

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: P521083

Luminaire Tested: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521083  
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-075U-050D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 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: 4645.0 lumens  
Efficiency: N/A  
Efficacy: 104.6 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: Semi-Indirect

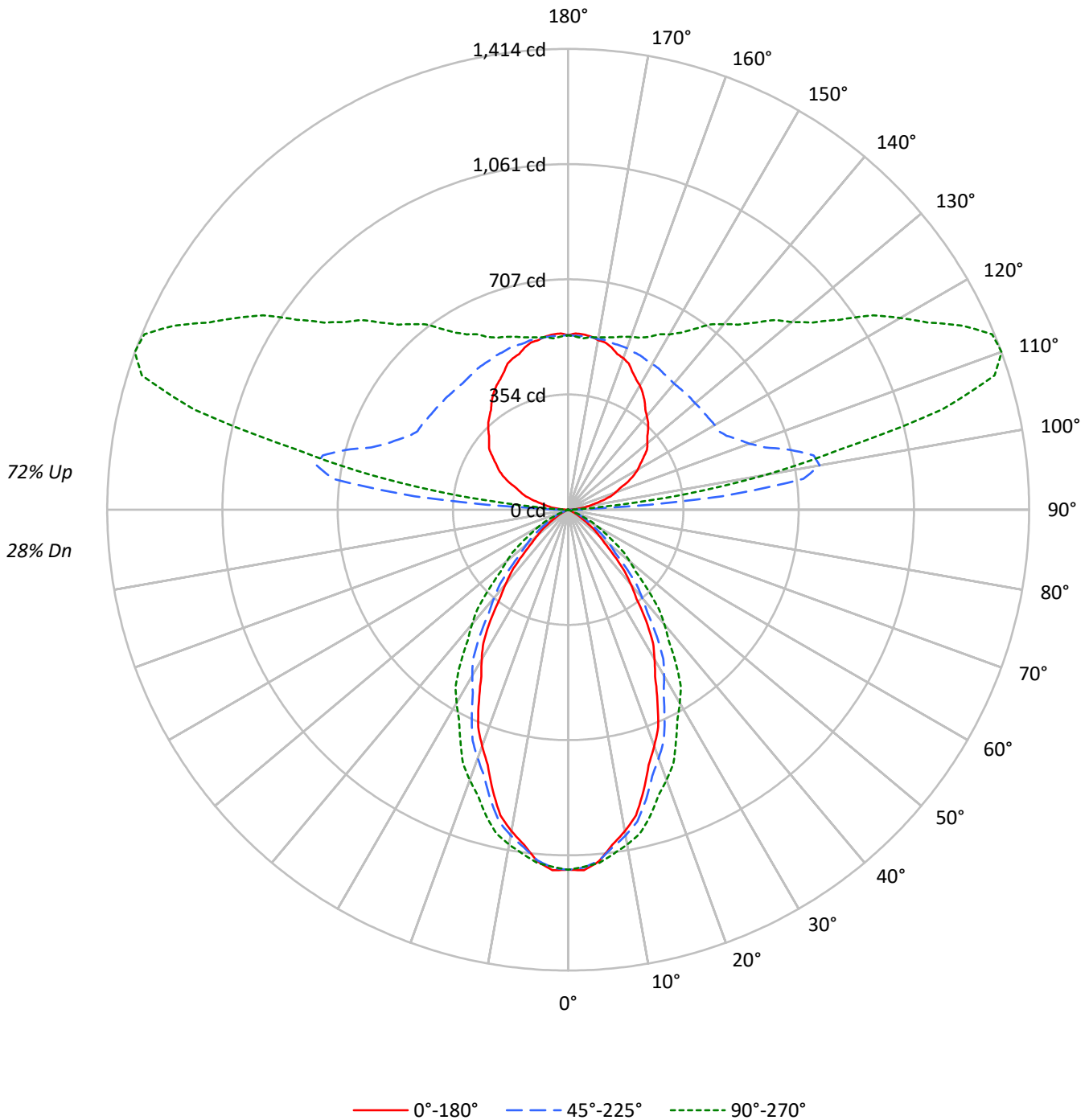
Input Watts (W): 44.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28		
1	94	90	87	84	84	81	78	76	64	62	60	48	47	46	34	33	33	26		
2	86	80	75	70	77	72	68	64	57	54	52	43	42	40	31	30	29	23		
3	79	71	65	60	71	64	59	55	51	48	45	39	37	35	28	27	26	21		
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	24	23	19		
5	67	57	50	44	61	52	46	41	42	38	34	33	30	28	24	22	21	17		
6	62	52	44	39	56	47	41	36	38	34	30	30	27	25	22	20	19	16		
7	58	47	40	35	52	43	36	32	35	30	27	27	24	22	21	19	17	15		
8	54	43	36	31	48	39	33	29	32	27	24	25	22	20	19	17	16	13		
9	50	39	32	28	45	36	30	26	29	25	22	23	20	18	18	16	15	12		
10	47	36	29	25	42	33	27	23	27	23	20	22	19	17	17	15	13	11		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10193	10193	10193
5°	10029	10004	10078
10°	9384	9509	9774
15°	8531	8801	9291
20°	7573	7966	8664
25°	6595	7117	7960
30°	5648	6270	7294
35°	4683	5322	6490
40°	3599	4255	5529
45°	2602	3222	4449
50°	1773	2401	3530
55°	1152	1737	2743
60°	661	1223	1982
65°	175	747	1004
70°	86	232	289
75°	39	18	0
80°	27	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4449 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.8	2.2
10°-20°	257.8	5.6
20°-30°	322.8	6.9
30°-40°	298.2	6.4
40°-50°	200.3	4.3
50°-60°	103.5	2.2
60°-70°	32.4	0.7
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	244.1	5.3
100°-110°	694.5	15.0
110°-120°	665.4	14.3
120°-130°	526.6	11.3
130°-140°	422.7	9.1
140°-150°	330.9	7.1
150°-160°	242.1	5.2
160°-170°	150.0	3.2
170°-180°	50.9	1.1
0°-30°	681.4	14.7
0°-40°	979.6	21.1
0°-60°	1283.4	27.6
0°-90°	1317.9	28.4
90°-120°	1603.9	34.5
90°-150°	2884.1	62.1
90°-180°	3327.0	71.6
0°-180°	4645.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1083	1072	1080	1084	1088	100
15°	893	890	921	952	973	249
25°	648	653	699	747	782	297
35°	416	426	472	528	576	258
45°	199	211	247	295	341	157
55°	72	84	108	139	170	67
65°	8	15	34	41	46	14
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	26	105	472	164	101	30
105°	108	164	708	1250	1188	114
115°	201	242	537	1137	1335	198
125°	283	314	512	850	1016	253
135°	346	375	506	718	812	267
145°	408	429	510	621	677	255
155°	466	477	522	562	584	216
