

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: P521691

Luminaire Tested: SQ4-F-150U-125D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521691
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11304.8 lumens
Efficiency: N/A
Efficacy: 106.0 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: General Diffuse

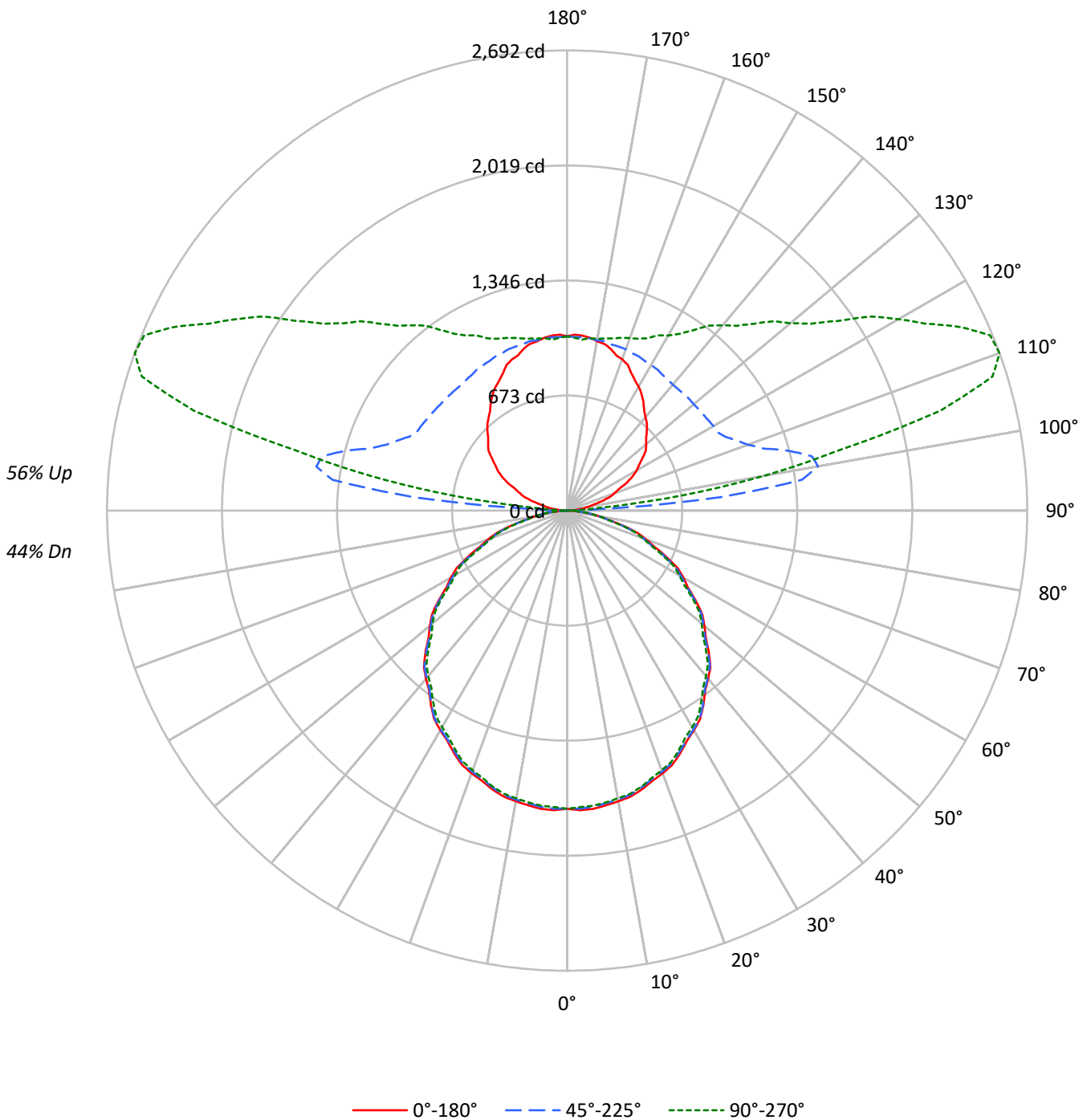
Input Watts (W): 106.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	16091	16091	16091
5°	16224	16118	16056
10°	16179	16080	16017
15°	16129	16029	15983
20°	16054	15950	15875
25°	15934	15846	15739
30°	15809	15758	15595
35°	15647	15593	15399
40°	15463	15407	15222
45°	15292	15193	14955
50°	15051	14928	14748
55°	14774	14636	14404
60°	14494	14229	13981
65°	13930	13640	13367
70°	13240	12776	12619
75°	11970	11628	11425
80°	9861	9861	9707
85°	6987	8003	8405

