

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: P521085

Luminaire Tested: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521085  
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\_5000K  
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 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

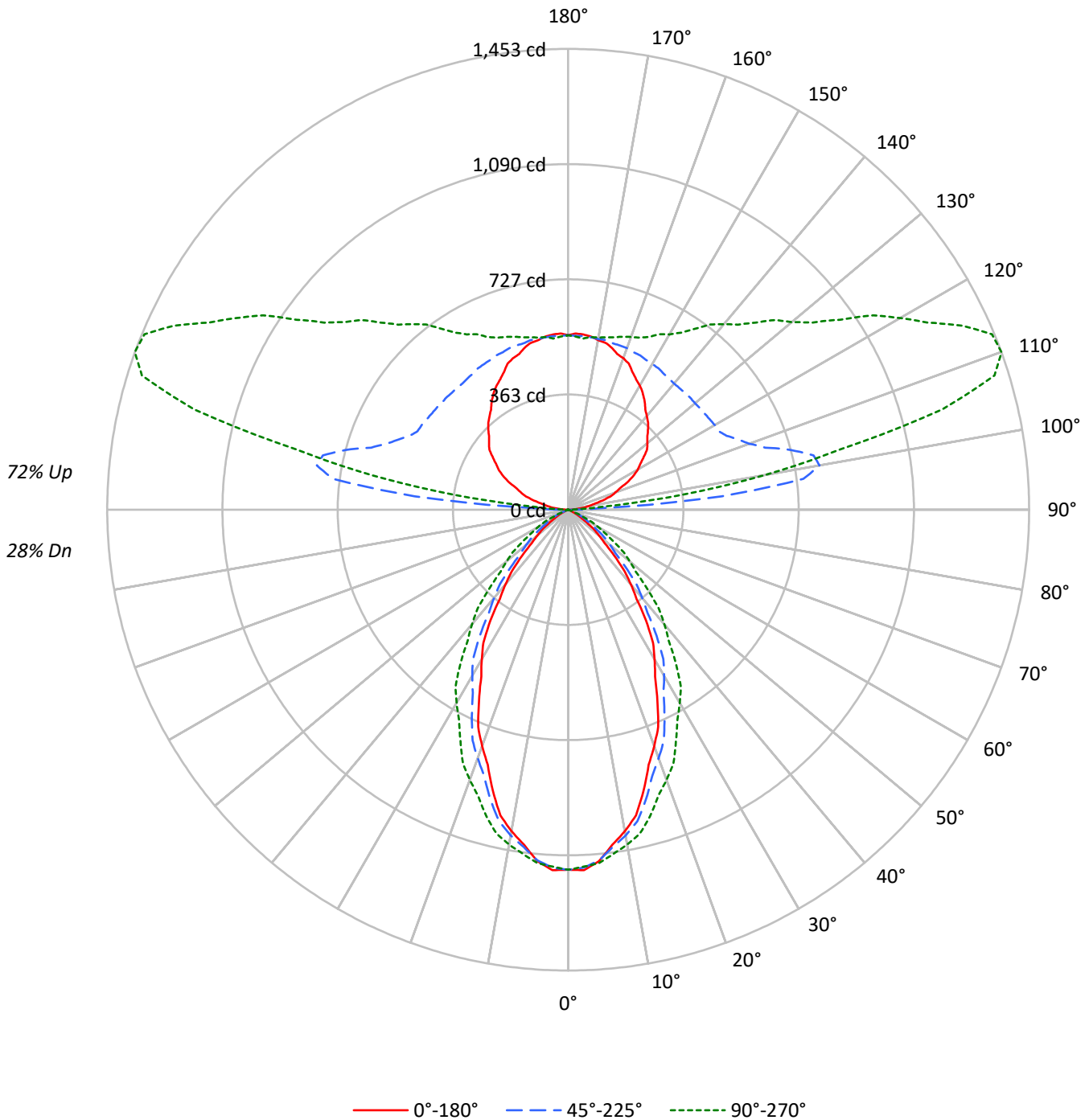
Lumens per Lamp: N/A  
Luminaire Lumens: 4772.1 lumens  
Efficiency: N/A  
Efficacy: 107.7 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 44.3  
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



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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	0		
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°	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

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.6	2.2
10°-20°	264.9	5.6
20°-30°	331.6	6.9
30°-40°	306.3	6.4
40°-50°	205.8	4.3
50°-60°	106.3	2.2
60°-70°	33.3	0.7
70°-80°	2.1	0.0
80°-90°	0.0	0.0
90°-100°	250.8	5.3
100°-110°	713.5	15.0
110°-120°	683.6	14.3
120°-130°	541.0	11.3
130°-140°	434.3	9.1
140°-150°	340.0	7.1
150°-160°	248.8	5.2
160°-170°	154.1	3.2
170°-180°	52.3	1.1
0°-30°	700.1	14.7
0°-40°	1006.4	21.1
0°-60°	1318.5	27.6
0°-90°	1354.0	28.4
90°-120°	1647.8	34.5
90°-150°	2963.1	62.1
90°-180°	3418.0	71.6
0°-180°	4772.1	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°	27	108	485	168	104	31
105°	111	168	727	1284	1221	117
115°	206	249	551	1168	1372	203
125°	291	322	526	873	1044	260
135°	356	385	520	738	834	274
145°	420	441	524	638	696	262
155°	479	490	537	577	600	221
165°	529	531	543	555	563	149
175°	554	551	549	546	542	53
180°	550	550	550	550	550	

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**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°	8.4	44.4	102.9	30.0	22.6
95°	27.2	108.0	485.4	168.0	103.6
97.5°	50.0	126.5	747.6	535.0	366.6
100°	65.9	137.5	804.5	814.9	627.7
102.5°	83.5	149.4	792.0	1043.1	879.6
105°	110.9	168.2	727.1	1284.3	1220.9
107.5°	138.7	190.1	651.3	1352.3	1408.8
110°	158.0	206.0	607.8	1326.3	1453.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	222.0	578.5	1264.7	1445.6
115°	206.1	249.1	551.3	1168.0	1371.5
117.5°	232.2	272.6	535.2	1062.2	1277.8
120°	253.2	286.9	533.5	1001.7	1208.3
122.5°	269.9	303.7	529.4	948.6	1140.5
125°	290.8	322.5	526.2	873.2	1044.1
127.5°	313.6	343.3	524.5	828.2	969.0
130°	325.4	355.0	522.0	796.8	919.6
132.5°	337.9	366.8	522.0	772.3	885.3
135°	355.7	385.4	519.9	737.6	833.8
137.5°	372.4	401.3	519.7	708.3	791.3
140°	385.0	414.7	518.9	683.9	763.7
142.5°	399.2	424.0	521.4	664.5	736.1
145°	419.5	441.0	524.1	638.4	695.7
147.5°	436.9	457.7	528.7	612.1	661.6
150°	451.9	466.3	530.4	603.4	638.2
152.5°	463.7	478.8	532.1	591.6	623.9
155°	479.1	490.4	536.7	577.0	600.5
157.5°	498.4	505.1	537.7	570.3	587.1
160°	508.4	513.6	541.9	565.3	579.6
162.5°	514.3	520.2	542.8	561.0	572.0
165°	529.4	531.4	543.0	554.7	562.8
167.5°	539.6	537.8	547.8	553.1	556.4
170°	543.0	541.9	546.1	547.2	551.3
172.5°	550.5	547.0	548.6	545.5	548.8
175°	554.5	551.4	549.2	546.0	541.9
177.5°	556.1	551.2	548.6	545.3	546.1
180°	550.3	550.3	550.3	550.3	550.3

(END OF REPORT)