165°	515	517	528	540	548	145
175°	540	537	535	532	528	51
180°	536	536	536	536	536	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1104.8	1104.8	1104.8	1104.8	1104.8
2.5°	1107.3	1096.9	1099.6	1099.6	1096.6
5°	1082.9	1071.9	1080.2	1084.0	1088.2
7.5°	1037.1	1028.5	1044.5	1056.4	1065.1
10°	1001.6	994.3	1015.0	1031.3	1043.3
12.5°	960.6	954.9	979.9	1002.3	1017.6
15°	893.1	890.0	921.4	952.4	972.7
17.5°	820.9	820.7	856.7	895.1	919.6
20°	771.3	772.8	811.3	853.7	882.4
22.5°	721.7	725.3	766.4	810.6	843.5
25°	647.8	653.0	699.1	746.9	781.9
27.5°	576.8	584.4	632.9	682.6	725.3
30°	530.2	539.1	588.5	640.8	684.7
32.5°	484.5	495.0	543.1	598.5	643.2
35°	415.8	426.3	472.5	528.1	576.2
37.5°	345.0	355.2	400.3	455.1	507.0
40°	298.8	310.3	353.3	406.3	459.1
42.5°	256.9	268.4	308.8	360.9	410.8
45°	199.4	211.4	246.9	295.0	341.0
47.5°	151.7	164.7	195.9	239.4	281.3
50°	123.5	136.5	167.3	205.6	245.9
52.5°	100.8	113.4	141.2	177.3	214.2
55°	71.6	83.6	108.0	138.6	170.5
57.5°	49.5	59.8	81.7	107.2	132.2
60°	35.8	45.7	66.3	87.0	107.4
62.5°	23.8	32.9	53.0	68.9	82.6
65°	8.0	15.3	34.2	41.3	46.0
67.5°	4.1	4.9	18.0	19.0	20.5
70°	3.2	3.2	8.6	9.1	10.7
72.5°	2.4	2.4	3.4	4.4	4.7
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°	8.1	43.2	100.2	29.2	22.0
95°	26.5	105.1	472.5	163.5	100.8
97.5°	48.7	123.2	727.7	520.7	356.8
100°	64.2	133.8	783.1	793.2	611.0
102.5°	81.3	145.4	770.8	1015.3	856.2
105°	107.9	163.7	707.7	1250.1	1188.4
107.5°	135.0	185.0	634.0	1316.3	1371.2
110°	153.8	200.6	591.6	1290.9	1414.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	171.7	216.1	563.1	1231.0	1407.1
115°	200.6	242.4	536.6	1136.8	1335.0
117.5°	226.1	265.3	521.0	1033.9	1243.7
120°	246.4	279.3	519.3	975.0	1176.1
122.5°	262.7	295.6	515.3	923.4	1110.1
125°	283.1	314.0	512.2	850.0	1016.3
127.5°	305.3	334.2	510.6	806.1	943.1
130°	316.7	345.6	508.1	775.6	895.1
132.5°	328.9	357.0	508.1	751.8	861.7
135°	346.2	375.1	506.1	718.0	811.6
137.5°	362.5	390.6	505.9	689.4	770.2
140°	374.7	403.6	505.1	665.7	743.4
142.5°	388.6	412.7	507.5	646.8	716.5
145°	408.3	429.2	510.2	621.4	677.2
147.5°	425.2	445.6	514.6	595.8	644.0
150°	439.9	453.8	516.3	587.3	621.2
152.5°	451.3	466.0	517.9	575.8	607.3
155°	466.4	477.3	522.4	561.6	584.5
157.5°	485.1	491.7	523.4	555.1	571.5
160°	494.9	499.9	527.5	550.2	564.1
162.5°	500.6	506.4	528.3	546.1	556.8
165°	515.3	517.2	528.5	539.9	547.8
167.5°	525.2	523.4	533.2	538.3	541.5
170°	528.5	527.5	531.5	532.7	536.6
172.5°	535.8	532.4	534.0	531.0	534.2
175°	539.7	536.7	534.6	531.5	527.5
177.5°	541.3	536.5	534.0	530.8	531.5
180°	535.6	535.6	535.6	535.6	535.6

(END OF REPORT)