

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: P521123

Luminaire Tested: SQ4-BB-075U-125D-92765-1D-UNV-STD-W-4\_4500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521123  
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-075U-125D-92765-1D-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 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: 6718.7 lumens  
Efficiency: N/A  
Efficacy: 84.6 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: General Diffuse

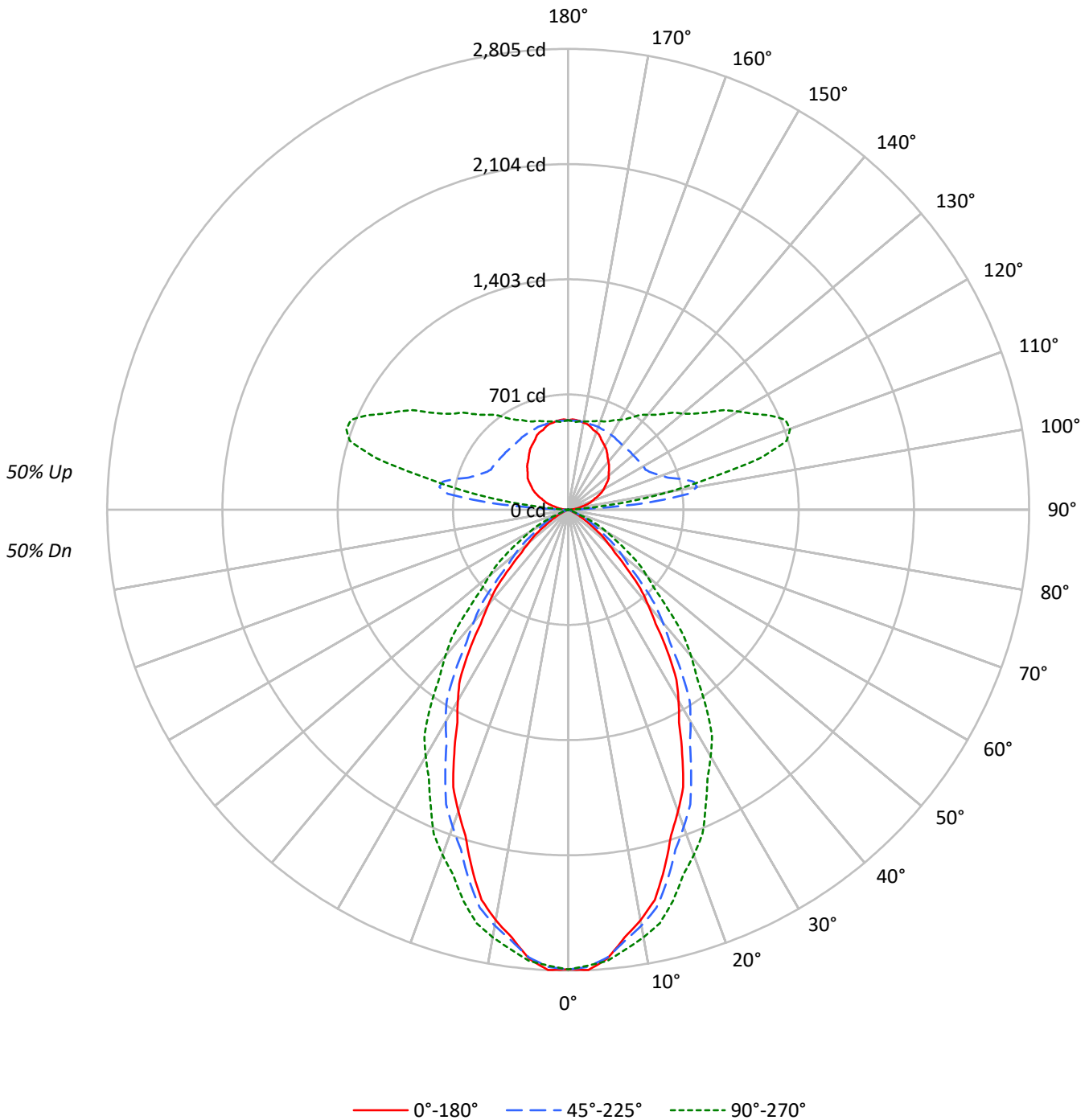
Input Watts (W): 79.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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									50									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	96	93	90	92	89	86	84	75	74	72	63	62	61	52	51	51	45																				
2	92	86	81	76	85	80	75	72	68	65	62	58	56	54	48	47	45	41																				
3	85	77	71	66	79	72	66	62	62	58	55	53	50	48	44	42	41	37																				
4	79	70	63	57	73	65	59	54	56	52	48	48	45	43	41	39	37	33																				
5	73	63	56	51	68	59	53	48	51	47	43	44	41	38	38	35	33	30																				
6	68	57	50	45	63	54	47	43	47	42	39	41	37	35	35	33	30	28																				
7	63	52	45	40	59	49	43	39	43	38	35	38	34	31	33	30	28	25																				
8	59	48	41	36	55	45	39	35	40	35	32	35	31	29	30	28	26	23																				
9	56	44	38	33	52	42	36	32	37	32	29	33	29	26	28	26	24	22																				
10	52	41	35	30	49	39	33	29	35	30	27	31	27	24	27	24	22	20																				

