

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: P520983

Luminaire Tested: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P520983
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-050D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3460.8 lumens
Efficiency: N/A
Efficacy: 100.6 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

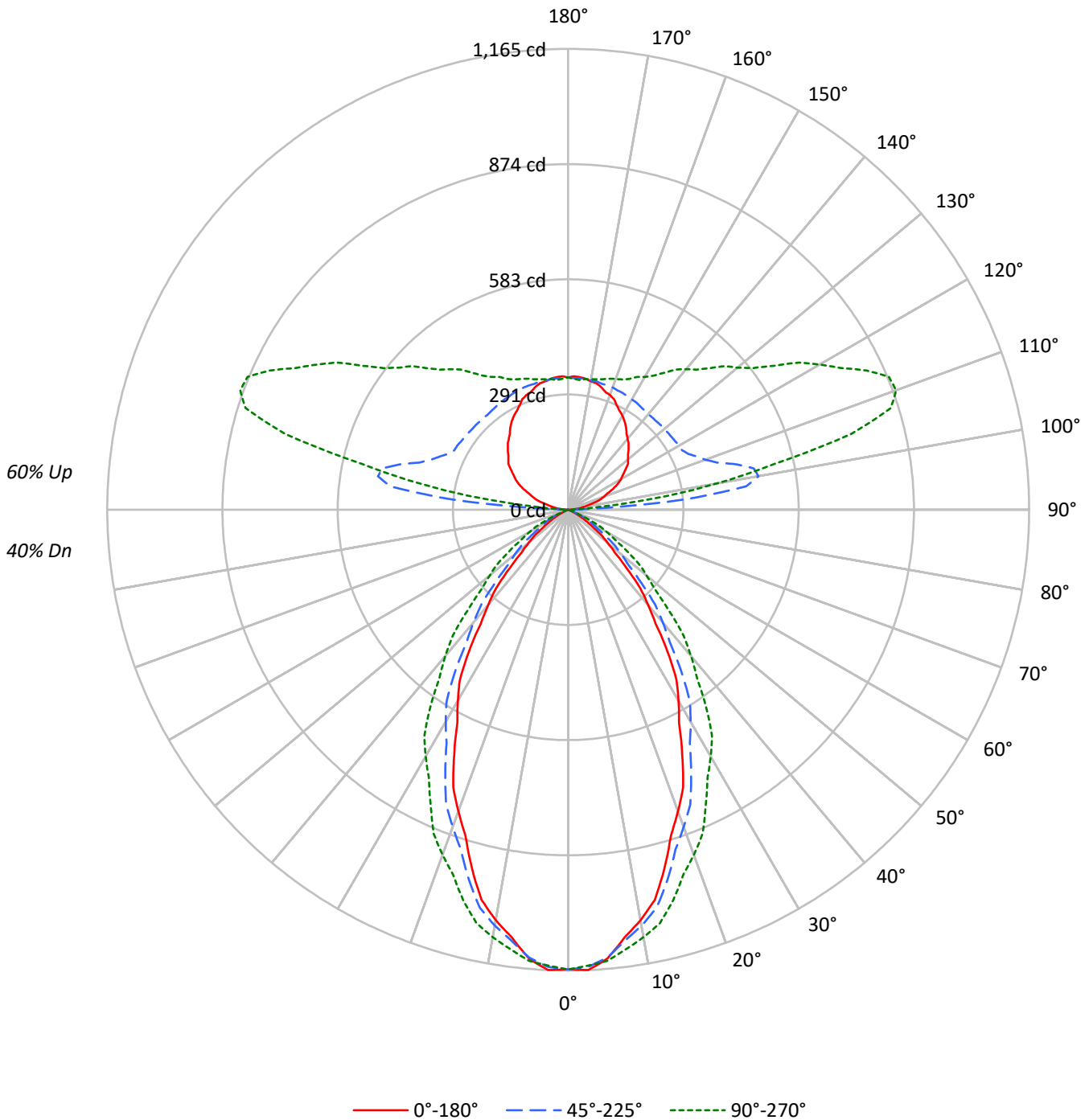
Input Watts (W): 34.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P520983

CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_6500K

Luminous Intensity Polar Plot



TEST NUMBER: P520983

CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_6500K

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	105	105	105	105	95	95	95	95	78	78	78		62	62	62		47	47	47	40
1	97	93	90	87	88	85	83	80	70	68	67		56	55	54		44	43	42	37
2	89	83	78	73	82	76	72	68	63	60	58		51	49	48		40	39	38	33
3	83	74	68	63	75	68	63	59	57	53	50		47	44	42		37	35	34	30
4	76	67	60	55	70	62	56	51	52	48	44		43	40	37		34	32	31	27
5	71	60	53	48	65	56	50	45	47	43	39		39	36	33		32	29	28	25
6	66	55	47	42	60	51	44	40	43	38	35		36	33	30		29	27	25	22
7	61	50	43	38	56	46	40	36	40	35	31		33	30	27		27	25	23	21
8	57	46	39	34	52	42	36	32	36	32	28		31	27	25		25	23	21	19
9	53	42	35	31	49	39	33	29	34	29	26		29	25	23		24	21	20	17
10	50	39	32	28	46	36	30	26	31	27	24		27	23	21		22	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10722	10722	10722
5°	10549	10523	10602
10°	9871	10002	10281
15°	8974	9258	9773
20°	7966	8379	9113
25°	6937	7486	8373
30°	5941	6595	7673
35°	4926	5598	6827
40°	3785	4476	5816
45°	2736	3389	4680
50°	1865	2526	3712
55°	1211	1827	2884
60°	696	1286	2085
65°	183	786	1057
70°	92	243	302
75°	39	21	0
80°	32	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4680 cd/sqm

TEST NUMBER: P520983

CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.1	3.1
10°-20°	271.2	7.8
20°-30°	339.5	9.8
30°-40°	313.6	9.1
40°-50°	210.7	6.1
50°-60°	108.8	3.1
60°-70°	34.1	1.0
70°-80°	2.2	0.1
80°-90°	0.0	0.0
90°-100°	152.2	4.4
100°-110°	433.0	12.5
110°-120°	414.9	12.0
120°-130°	328.4	9.5
130°-140°	263.6	7.6
140°-150°	206.3	6.0
150°-160°	151.0	4.4
160°-170°	93.5	2.7
170°-180°	31.7	0.9
0°-30°	716.8	20.7
0°-40°	1030.4	29.8
0°-60°	1350.0	39.0
0°-90°	1386.3	40.1
90°-120°	1000.1	28.9
90°-150°	1798.3	52.0
90°-180°	2075.0	60.0
0°-180°	3460.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1162	1162	1162	1162	1162	
5°	1139	1128	1136	1140	1145	106
15°	940	936	969	1002	1023	262
25°	681	687	735	786	822	312
35°	437	448	497	556	606	271
45°	210	222	260	310	359	165
55°	75	88	114	146	179	70
65°	8	16	36	43	48	14
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	66	295	102	63	19
105°	67	102	441	779	741	71
115°	125	151	335	709	832	123
125°	176	196	319	530	634	158
135°	216	234	316	448	506	167
145°	255	268	318	388	422	159
155°	291	298	326	350	364	134
165°	321	322	330	337	342	90
175°	336	335	333	331	329	32
180°	334	334	334	334	334	

