

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: P521852

Luminaire Tested: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521852  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 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: 7963.5 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

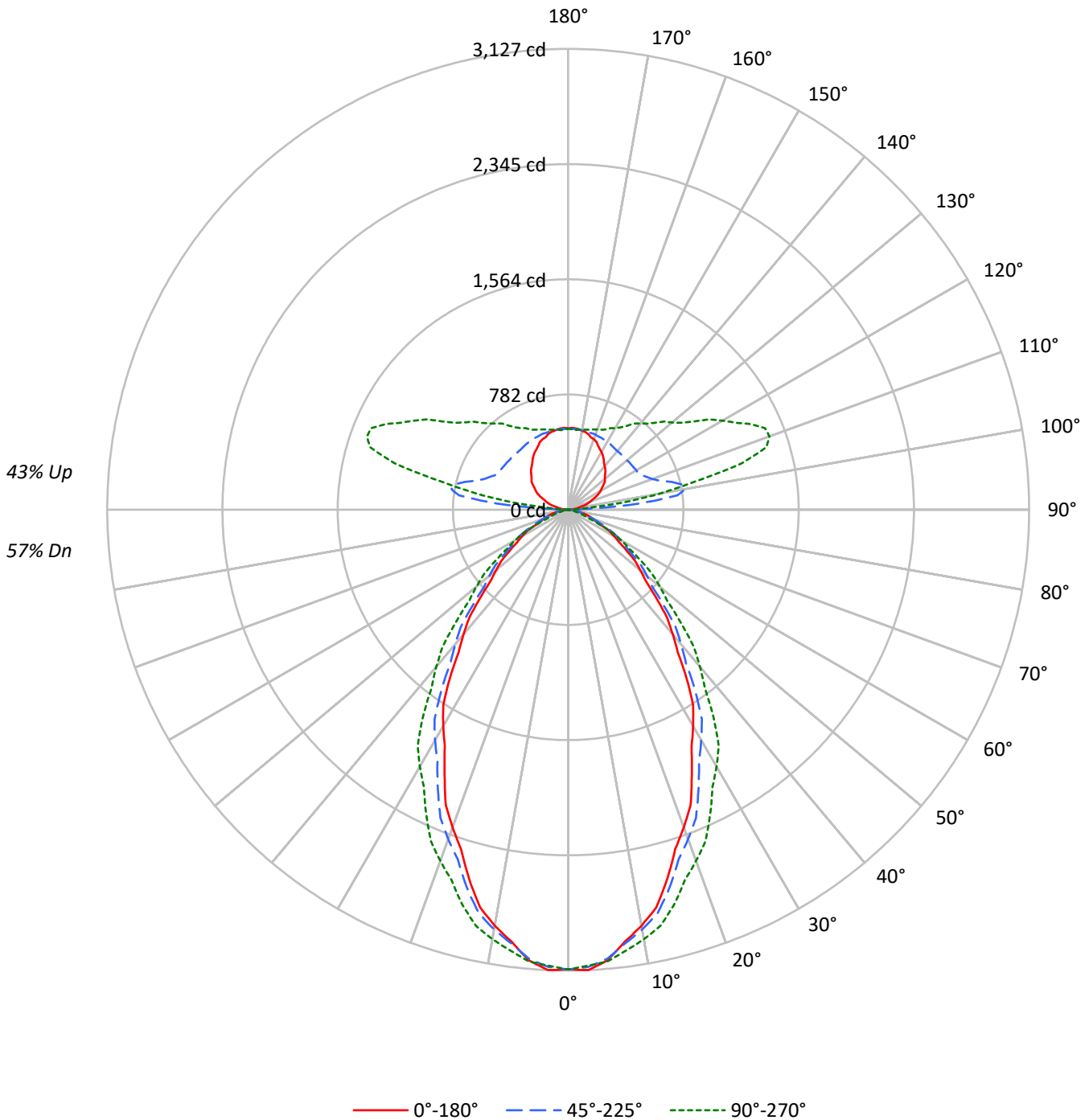
Input Watts (W): 79.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521852

CATALOG NUMBER: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4\_5000K

### Luminous Intensity Polar Plot



TEST NUMBER: P521852

CATALOG NUMBER: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4\_5000K

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

RF	20									20									20									20									
RC	80									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	50	30	10	0													
RCR																																					
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	63	63	63	57																			
1	101	97	93	90	94	90	87	85	78	76	74	67	66	65	57	56	55	51																			
2	93	86	81	76	86	81	76	72	70	67	64	61	58	56	52	50	49	45																			
3	86	77	70	65	80	72	66	62	63	59	55	55	52	49	47	45	43	39																			
4	79	69	62	56	74	65	59	54	57	52	48	50	46	43	43	41	38	35																			
5	73	62	55	49	68	59	52	47	52	47	43	46	42	39	40	37	34	32																			
6	68	57	49	44	63	54	47	42	48	42	38	42	38	35	37	34	31	28																			
7	63	52	44	39	59	49	42	37	44	38	34	39	34	31	34	31	28	26																			
8	59	47	40	35	55	45	38	34	40	35	31	36	32	28	32	28	26	24																			
9	55	44	37	32	52	41	35	31	37	32	28	33	29	26	29	26	24	22																			
10	52	40	34	29	49	38	32	28	35	29	26	31	27	24	28	24	22	20																			

