

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: P521489

Luminaire Tested: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521489  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8981.9 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

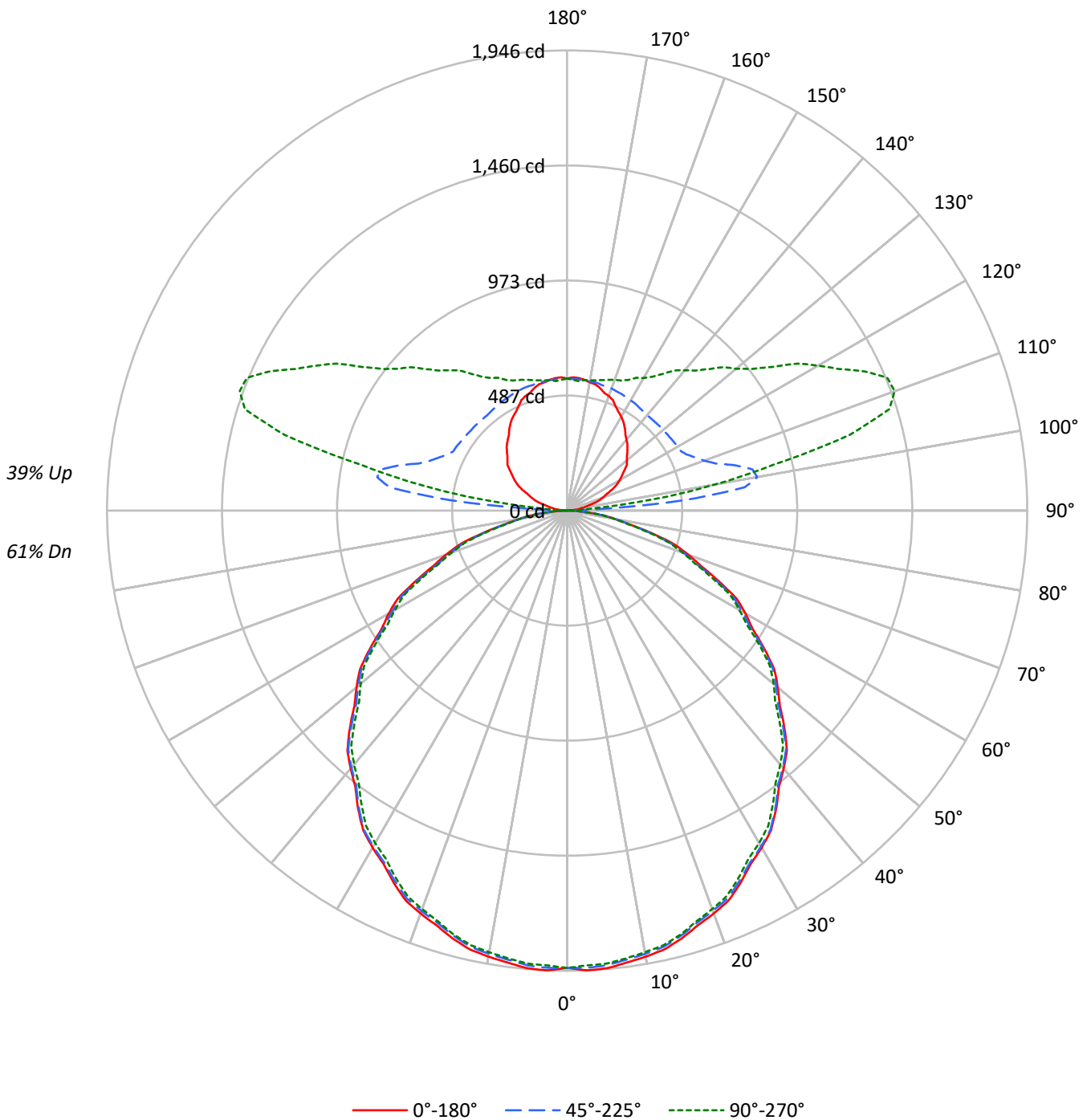
Input Watts (W): 79.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20				20				20				20				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	0
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90		78	78	78		67	67	67	61
1	100	96	92	88	94	90	86	83	78	76	73		68	66	64		59	57	56	51
2	91	83	77	72	85	78	73	68	69	64	60		60	56	53		51	49	47	43
3	83	73	65	59	77	69	62	56	60	55	51		52	48	45		45	42	40	36
4	76	65	56	50	71	61	53	48	53	48	43		47	42	38		40	37	34	31
5	70	58	49	43	65	54	47	41	48	42	37		42	37	33		36	32	29	26
6	64	52	43	37	60	49	41	35	43	37	32		38	33	29		33	29	26	23
7	59	47	38	33	55	44	36	31	39	33	28		34	29	26		30	26	23	20
8	55	42	34	29	51	40	33	28	36	29	25		31	26	23		27	23	20	18
9	51	39	31	26	48	37	29	25	33	27	23		29	24	20		25	21	18	16
10	48	35	28	23	45	34	27	22	30	24	20		27	22	18		23	20	17	15

