

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:

Luminaire Tested: SQ4-BB-075U-050D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

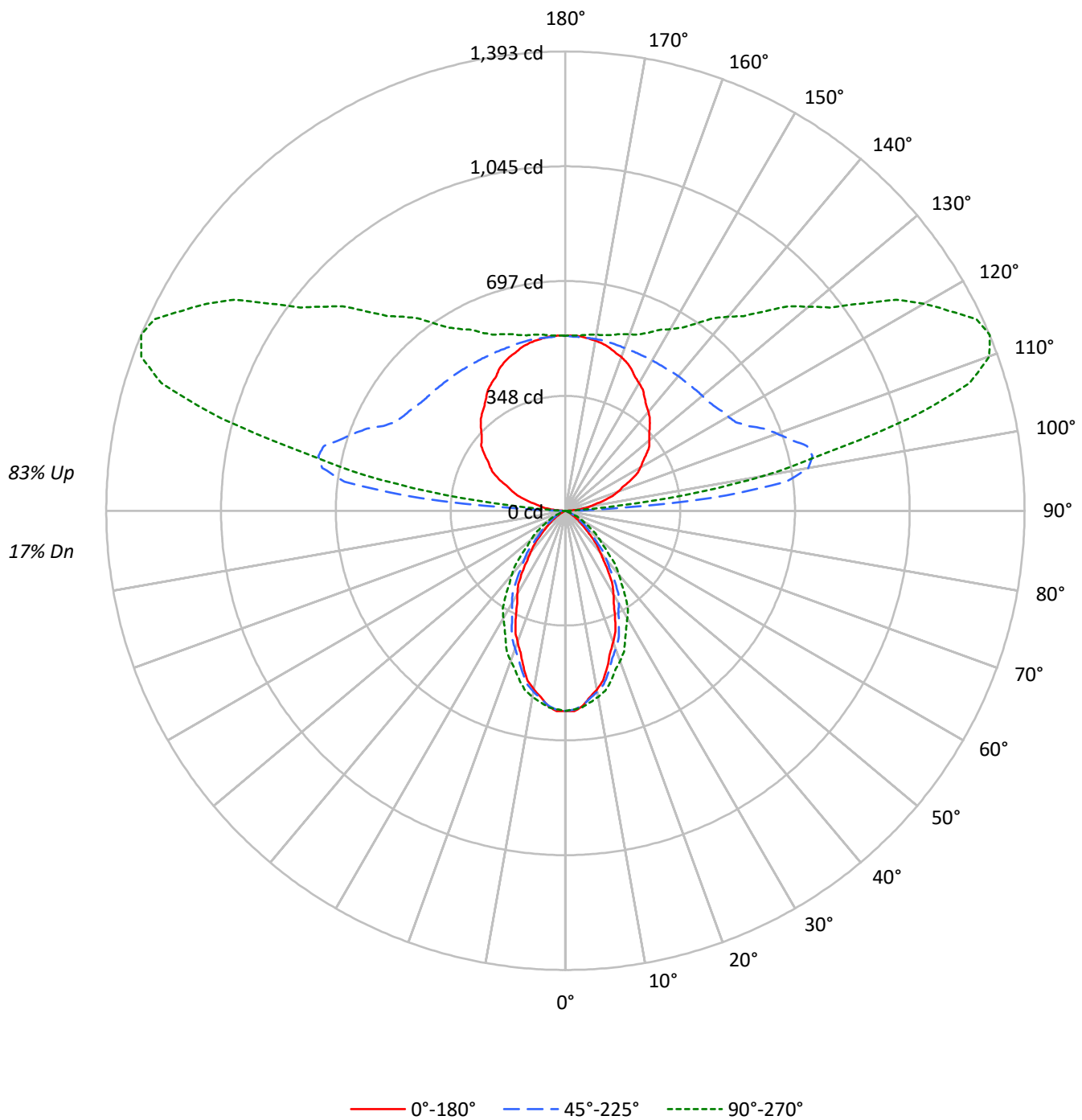
Lumens per Lamp: N/A
Luminaire Lumens: 4183.6 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 54.3
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:

CATALOG NUMBER: SQ4-BB-075U-050D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-BB-075U-050D-927-1D-UNV-STD-W-6

