

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: P520995

Luminaire Tested: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520995  
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-075D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4111.7 lumens  
Efficiency: N/A  
Efficacy: 89.8 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

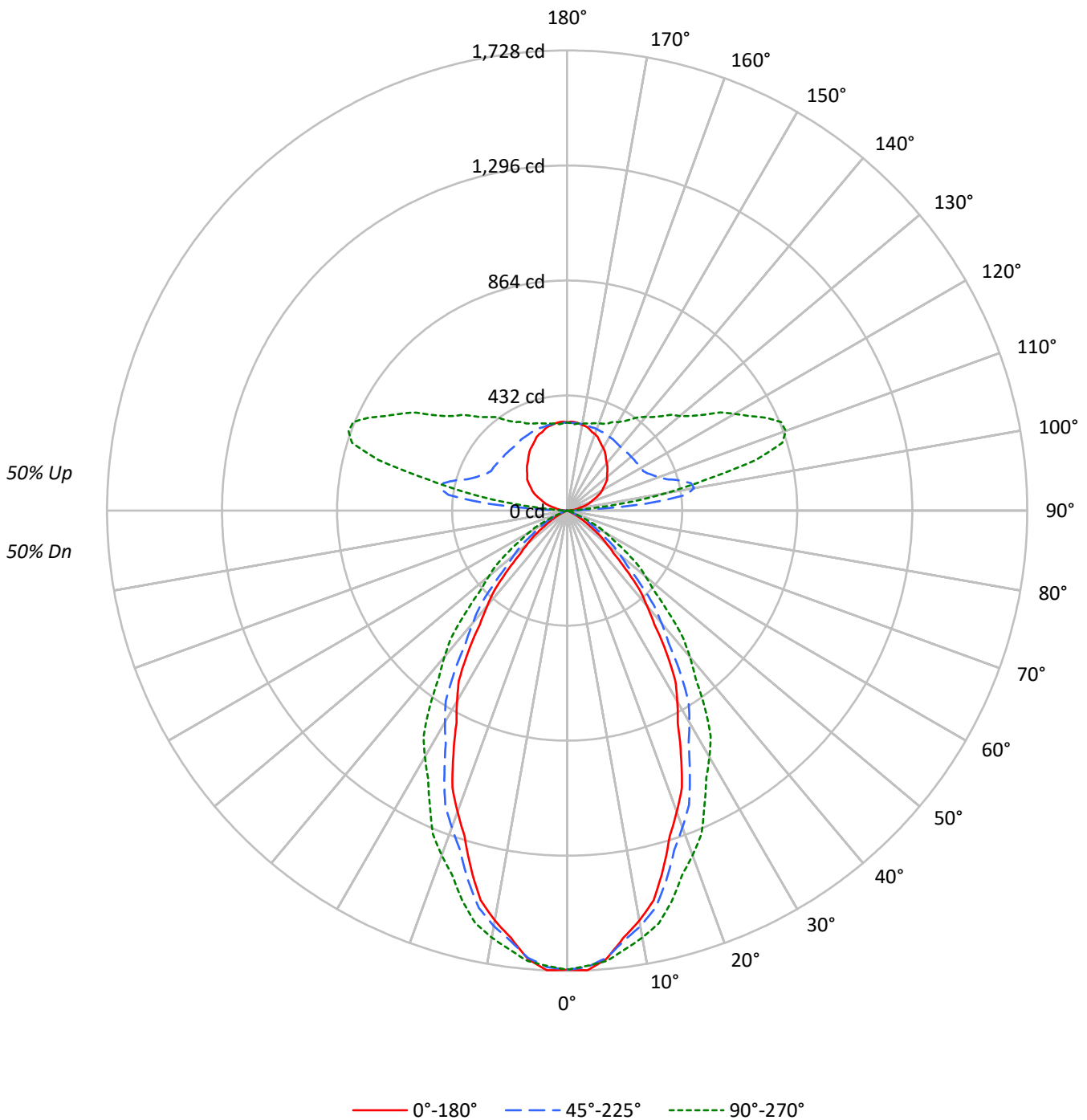
Input Watts (W): 45.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P520995

CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_5700K

### Luminous Intensity Polar Plot



TEST NUMBER: P520995

CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_5700K

**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	83	83	83		69	69	69		56	56	56	50
1	100	96	93	90	92	89	86	84	76	74	72		64	62	61		52	52	51	46
2	92	86	81	76	85	80	75	72	69	65	63		58	56	54		48	47	46	41
3	85	77	71	66	79	72	67	62	62	58	55		53	50	48		45	43	41	37
4	79	70	63	58	73	65	59	55	57	52	49		49	45	43		41	39	37	34
5	73	63	56	51	68	59	53	48	52	47	43		45	41	38		38	36	34	31
6	68	57	50	45	63	54	48	43	47	42	39		41	37	35		35	33	31	28
7	64	53	45	40	59	49	43	39	44	39	35		38	34	32		33	30	28	26
8	59	48	41	36	55	46	39	35	40	35	32		35	32	29		31	28	26	24
9	56	45	38	33	52	42	36	32	37	32	29		33	29	26		29	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°	15906	15906	15906
5°	15650	15612	15728
10°	14644	14839	15253
15°	13312	13734	14499
20°	11817	12431	13521
25°	10291	11106	12423
30°	8815	9783	11383
35°	7309	8304	10127
40°	5615	6640	8629
45°	4059	5027	6943
50°	2766	3748	5507
55°	1798	2710	4280
60°	1031	1908	3093
65°	273	1166	1565
70°	135	359	450
75°	61	29	0
80°	43	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6943 cd/sqm

