

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: P521698

Luminaire Tested: SQ4-F-150U-125D-92765-1D-UNV-STD-W-4\_6500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521698  
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-150U-125D-92765-1D-UNV-STD-W-4\_6500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 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: 12656.5 lumens  
Efficiency: N/A  
Efficacy: 119.2 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

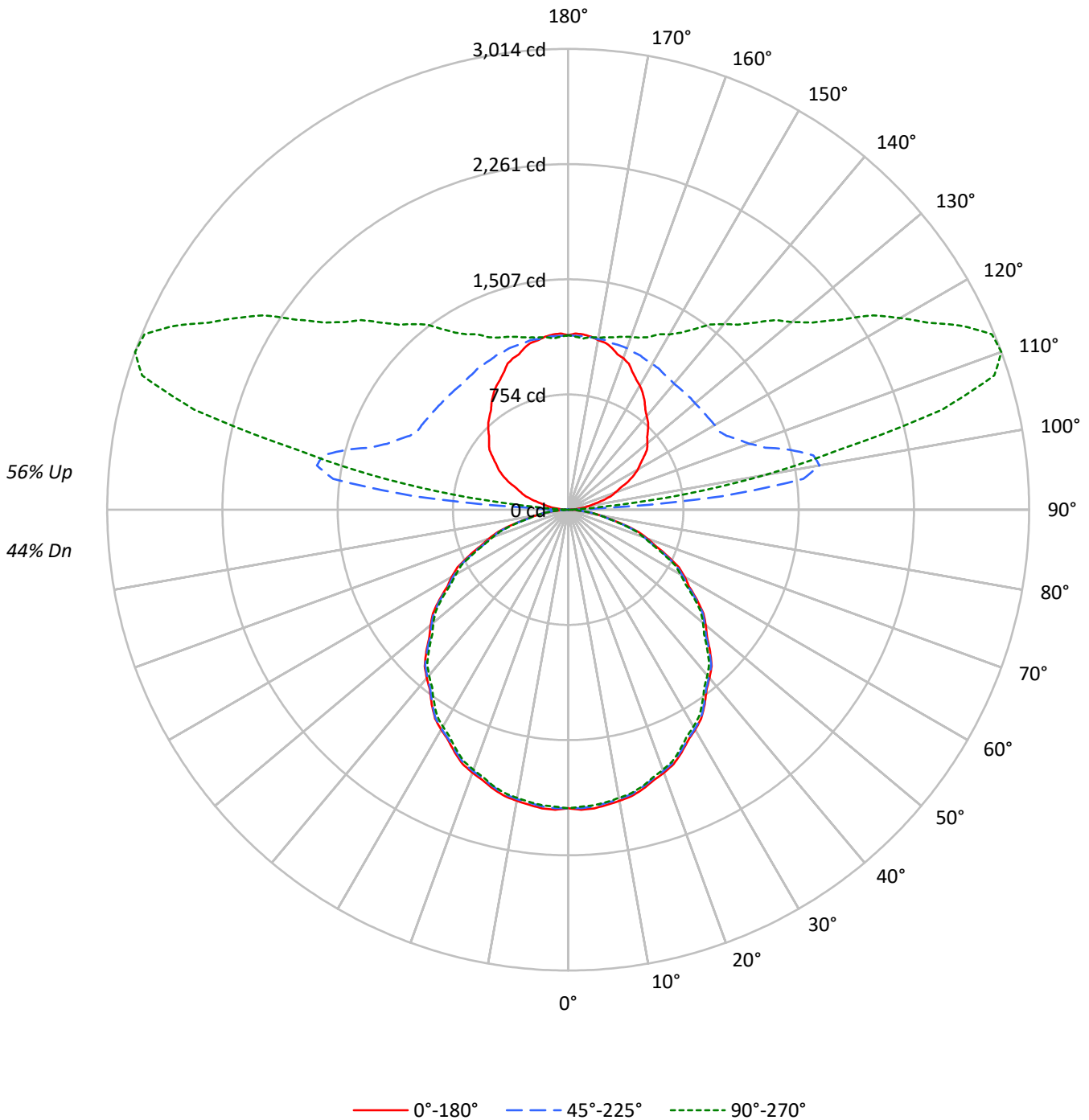
Input Watts (W): 106.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	96	92	88	85	88	84	81	78	70	68	65	57	55	54	45	43	42	37				
2	88	80	74	69	80	74	68	64	61	57	54	50	47	44	39	37	36	31				
3	80	70	63	57	73	65	58	53	54	49	45	44	40	37	34	32	30	26				
4	73	62	54	48	66	57	50	45	48	42	38	39	35	32	31	28	26	22				
5	67	55	47	41	61	51	44	38	42	37	33	35	31	28	28	25	22	19				
6	61	49	41	35	56	45	38	33	38	33	29	31	27	24	25	22	20	17				
7	57	44	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15				
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	21	18	15	13				
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12				
10	46	34	26	22	42	31	25	20	26	21	18	22	18	15	18	15	13	11				