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

	0°	45°	90°
0°	25816	25816	25816
5°	25400	25337	25526
10°	23767	24084	24755
15°	21607	22292	23533
20°	19179	20176	21944
25°	16702	18026	20161
30°	14307	15878	18474
35°	11862	13479	16436
40°	9114	10777	14005
45°	6588	8160	11269
50°	4488	6082	8938
55°	2918	4398	6946
60°	1674	3098	5021
65°	443	1891	2541
70°	219	585	731
75°	96	50	0
80°	74	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11269 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	255.4	3.8
10°-20°	653.0	9.7
20°-30°	817.5	12.2
30°-40°	755.1	11.2
40°-50°	507.4	7.6
50°-60°	262.1	3.9
60°-70°	82.1	1.2
70°-80°	5.2	0.1
80°-90°	0.1	0.0
90°-100°	248.0	3.7
100°-110°	705.7	10.5
110°-120°	676.1	10.1
120°-130°	535.1	8.0
130°-140°	429.5	6.4
140°-150°	336.2	5.0
150°-160°	246.0	3.7
160°-170°	152.4	2.3
170°-180°	51.7	0.8
0°-30°	1725.9	25.7
0°-40°	2481.1	36.9
0°-60°	3250.5	48.4
0°-90°	3337.9	49.7
90°-120°	1629.8	24.3
90°-150°	2930.6	43.6
90°-180°	3381.0	50.3
0°-180°	6718.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2798	2798	2798	2798	2798	
5°	2743	2715	2736	2746	2756	254
15°	2262	2254	2334	2412	2464	630
25°	1641	1654	1771	1892	1980	752
35°	1053	1080	1197	1338	1459	652
45°	505	535	625	747	864	397
55°	181	212	273	351	432	169
65°	20	39	87	104	116	34
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
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°	2798.1	2798.1	2798.1	2798.1	2798.1
2.5°	2804.6	2778.1	2785.1	2785.0	2777.5
5°	2742.6	2714.8	2735.8	2745.6	2756.2
7.5°	2626.7	2605.0	2645.4	2675.7	2697.7
10°	2536.9	2518.3	2570.7	2612.0	2642.4
12.5°	2432.9	2418.6	2481.9	2538.6	2577.5
15°	2262.1	2254.1	2333.8	2412.1	2463.8
17.5°	2079.0	2078.8	2169.7	2267.0	2329.2
20°	1953.4	1957.4	2054.9	2162.2	2235.0
22.5°	1827.8	1837.0	1941.2	2053.0	2136.4
25°	1640.7	1653.9	1770.7	1891.8	1980.5
27.5°	1460.9	1480.2	1603.1	1729.0	1837.0
30°	1342.9	1365.4	1490.4	1622.9	1734.1
32.5°	1227.0	1253.7	1375.6	1515.8	1629.1
35°	1053.2	1079.7	1196.7	1337.5	1459.3
37.5°	873.7	899.6	1013.9	1152.6	1284.1
40°	756.7	785.8	894.8	1029.2	1162.8
42.5°	650.6	679.7	782.2	914.2	1040.5
45°	504.9	535.4	625.4	747.2	863.7
47.5°	384.2	417.3	496.3	606.4	712.6
50°	312.7	345.8	423.7	520.8	622.7
52.5°	255.3	287.3	357.7	449.1	542.6
55°	181.4	211.8	273.4	351.1	431.8
57.5°	125.4	151.6	206.8	271.6	334.9
60°	90.7	115.8	167.9	220.5	272.1
62.5°	60.4	83.4	134.3	174.6	209.3
65°	20.3	38.8	86.6	104.5	116.4
67.5°	10.3	12.4	45.5	48.0	52.0
70°	8.1	8.1	21.7	23.1	27.1
72.5°	6.0	6.0	8.7	11.1	11.9
75°	2.7	2.7	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	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°	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)