

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: P521385

Luminaire Tested: SQ4-F-025U-125D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521385
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-025U-125D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 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: 7570.0 lumens
Efficiency: N/A
Efficacy: 108.8 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

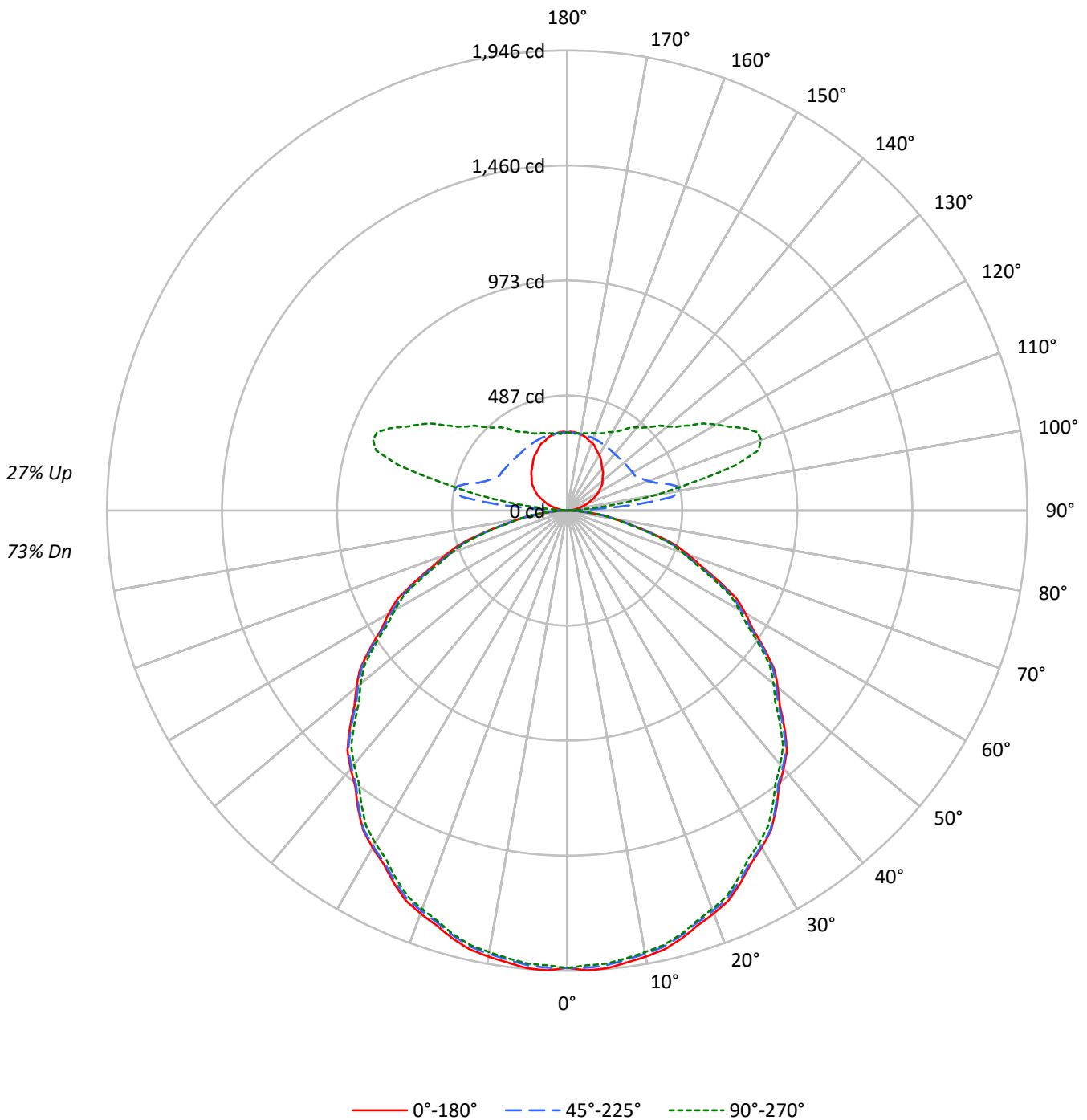
Input Watts (W): 69.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521385