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

	0°	45°	90°
0°	17846	17846	17846
5°	17993	17876	17807
10°	17943	17834	17764
15°	17888	17777	17726
20°	17805	17690	17606
25°	17671	17575	17456
30°	17532	17476	17295
35°	17353	17293	17078
40°	17151	17087	16882
45°	16960	16849	16586
50°	16692	16555	16357
55°	16385	16232	15976
60°	16074	15780	15507
65°	15450	15127	14825
70°	14683	14168	13998
75°	13275	12897	12673
80°	10934	10934	10770
85°	7749	8871	9326

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16960 cd/sqm

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CATALOG NUMBER: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4\_5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.1	2.0
10°-20°	524.3	5.8
20°-30°	792.9	8.8
30°-40°	955.1	10.6
40°-50°	991.6	11.0
50°-60°	898.9	10.0
60°-70°	685.7	7.6
70°-80°	383.6	4.3
80°-90°	99.7	1.1
90°-100°	254.3	2.8
100°-110°	723.6	8.1
110°-120°	693.3	7.7
120°-130°	548.7	6.1
130°-140°	440.5	4.9
140°-150°	344.8	3.8
150°-160°	252.3	2.8
160°-170°	156.3	1.7
170°-180°	53.0	0.6
0°-30°	1500.3	16.7
0°-40°	2455.4	27.3
0°-60°	4346.0	48.4
0°-90°	5515.0	61.4
90°-120°	1671.3	18.6
90°-150°	3005.3	33.5
90°-180°	3467.0	38.6
0°-180°	8981.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1934	1934	1934	1934	1934	
5°	1943	1923	1930	1925	1923	184
15°	1873	1854	1861	1859	1856	528
25°	1736	1718	1726	1714	1715	800
35°	1541	1528	1535	1518	1516	963
45°	1300	1293	1291	1275	1271	1001
55°	1019	1017	1009	996	993	910
65°	708	704	693	684	679	702
75°	372	366	362	356	356	394
85°	73	80	84	84	88	91
90°	0	0	0	0	0	4
95°	28	110	492	170	105	32
105°	112	171	737	1303	1238	119
115°	209	253	559	1185	1391	206
125°	295	327	534	886	1059	264
135°	361	391	527	748	846	278
145°	426	447	532	648	706	266
155°	486	497	544	585	609	225
165°	537	539	551	563	571	151
175°	562	559	557	554	550	53
180°	558	558	558	558	558	

