

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: P521838

Luminaire Tested: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4\_4500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521838  
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-075U-100D-92765-1D-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6931.6 lumens  
Efficiency: N/A  
Efficacy: 105.0 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: General Diffuse

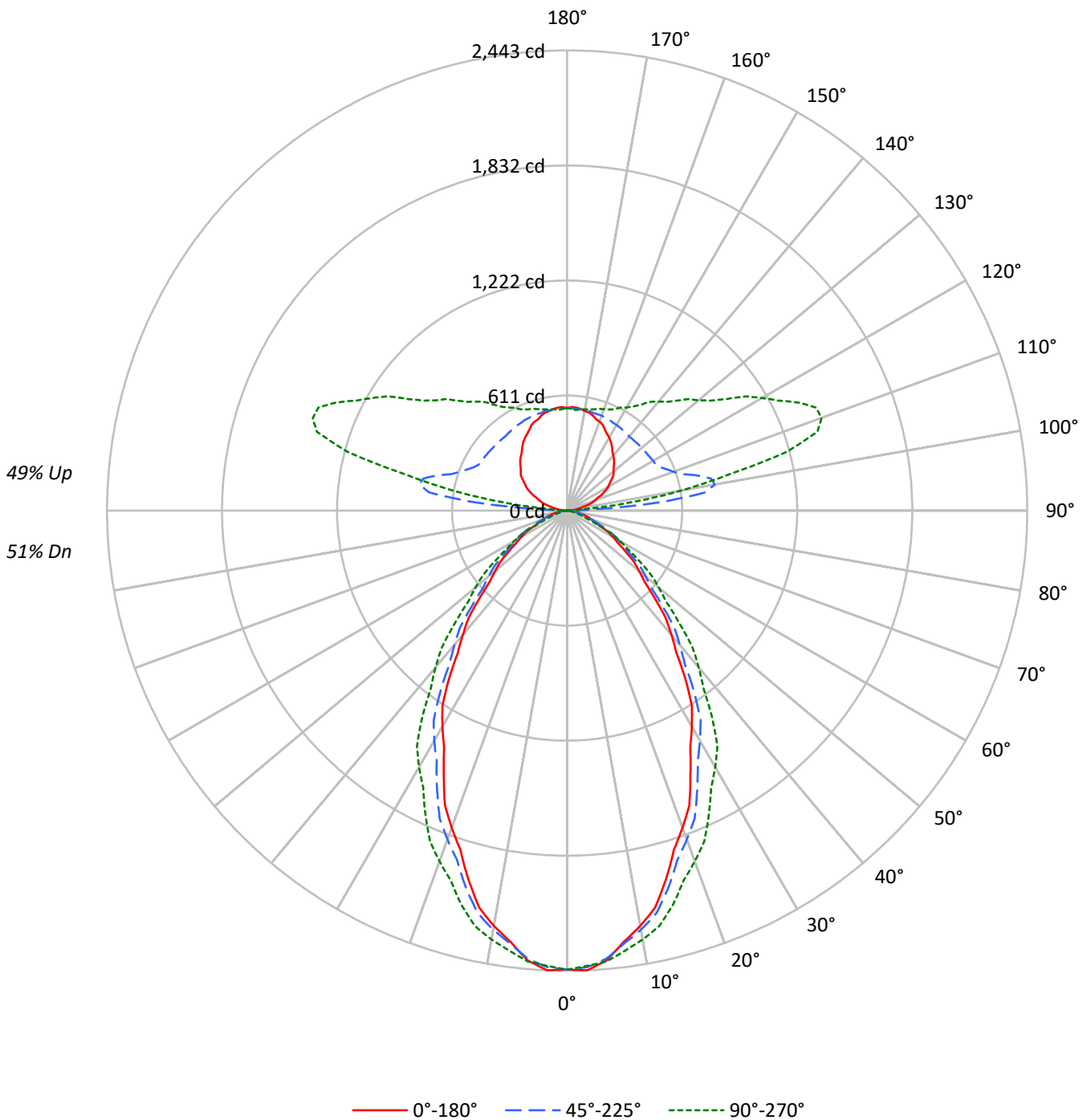
Input Watts (W): 66  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	107	107	107	107	99	99	99	99	84	84	84		70	70	70		57	57	57	51
1	99	95	92	89	92	88	85	83	75	73	71		63	62	61		52	51	51	45
2	91	85	79	75	84	79	74	70	67	64	61		57	55	53		48	46	45	40
3	84	76	69	64	78	70	65	60	61	56	53		52	49	46		43	41	39	35
4	78	68	60	55	72	63	57	52	55	50	46		47	43	41		40	37	35	32
5	72	61	54	48	66	57	51	46	50	45	41		43	39	36		36	34	31	28
6	67	55	48	42	62	52	45	40	45	40	36		39	35	32		33	31	28	26
7	62	50	43	38	57	47	41	36	42	36	33		36	32	29		31	28	26	23
8	58	46	39	34	54	43	37	32	38	33	29		33	29	26		29	26	23	21
9	54	42	35	31	50	40	34	29	35	30	27		31	27	24		27	24	22	20
10	51	39	32	28	47	37	31	27	33	28	24		29	25	22		25	22	20	18

