

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: P521437

Luminaire Tested: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521437
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-050U-125D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 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: 7831.0 lumens
Efficiency: N/A
Efficacy: 109.7 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

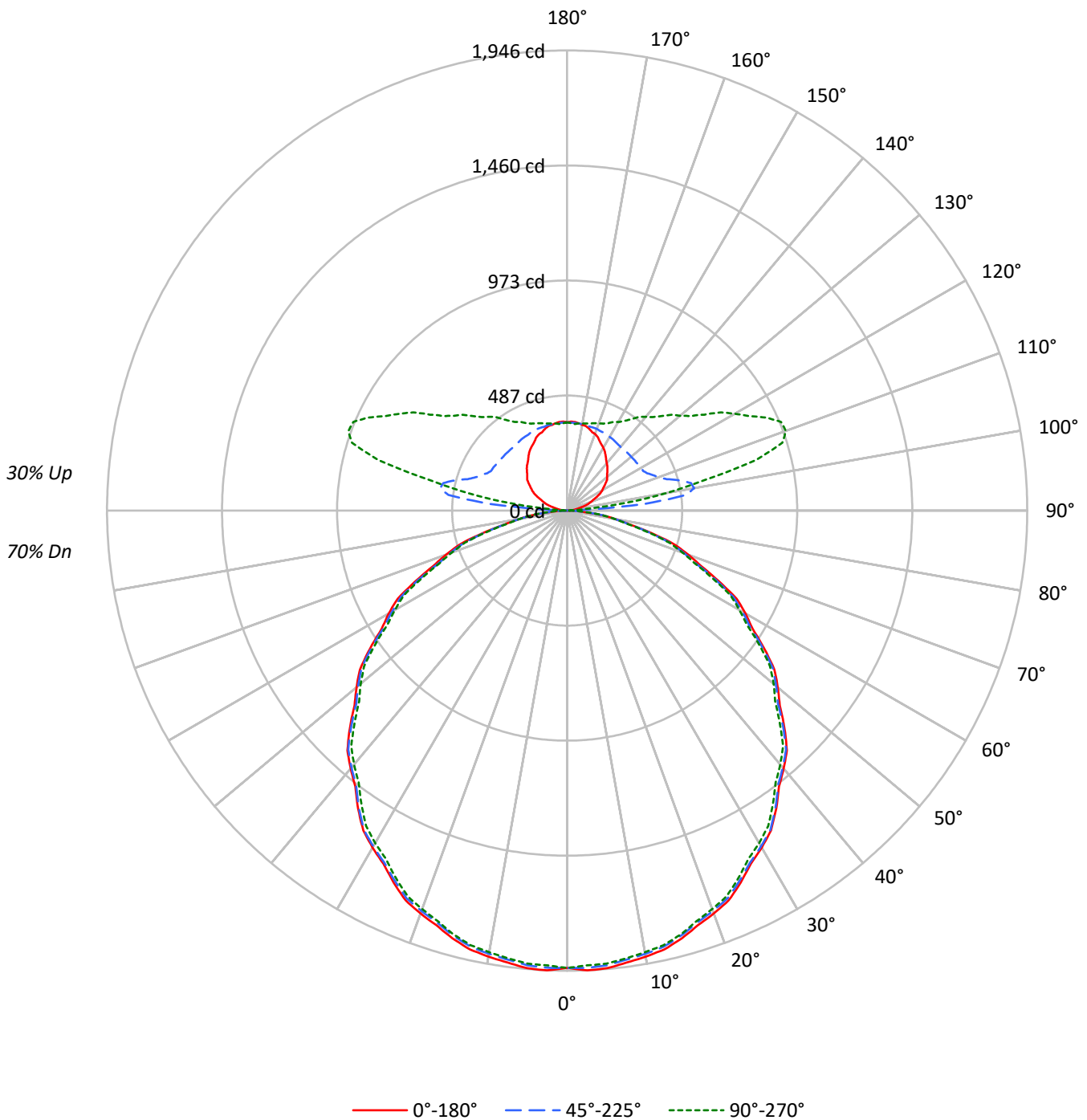
Input Watts (W): 71.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	112	112	112	112	106	106	106	106	95	95	95		84	84	84		75	75	75	70
1	102	98	94	90	96	92	89	86	83	80	78		74	72	70		66	64	63	59
2	93	85	79	73	88	81	75	70	72	68	64		65	61	58		58	55	53	49
3	85	75	67	61	80	71	64	58	64	58	53		57	53	49		51	47	45	41
4	77	66	58	51	73	63	55	49	56	50	45		51	46	42		45	41	38	35
5	71	59	50	44	67	56	48	42	50	44	39		45	40	36		41	37	33	30
6	65	53	44	38	62	50	42	37	45	39	34		41	36	32		37	33	29	26
7	61	48	39	33	57	45	38	32	41	35	30		37	32	28		34	29	26	23
8	56	43	35	30	53	41	34	29	38	31	27		34	29	25		31	26	23	21
9	52	40	32	26	49	38	31	26	35	28	24		31	26	22		28	24	21	19
10	49	36	29	24	46	35	28	23	32	26	22		29	24	20		26	22	19	17

