

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: P521646

Luminaire Tested: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521646
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-125U-125D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11449.7 lumens
Efficiency: N/A
Efficacy: 118.5 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: General Diffuse

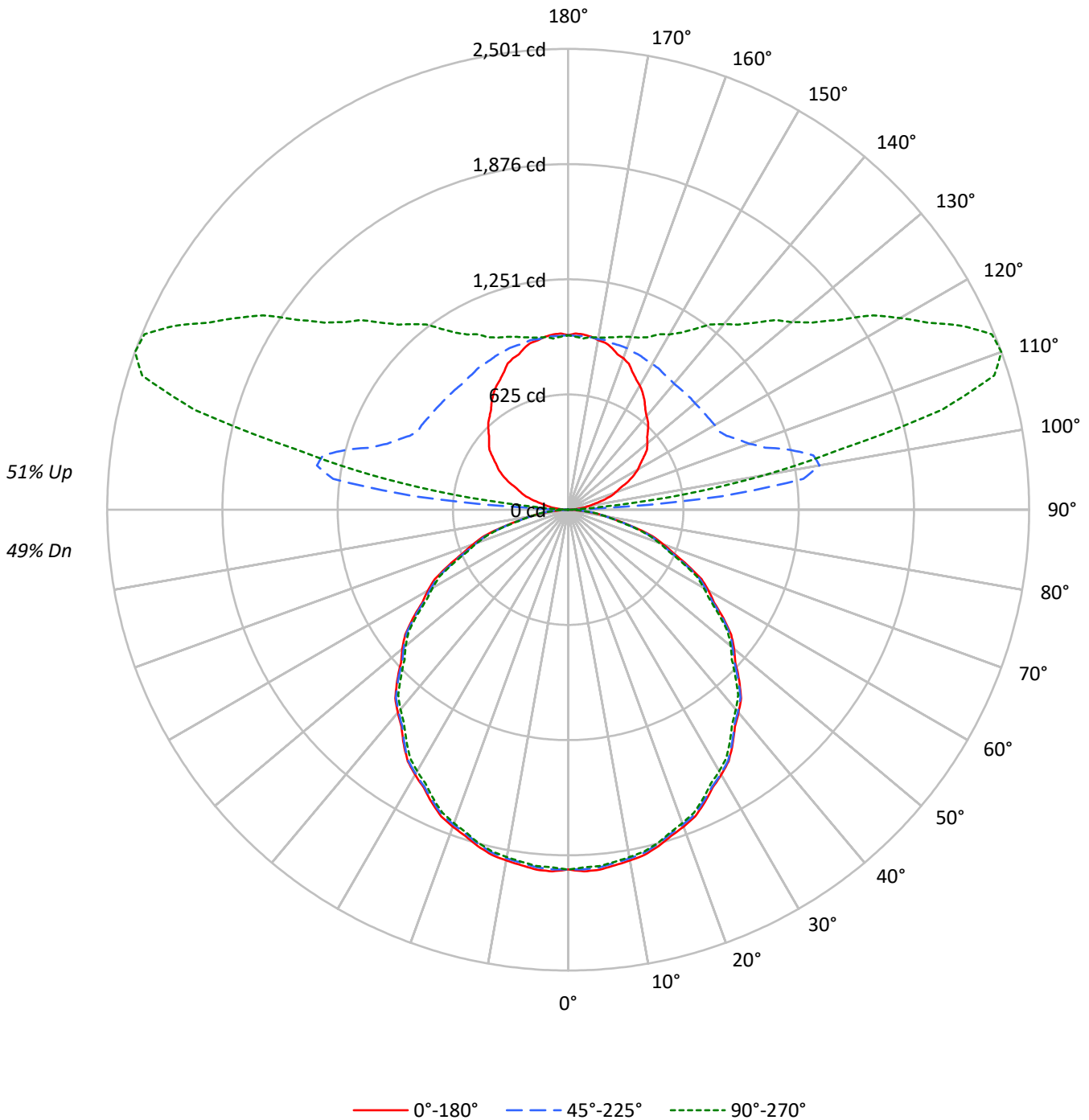
Input Watts (W): 96.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521646

