

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: P521436

Luminaire Tested: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521436
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7721.0 lumens
Efficiency: N/A
Efficacy: 108.0 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

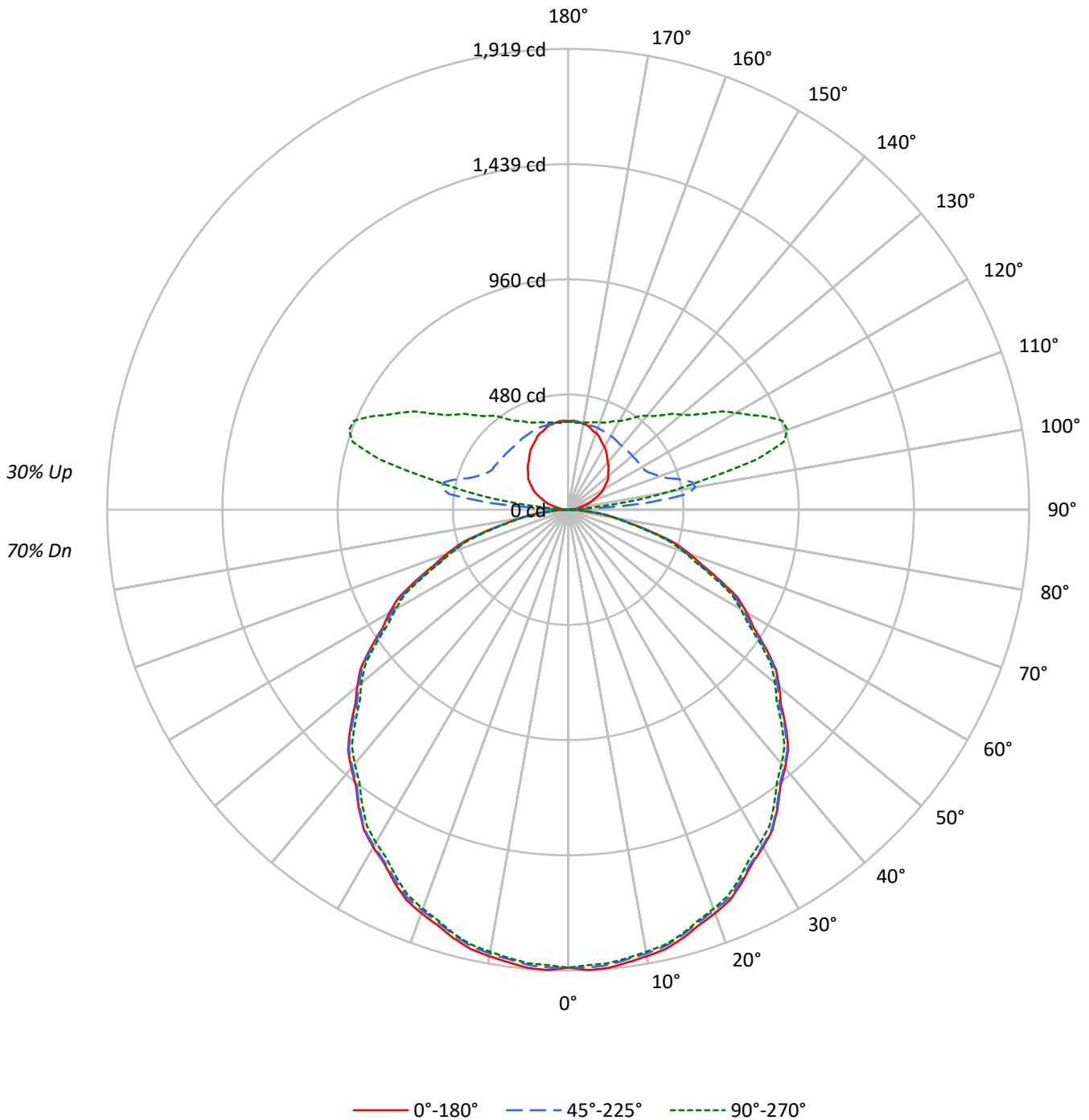
Input Watts (W): 71.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521436

CATALOG NUMBER: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P521436

CATALOG NUMBER: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_5000K

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°	17596	17596	17596
5°	17740	17625	17557
10°	17691	17583	17514
15°	17637	17527	17478
20°	17554	17441	17359
25°	17423	17327	17210
30°	17286	17231	17052
35°	17109	17050	16838
40°	16910	16846	16645
45°	16722	16612	16353
50°	16458	16323	16128
55°	16155	16003	15751
60°	15849	15559	15290
65°	15234	14913	14616
70°	14478	13971	13801
75°	13090	12715	12494
80°	10786	10786	10616
85°	7643	8744	9189

