

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: P521642

Luminaire Tested: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521642
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_4000K
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10884.9 lumens
Efficiency: N/A
Efficacy: 111.9 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

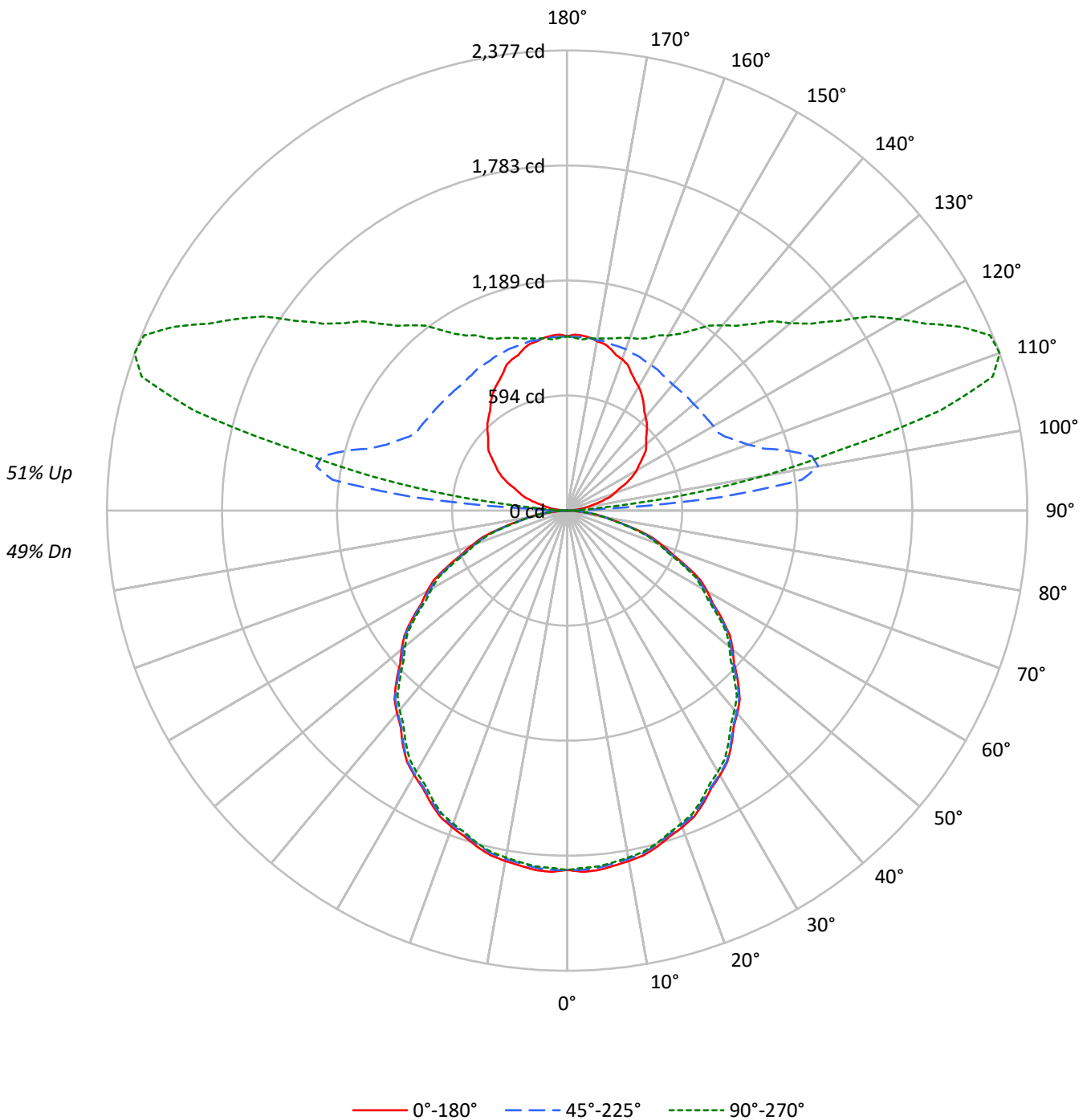
Input Watts (W): 97.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	17128	17128	17128
5°	17268	17155	17089
10°	17219	17114	17048
15°	17167	17060	17012
20°	17087	16977	16896
25°	16959	16866	16752
30°	16826	16772	16598
35°	16654	16596	16389
40°	16459	16398	16202
45°	16276	16170	15917
50°	16020	15888	15697
55°	15725	15577	15331
60°	15426	15144	14882
65°	14828	14515	14227
70°	14092	13598	13431
75°	12740	12377	12159
80°	10493	10493	10334
85°	7442	8511	8945

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16276 cd/sqm

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CATALOG NUMBER: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.7	1.6
10°-20°	503.2	4.6
20°-30°	761.0	7.0
30°-40°	916.6	8.4
40°-50°	951.6	8.7
50°-60°	862.7	7.9
60°-70°	658.1	6.0
70°-80°	368.1	3.4
80°-90°	95.7	0.9
90°-100°	410.2	3.8
100°-110°	1167.3	10.7
110°-120°	1118.4	10.3
120°-130°	885.2	8.1
130°-140°	710.5	6.5
140°-150°	556.2	5.1
150°-160°	407.0	3.7
160°-170°	252.1	2.3
170°-180°	85.5	0.8
0°-30°	1439.8	13.2
0°-40°	2356.4	21.6
0°-60°	4170.7	38.3
0°-90°	5292.6	48.6
90°-120°	2695.9	24.8
90°-150°	4847.7	44.5
90°-180°	5592.0	51.4
0°-180°	10884.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1856	1856	1856	1856	1856	
5°	1864	1846	1852	1847	1845	177
15°	1797	1779	1786	1784	1781	507
25°	1666	1649	1657	1645	1646	768
35°	1479	1467	1474	1457	1455	924
45°	1247	1240	1239	1224	1220	961
55°	978	976	968	956	953	873
65°	679	675	665	657	652	673
75°	357	351	347	342	341	378
85°	70	77	80	80	84	87
90°	0	0	0	0	0	5
95°	44	177	794	275	169	51
105°	181	275	1190	2101	1997	192
115°	337	408	902	1911	2244	332
125°	476	528	861	1429	1708	426
135°	582	630	851	1207	1364	449
145°	686	722	858	1044	1138	429
155°	784	802	878	944	982	362
165°	866	869	888	907	921	244
175°	907	902	899	893	887	86
180°	900	900	900	900	900	