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: P521437

CATALOG NUMBER: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.1	2.3
10°-20°	524.3	6.7
20°-30°	792.9	10.1
30°-40°	955.1	12.2
40°-50°	991.6	12.7
50°-60°	898.9	11.5
60°-70°	685.7	8.8
70°-80°	383.6	4.9
80°-90°	99.7	1.3
90°-100°	169.9	2.2
100°-110°	483.4	6.2
110°-120°	463.2	5.9
120°-130°	366.6	4.7
130°-140°	294.2	3.8
140°-150°	230.4	2.9
150°-160°	168.5	2.2
160°-170°	104.4	1.3
170°-180°	35.4	0.5
0°-30°	1500.3	19.2
0°-40°	2455.4	31.4
0°-60°	4346.0	55.5
0°-90°	5515.0	70.4
90°-120°	1116.5	14.3
90°-150°	2007.7	25.6
90°-180°	2316.0	29.6
0°-180°	7831.0	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	4
95°	18	73	329	114	70	21
105°	75	114	493	870	827	79
115°	140	169	374	791	929	137
125°	197	218	356	592	707	176
135°	241	261	352	500	565	186
145°	284	299	355	433	471	178
155°	325	332	364	391	407	150
165°	359	360	368	376	381	101
175°	376	374	372	370	367	36
180°	373	373	373	373	373	

TEST NUMBER: P521437

CATALOG NUMBER: SQ4-F-050U-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°	5.7	30.1	69.8	20.3	15.3
95°	18.4	73.2	328.9	113.8	70.2
97.5°	33.9	85.7	506.5	362.5	248.4
100°	44.7	93.2	545.1	552.1	425.3
102.5°	56.6	101.2	536.6	706.7	596.0
105°	75.1	114.0	492.6	870.2	827.2
107.5°	94.0	128.8	441.3	916.3	954.5
110°	107.0	139.6	411.8	898.6	984.6

TEST NUMBER: P521437

CATALOG NUMBER: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_5700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	119.5	150.4	392.0	856.9	979.5
115°	139.6	168.8	373.6	791.4	929.3
117.5°	157.4	184.7	362.6	719.7	865.8
120°	171.5	194.4	361.5	678.7	818.7
122.5°	182.9	205.8	358.7	642.8	772.8
125°	197.1	218.5	356.5	591.7	707.4
127.5°	212.5	232.6	355.4	561.2	656.5
130°	220.4	240.5	353.7	539.9	623.1
132.5°	229.0	248.5	353.7	523.3	599.8
135°	241.0	261.1	352.3	499.8	564.9
137.5°	252.3	271.9	352.2	479.9	536.2
140°	260.9	281.0	351.6	463.4	517.5
142.5°	270.5	287.3	353.3	450.2	498.7
145°	284.2	298.8	355.1	432.6	471.4
147.5°	296.0	310.2	358.2	414.7	448.3
150°	306.2	315.9	359.4	408.8	432.4
152.5°	314.2	324.4	360.5	400.9	422.8
155°	324.6	332.3	363.6	390.9	406.9
157.5°	337.7	342.3	364.3	386.4	397.8
160°	344.5	348.0	367.2	383.0	392.7
162.5°	348.5	352.5	367.7	380.1	387.6
165°	358.7	360.1	367.9	375.8	381.4
167.5°	365.6	364.4	371.1	374.7	377.0
170°	367.9	367.2	370.0	370.8	373.6
172.5°	373.0	370.6	371.7	369.6	371.9
175°	375.7	373.6	372.1	370.0	367.2
177.5°	376.8	373.5	371.7	369.5	370.0
180°	372.9	372.9	372.9	372.9	372.9

(END OF REPORT)