

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: P520981

Luminaire Tested: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P520981
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3380.1 lumens
Efficiency: N/A
Efficacy: 97.4 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

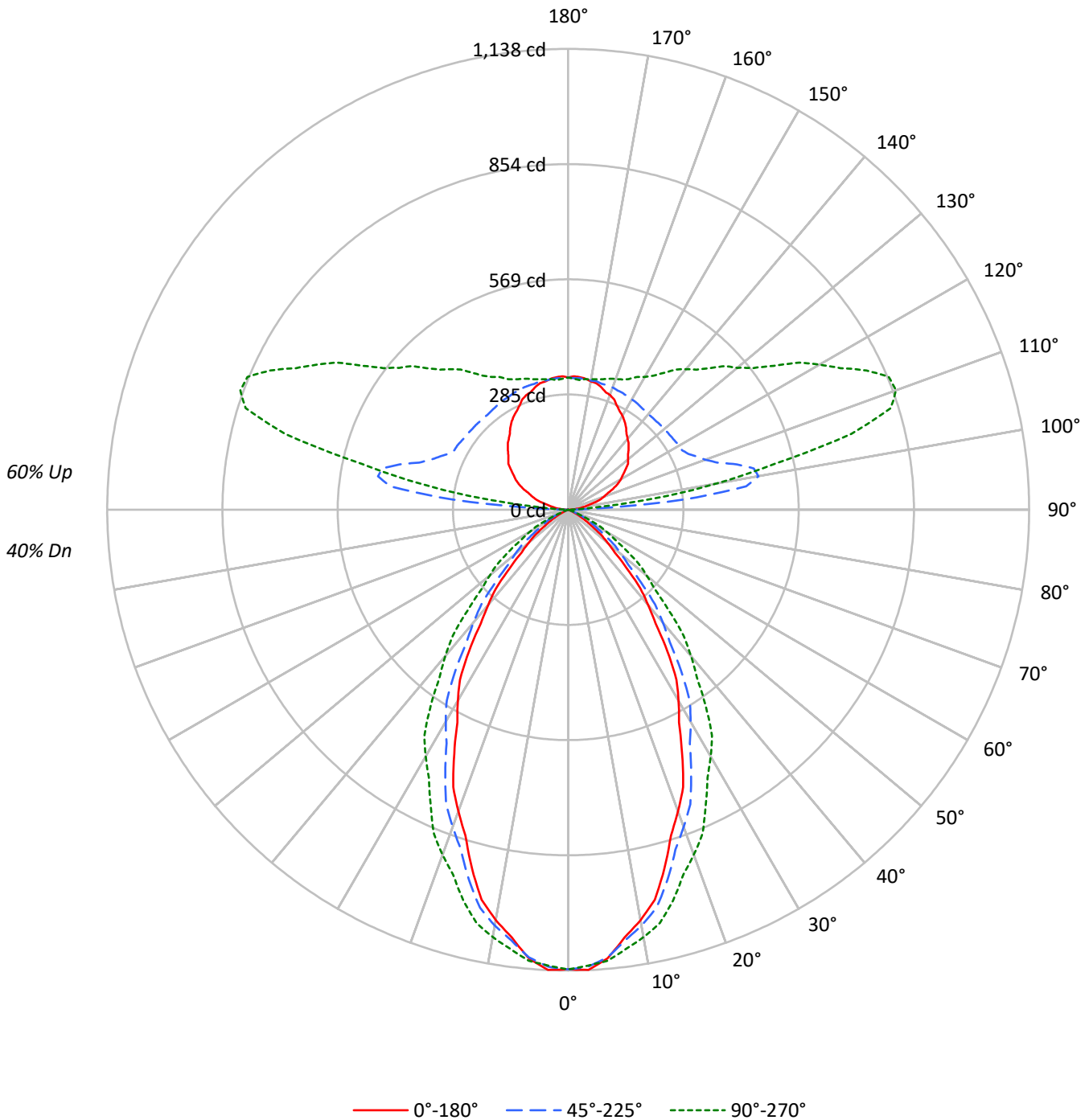
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P520981

CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P520981

CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_5000K

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	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°	10472	10472	10472
5°	10303	10277	10354
10°	9640	9770	10042
15°	8765	9043	9546
20°	7780	8184	8901
25°	6775	7311	8178
30°	5803	6441	7494
35°	4812	5467	6667
40°	3697	4372	5681
45°	2672	3310	4571
50°	1820	2467	3626
55°	1184	1784	2818
60°	679	1257	2037
65°	179	766	1030
70°	89	237	297
75°	39	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4571 cd/sqm

