

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: P521328

Luminaire Tested: SQ4-BB-150U-125D-92765-1D-UNV-STD-W-4\_3000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521328  
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-150U-125D-92765-1D-UNV-STD-W-4\_3000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9613.7 lumens  
Efficiency: N/A  
Efficacy: 89.9 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-Indirect

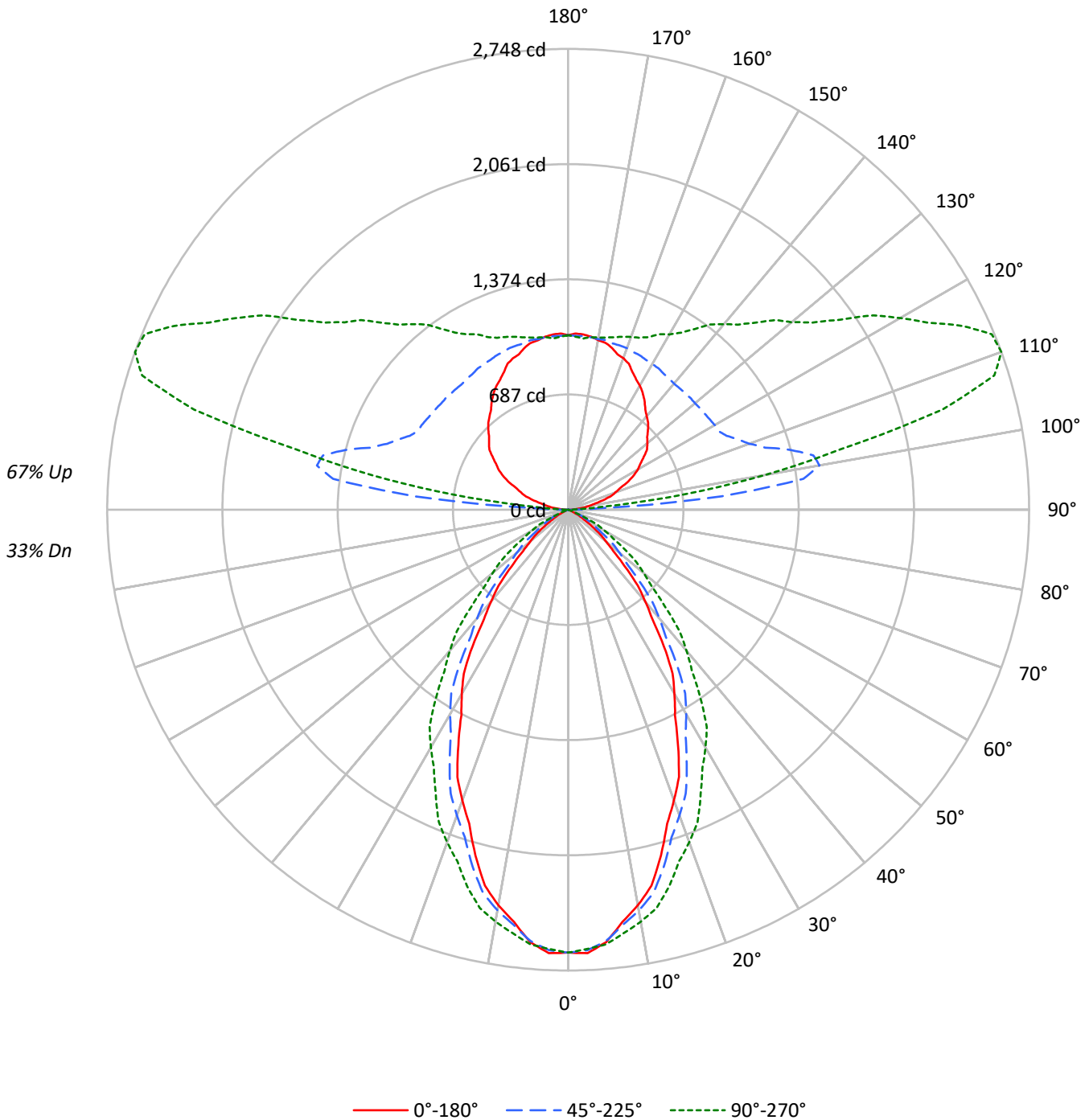
Input Watts (W): 106.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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									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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33																				
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30																				
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27																				
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24																				
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22																				
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20																				
6	64	53	45	40	58	48	42	37	40	35	32	32	29	27	25	23	21	18																				
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17																				
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15																				
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14																				
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13																				

