

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: P520992

Luminaire Tested: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520992  
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\_4000K  
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 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3945.8 lumens  
Efficiency: N/A  
Efficacy: 86.0 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

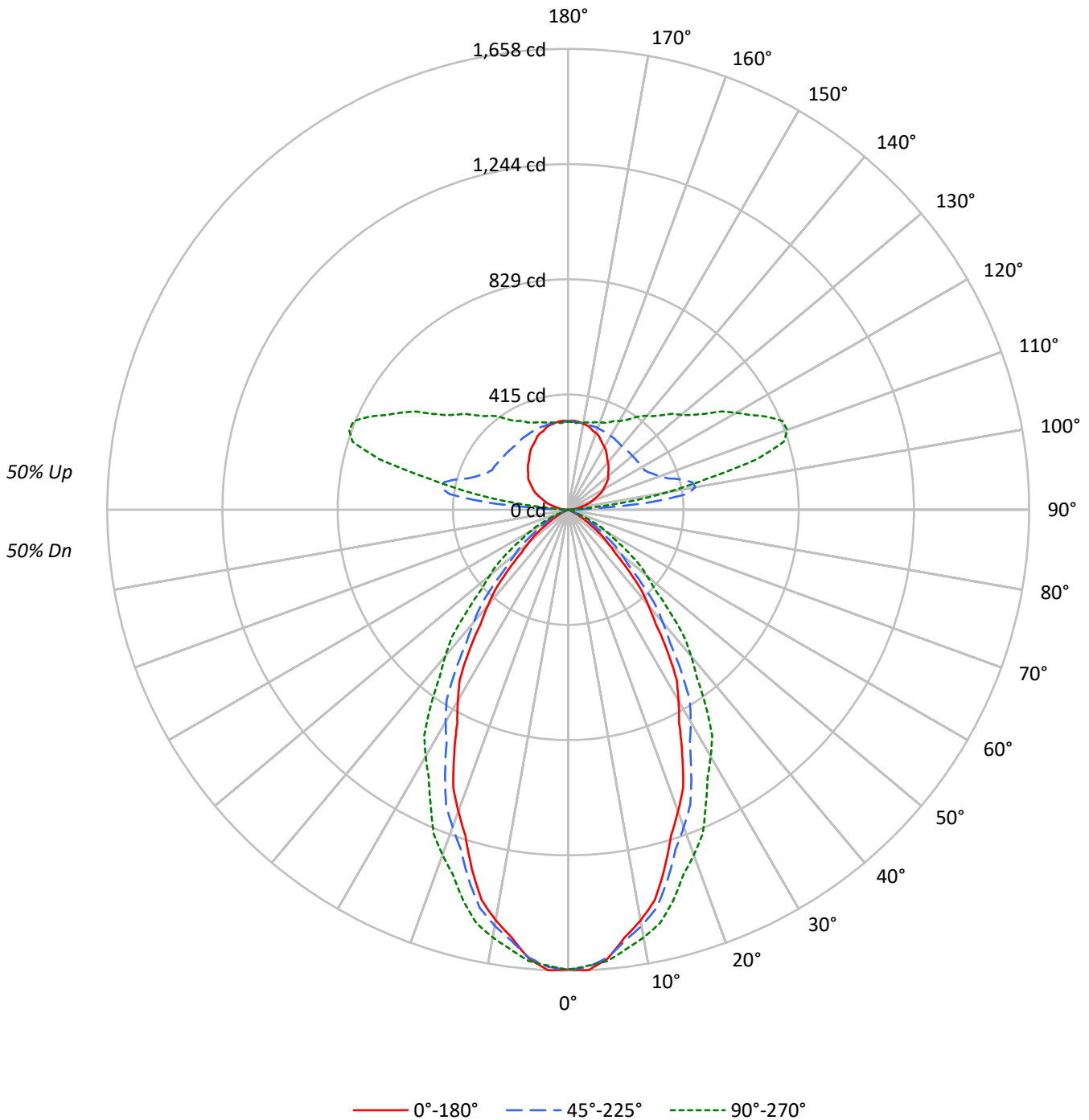
Input Watts (W): 45.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				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°	15265	15265	15265
5°	15019	14982	15093
10°	14053	14241	14638
15°	12776	13181	13915
20°	11340	11930	12975
25°	9876	10658	11922
30°	8459	9389	10924
35°	7014	7970	9719
40°	5390	6372	8281
45°	3896	4825	6664
50°	2654	3596	5285
55°	1726	2601	4107
60°	989	1832	2969
65°	262	1118	1502
70°	129	345	432
75°	57	29	0
80°	43	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6664 cd/sqm