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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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				
1	97	93	89	85	89	86	82	79	72	70	68	60	58	56	48	47	46	41				
2	88	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	39	34				
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	35	33	28				
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28	24				
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21				
6	62	50	42	36	57	46	39	34	39	34	29	33	29	25	27	24	21	18				
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16				
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	23	19	17	14				
9	50	37	30	25	46	35	28	23	30	24	20	25	21	18	21	18	15	13				
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18016	18016	18016
5°	18164	18045	17976
10°	18113	18003	17932
15°	18057	17946	17894
20°	17973	17858	17773
25°	17839	17741	17622
30°	17699	17642	17459
35°	17518	17457	17239
40°	17313	17248	17042
45°	17120	17009	16743
50°	16851	16712	16512
55°	16541	16385	16127
60°	16227	15930	15653
65°	15596	15269	14965
70°	14823	14302	14130
75°	13403	13022	12790
80°	11041	11041	10871
85°	7823	8956	9411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17120 cd/sqm

TEST NUMBER: P521646

CATALOG NUMBER: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	1.6
10°-20°	529.3	4.6
20°-30°	800.5	7.0
30°-40°	964.1	8.4
40°-50°	1001.0	8.7
50°-60°	907.5	7.9
60°-70°	692.3	6.0
70°-80°	387.2	3.4
80°-90°	100.7	0.9
90°-100°	431.5	3.8
100°-110°	1227.8	10.7
110°-120°	1176.4	10.3
120°-130°	931.1	8.1
130°-140°	747.3	6.5
140°-150°	585.1	5.1
150°-160°	428.1	3.7
160°-170°	265.2	2.3
170°-180°	90.0	0.8
0°-30°	1514.5	13.2
0°-40°	2478.7	21.6
0°-60°	4387.2	38.3
0°-90°	5567.3	48.6
90°-120°	2835.8	24.8
90°-150°	5099.2	44.5
90°-180°	5882.0	51.4
0°-180°	11449.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1953	1953	1953	1953	1953	
5°	1961	1941	1948	1943	1941	186
15°	1890	1872	1879	1877	1873	533
25°	1752	1735	1743	1730	1731	807
35°	1555	1543	1550	1533	1531	972
45°	1312	1305	1304	1287	1283	1011
55°	1028	1026	1019	1006	1003	919
65°	714	710	699	691	686	708
75°	376	370	365	360	359	397
85°	74	81	85	85	89	92
90°	0	0	0	0	0	5
95°	47	186	835	289	178	54
105°	191	289	1251	2210	2101	202
115°	355	429	949	2010	2360	349
125°	500	555	906	1503	1797	448
135°	612	663	895	1269	1435	472
145°	722	759	902	1099	1197	451
155°	825	844	924	993	1033	381
165°	911	914	934	954	969	256
175°	954	949	945	940	933	90
180°	947	947	947	947	947	