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

	0°	45°	90°
0°	22482	22482	22482
5°	22202	22122	22251
10°	20975	21166	21657
15°	19363	19813	20701
20°	17584	18245	19453
25°	15772	16632	18123
30°	14102	15025	16745
35°	12332	13223	15114
40°	10379	11203	13083
45°	8566	9306	10924
50°	7152	7797	9100
55°	6071	6690	7515
60°	5189	5801	5997
65°	4133	4879	3875
70°	3663	3806	2366
75°	3394	3087	1447
80°	3124	2843	1249
85°	2826	2604	1016

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10924 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.5	3.2
10°-20°	581.4	8.4
20°-30°	753.0	10.9
30°-40°	737.4	10.6
40°-50°	564.4	8.1
50°-60°	376.1	5.4
60°-70°	205.2	3.0
70°-80°	85.5	1.2
80°-90°	24.2	0.3
90°-100°	248.0	3.6
100°-110°	705.7	10.2
110°-120°	676.1	9.8
120°-130°	535.1	7.7
130°-140°	429.5	6.2
140°-150°	336.2	4.9
150°-160°	246.0	3.5
160°-170°	152.4	2.2
170°-180°	51.7	0.7
0°-30°	1557.9	22.5
0°-40°	2295.3	33.1
0°-60°	3235.8	46.7
0°-90°	3550.8	51.2
90°-120°	1629.8	23.5
90°-150°	2930.6	42.3
90°-180°	3381.0	48.8
0°-180°	6931.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2437	2437	2437	2437	2437	
5°	2397	2373	2389	2394	2402	223
15°	2027	2020	2074	2131	2167	566
25°	1549	1554	1634	1705	1780	712
35°	1095	1100	1174	1253	1342	681
45°	656	669	713	767	837	512
55°	377	393	416	432	467	342
65°	189	205	224	195	178	197
75°	95	95	87	59	41	102
85°	27	27	25	16	10	29
90°	0	0	0	0	0	2
95°	27	107	480	166	102	31
105°	110	166	719	1270	1208	116
115°	204	246	545	1155	1356	201
125°	288	319	520	864	1033	257
135°	352	381	514	730	825	271
145°	415	436	518	631	688	259
155°	474	485	531	571	594	219
165°	524	526	537	549	557	147
175°	548	545	543	540	536	52
180°	544	544	544	544	544	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2436.8	2436.8	2436.8	2436.8	2436.8
2.5°	2442.7	2421.0	2426.5	2426.3	2419.6
5°	2397.2	2373.1	2388.6	2394.2	2402.5
7.5°	2308.2	2290.0	2318.3	2339.2	2356.1
10°	2238.9	2223.3	2259.3	2289.7	2311.7
12.5°	2158.5	2145.4	2190.0	2230.8	2259.5
15°	2027.2	2019.9	2074.3	2130.7	2167.3
17.5°	1886.7	1883.2	1945.6	2011.4	2058.3
20°	1790.9	1789.9	1858.3	1926.9	1981.3
22.5°	1694.3	1696.6	1768.5	1839.8	1901.7
25°	1549.3	1553.5	1633.8	1705.0	1780.3
27.5°	1415.2	1417.1	1500.1	1575.3	1655.6