TEST NUMBER: P520992

CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.0	3.8
10°-20°	386.1	9.8
20°-30°	483.4	12.3
30°-40°	446.5	11.3
40°-50°	300.0	7.6
50°-60°	155.0	3.9
60°-70°	48.5	1.2
70°-80°	3.1	0.1
80°-90°	0.1	0.0
90°-100°	144.7	3.7
100°-110°	411.6	10.4
110°-120°	394.4	10.0
120°-130°	312.1	7.9
130°-140°	250.5	6.3
140°-150°	196.1	5.0
150°-160°	143.5	3.6
160°-170°	88.9	2.3
170°-180°	30.2	0.8
0°-30°	1020.5	25.9
0°-40°	1467.1	37.2
0°-60°	1922.1	48.7
0°-90°	1973.7	50.0
90°-120°	950.7	24.1
90°-150°	1709.6	43.3
90°-180°	1972.0	50.0
0°-180°	3945.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1654	1654	1654	1654	1654	
5°	1622	1605	1618	1624	1630	150
15°	1338	1333	1380	1426	1457	373
25°	970	978	1047	1119	1171	445
35°	623	638	708	791	863	386
45°	299	317	370	442	511	235
55°	107	125	162	208	255	100
65°	12	23	51	62	69	20
75°	2	2	1	0	0	2
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	

TEST NUMBER: P520992

CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1654.5	1654.5	1654.5	1654.5	1654.5
2.5°	1658.4	1642.7	1646.8	1646.7	1642.4
5°	1621.7	1605.3	1617.7	1623.5	1629.7
7.5°	1553.2	1540.4	1564.2	1582.1	1595.1
10°	1500.0	1489.1	1520.1	1544.5	1562.5
12.5°	1438.6	1430.1	1467.5	1501.0	1524.1
15°	1337.6	1332.9	1380.0	1426.3	1456.8
17.5°	1229.3	1229.2	1283.0	1340.5	1377.3
20°	1155.0	1157.4	1215.1	1278.5	1321.5
22.5°	1080.8	1086.2	1147.8	1214.0	1263.3
25°	970.1	978.0	1047.0	1118.6	1171.1
27.5°	863.8	875.3	947.9	1022.3	1086.2
30°	794.0	807.4	881.3	959.6	1025.4
32.5°	725.5	741.3	813.4	896.3	963.3
35°	622.7	638.4	707.6	790.9	862.9
37.5°	516.6	532.0	599.5	681.5	759.3
40°	447.5	464.7	529.1	608.5	687.6
42.5°	384.7	401.9	462.5	540.6	615.2
45°	298.6	316.6	369.8	441.8	510.7
47.5°	227.2	246.7	293.4	358.6	421.4
50°	184.9	204.5	250.5	307.9	368.2
52.5°	151.0	169.9	211.5	265.6	320.8
55°	107.3	125.3	161.7	207.6	255.3
57.5°	74.1	89.6	122.3	160.6	198.0
60°	53.6	68.5	99.3	130.4	160.9
62.5°	35.7	49.3	79.4	103.2	123.7
65°	12.0	23.0	51.2	61.8	68.8
67.5°	6.1	7.3	26.9	28.4	30.7
70°	4.8	4.8	12.8	13.7	16.0
72.5°	3.5	3.5	5.1	6.6	7.0
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	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°	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

TEST NUMBER: P520992

CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_4000K

**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)