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

	0°	45°	90°
0°	28778	28778	28778
5°	28420	28318	28483
10°	26850	27094	27722
15°	24787	25363	26499
20°	22509	23356	24901
25°	20189	21290	23199
30°	18051	19233	21435
35°	15785	16926	19347
40°	13287	14342	16748
45°	10965	11911	13983
50°	9155	9980	11649
55°	7771	8564	9621
60°	6643	7425	7678
65°	5290	6246	4960
70°	4688	4874	3027
75°	4342	3953	1854
80°	4001	3634	1599
85°	3620	3335	1302

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13983 cd/sqm

TEST NUMBER: P521852

CATALOG NUMBER: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4\_5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	286.1	3.6
10°-20°	744.2	9.3
20°-30°	963.9	12.1
30°-40°	943.9	11.9
40°-50°	722.5	9.1
50°-60°	481.4	6.0
60°-70°	262.7	3.3
70°-80°	109.5	1.4
80°-90°	31.0	0.4
90°-100°	250.8	3.1
100°-110°	713.5	9.0
110°-120°	683.6	8.6
120°-130°	541.0	6.8
130°-140°	434.3	5.5
140°-150°	340.0	4.3
150°-160°	248.8	3.1
160°-170°	154.1	1.9
170°-180°	52.3	0.7
0°-30°	1994.2	25.0
0°-40°	2938.1	36.9
0°-60°	4142.1	52.0
0°-90°	4545.3	57.1
90°-120°	1647.8	20.7
90°-150°	2963.1	37.2
90°-180°	3418.0	42.9
0°-180°	7963.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3119	3119	3119	3119	3119	
5°	3069	3038	3058	3065	3075	285
15°	2595	2586	2655	2728	2774	725
25°	1983	1989	2091	2182	2279	912
35°	1402	1408	1503	1604	1718	871
45°	840	856	913	982	1072	655
55°	483	503	532	553	598	438
65°	242	262	286	250	227	252
75°	122	122	111	76	52	130
85°	34	34	32	20	12	37
90°	0	0	0	0	0	3
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	

TEST NUMBER: P521852

CATALOG NUMBER: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3119.2	3119.2	3119.2	3119.2	3119.2
2.5°	3126.9	3099.1	3106.1	3105.9	3097.3
5°	3068.6	3037.8	3057.6	3064.7	3075.4
7.5°	2954.7	2931.4	2967.6	2994.4	3016.0
10°	2866.0	2846.0	2892.0	2931.0	2959.1
12.5°	2763.1	2746.2	2803.3	2855.6	2892.3
15°	2595.0	2585.7	2655.3	2727.5	2774.3
17.5°	2415.2	2410.6	2490.5	2574.8	2634.7
20°	2292.6	2291.2	2378.8	2466.6	2536.2
22.5°	2168.8	2171.8	2263.8	2355.1	2434.3
25°	1983.2	1988.6	2091.4	2182.5	2278.9
27.5°	1811.6	1814.0	1920.3	2016.5	2119.3
30°	1694.4	1701.1	1805.3	1904.9	2012.0
32.5°	1577.3	1585.0	1687.0	1790.0	1899.2
35°	1401.5	1408.2	1502.8	1604.0	1717.7
37.5°	1220.3	1229.4	1313.4	1409.0	1520.9
40°	1103.2	1116.5	1190.8	1280.8	1390.6
42.5°	990.4	1007.0	1075.8	1161.3	1260.3
45°	840.4	856.4	912.9	982.0	1071.7
47.5°	711.2	729.6	773.0	832.5	909.1
50°	637.8	655.2	695.3	739.4	811.6
52.5°	573.2	590.6	626.3	660.3	721.8
55°	483.1	503.2	532.4	552.6	598.1
57.5°	409.2	428.5	451.7	460.8	488.3
60°	360.0	381.4	402.4	401.4	416.1
62.5°	315.1	333.3	354.2	339.7	340.5
65°	242.3	262.3	286.1	250.0	227.2
67.5°	195.7	200.0	224.5	174.3	147.3
70°	173.8	173.8	180.7	135.0	112.2
72.5°	153.0	153.0	146.7	109.8	86.0
75°	121.8	121.8	110.9	76.1	52.0
77.5°	93.9	92.8	84.9	56.8	37.8
80°	75.3	75.3	68.4	44.8	30.1
82.5°	58.9	58.9	53.1	35.0	22.4
85°	34.2	34.2	31.5	20.3	12.3
87.5°	12.0	12.0	10.9	6.5	5.5
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

TEST NUMBER: P521852

CATALOG NUMBER: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4\_5000K

**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)