

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: P521734

Luminaire Tested: SQ4-WB-025U-100D-92765-1D-UNV-STD-W-4\_4500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521734  
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-025U-100D-92765-1D-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 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: 5554.8 lumens  
Efficiency: N/A  
Efficacy: 98.7 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: Semi-Direct

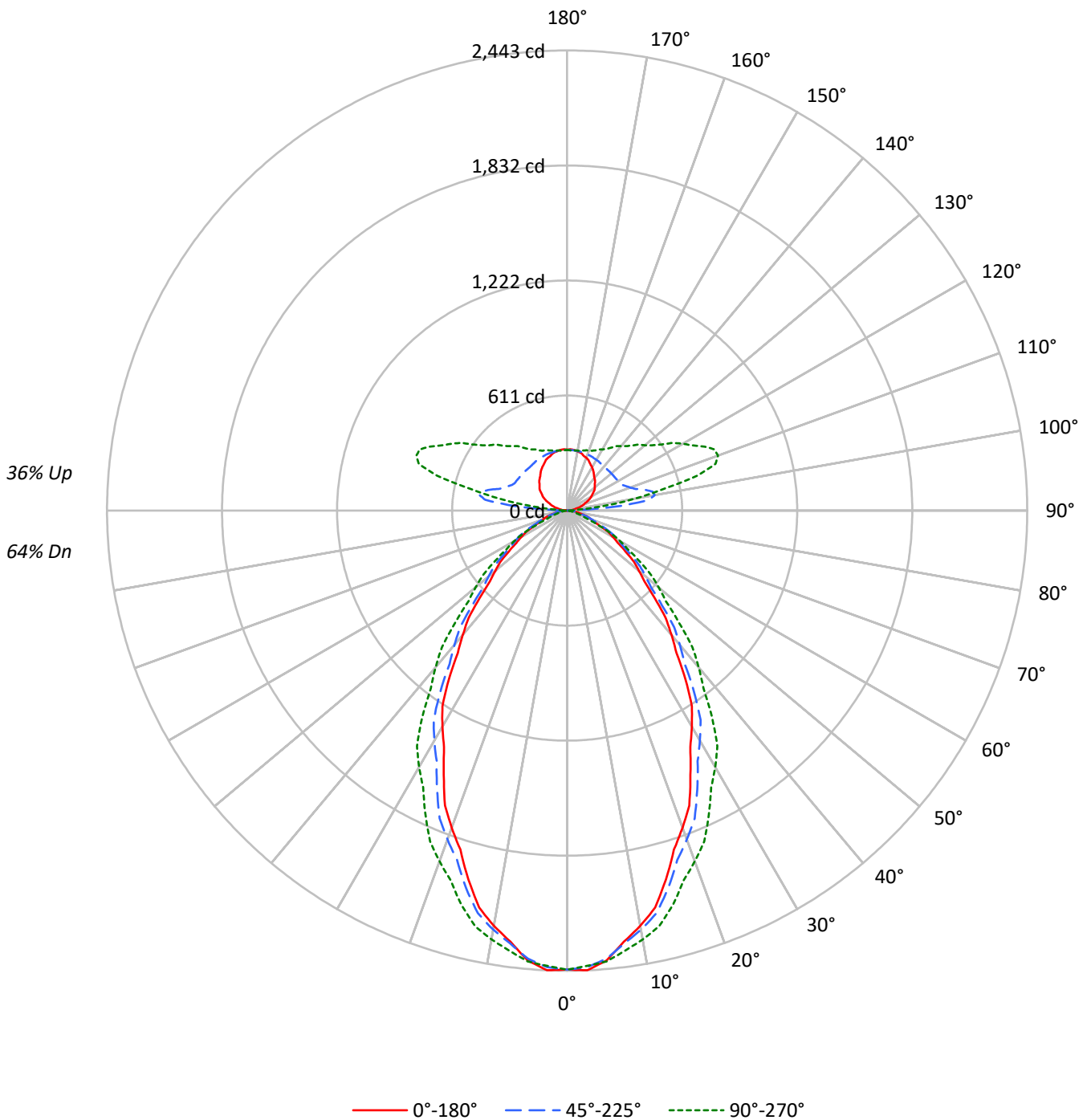
Input Watts (W): 56.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	110	110	110	110	104	104	104	104	91	91	91	80	80	80	69	69	69	64																			
1	102	98	95	92	96	93	90	87	82	80	78	72	71	69	63	62	61	57																			
2	94	88	82	78	89	83	78	74	74	70	67	65	63	60	57	56	54	50																			
3	87	79	72	67	82	74	69	64	66	62	58	59	56	53	52	50	48	44																			
4	81	71	63	58	76	67	61	56	60	55	51	54	50	47	48	45	42	39																			
5	75	64	56	51	70	61	54	49	55	49	45	49	45	42	44	41	38	35																			
6	69	58	51	45	65	55	49	44	50	45	40	45	41	37	41	37	34	32																			
7	65	53	46	40	61	51	44	39	46	41	36	42	37	34	38	34	31	29																			
8	60	49	42	37	57	47	40	35	43	37	33	39	34	31	35	31	29	27																			
9	57	45	38	33	54	43	37	32	39	34	30	36	31	28	33	29	26	24																			
10	53	42	35	30	50	40	34	29	37	31	28	33	29	26	31	27	24	22																			

