

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: P521645

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521645
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_5700K
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 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11342.2 lumens
Efficiency: N/A
Efficacy: 116.9 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

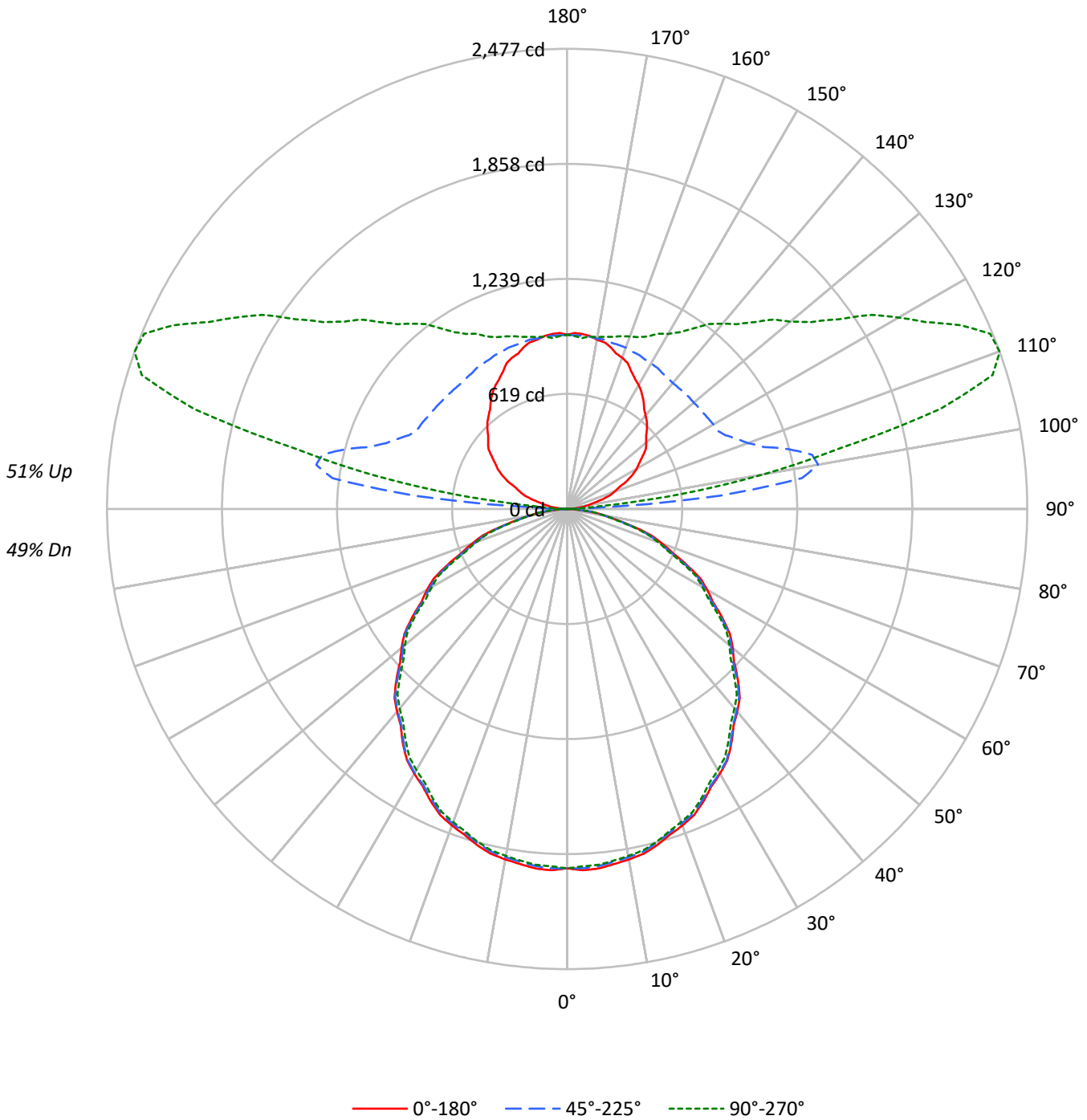
Input Watts (W): 97
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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°	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.1	1.6
10°-20°	524.3	4.6
20°-30°	792.9	7.0
30°-40°	955.1	8.4
40°-50°	991.6	8.7
50°-60°	898.9	7.9
60°-70°	685.7	6.0
70°-80°	383.6	3.4
80°-90°	99.7	0.9
90°-100°	427.5	3.8
100°-110°	1216.3	10.7
110°-120°	1165.4	10.3
120°-130°	922.3	8.1
130°-140°	740.3	6.5
140°-150°	579.6	5.1
150°-160°	424.1	3.7
160°-170°	262.7	2.3
170°-180°	89.1	0.8
0°-30°	1500.3	13.2
0°-40°	2455.4	21.6
0°-60°	4346.0	38.3
0°-90°	5515.0	48.6
90°-120°	2809.1	24.8
90°-150°	5051.4	44.5
90°-180°	5827.0	51.4
0°-180°	11342.2	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	5
95°	46	184	828	286	177	53
105°	189	287	1240	2189	2081	200
115°	351	425	940	1991	2338	346
125°	496	550	897	1489	1780	444
135°	606	657	886	1258	1421	468
145°	715	752	894	1088	1186	447
155°	817	836	915	984	1024	378
165°	902	906	926	946	960	254
175°	945	940	936	931	924	90
180°	938	938	938	938	938	