TEST NUMBER: P521646

CATALOG NUMBER: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1952.7	1952.7	1952.7	1952.7	1952.7
2.5°	1964.7	1948.8	1953.5	1950.0	1943.2
5°	1961.2	1941.3	1948.4	1943.0	1940.9
7.5°	1946.2	1927.6	1933.6	1930.3	1927.8
10°	1933.4	1915.6	1921.6	1918.3	1914.1
12.5°	1918.8	1900.2	1907.0	1902.1	1900.4
15°	1890.5	1871.7	1878.8	1876.6	1873.4
17.5°	1856.3	1837.2	1844.5	1840.1	1837.6
20°	1830.6	1810.7	1818.8	1810.2	1810.2
22.5°	1801.4	1781.5	1791.4	1778.6	1781.1
25°	1752.4	1734.6	1742.7	1729.9	1731.0
27.5°	1699.0	1682.3	1692.8	1676.3	1675.7
30°	1661.3	1644.6	1656.0	1637.8	1638.8
32.5°	1619.3	1605.1	1614.8	1597.5	1596.8
35°	1555.3	1542.7	1549.9	1532.7	1530.6
37.5°	1485.4	1476.2	1479.2	1462.9	1462.1
40°	1437.5	1429.1	1432.1	1415.0	1415.0
42.5°	1388.6	1381.1	1383.3	1364.4	1364.4
45°	1312.1	1304.8	1303.6	1287.4	1283.2
47.5°	1230.5	1224.7	1220.9	1206.3	1204.4
50°	1174.0	1169.8	1164.3	1151.4	1150.4
52.5°	1114.8	1113.2	1106.9	1093.2	1092.1
55°	1028.3	1026.2	1018.6	1005.7	1002.6
57.5°	937.7	935.6	926.7	914.0	910.9
60°	879.4	873.1	863.3	851.5	848.3
62.5°	816.0	808.9	799.1	788.1	787.5
65°	714.4	710.3	699.4	690.8	685.5
67.5°	618.9	609.5	598.8	591.7	590.6
70°	549.5	540.1	530.2	524.8	523.8
72.5°	480.1	472.3	463.4	458.0	457.8
75°	376.0	369.7	365.3	359.9	358.8
77.5°	272.9	271.2	269.5	263.7	263.7
80°	207.8	207.8	207.8	204.6	204.6
82.5°	149.5	153.7	153.8	152.3	152.3
85°	73.9	81.2	84.6	84.7	88.9
87.5°	20.6	28.1	33.4	34.3	36.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	14.4	76.4	177.2	51.6	38.9
95°	46.8	185.9	835.4	289.1	178.2
97.5°	86.1	217.7	1286.6	920.6	630.9
100°	113.4	236.6	1384.5	1402.4	1080.2
102.5°	143.7	257.0	1362.9	1795.1	1513.8
105°	190.8	289.4	1251.3	2210.2	2101.0
107.5°	238.7	327.1	1120.9	2327.2	2424.4
110°	271.9	354.6	1046.0	2282.4	2500.7

TEST NUMBER: P521646

CATALOG NUMBER: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	303.5	382.1	995.6	2176.5	2487.8
115°	354.7	428.6	948.8	2010.0	2360.3
117.5°	399.7	469.0	921.1	1827.9	2199.0
120°	435.7	493.8	918.2	1723.8	2079.4
122.5°	464.5	522.6	911.0	1632.5	1962.8
125°	500.5	555.1	905.6	1502.8	1796.8
127.5°	539.8	590.8	902.7	1425.3	1667.5
130°	559.9	611.0	898.4	1371.3	1582.5
132.5°	581.5	631.2	898.4	1329.1	1523.5
135°	612.1	663.2	894.8	1269.4	1434.9
137.5°	640.9	690.6	894.4	1218.9	1361.8
140°	662.5	713.6	893.0	1177.0	1314.3
142.5°	687.0	729.6	897.3	1143.5	1266.7
145°	722.0	758.9	902.0	1098.7	1197.3
147.5°	751.8	787.8	909.9	1053.4	1138.6
150°	777.8	802.4	912.8	1038.4	1098.2
152.5°	797.9	824.0	915.7	1018.1	1073.7
155°	824.6	843.9	923.6	992.9	1033.4
157.5°	857.7	869.3	925.4	981.5	1010.4
160°	875.0	883.8	932.6	972.8	997.4
162.5°	885.1	895.3	934.0	965.4	984.4
165°	911.0	914.5	934.4	954.5	968.6
167.5°	928.6	925.5	942.7	951.8	957.4
170°	934.4	932.6	939.8	941.8	948.8
172.5°	947.4	941.4	944.1	938.8	944.5
175°	954.2	948.9	945.2	939.6	932.6
177.5°	957.1	948.6	944.1	938.4	939.8
180°	947.0	947.0	947.0	947.0	947.0

(END OF REPORT)