**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

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.8	1.5
10°-20°	529.3	4.2
20°-30°	800.5	6.3
30°-40°	964.1	7.6
40°-50°	1001.0	7.9
50°-60°	907.5	7.2
60°-70°	692.3	5.5
70°-80°	387.2	3.1
80°-90°	100.7	0.8
90°-100°	520.1	4.1
100°-110°	1479.7	11.7
110°-120°	1417.7	11.2
120°-130°	1122.1	8.9
130°-140°	900.6	7.1
140°-150°	705.1	5.6
150°-160°	515.9	4.1
160°-170°	319.6	2.5
170°-180°	108.4	0.9
0°-30°	1514.5	12.0
0°-40°	2478.7	19.6
0°-60°	4387.2	34.7
0°-90°	5567.3	44.0
90°-120°	3417.5	27.0
90°-150°	6145.3	48.6
90°-180°	7089.0	56.0
0°-180°	12656.5	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°	56	224	1007	348	215	64
105°	230	349	1508	2664	2532	243
115°	427	516	1143	2422	2844	421
125°	603	669	1091	1811	2165	540
135°	738	799	1078	1530	1729	569
145°	870	915	1087	1324	1443	544
155°	994	1017	1113	1197	1245	459
165°	1098	1102	1126	1150	1167	309
175°	1150	1144	1139	1132	1124	109
180°	1141	1141	1141	1141	1141	

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**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°	17.4	92.0	213.5	62.1	46.9
95°	56.4	224.0	1006.8	348.5	214.8
97.5°	103.7	262.4	1550.5	1109.5	760.3
100°	136.7	285.2	1668.5	1690.1	1301.8
102.5°	173.1	309.8	1642.5	2163.3	1824.3
105°	230.0	348.8	1508.0	2663.6	2532.1
107.5°	287.7	394.2	1350.9	2804.6	2921.8
110°	327.6	427.3	1260.6	2750.7	3013.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	365.8	460.4	1199.9	2623.0	2998.1
115°	427.4	516.5	1143.4	2422.3	2844.5
117.5°	481.7	565.3	1110.0	2202.9	2650.1
120°	525.1	595.1	1106.6	2077.5	2506.0
122.5°	559.8	629.8	1097.9	1967.4	2365.4
125°	603.2	669.0	1091.4	1811.1	2165.4
127.5°	650.5	712.0	1087.9	1717.7	2009.6
130°	674.8	736.3	1082.7	1652.6	1907.2
132.5°	700.8	760.6	1082.7	1601.8	1836.0
135°	737.7	799.2	1078.4	1529.8	1729.3
137.5°	772.4	832.2	1077.9	1468.9	1641.2
140°	798.5	860.0	1076.2	1418.4	1583.9
142.5°	828.0	879.3	1081.4	1378.1	1526.6
145°	870.1	914.6	1087.0	1324.1	1442.9
147.5°	906.1	949.4	1096.6	1269.5	1372.1
150°	937.3	967.0	1100.1	1251.4	1323.5
152.5°	961.6	993.0	1103.5	1227.0	1294.0
155°	993.7	1017.1	1113.1	1196.6	1245.4
157.5°	1033.7	1047.7	1115.2	1182.9	1217.7
160°	1054.5	1065.1	1123.9	1172.3	1202.0
162.5°	1066.6	1078.9	1125.7	1163.5	1186.4
165°	1097.9	1102.1	1126.1	1150.3	1167.3
167.5°	1119.1	1115.3	1136.1	1147.1	1153.9
170°	1126.1	1124.0	1132.6	1135.0	1143.4
172.5°	1141.7	1134.5	1137.8	1131.4	1138.2
175°	1150.0	1143.6	1139.1	1132.4	1123.9
177.5°	1153.4	1143.2	1137.8	1130.9	1132.6
180°	1141.3	1141.3	1141.3	1141.3	1141.3

(END OF REPORT)