TEST NUMBER: P521642

CATALOG NUMBER: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1856.4	1856.4	1856.4	1856.4	1856.4
2.5°	1867.8	1852.6	1857.2	1853.8	1847.4
5°	1864.5	1845.6	1852.3	1847.1	1845.2
7.5°	1850.2	1832.5	1838.2	1835.1	1832.7
10°	1838.0	1821.1	1826.8	1823.7	1819.7
12.5°	1824.2	1806.5	1813.0	1808.3	1806.7
15°	1797.3	1779.4	1786.1	1784.0	1781.0
17.5°	1764.7	1746.6	1753.5	1749.4	1747.0
20°	1740.3	1721.3	1729.1	1720.9	1720.9
22.5°	1712.6	1693.7	1703.0	1690.8	1693.2
25°	1665.9	1649.0	1656.8	1644.6	1645.6
27.5°	1615.2	1599.3	1609.3	1593.6	1593.0
30°	1579.4	1563.4	1574.3	1557.0	1558.0
32.5°	1539.5	1525.9	1535.2	1518.7	1518.1
35°	1478.6	1466.6	1473.5	1457.1	1455.1
37.5°	1412.2	1403.4	1406.3	1390.8	1390.0
40°	1366.6	1358.6	1361.5	1345.2	1345.2
42.5°	1320.1	1312.9	1315.0	1297.1	1297.1
45°	1247.4	1240.4	1239.3	1223.9	1219.9
47.5°	1169.8	1164.2	1160.7	1146.8	1145.0
50°	1116.1	1112.1	1106.9	1094.6	1093.6
52.5°	1059.8	1058.2	1052.3	1039.2	1038.3
55°	977.6	975.6	968.4	956.1	953.1
57.5°	891.4	889.4	881.0	868.9	866.0
60°	836.0	830.0	820.7	809.5	806.5
62.5°	775.7	769.0	759.6	749.2	748.7
65°	679.2	675.2	664.9	656.7	651.7
67.5°	588.4	579.4	569.2	562.5	561.5
70°	522.4	513.4	504.1	498.9	497.9
72.5°	456.4	449.0	440.5	435.4	435.2
75°	357.4	351.4	347.2	342.1	341.1
77.5°	259.5	257.9	256.2	250.7	250.7
80°	197.5	197.5	197.5	194.5	194.5
82.5°	142.2	146.1	146.2	144.8	144.8
85°	70.3	77.2	80.4	80.5	84.5
87.5°	19.6	26.7	31.8	32.6	35.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.7	72.6	168.4	49.0	37.0
95°	44.5	176.7	794.2	274.9	169.4
97.5°	81.8	207.0	1223.1	875.2	599.7
100°	107.8	225.0	1316.2	1333.2	1026.9
102.5°	136.6	244.4	1295.7	1706.5	1439.1
105°	181.4	275.1	1189.5	2101.2	1997.4
107.5°	227.0	311.0	1065.6	2212.4	2304.8
110°	258.4	337.1	994.4	2169.9	2377.4

TEST NUMBER: P521642

CATALOG NUMBER: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.6	363.2	946.5	2069.2	2365.0
115°	337.2	407.5	902.0	1910.8	2243.9
117.5°	380.0	445.9	875.6	1737.7	2090.5
120°	414.2	469.4	872.9	1638.8	1976.9
122.5°	441.6	496.8	866.1	1552.0	1866.0
125°	475.8	527.7	860.9	1428.7	1708.1
127.5°	513.1	561.7	858.2	1355.0	1585.3
130°	532.3	580.8	854.1	1303.6	1504.5
132.5°	552.8	600.0	854.1	1263.6	1448.3
135°	581.9	630.5	850.7	1206.8	1364.1
137.5°	609.3	656.5	850.3	1158.7	1294.6
140°	629.9	678.4	848.9	1118.9	1249.4
142.5°	653.1	693.6	853.0	1087.1	1204.3
145°	686.3	721.5	857.5	1044.5	1138.2
147.5°	714.8	748.9	865.0	1001.4	1082.4
150°	739.4	762.8	867.8	987.2	1044.1
152.5°	758.6	783.3	870.5	967.9	1020.8
155°	783.9	802.3	878.0	943.9	982.4
157.5°	815.4	826.4	879.7	933.1	960.5
160°	831.8	840.2	886.6	924.8	948.2
162.5°	841.4	851.1	888.0	917.8	935.9
165°	866.1	869.4	888.3	907.4	920.8
167.5°	882.8	879.8	896.2	904.9	910.2
170°	888.3	886.6	893.4	895.3	902.0
172.5°	900.6	894.9	897.5	892.5	897.9
175°	907.1	902.1	898.6	893.3	886.6
177.5°	909.9	901.8	897.5	892.1	893.4
180°	900.3	900.3	900.3	900.3	900.3

(END OF REPORT)