TEST NUMBER: P521489

CATALOG NUMBER: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1934.3	1934.3	1934.3	1934.3	1934.3
2.5°	1946.2	1930.4	1935.2	1931.6	1925.0
5°	1942.8	1923.1	1930.1	1924.7	1922.7
7.5°	1928.0	1909.5	1915.4	1912.2	1909.7
10°	1915.2	1897.6	1903.6	1900.3	1896.1
12.5°	1900.8	1882.3	1889.1	1884.2	1882.6
15°	1872.8	1854.1	1861.1	1858.9	1855.8
17.5°	1838.8	1820.0	1827.2	1822.9	1820.4
20°	1813.4	1793.7	1801.7	1793.2	1793.2
22.5°	1784.5	1764.8	1774.5	1761.9	1764.4
25°	1735.9	1718.3	1726.4	1713.7	1714.7
27.5°	1683.1	1666.5	1676.9	1660.6	1659.9
30°	1645.7	1629.1	1640.4	1622.4	1623.4
32.5°	1604.1	1590.0	1599.7	1582.5	1581.8
35°	1540.7	1528.2	1535.4	1518.3	1516.3
37.5°	1471.5	1462.4	1465.3	1449.2	1448.4
40°	1424.0	1415.7	1418.7	1401.7	1401.7
42.5°	1375.6	1368.1	1370.3	1351.6	1351.6
45°	1299.8	1292.6	1291.3	1275.3	1271.2
47.5°	1219.0	1213.1	1209.4	1194.9	1193.1
50°	1162.9	1158.8	1153.4	1140.6	1139.6
52.5°	1104.4	1102.7	1096.5	1082.9	1081.9
55°	1018.6	1016.6	1009.1	996.3	993.2
57.5°	928.9	926.8	918.0	905.4	902.3
60°	871.1	864.9	855.2	843.5	840.4
62.5°	808.3	801.3	791.6	780.7	780.1
65°	707.7	703.6	692.9	684.3	679.1
67.5°	613.1	603.7	593.1	586.1	585.1
70°	544.3	535.0	525.2	519.9	518.9
72.5°	475.6	467.9	459.0	453.7	453.5
75°	372.4	366.2	361.8	356.5	355.5
77.5°	270.4	268.7	267.0	261.2	261.2
80°	205.8	205.8	205.8	202.7	202.7
82.5°	148.1	152.3	152.4	150.9	150.9
85°	73.2	80.5	83.8	83.9	88.1
87.5°	20.4	27.8	33.1	34.0	36.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.5	45.0	104.4	30.4	22.9
95°	27.6	109.5	492.3	170.4	105.0
97.5°	50.7	128.3	758.2	542.6	371.8
100°	66.8	139.5	816.0	826.5	636.6
102.5°	84.7	151.5	803.2	1057.9	892.1
105°	112.5	170.6	737.4	1302.6	1238.3
107.5°	140.7	192.8	660.6	1371.6	1428.8
110°	160.2	209.0	616.5	1345.2	1473.8

TEST NUMBER: P521489

CATALOG NUMBER: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	178.9	225.2	586.8	1282.8	1466.2
115°	209.0	252.6	559.2	1184.6	1391.1
117.5°	235.6	276.4	542.8	1077.3	1296.0
120°	256.8	291.0	541.1	1016.0	1225.5
122.5°	273.8	308.0	536.9	962.1	1156.8
125°	295.0	327.1	533.7	885.7	1058.9
127.5°	318.1	348.2	532.0	840.0	982.8
130°	330.0	360.1	529.5	808.2	932.7
132.5°	342.7	372.0	529.5	783.3	897.9
135°	360.8	390.9	527.4	748.1	845.7
137.5°	377.7	407.0	527.1	718.4	802.6
140°	390.5	420.6	526.3	693.7	774.6
142.5°	404.9	430.0	528.8	673.9	746.6
145°	425.5	447.3	531.6	647.5	705.6
147.5°	443.1	464.3	536.3	620.8	671.0
150°	458.4	472.9	538.0	612.0	647.3
152.5°	470.3	485.6	539.7	600.0	632.8
155°	486.0	497.4	544.3	585.2	609.1
157.5°	505.5	512.3	545.4	578.5	595.5
160°	515.7	520.9	549.6	573.3	587.8
162.5°	521.6	527.6	550.5	569.0	580.2
165°	536.9	539.0	550.7	562.6	570.9
167.5°	547.3	545.4	555.6	561.0	564.3
170°	550.7	549.7	553.9	555.0	559.2
172.5°	558.3	554.8	556.4	553.3	556.6
175°	562.4	559.3	557.1	553.8	549.6
177.5°	564.1	559.1	556.4	553.0	553.9
180°	558.1	558.1	558.1	558.1	558.1

(END OF REPORT)