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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°	14.3	75.7	175.5	51.1	38.5
95°	46.4	184.1	827.5	286.4	176.6
97.5°	85.2	215.7	1274.5	912.0	624.9
100°	112.4	234.4	1371.5	1389.2	1070.1
102.5°	142.3	254.6	1350.1	1778.2	1499.5
105°	189.0	286.7	1239.5	2189.4	2081.3
107.5°	236.5	324.0	1110.4	2305.4	2401.6
110°	269.3	351.3	1036.2	2261.0	2477.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	300.7	378.5	986.3	2156.1	2464.4
115°	351.3	424.6	939.9	1991.1	2338.1
117.5°	395.9	464.6	912.4	1810.7	2178.3
120°	431.6	489.1	909.6	1707.7	2059.9
122.5°	460.1	517.7	902.4	1617.2	1944.3
125°	495.8	549.9	897.1	1488.7	1779.9
127.5°	534.7	585.3	894.2	1411.9	1651.8
130°	554.7	605.2	890.0	1358.4	1567.7
132.5°	576.1	625.2	890.0	1316.7	1509.2
135°	606.4	657.0	886.4	1257.5	1421.4
137.5°	634.9	684.1	886.0	1207.4	1349.0
140°	656.3	706.9	884.6	1165.9	1301.9
142.5°	680.6	722.8	888.9	1132.8	1254.8
145°	715.2	751.8	893.5	1088.4	1186.0
147.5°	744.8	780.4	901.4	1043.5	1127.9
150°	770.5	794.9	904.2	1028.6	1087.9
152.5°	790.4	816.2	907.1	1008.6	1063.7
155°	816.8	836.0	914.9	983.6	1023.7
157.5°	849.6	861.2	916.7	972.3	1000.9
160°	866.8	875.5	923.8	963.6	988.0
162.5°	876.8	886.9	925.3	956.4	975.2
165°	902.4	905.9	925.6	945.6	959.5
167.5°	919.9	916.8	933.8	942.9	948.4
170°	925.6	923.9	931.0	932.9	939.9
172.5°	938.5	932.5	935.3	930.0	935.6
175°	945.2	940.0	936.3	930.8	923.8
177.5°	948.1	939.7	935.3	929.6	931.0
180°	938.1	938.1	938.1	938.1	938.1

(END OF REPORT)