TEST NUMBER: P520995

CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.3	3.8
10°-20°	402.4	9.8
20°-30°	503.7	12.3
30°-40°	465.3	11.3
40°-50°	312.6	7.6
50°-60°	161.5	3.9
60°-70°	50.6	1.2
70°-80°	3.2	0.1
80°-90°	0.1	0.0
90°-100°	150.8	3.7
100°-110°	428.9	10.4
110°-120°	411.0	10.0
120°-130°	325.3	7.9
130°-140°	261.1	6.3
140°-150°	204.4	5.0
150°-160°	149.6	3.6
160°-170°	92.6	2.3
170°-180°	31.4	0.8
0°-30°	1063.4	25.9
0°-40°	1528.7	37.2
0°-60°	2002.8	48.7
0°-90°	2056.6	50.0
90°-120°	990.7	24.1
90°-150°	1781.4	43.3
90°-180°	2055.0	50.0
0°-180°	4111.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1724	1724	1724	1724	1724	
5°	1690	1673	1686	1692	1698	157
15°	1394	1389	1438	1486	1518	388
25°	1011	1019	1091	1166	1220	463
35°	649	665	737	824	899	402
45°	311	330	385	460	532	244
55°	112	130	168	216	266	104
65°	12	24	53	64	72	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	65	292	101	62	19
105°	67	101	437	772	734	71
115°	124	150	332	702	825	122
125°	175	194	316	525	628	157
135°	214	232	313	444	501	165
145°	252	265	315	384	418	158
155°	288	295	323	347	361	133
165°	318	320	326	334	338	90
175°	333	332	330	328	326	32
180°	331	331	331	331	331	

TEST NUMBER: P520995

CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1724.0	1724.0	1724.0	1724.0	1724.0
2.5°	1728.0	1711.7	1716.0	1715.9	1711.4
5°	1689.8	1672.7	1685.7	1691.7	1698.2
7.5°	1618.4	1605.1	1629.9	1648.6	1662.1
10°	1563.1	1551.6	1583.9	1609.4	1628.1
12.5°	1499.0	1490.2	1529.2	1564.1	1588.1
15°	1393.7	1388.8	1437.9	1486.2	1518.0
17.5°	1281.0	1280.8	1336.9	1396.8	1435.1
20°	1203.6	1206.0	1266.1	1332.2	1377.1
22.5°	1126.2	1131.9	1196.1	1265.0	1316.3
25°	1010.9	1019.1	1091.0	1165.6	1220.3
27.5°	900.1	912.0	987.7	1065.3	1131.8
30°	827.4	841.3	918.3	999.9	1068.5
32.5°	756.0	772.5	847.6	933.9	1003.7
35°	648.9	665.2	737.3	824.1	899.1
37.5°	538.3	554.3	624.7	710.1	791.2
40°	466.2	484.2	551.3	634.1	716.5
42.5°	400.9	418.8	481.9	563.3	641.1
45°	311.1	329.9	385.3	460.4	532.1
47.5°	236.7	257.1	305.8	373.7	439.1
50°	192.7	213.1	261.1	320.9	383.7
52.5°	157.3	177.0	220.4	276.7	334.3
55°	111.8	130.5	168.5	216.3	266.1
57.5°	77.2	93.4	127.4	167.4	206.4
60°	55.9	71.4	103.4	135.8	167.6
62.5°	37.2	51.4	82.7	107.6	128.9
65°	12.5	23.9	53.4	64.4	71.7
67.5°	6.3	7.6	28.0	29.6	32.0
70°	5.0	5.0	13.3	14.2	16.7
72.5°	3.7	3.7	5.3	6.9	7.3
75°	1.7	1.7	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	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°	5.0	26.7	61.9	18.0	13.6
95°	16.4	64.9	291.8	101.0	62.3
97.5°	30.1	76.1	449.5	321.6	220.4
100°	39.6	82.7	483.7	489.9	377.4
102.5°	50.2	89.8	476.1	627.1	528.8
105°	66.7	101.1	437.1	772.1	734.0
107.5°	83.4	114.3	391.6	813.0	847.0
110°	95.0	123.9	365.4	797.4	873.6

TEST NUMBER: P520995

CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	106.0	133.5	347.8	760.4	869.1
115°	123.9	149.7	331.5	702.2	824.6
117.5°	139.6	163.9	321.8	638.6	768.2
120°	152.2	172.5	320.8	602.2	726.4
122.5°	162.3	182.6	318.3	570.3	685.7
125°	174.8	193.9	316.4	525.0	627.7
127.5°	188.6	206.4	315.4	497.9	582.5
130°	195.6	213.4	313.8	479.1	552.9
132.5°	203.2	220.5	313.8	464.3	532.2
135°	213.8	231.7	312.6	443.5	501.3
137.5°	223.9	241.3	312.5	425.8	475.7
140°	231.5	249.3	312.0	411.2	459.1
142.5°	240.0	254.9	313.5	399.5	442.5
145°	252.2	265.1	315.1	383.8	418.3
147.5°	262.7	275.2	317.9	368.0	397.8
150°	271.7	280.3	318.9	362.8	383.7
152.5°	278.8	287.9	319.9	355.7	375.1
155°	288.1	294.8	322.7	346.9	361.0
157.5°	299.6	303.7	323.3	342.9	353.0
160°	305.7	308.7	325.8	339.8	348.4
162.5°	309.2	312.8	326.3	337.3	343.9
165°	318.3	319.5	326.4	333.5	338.4
167.5°	324.4	323.3	329.3	332.5	334.5
170°	326.4	325.8	328.3	329.0	331.5
172.5°	331.0	328.9	329.8	328.0	329.9
175°	333.3	331.5	330.2	328.3	325.8
177.5°	334.4	331.4	329.8	327.8	328.3
180°	330.8	330.8	330.8	330.8	330.8

(END OF REPORT)