

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: P521018

Luminaire Tested: SQ4-BB-025U-125D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521018  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-BB-025U-125D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5257.1 lumens  
Efficiency: N/A  
Efficacy: 75.3 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: Semi-Direct

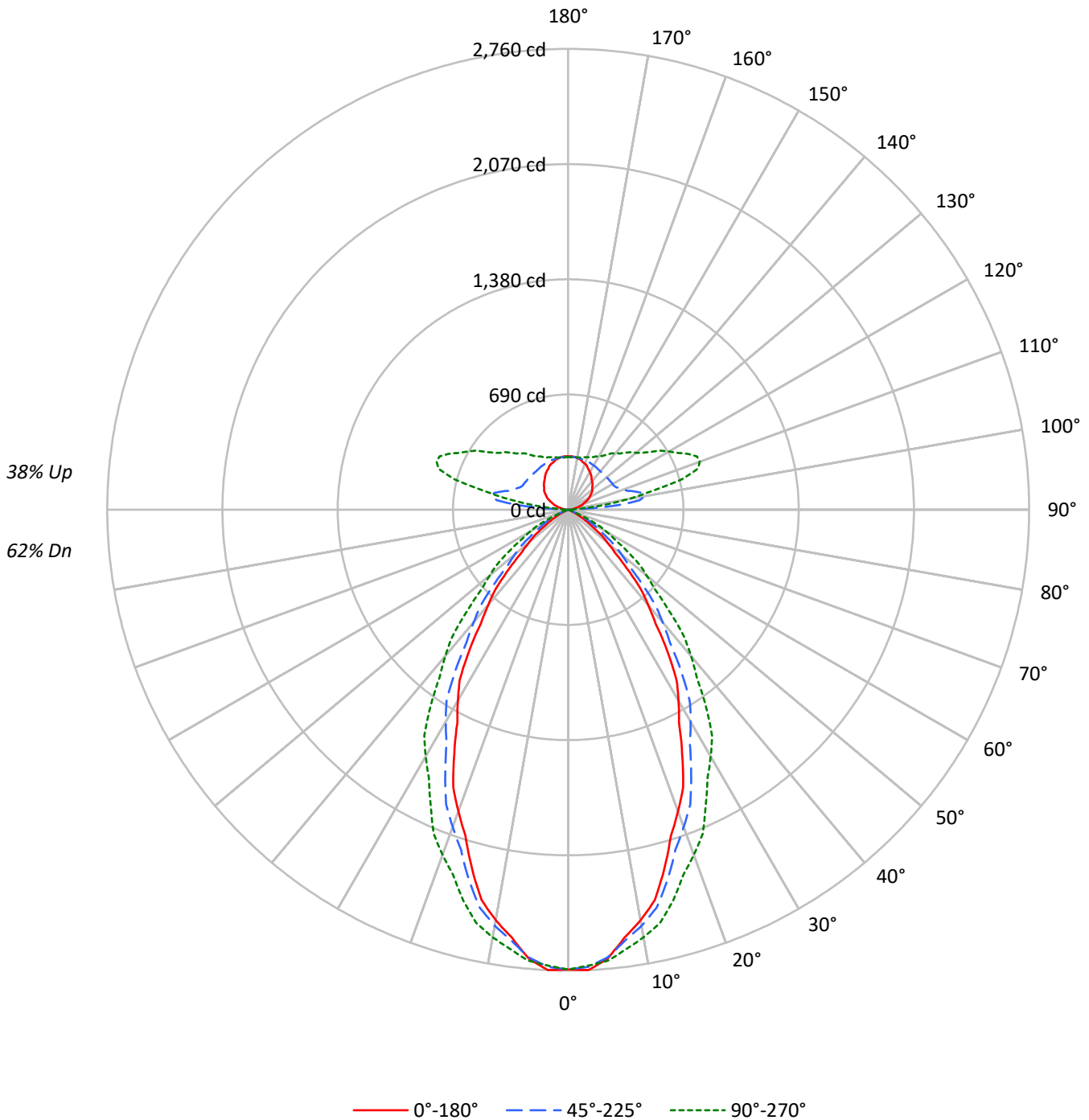
Input Watts (W): 69.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	62
1	103	99	96	93	96	93	91	88	82	81	79	72	71	70	63	62	61	57
2	96	89	84	80	90	84	80	76	75	72	69	66	64	62	58	57	55	52
3	89	81	75	70	83	76	71	67	68	64	61	61	58	55	54	52	50	47
4	82	73	66	61	78	69	63	59	62	58	54	56	52	50	50	47	45	42
5	77	67	60	54	72	63	57	52	57	52	48	52	48	45	46	43	41	38
6	72	61	54	49	67	58	52	47	53	48	44	48	44	40	43	40	37	35
7	67	56	49	44	63	53	47	42	49	43	40	44	40	37	40	37	34	32
8	63	52	45	40	59	49	43	39	45	40	36	41	37	34	37	34	32	29
9	59	48	41	36	56	46	39	35	42	37	33	38	34	31	35	32	29	27
10	55	44	38	33	52	43	36	32	39	34	31	36	32	29	33	29	27	25