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16722 cd/sqm

TEST NUMBER: P521436

CATALOG NUMBER: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.5	2.3
10°-20°	516.9	6.7
20°-30°	781.8	10.1
30°-40°	941.7	12.2
40°-50°	977.7	12.7
50°-60°	886.3	11.5
60°-70°	676.1	8.8
70°-80°	378.2	4.9
80°-90°	98.3	1.3
90°-100°	167.5	2.2
100°-110°	476.6	6.2
110°-120°	456.7	5.9
120°-130°	361.4	4.7
130°-140°	290.1	3.8
140°-150°	227.1	2.9
150°-160°	166.2	2.2
160°-170°	102.9	1.3
170°-180°	34.9	0.5
0°-30°	1479.2	19.2
0°-40°	2420.9	31.4
0°-60°	4284.9	55.5
0°-90°	5437.5	70.4
90°-120°	1100.8	14.3
90°-150°	1979.5	25.6
90°-180°	2283.0	29.6
0°-180°	7721.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1907	1907	1907	1907	1907	
5°	1916	1896	1903	1898	1896	182
15°	1846	1828	1835	1833	1830	521
25°	1712	1694	1702	1690	1691	789
35°	1519	1507	1514	1497	1495	950
45°	1282	1274	1273	1257	1253	987
55°	1004	1002	995	982	979	897
65°	698	694	683	675	670	692
75°	367	361	357	352	350	388
85°	72	79	83	83	87	90
90°	0	0	0	0	0	4
95°	18	72	324	112	69	21
105°	74	112	486	858	816	78
115°	138	166	368	780	916	136
125°	194	216	352	583	698	174
135°	238	257	347	493	557	183
145°	280	295	350	426	465	175
155°	320	328	358	385	401	148
165°	354	355	363	370	376	99
175°	370	368	367	365	362	35
180°	368	368	368	368	368	

TEST NUMBER: P521436

CATALOG NUMBER: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1907.2	1907.2	1907.2	1907.2	1907.2
2.5°	1918.9	1903.3	1908.0	1904.5	1898.0
5°	1915.5	1896.1	1903.0	1897.7	1895.7
7.5°	1900.9	1882.7	1888.5	1885.4	1882.9
10°	1888.3	1870.9	1876.8	1873.6	1869.5
12.5°	1874.1	1855.9	1862.6	1857.8	1856.1
15°	1846.5	1828.1	1835.0	1832.8	1829.8
17.5°	1813.0	1794.4	1801.5	1797.3	1794.8
20°	1787.9	1768.5	1776.4	1768.0	1768.0
22.5°	1759.4	1740.0	1749.6	1737.1	1739.6
25°	1711.5	1694.1	1702.1	1689.6	1690.6
27.5°	1659.4	1643.1	1653.4	1637.2	1636.6
30°	1622.6	1606.2	1617.4	1599.6	1600.6
32.5°	1581.6	1567.7	1577.2	1560.2	1559.6
35°	1519.0	1506.8	1513.8	1497.0	1495.0
37.5°	1450.8	1441.8	1444.8	1428.8	1428.0
40°	1404.0	1395.8	1398.7	1382.0	1382.0
42.5°	1356.3	1348.9	1351.0	1332.6	1332.6
45°	1281.6	1274.4	1273.2	1257.4	1253.3
47.5°	1201.8	1196.1	1192.4	1178.2	1176.3
50°	1146.6	1142.5	1137.2	1124.6	1123.6
52.5°	1088.9	1087.2	1081.1	1067.7	1066.7
55°	1004.3	1002.3	994.9	982.3	979.2
57.5°	915.8	913.8	905.1	892.7	889.7
60°	858.9	852.8	843.2	831.6	828.6
62.5°	797.0	790.0	780.4	769.8	769.1
65°	697.8	693.7	683.1	674.7	669.5
67.5°	604.5	595.3	584.8	577.9	576.9
70°	536.7	527.5	517.9	512.6	511.6
72.5°	468.9	461.3	452.6	447.3	447.1
75°	367.2	361.1	356.7	351.5	350.5
77.5°	266.6	264.9	263.2	257.6	257.6
80°	203.0	203.0	203.0	199.8	199.8
82.5°	146.0	150.1	150.2	148.8	148.8
85°	72.2	79.3	82.6	82.7	86.8
87.5°	20.1	27.5	32.6	33.5	36.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.6	29.6	68.8	20.0	15.1
95°	18.2	72.2	324.3	112.2	69.2
97.5°	33.4	84.5	499.4	357.4	244.9
100°	44.0	91.9	537.4	544.4	419.3
102.5°	55.8	99.8	529.1	696.8	587.6
105°	74.1	112.3	485.7	858.0	815.6
107.5°	92.7	127.0	435.1	903.4	941.1
110°	105.5	137.6	406.1	886.0	970.8

TEST NUMBER: P521436

CATALOG NUMBER: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	148.3	386.5	844.9	965.7
115°	137.7	166.4	368.3	780.3	916.2
117.5°	155.2	182.1	357.6	709.6	853.6
120°	169.1	191.7	356.4	669.2	807.2
122.5°	180.3	202.9	353.6	633.7	761.9
125°	194.3	215.5	351.5	583.4	697.5
127.5°	209.5	229.3	350.4	553.3	647.3
130°	217.4	237.2	348.7	532.3	614.3
132.5°	225.7	245.0	348.7	516.0	591.4
135°	237.6	257.4	347.3	492.8	557.0
137.5°	248.8	268.1	347.2	473.1	528.6
140°	257.2	277.0	346.6	456.9	510.2
142.5°	266.7	283.2	348.3	443.9	491.7
145°	280.3	294.6	350.1	426.5	464.8
147.5°	291.9	305.8	353.2	408.9	442.0
150°	301.9	311.5	354.3	403.1	426.3
152.5°	309.7	319.9	355.5	395.2	416.8
155°	320.1	327.6	358.5	385.4	401.2
157.5°	332.9	337.5	359.2	381.0	392.2
160°	339.7	343.1	362.0	377.6	387.2
162.5°	343.6	347.5	362.6	374.8	382.2
165°	353.6	355.0	362.7	370.5	376.0
167.5°	360.5	359.3	365.9	369.5	371.7
170°	362.7	362.0	364.8	365.6	368.3
172.5°	367.8	365.4	366.5	364.4	366.6
175°	370.4	368.4	366.9	364.8	362.0
177.5°	371.5	368.2	366.5	364.3	364.8
180°	367.6	367.6	367.6	367.6	367.6

(END OF REPORT)