CATALOG NUMBER: SQ4-F-025U-125D-92765-1D-UNV-STD-W-4_5700K

Luminous Intensity Polar Plot



TEST NUMBER: P521385

CATALOG NUMBER: SQ4-F-025U-125D-92765-1D-UNV-STD-W-4_5700K

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	113	113	113	113	107	107	107	107	96	96	96		86	86	86		77	77	77	73
1	103	98	94	90	97	93	90	86	84	81	79		76	74	72		68	66	65	61
2	93	85	79	73	88	81	75	71	73	69	65		66	63	59		59	57	54	51
3	85	75	67	61	80	71	64	59	65	59	54		58	54	50		52	49	46	43
4	78	66	58	51	73	63	56	50	57	51	46		52	47	43		47	43	39	36
5	71	59	50	44	67	56	48	43	51	45	40		46	41	37		42	38	34	31
6	66	53	44	38	62	51	43	37	46	40	35		42	36	32		38	33	30	27
7	61	48	40	34	58	46	38	33	42	35	31		38	33	29		35	30	27	24
8	57	44	35	30	53	42	34	29	38	32	27		35	29	25		32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	24		32	27	23		29	25	21	19
10	49	37	29	24	47	35	28	23	32	26	22		30	24	21		27	23	19	18

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

TEST NUMBER: P521385

CATALOG NUMBER: SQ4-F-025U-125D-92765-1D-UNV-STD-W-4_5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.1	2.4
10°-20°	524.3	6.9
20°-30°	792.9	10.5
30°-40°	955.1	12.6
40°-50°	991.6	13.1
50°-60°	898.9	11.9
60°-70°	685.7	9.1
70°-80°	383.6	5.1
80°-90°	99.7	1.3
90°-100°	150.8	2.0
100°-110°	428.9	5.7
110°-120°	411.0	5.4
120°-130°	325.3	4.3
130°-140°	261.1	3.4
140°-150°	204.4	2.7
150°-160°	149.6	2.0
160°-170°	92.6	1.2
170°-180°	31.4	0.4
0°-30°	1500.3	19.8
0°-40°	2455.4	32.4
0°-60°	4346.0	57.4
0°-90°	5515.0	72.9
90°-120°	990.7	13.1
90°-150°	1781.4	23.5
90°-180°	2055.0	27.1
0°-180°	7570.0	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	3
95°	16	65	292	101	62	19
105°	67	101	437	772	734	71
115°	124	150	332	702	825	122
125°	175	194	316	525	628	157
135°	214	232	313	444	501	165
145°	252	265	315	384	418	158
155°	288	295	323	347	361	133
165°	318	320	326	334	338	90
175°	333	332	330	328	326	32
180°	331	331	331	331	331	

TEST NUMBER: P521385

CATALOG NUMBER: SQ4-F-025U-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°	5.0	26.7	61.9	18.0	13.6
95°	16.4	64.9	291.8	101.0	62.3
97.5°	30.1	76.1	449.5	321.6	220.4
100°	39.6	82.7	483.7	489.9	377.4
102.5°	50.2	89.8	476.1	627.1	528.8
105°	66.7	101.1	437.1	772.1	734.0
107.5°	83.4	114.3	391.6	813.0	847.0
110°	95.0	123.9	365.4	797.4	873.6

TEST NUMBER: P521385

CATALOG NUMBER: SQ4-F-025U-125D-92765-1D-UNV-STD-W-4_5700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.0	133.5	347.8	760.4	869.1
115°	123.9	149.7	331.5	702.2	824.6
117.5°	139.6	163.9	321.8	638.6	768.2
120°	152.2	172.5	320.8	602.2	726.4
122.5°	162.3	182.6	318.3	570.3	685.7
125°	174.8	193.9	316.4	525.0	627.7
127.5°	188.6	206.4	315.4	497.9	582.5
130°	195.6	213.4	313.8	479.1	552.9
132.5°	203.2	220.5	313.8	464.3	532.2
135°	213.8	231.7	312.6	443.5	501.3
137.5°	223.9	241.3	312.5	425.8	475.7
140°	231.5	249.3	312.0	411.2	459.1
142.5°	240.0	254.9	313.5	399.5	442.5
145°	252.2	265.1	315.1	383.8	418.3
147.5°	262.7	275.2	317.9	368.0	397.8
150°	271.7	280.3	318.9	362.8	383.7
152.5°	278.8	287.9	319.9	355.7	375.1
155°	288.1	294.8	322.7	346.9	361.0
157.5°	299.6	303.7	323.3	342.9	353.0
160°	305.7	308.7	325.8	339.8	348.4
162.5°	309.2	312.8	326.3	337.3	343.9
165°	318.3	319.5	326.4	333.5	338.4
167.5°	324.4	323.3	329.3	332.5	334.5
170°	326.4	325.8	328.3	329.0	331.5
172.5°	331.0	328.9	329.8	328.0	329.9
175°	333.3	331.5	330.2	328.3	325.8
177.5°	334.4	331.4	329.8	327.8	328.3
180°	330.8	330.8	330.8	330.8	330.8

(END OF REPORT)