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

	0°	45°	90°
0°	24365	24365	24365
5°	23973	23914	24092
10°	22431	22730	23364
15°	20392	21039	22210
20°	18101	19042	20711
25°	15764	17012	19028
30°	13502	14986	17436
35°	11196	12721	15513
40°	8602	10171	13218
45°	6219	7702	10635
50°	4236	5740	8436
55°	2754	4152	6556
60°	1580	2923	4739
65°	419	1786	2399
70°	208	550	691
75°	93	46	0
80°	69	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10635 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.0	2.5
10°-20°	616.3	6.4
20°-30°	771.6	8.0
30°-40°	712.7	7.4
40°-50°	478.9	5.0
50°-60°	247.4	2.6
60°-70°	77.5	0.8
70°-80°	4.9	0.1
80°-90°	0.1	0.0
90°-100°	474.1	4.9
100°-110°	1349.1	14.0
110°-120°	1292.6	13.4
120°-130°	1023.0	10.6
130°-140°	821.1	8.5
140°-150°	642.8	6.7
150°-160°	470.4	4.9
160°-170°	291.4	3.0
170°-180°	98.9	1.0
0°-30°	1628.9	16.9
0°-40°	2341.6	24.4
0°-60°	3067.9	31.9
0°-90°	3150.3	32.8
90°-120°	3115.8	32.4
90°-150°	5602.8	58.3
90°-180°	6463.0	67.2
0°-180°	9613.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2641	2641	2641	2641	2641	
5°	2588	2562	2582	2591	2601	240
15°	2135	2127	2203	2277	2325	595
25°	1548	1561	1671	1786	1869	710
35°	994	1019	1129	1262	1377	616
45°	477	505	590	705	815	374
55°	171	200	258	331	408	160
65°	19	37	82	99	110	32
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	51	204	918	318	196	59
105°	210	318	1375	2428	2308	222
115°	390	471	1042	2208	2593	384
125°	550	610	995	1651	1974	492
135°	673	729	983	1395	1577	519
145°	793	834	991	1207	1316	496
155°	906	927	1015	1091	1136	419
165°	1001	1005	1027	1049	1064	281
175°	1048	1043	1038	1032	1025	99
180°	1040	1040	1040	1040	1040	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2640.9	2640.9	2640.9	2640.9	2640.9
2.5°	2647.0	2622.0	2628.6	2628.4	2621.4
5°	2588.5	2562.2	2582.1	2591.3	2601.3
7.5°	2479.1	2458.6	2496.7	2525.3	2546.1
10°	2394.3	2376.8	2426.2	2465.2	2493.9
12.5°	2296.2	2282.7	2342.4	2395.9	2432.6
15°	2134.9	2127.4	2202.6	2276.6	2325.3
17.5°	1962.2	1961.9	2047.8	2139.6	2198.3
20°	1843.6	1847.4	1939.4	2040.7	2109.4
22.5°	1725.1	1733.8	1832.1	1937.7	2016.4
25°	1548.5	1561.0	1671.1	1785.5	1869.2
27.5°	1378.8	1397.1	1513.0	1631.8	1733.7
30°	1267.4	1288.6	1406.7	1531.7	1636.6
32.5°	1158.0	1183.3	1298.3	1430.6	1537.5
35°	994.0	1019.0	1129.4	1262.4	1377.3
37.5°	824.6	849.1	956.9	1087.8	1212.0
40°	714.2	741.7	844.5	971.3	1097.5
42.5°	614.0	641.5	738.2	862.8	982.0
45°	476.6	505.3	590.3	705.2	815.1
47.5°	362.6	393.8	468.4	572.4	672.5
50°	295.1	326.4	399.9	491.5	587.7
52.5°	241.0	271.2	337.5	423.9	512.1
55°	171.2	199.9	258.1	331.4	407.6
57.5°	118.3	143.0	195.2	256.4	316.1
60°	85.6	109.3	158.4	208.1	256.8
62.5°	57.0	78.7	126.7	164.8	197.5
65°	19.2	36.7	81.8	98.6	109.9
67.5°	9.7	11.7	42.9	45.3	49.1
70°	7.7	7.7	20.4	21.8	25.6
72.5°	5.6	5.6	8.2	10.5	11.2
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	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°	15.8	83.9	194.7	56.7	42.7
95°	51.4	204.2	917.9	317.7	195.8
97.5°	94.6	239.2	1413.6	1011.5	693.2
100°	124.6	260.0	1521.2	1540.9	1186.9
102.5°	157.9	282.4	1497.5	1972.3	1663.2
105°	209.7	318.0	1374.8	2428.4	2308.5
107.5°	262.3	359.4	1231.6	2557.0	2663.8
110°	298.7	389.6	1149.3	2507.8	2747.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	333.5	419.8	1093.9	2391.5	2733.4
115°	389.7	470.9	1042.5	2208.5	2593.4
117.5°	439.2	515.4	1012.0	2008.4	2416.1
120°	478.7	542.5	1008.9	1894.1	2284.8
122.5°	510.4	574.2	1001.0	1793.7	2156.6
125°	549.9	609.9	995.0	1651.2	1974.2
127.5°	593.1	649.1	991.9	1566.0	1832.2
130°	615.2	671.3	987.1	1506.7	1738.8
132.5°	638.9	693.5	987.1	1460.4	1673.9
135°	672.6	728.7	983.2	1394.8	1576.6
137.5°	704.2	758.8	982.8	1339.2	1496.3
140°	728.0	784.1	981.2	1293.2	1444.1
142.5°	754.9	801.7	985.9	1256.4	1391.8
145°	793.2	833.9	991.1	1207.2	1315.5
147.5°	826.1	865.5	999.8	1157.4	1251.0
150°	854.6	881.6	1002.9	1140.9	1206.7
152.5°	876.7	905.4	1006.1	1118.7	1179.8
155°	906.0	927.3	1014.8	1091.0	1135.5
157.5°	942.4	955.2	1016.8	1078.4	1110.1
160°	961.4	971.1	1024.7	1068.8	1095.9
162.5°	972.5	983.7	1026.3	1060.8	1081.7
165°	1001.0	1004.8	1026.7	1048.8	1064.3
167.5°	1020.3	1016.9	1035.8	1045.8	1052.0
170°	1026.7	1024.7	1032.6	1034.8	1042.5
172.5°	1040.9	1034.3	1037.4	1031.6	1037.7
175°	1048.4	1042.6	1038.5	1032.4	1024.7
177.5°	1051.6	1042.3	1037.4	1031.1	1032.6
180°	1040.5	1040.5	1040.5	1040.5	1040.5

(END OF REPORT)