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15292 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.1	1.5
10°-20°	472.7	4.2
20°-30°	715.0	6.3
30°-40°	861.2	7.6
40°-50°	894.1	7.9
50°-60°	810.6	7.2
60°-70°	618.3	5.5
70°-80°	345.8	3.1
80°-90°	89.9	0.8
90°-100°	464.5	4.1
100°-110°	1321.7	11.7
110°-120°	1266.3	11.2
120°-130°	1002.2	8.9
130°-140°	804.5	7.1
140°-150°	629.8	5.6
150°-160°	460.8	4.1
160°-170°	285.4	2.5
170°-180°	96.9	0.9
0°-30°	1352.8	12.0
0°-40°	2214.0	19.6
0°-60°	3918.6	34.7
0°-90°	4972.7	44.0
90°-120°	3052.5	27.0
90°-150°	5489.0	48.6
90°-180°	6332.0	56.0
0°-180°	11304.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1744	1744	1744	1744	1744	
5°	1752	1734	1740	1736	1734	166
15°	1689	1672	1678	1676	1673	476
25°	1565	1549	1557	1545	1546	721
35°	1389	1378	1384	1369	1367	868
45°	1172	1166	1164	1150	1146	903
55°	918	917	910	898	896	820
65°	638	634	625	617	612	633
75°	336	330	326	321	320	355
85°	66	73	76	76	79	82
90°	0	0	0	0	0	5
95°	50	200	899	311	192	58
105°	205	312	1347	2379	2262	217
115°	382	461	1021	2164	2541	376
125°	539	598	975	1618	1934	482
135°	659	714	963	1366	1545	508
145°	777	817	971	1183	1289	485
155°	888	908	994	1069	1112	410
165°	981	984	1006	1028	1043	276
175°	1027	1022	1018	1012	1004	97
180°	1019	1019	1019	1019	1019	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1744.1	1744.1	1744.1	1744.1	1744.1
2.5°	1754.8	1740.6	1744.9	1741.7	1735.7
5°	1751.8	1734.0	1740.3	1735.5	1733.6
7.5°	1738.4	1721.7	1727.1	1724.2	1721.9
10°	1726.9	1711.0	1716.4	1713.4	1709.7
12.5°	1713.9	1697.2	1703.4	1698.9	1697.4
15°	1688.6	1671.8	1678.1	1676.1	1673.3
17.5°	1658.0	1641.0	1647.5	1643.6	1641.4
20°	1635.1	1617.3	1624.5	1616.9	1616.9
22.5°	1609.0	1591.3	1600.0	1588.6	1590.9
25°	1565.2	1549.3	1556.6	1545.2	1546.1
27.5°	1517.6	1502.6	1512.0	1497.3	1496.7
30°	1483.9	1468.9	1479.1	1462.9	1463.8
32.5°	1446.4	1433.7	1442.4	1426.9	1426.3
35°	1389.2	1378.0	1384.4	1369.0	1367.2
37.5°	1326.8	1318.6	1321.3	1306.7	1305.9
40°	1283.9	1276.5	1279.2	1263.9	1263.9
42.5°	1240.3	1233.6	1235.5	1218.7	1218.7
45°	1172.0	1165.5	1164.4	1149.9	1146.2
47.5°	1099.1	1093.9	1090.5	1077.4	1075.8
50°	1048.6	1044.8	1040.0	1028.5	1027.5
52.5°	995.8	994.3	988.7	976.4	975.5
55°	918.5	916.6	909.9	898.3	895.5
57.5°	837.5	835.7	827.8	816.4	813.6
60°	785.5	779.9	771.1	760.5	757.7
62.5°	728.8	722.5	713.7	704.0	703.4
65°	638.1	634.4	624.8	617.0	612.3
67.5°	552.8	544.4	534.8	528.5	527.5
70°	490.8	482.4	473.6	468.8	467.8
72.5°	428.8	421.9	413.9	409.1	408.9
75°	335.8	330.2	326.2	321.4	320.5
77.5°	243.8	242.3	240.7	235.5	235.5
80°	185.6	185.6	185.6	182.7	182.7
82.5°	133.6	137.3	137.4	136.0	136.0
85°	66.0	72.6	75.6	75.7	79.4
87.5°	18.4	25.1	29.9	30.7	32.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	15.5	82.2	190.7	55.5	41.9
95°	50.4	200.1	899.2	311.2	191.9
97.5°	92.6	234.4	1384.9	991.0	679.1
100°	122.1	254.7	1490.3	1509.6	1162.8
102.5°	154.7	276.7	1467.1	1932.3	1629.5
105°	205.4	311.5	1346.9	2379.1	2261.7
107.5°	257.0	352.1	1206.6	2505.1	2609.7
110°	292.6	381.7	1126.0	2456.9	2691.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.7	411.3	1071.7	2342.9	2677.9
115°	381.8	461.4	1021.3	2163.6	2540.7
117.5°	430.2	504.9	991.5	1967.6	2367.1
120°	469.0	531.5	988.4	1855.6	2238.4
122.5°	500.0	562.5	980.6	1757.3	2112.8
125°	538.8	597.5	974.8	1617.7	1934.1
127.5°	581.0	636.0	971.7	1534.2	1795.0
130°	602.7	657.7	967.1	1476.1	1703.5
132.5°	626.0	679.4	967.1	1430.7	1639.9
135°	658.9	713.9	963.2	1366.5	1544.6
137.5°	689.9	743.4	962.8	1312.0	1465.9
140°	713.2	768.1	961.3	1266.9	1414.7
142.5°	739.5	785.4	965.9	1230.9	1363.6
145°	777.1	816.9	970.9	1182.7	1288.8
147.5°	809.3	848.0	979.5	1133.9	1225.6
150°	837.2	863.7	982.6	1117.8	1182.2
152.5°	858.9	887.0	985.7	1095.9	1155.8
155°	887.6	908.5	994.2	1068.8	1112.4
157.5°	923.3	935.8	996.1	1056.5	1087.6
160°	941.9	951.3	1003.9	1047.1	1073.7
162.5°	952.7	963.7	1005.4	1039.2	1059.7
165°	980.6	984.4	1005.8	1027.5	1042.6
167.5°	999.6	996.2	1014.7	1024.6	1030.6
170°	1005.8	1003.9	1011.6	1013.7	1021.3
172.5°	1019.8	1013.3	1016.3	1010.6	1016.7
175°	1027.1	1021.5	1017.5	1011.5	1003.9
177.5°	1030.2	1021.1	1016.3	1010.1	1011.6
180°	1019.4	1019.4	1019.4	1019.4	1019.4

(END OF REPORT)