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

	0°	45°	90°
0°	25406	25406	25406
5°	24998	24936	25121
10°	23389	23701	24363
15°	21263	21937	23159
20°	18875	19856	21595
25°	16438	17739	19841
30°	14080	15627	18181
35°	11674	13265	16175
40°	8969	10606	13783
45°	6483	8031	11091
50°	4417	5985	8796
55°	2871	4329	6836
60°	1648	3048	4942
65°	437	1862	2502
70°	216	575	718
75°	96	46	0
80°	69	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11091 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	251.3	4.8
10°-20°	642.7	12.2
20°-30°	804.6	15.3
30°-40°	743.1	14.1
40°-50°	499.4	9.5
50°-60°	257.9	4.9
60°-70°	80.8	1.5
70°-80°	5.1	0.1
80°-90°	0.1	0.0
90°-100°	144.7	2.8
100°-110°	411.6	7.8
110°-120°	394.4	7.5
120°-130°	312.1	5.9
130°-140°	250.5	4.8
140°-150°	196.1	3.7
150°-160°	143.5	2.7
160°-170°	88.9	1.7
170°-180°	30.2	0.6
0°-30°	1698.5	32.3
0°-40°	2441.7	46.4
0°-60°	3199.0	60.9
0°-90°	3284.9	62.5
90°-120°	950.7	18.1
90°-150°	1709.6	32.5
90°-180°	1972.0	37.5
0°-180°	5257.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2754	2754	2754	2754	2754	
5°	2699	2672	2692	2702	2712	250
15°	2226	2218	2297	2374	2425	620
25°	1615	1628	1742	1862	1949	740
35°	1036	1062	1178	1316	1436	642
45°	497	527	616	735	850	390
55°	178	208	269	346	425	167
65°	20	38	85	103	115	34
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	62	280	97	60	18
105°	64	97	420	741	704	68
115°	119	144	318	674	791	117
125°	168	186	304	504	602	150
135°	205	222	300	426	481	158
145°	242	254	302	368	401	151
155°	276	283	310	333	346	128
165°	305	307	313	320	325	86
175°	320	318	317	315	313	30
180°	318	318	318	318	318	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2753.7	2753.7	2753.7	2753.7	2753.7
2.5°	2760.1	2734.0	2740.9	2740.7	2733.5
5°	2699.1	2671.7	2692.4	2702.0	2712.4
7.5°	2585.0	2563.7	2603.4	2633.2	2654.8
10°	2496.6	2478.3	2529.9	2570.5	2600.5
12.5°	2394.3	2380.2	2442.5	2498.3	2536.5
15°	2226.1	2218.3	2296.7	2373.8	2424.6
17.5°	2046.0	2045.8	2135.3	2231.0	2292.2
20°	1922.4	1926.3	2022.3	2127.9	2199.5
22.5°	1798.8	1807.9	1910.4	2020.4	2102.5
25°	1614.7	1627.7	1742.5	1861.8	1949.0
27.5°	1437.7	1456.8	1577.6	1701.5	1807.8
30°	1321.6	1343.7	1466.8	1597.2	1706.6
32.5°	1207.5	1233.8	1353.8	1491.7	1603.2
35°	1036.5	1062.5	1177.7	1316.3	1436.1
37.5°	859.8	885.3	997.8	1134.3	1263.7
40°	744.7	773.4	880.6	1012.8	1144.4
42.5°	640.3	668.9	769.8	899.7	1023.9
45°	496.9	526.9	615.5	735.3	850.0
47.5°	378.1	410.6	488.4	596.8	701.3
50°	307.7	340.3	417.0	512.5	612.8
52.5°	251.3	282.8	352.0	442.0	534.0
55°	178.5	208.5	269.1	345.5	425.0
57.5°	123.4	149.2	203.6	267.3	329.6
60°	89.3	114.0	165.2	217.0	267.8
62.5°	59.4	82.1	132.2	171.8	206.0
65°	20.0	38.2	85.3	102.8	114.6
67.5°	10.1	12.2	44.8	47.2	51.2
70°	8.0	8.0	21.3	22.7	26.6
72.5°	5.9	5.9	8.5	10.9	11.7
75°	2.7	2.7	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	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
92.5°	4.8	25.6	59.4	17.3	13.0
95°	15.7	62.3	280.1	96.9	59.8
97.5°	28.9	73.0	431.3	308.6	211.5
100°	38.0	79.3	464.2	470.2	362.2
102.5°	48.2	86.2	456.9	601.8	507.5
105°	64.0	97.0	419.5	741.0	704.4
107.5°	80.0	109.7	375.8	780.2	812.8
110°	91.1	118.9	350.7	765.2	838.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	101.8	128.1	333.8	729.7	834.1
115°	118.9	143.7	318.1	673.9	791.3
117.5°	134.0	157.3	308.8	612.8	737.2
120°	146.1	165.5	307.8	577.9	697.2
122.5°	155.7	175.2	305.4	547.3	658.0
125°	167.8	186.1	303.6	503.8	602.4
127.5°	181.0	198.1	302.6	477.8	559.1
130°	187.7	204.8	301.2	459.7	530.6
132.5°	195.0	211.6	301.2	445.6	510.8
135°	205.2	222.3	300.0	425.6	481.1
137.5°	214.9	231.5	299.9	408.6	456.6
140°	222.1	239.2	299.4	394.6	440.6
142.5°	230.3	244.6	300.8	383.4	424.7
145°	242.0	254.4	302.4	368.3	401.4
147.5°	252.1	264.1	305.1	353.2	381.7
150°	260.8	269.0	306.0	348.1	368.2
152.5°	267.5	276.2	307.0	341.3	360.0
155°	276.4	282.9	309.6	332.9	346.5
157.5°	287.6	291.4	310.2	329.1	338.7
160°	293.3	296.3	312.7	326.1	334.4
162.5°	296.7	300.2	313.1	323.7	330.0
165°	305.4	306.6	313.3	320.0	324.7
167.5°	311.3	310.3	316.0	319.1	321.0
170°	313.3	312.7	315.1	315.7	318.1
172.5°	317.6	315.6	316.5	314.8	316.6
175°	319.9	318.1	316.9	315.0	312.7
177.5°	320.9	318.0	316.5	314.6	315.1
180°	317.5	317.5	317.5	317.5	317.5

(END OF REPORT)