30°	1323.7	1328.9	1410.3	1488.1	1571.8
32.5°	1232.2	1238.2	1317.9	1398.3	1483.7
35°	1094.9	1100.1	1174.0	1253.0	1341.9
37.5°	953.3	960.4	1026.0	1100.7	1188.1
40°	861.8	872.2	930.2	1000.6	1086.3
42.5°	773.7	786.7	840.4	907.2	984.5
45°	656.5	669.0	713.2	767.2	837.2
47.5°	555.6	570.0	603.9	650.4	710.2
50°	498.3	511.8	543.2	577.6	634.0
52.5°	447.8	461.4	489.3	515.8	563.9
55°	377.4	393.1	415.9	431.7	467.2
57.5°	319.7	334.8	352.8	360.0	381.5
60°	281.2	297.9	314.4	313.5	325.0
62.5°	246.1	260.4	276.7	265.4	266.0
65°	189.3	204.9	223.5	195.3	177.5
67.5°	152.9	156.2	175.4	136.2	115.0
70°	135.8	135.8	141.1	105.4	87.7
72.5°	119.5	119.5	114.6	85.8	67.1
75°	95.2	95.2	86.6	59.4	40.6
77.5°	73.3	72.5	66.3	44.4	29.5
80°	58.8	58.8	53.5	35.0	23.5
82.5°	46.0	46.0	41.5	27.4	17.5
85°	26.7	26.7	24.6	15.9	9.6
87.5°	9.4	9.4	8.6	5.1	4.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.3	43.9	101.8	29.6	22.3
95°	26.9	106.8	480.1	166.2	102.4
97.5°	49.5	125.1	739.4	529.1	362.6
100°	65.2	136.0	795.7	806.0	620.8
102.5°	82.6	147.7	783.3	1031.7	870.0
105°	109.7	166.3	719.1	1270.2	1207.5
107.5°	137.2	188.0	644.2	1337.5	1393.4
110°	156.2	203.8	601.2	1311.8	1437.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	174.5	219.6	572.2	1250.9	1429.8
115°	203.8	246.3	545.3	1155.2	1356.5
117.5°	229.7	269.6	529.4	1050.5	1263.8
120°	250.4	283.8	527.7	990.7	1195.1
122.5°	267.0	300.3	523.6	938.3	1128.1
125°	287.7	319.0	520.5	863.7	1032.7
127.5°	310.2	339.5	518.8	819.1	958.4
130°	321.8	351.1	516.3	788.1	909.5
132.5°	334.2	362.7	516.3	763.9	875.6
135°	351.8	381.1	514.3	729.6	824.7
137.5°	368.4	396.9	514.0	700.5	782.7
140°	380.8	410.1	513.2	676.4	755.3
142.5°	394.8	419.3	515.7	657.2	728.0
145°	414.9	436.2	518.4	631.4	688.1
147.5°	432.1	452.7	522.9	605.4	654.4
150°	447.0	461.2	524.6	596.8	631.2
152.5°	458.6	473.6	526.3	585.1	617.1
155°	473.9	485.0	530.8	570.7	593.9
157.5°	492.9	499.6	531.8	564.1	580.7
160°	502.9	507.9	536.0	559.1	573.2
162.5°	508.7	514.5	536.8	554.9	565.8
165°	523.6	525.6	537.0	548.6	556.7
167.5°	533.7	531.9	541.8	547.0	550.3
170°	537.0	536.0	540.1	541.3	545.3
172.5°	544.5	541.0	542.6	539.6	542.8
175°	548.4	545.4	543.2	540.0	536.0
177.5°	550.1	545.2	542.6	539.3	540.1
180°	544.3	544.3	544.3	544.3	544.3

(END OF REPORT)