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	24	23
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	15
6	59	49	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11
9	47	36	29	25	42	33	27	23	25	21	18	19	16	14	12	11	10
10	44	33	27	22	39	30	24	20	23	19	17	17	15	13	11	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3735	3735	3735
5°	3675	3666	3693
10°	3439	3484	3582
15°	3126	3225	3405
20°	2775	2919	3175
25°	2417	2608	2917
30°	2070	2298	2673
35°	1716	1950	2378
40°	1318	1559	2027
45°	953	1180	1630
50°	650	880	1293
55°	423	636	1005
60°	242	448	727
65°	64	274	368
70°	32	85	106
75°	14	7	0
80°	11	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1630 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-BB-075U-050D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	1.3
10°-20°	141.7	3.4
20°-30°	177.4	4.2
30°-40°	163.9	3.9
40°-50°	110.1	2.6
50°-60°	56.9	1.4
60°-70°	17.8	0.4
70°-80°	1.1	0.0
80°-90°	1.4	0.0
90°-100°	250.3	6.0
100°-110°	688.7	16.5
110°-120°	710.9	17.0
120°-130°	569.6	13.6
130°-140°	447.4	10.7
140°-150°	342.8	8.2
150°-160°	246.5	5.9
160°-170°	150.7	3.6
170°-180°	50.8	1.2
0°-30°	374.6	9.0
0°-40°	538.5	12.9
0°-60°	705.5	16.9
0°-90°	725.8	17.3
90°-120°	1650.0	39.4
90°-150°	3009.8	71.9
90°-180°	3458.0	82.7
0°-180°	4183.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	607	607	607	607	607	
5°	595	589	594	596	598	55
15°	491	489	506	524	535	137
25°	356	359	384	411	430	163
35°	229	234	260	290	317	142
45°	110	116	136	162	187	86
55°	39	46	59	76	94	37
65°	4	8	19	23	25	7
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	4	8	10	10	2
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

TEST NUMBER:

CATALOG NUMBER: SQ4-BB-075U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	607.3	607.3	607.3	607.3	607.3
2.5°	608.7	602.9	604.4	604.4	602.8
5°	595.2	589.2	593.8	595.9	598.2
7.5°	570.1	565.4	574.1	580.7	585.5
10°	550.6	546.5	557.9	566.9	573.5
12.5°	528.0	524.9	538.6	550.9	559.4
15°	490.9	489.2	506.5	523.5	534.7
17.5°	451.2	451.1	470.9	492.0	505.5
20°	423.9	424.8	446.0	469.3	485.1
22.5°	396.7	398.7	421.3	445.6	463.7
25°	356.1	358.9	384.3	410.6	429.8
27.5°	317.1	321.3	347.9	375.2	398.7
30°	291.4	296.3	323.5	352.2	376.3
32.5°	266.3	272.1	298.6	329.0	353.5
35°	228.6	234.3	259.7	290.3	316.7
37.5°	189.6	195.2	220.1	250.1	278.7
40°	164.2	170.5	194.2	223.4	252.4
42.5°	141.2	147.5	169.8	198.4	225.8
45°	109.6	116.2	135.7	162.2	187.4
47.5°	83.4	90.6	107.7	131.6	154.7
50°	67.9	75.0	92.0	113.0	135.1
52.5°	55.4	62.4	77.6	97.5	117.8
55°	39.4	46.0	59.3	76.2	93.7
57.5°	27.2	32.9	44.9	59.0	72.7
60°	19.7	25.1	36.4	47.8	59.1
62.5°	13.1	18.1	29.1	37.9	45.4
65°	4.4	8.4	18.8	22.7	25.3
67.5°	2.2	2.7	9.9	10.4	11.3
70°	1.8	1.8	4.7	5.0	5.9
72.5°	1.3	1.3	1.9	2.4	2.6
75°	0.6	0.6	0.3	0.0	0.0
77.5°	0.3	0.3	0.2	0.0	0.0
80°	0.3	0.3	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°	0.2	0.9	1.6	2.0	2.0
90°	1.1	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

TEST NUMBER:

CATALOG NUMBER: SQ4-BB-075U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)