TEST NUMBER: P520981

CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.6	3.1
10°-20°	264.9	7.8
20°-30°	331.6	9.8
30°-40°	306.3	9.1
40°-50°	205.8	6.1
50°-60°	106.3	3.1
60°-70°	33.3	1.0
70°-80°	2.1	0.1
80°-90°	0.0	0.0
90°-100°	148.6	4.4
100°-110°	422.9	12.5
110°-120°	405.2	12.0
120°-130°	320.7	9.5
130°-140°	257.4	7.6
140°-150°	201.5	6.0
150°-160°	147.4	4.4
160°-170°	91.3	2.7
170°-180°	31.0	0.9
0°-30°	700.1	20.7
0°-40°	1006.4	29.8
0°-60°	1318.5	39.0
0°-90°	1354.0	40.1
90°-120°	976.8	28.9
90°-150°	1756.4	52.0
90°-180°	2026.0	59.9
0°-180°	3380.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1135	1135	1135	1135	1135	
5°	1112	1101	1110	1114	1118	103
15°	918	914	947	978	999	256
25°	666	671	718	767	803	305
35°	427	438	485	542	592	265
45°	205	217	254	303	350	161
55°	74	86	111	142	175	69
65°	8	16	35	42	47	14
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	64	288	100	61	18
105°	66	100	431	761	724	70
115°	122	148	327	692	813	120
125°	172	191	312	518	619	154
135°	211	228	308	437	494	163
145°	249	261	311	378	412	155
155°	284	291	318	342	356	131
165°	314	315	322	329	334	88
175°	329	327	326	324	321	31
180°	326	326	326	326	326	

TEST NUMBER: P520981

CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1135.0	1135.0	1135.0	1135.0	1135.0
2.5°	1137.6	1126.9	1129.7	1129.7	1126.7
5°	1112.5	1101.2	1109.7	1113.7	1118.0
7.5°	1065.5	1056.7	1073.1	1085.3	1094.3
10°	1029.0	1021.5	1042.8	1059.5	1071.9
12.5°	986.9	981.1	1006.7	1029.7	1045.5
15°	917.6	914.3	946.7	978.4	999.4
17.5°	843.3	843.2	880.1	919.6	944.8
20°	792.4	794.0	833.5	877.0	906.6
22.5°	741.4	745.2	787.4	832.8	866.6
25°	665.5	670.9	718.2	767.4	803.3
27.5°	592.6	600.4	650.3	701.3	745.1
30°	544.7	553.8	604.6	658.3	703.4
32.5°	497.7	508.6	558.0	614.8	660.8
35°	427.2	437.9	485.4	542.5	591.9
37.5°	354.4	364.9	411.3	467.5	520.9
40°	307.0	318.8	363.0	417.5	471.7
42.5°	263.9	275.7	317.3	370.8	422.0
45°	204.8	217.2	253.7	303.1	350.3
47.5°	155.8	169.3	201.3	246.0	289.1
50°	126.8	140.3	171.9	211.2	252.6
52.5°	103.6	116.6	145.1	182.2	220.1
55°	73.6	85.9	110.9	142.4	175.2
57.5°	50.8	61.5	83.9	110.2	135.8
60°	36.8	47.0	68.1	89.4	110.4
62.5°	24.5	33.8	54.5	70.8	84.9
65°	8.2	15.8	35.1	42.4	47.2
67.5°	4.2	5.0	18.5	19.5	21.1
70°	3.3	3.3	8.8	9.4	11.0
72.5°	2.4	2.4	3.5	4.5	4.8
75°	1.1	1.1	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	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°	5.0	26.3	61.0	17.8	13.4
95°	16.1	64.0	287.7	99.6	61.4
97.5°	29.6	75.0	443.1	317.1	217.3
100°	39.1	81.5	476.9	483.0	372.1
102.5°	49.5	88.5	469.4	618.3	521.4
105°	65.7	99.7	431.0	761.3	723.7
107.5°	82.2	112.7	386.1	801.6	835.1
110°	93.6	122.1	360.3	786.2	861.3

TEST NUMBER: P520981

CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	131.6	342.9	749.7	856.9
115°	122.2	147.6	326.8	692.3	813.0
117.5°	137.7	161.6	317.3	629.6	757.4
120°	150.1	170.1	316.3	593.8	716.2
122.5°	160.0	180.0	313.8	562.3	676.1
125°	172.4	191.2	311.9	517.6	618.9
127.5°	185.9	203.5	310.9	490.9	574.4
130°	192.9	210.4	309.4	472.3	545.1
132.5°	200.3	217.4	309.4	457.8	524.7
135°	210.8	228.4	308.2	437.2	494.2
137.5°	220.8	237.9	308.1	419.8	469.1
140°	228.2	245.8	307.6	405.4	452.7
142.5°	236.6	251.3	309.1	393.9	436.3
145°	248.7	261.4	310.7	378.4	412.4
147.5°	259.0	271.3	313.4	362.8	392.2
150°	267.9	276.4	314.4	357.7	378.3
152.5°	274.8	283.8	315.4	350.7	369.8
155°	284.0	290.7	318.1	342.0	355.9
157.5°	295.4	299.4	318.7	338.1	348.0
160°	301.4	304.4	321.2	335.1	343.5
162.5°	304.9	308.4	321.7	332.5	339.1
165°	313.8	315.0	321.8	328.8	333.6
167.5°	319.9	318.8	324.7	327.8	329.8
170°	321.8	321.2	323.7	324.4	326.8
172.5°	326.3	324.2	325.2	323.4	325.3
175°	328.7	326.8	325.6	323.6	321.2
177.5°	329.7	326.7	325.2	323.2	323.7
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)