091.1	1177.8	1278.2
45°	852.3	868.6	925.9	996.0	1086.9
47.5°	721.3	740.0	784.0	844.4	922.0
50°	646.9	664.5	705.2	749.9	823.2
52.5°	581.4	599.0	635.2	669.7	732.1
55°	490.0	510.4	540.0	560.5	606.6
57.5°	415.1	434.6	458.1	467.3	495.3
60°	365.1	386.8	408.1	407.1	422.0
62.5°	319.6	338.0	359.3	344.6	345.4
65°	245.7	266.1	290.1	253.5	230.4
67.5°	198.5	202.9	227.7	176.8	149.4
70°	176.3	176.3	183.2	136.9	113.8
72.5°	155.2	155.2	148.8	111.3	87.2
75°	123.5	123.5	112.4	77.2	52.8
77.5°	95.2	94.1	86.1	57.6	38.3
80°	76.4	76.4	69.4	45.5	30.5
82.5°	59.7	59.7	53.9	35.5	22.8
85°	34.7	34.7	31.9	20.6	12.5
87.5°	12.2	12.2	11.1	6.6	5.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.4	60.2	139.7	40.7	30.7
95°	36.9	146.6	658.9	228.0	140.6
97.5°	67.9	171.7	1014.7	726.1	497.6
100°	89.5	186.6	1092.0	1106.1	852.0
102.5°	113.3	202.7	1074.9	1415.8	1193.9
105°	150.5	228.3	986.9	1743.2	1657.1
107.5°	188.3	258.0	884.1	1835.5	1912.1
110°	214.4	279.7	825.0	1800.2	1972.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	301.3	785.2	1716.7	1962.1
115°	279.7	338.0	748.3	1585.3	1861.6
117.5°	315.2	369.9	726.5	1441.7	1734.4
120°	343.6	389.5	724.2	1359.6	1640.1
122.5°	366.4	412.2	718.5	1287.6	1548.1
125°	394.8	437.8	714.2	1185.3	1417.1
127.5°	425.7	466.0	712.0	1124.1	1315.2
130°	441.6	481.9	708.6	1081.5	1248.2
132.5°	458.7	497.8	708.6	1048.3	1201.6
135°	482.8	523.1	705.7	1001.2	1131.7
137.5°	505.5	544.7	705.4	961.3	1074.1
140°	522.6	562.8	704.3	928.3	1036.6
142.5°	541.9	575.5	707.7	901.9	999.1
145°	569.4	598.6	711.4	866.5	944.3
147.5°	593.0	621.3	717.7	830.8	898.0
150°	613.4	632.9	719.9	819.0	866.2
152.5°	629.3	649.9	722.2	803.0	846.9
155°	650.3	665.6	728.4	783.1	815.1
157.5°	676.5	685.6	729.9	774.1	796.9
160°	690.1	697.1	735.5	767.2	786.7
162.5°	698.1	706.1	736.7	761.4	776.4
165°	718.5	721.3	737.0	752.8	763.9
167.5°	732.4	729.9	743.5	750.7	755.1
170°	737.0	735.6	741.2	742.8	748.3
172.5°	747.2	742.5	744.6	740.5	744.9
175°	752.6	748.4	745.5	741.1	735.5
177.5°	754.9	748.2	744.6	740.1	741.2
180°	746.9	746.9	746.9	746.9	746.9

(END OF REPORT)