TEST NUMBER: P520983

CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1162.1	1162.1	1162.1	1162.1	1162.1
2.5°	1164.8	1153.8	1156.7	1156.6	1153.5
5°	1139.0	1127.5	1136.2	1140.3	1144.7
7.5°	1090.9	1081.9	1098.7	1111.2	1120.4
10°	1053.6	1045.9	1067.6	1084.8	1097.4
12.5°	1010.4	1004.5	1030.8	1054.3	1070.4
15°	939.5	936.2	969.3	1001.8	1023.2
17.5°	863.4	863.3	901.1	941.5	967.3
20°	811.3	812.9	853.4	898.0	928.2
22.5°	759.1	762.9	806.2	852.6	887.3
25°	681.4	686.9	735.4	785.7	822.5
27.5°	606.7	614.8	665.8	718.1	762.9
30°	557.7	567.1	619.0	674.0	720.2
32.5°	509.6	520.7	571.3	629.5	676.6
35°	437.4	448.4	497.0	555.5	606.1
37.5°	362.9	373.6	421.1	478.7	533.3
40°	314.3	326.4	371.6	427.4	482.9
42.5°	270.2	282.3	324.8	379.7	432.1
45°	209.7	222.3	259.7	310.3	358.7
47.5°	159.6	173.3	206.1	251.9	295.9
50°	129.9	143.6	176.0	216.3	258.6
52.5°	106.0	119.3	148.5	186.5	225.3
55°	75.3	88.0	113.6	145.8	179.3
57.5°	52.1	62.9	85.9	112.8	139.1
60°	37.7	48.1	69.7	91.6	113.0
62.5°	25.1	34.6	55.8	72.5	86.9
65°	8.4	16.1	36.0	43.4	48.4
67.5°	4.3	5.2	18.9	19.9	21.6
70°	3.4	3.4	9.0	9.6	11.2
72.5°	2.5	2.5	3.6	4.6	4.9
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.4	0.0	0.0
80°	0.6	0.6	0.0	0.0	0.0
82.5°	0.1	0.1	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°	5.1	26.9	62.5	18.2	13.7
95°	16.5	65.6	294.6	102.0	62.9
97.5°	30.3	76.8	453.7	324.7	222.5
100°	40.0	83.5	488.3	494.6	381.0
102.5°	50.7	90.6	480.6	633.0	533.8
105°	67.3	102.1	441.3	779.4	740.9
107.5°	84.2	115.4	395.3	820.7	855.0
110°	95.9	125.1	368.9	804.9	881.9

TEST NUMBER: P520983

CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.0	134.7	351.1	767.6	877.3
115°	125.1	151.2	334.6	708.8	832.4
117.5°	141.0	165.4	324.8	644.6	775.5
120°	153.7	174.1	323.8	607.9	733.3
122.5°	163.8	184.3	321.3	575.7	692.2
125°	176.5	195.8	319.4	530.0	633.6
127.5°	190.3	208.4	318.3	502.6	588.1
130°	197.5	215.5	316.8	483.6	558.1
132.5°	205.1	222.6	316.8	468.7	537.3
135°	215.9	233.9	315.6	447.7	506.0
137.5°	226.0	243.5	315.4	429.8	480.3
140°	233.7	251.7	314.9	415.1	463.5
142.5°	242.3	257.3	316.4	403.3	446.7
145°	254.6	267.6	318.1	387.5	422.2
147.5°	265.1	277.8	320.9	371.5	401.5
150°	274.3	283.0	321.9	366.2	387.3
152.5°	281.4	290.6	322.9	359.0	378.7
155°	290.8	297.6	325.7	350.2	364.4
157.5°	302.5	306.6	326.3	346.1	356.3
160°	308.6	311.7	328.9	343.1	351.7
162.5°	312.1	315.7	329.4	340.5	347.2
165°	321.3	322.5	329.5	336.6	341.6
167.5°	327.5	326.4	332.4	335.7	337.6
170°	329.5	328.9	331.4	332.1	334.6
172.5°	334.1	332.0	333.0	331.1	333.1
175°	336.5	334.6	333.3	331.4	328.9
177.5°	337.5	334.5	333.0	330.9	331.4
180°	334.0	334.0	334.0	334.0	334.0

(END OF REPORT)