**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	4.0
10°-20°	581.4	10.5
20°-30°	753.0	13.6
30°-40°	737.4	13.3
40°-50°	564.4	10.2
50°-60°	376.1	6.8
60°-70°	205.2	3.7
70°-80°	85.5	1.5
80°-90°	24.2	0.4
90°-100°	147.0	2.6
100°-110°	418.3	7.5
110°-120°	400.8	7.2
120°-130°	317.2	5.7
130°-140°	254.6	4.6
140°-150°	199.3	3.6
150°-160°	145.8	2.6
160°-170°	90.3	1.6
170°-180°	30.7	0.6
0°-30°	1557.9	28.0
0°-40°	2295.3	41.3
0°-60°	3235.8	58.3
0°-90°	3550.8	63.9
90°-120°	966.1	17.4
90°-150°	1737.2	31.3
90°-180°	2004.0	36.1
0°-180°	5554.8	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°	16	63	285	98	61	18
105°	65	99	426	753	716	69
115°	121	146	323	685	804	119
125°	170	189	308	512	612	153
135°	208	226	305	432	489	161
145°	246	258	307	374	408	154
155°	281	288	315	338	352	130
165°	310	312	318	325	330	87
175°	325	323	322	320	318	31
180°	323	323	323	323	323	

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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°	4.9	26.0	60.4	17.6	13.2
95°	15.9	63.3	284.6	98.5	60.7
97.5°	29.3	74.2	438.3	313.6	214.9
100°	38.6	80.6	471.7	477.7	368.0
102.5°	48.9	87.6	464.3	611.5	515.7
105°	65.0	98.6	426.3	752.9	715.8
107.5°	81.3	111.4	381.9	792.8	825.9
110°	92.6	120.8	356.3	777.6	851.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	103.4	130.2	339.2	741.5	847.5
115°	120.8	146.0	323.2	684.7	804.1
117.5°	136.2	159.8	313.8	622.7	749.1
120°	148.4	168.2	312.8	587.3	708.4
122.5°	158.2	178.0	310.3	556.2	668.7
125°	170.5	189.1	308.5	512.0	612.1
127.5°	183.9	201.3	307.5	485.6	568.1
130°	190.7	208.1	306.1	467.2	539.1
132.5°	198.1	215.0	306.1	452.8	519.0
135°	208.5	225.9	304.8	432.5	488.8
137.5°	218.3	235.3	304.7	415.2	463.9
140°	225.7	243.1	304.2	401.0	447.7
142.5°	234.0	248.6	305.7	389.6	431.5
145°	245.9	258.5	307.3	374.3	407.9
147.5°	256.1	268.4	310.0	358.8	387.9
150°	265.0	273.4	311.0	353.7	374.1
152.5°	271.8	280.7	311.9	346.8	365.8
155°	280.9	287.5	314.6	338.3	352.1
157.5°	292.2	296.2	315.3	334.4	344.2
160°	298.1	301.1	317.7	331.4	339.8
162.5°	301.5	305.0	318.2	328.9	335.4
165°	310.3	311.5	318.3	325.2	330.0
167.5°	316.4	315.3	321.1	324.3	326.2
170°	318.3	317.7	320.2	320.8	323.2
172.5°	322.7	320.7	321.6	319.8	321.8
175°	325.1	323.3	322.0	320.1	317.7
177.5°	326.0	323.2	321.6	319.7	320.2
180°	322.6	322.6	322.6	322.6	322.6

(END OF REPORT)