

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: P521693

Luminaire Tested: SQ4-F-150U-125D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521693
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_3500K
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11816.0 lumens
Efficiency: N/A
Efficacy: 110.4 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

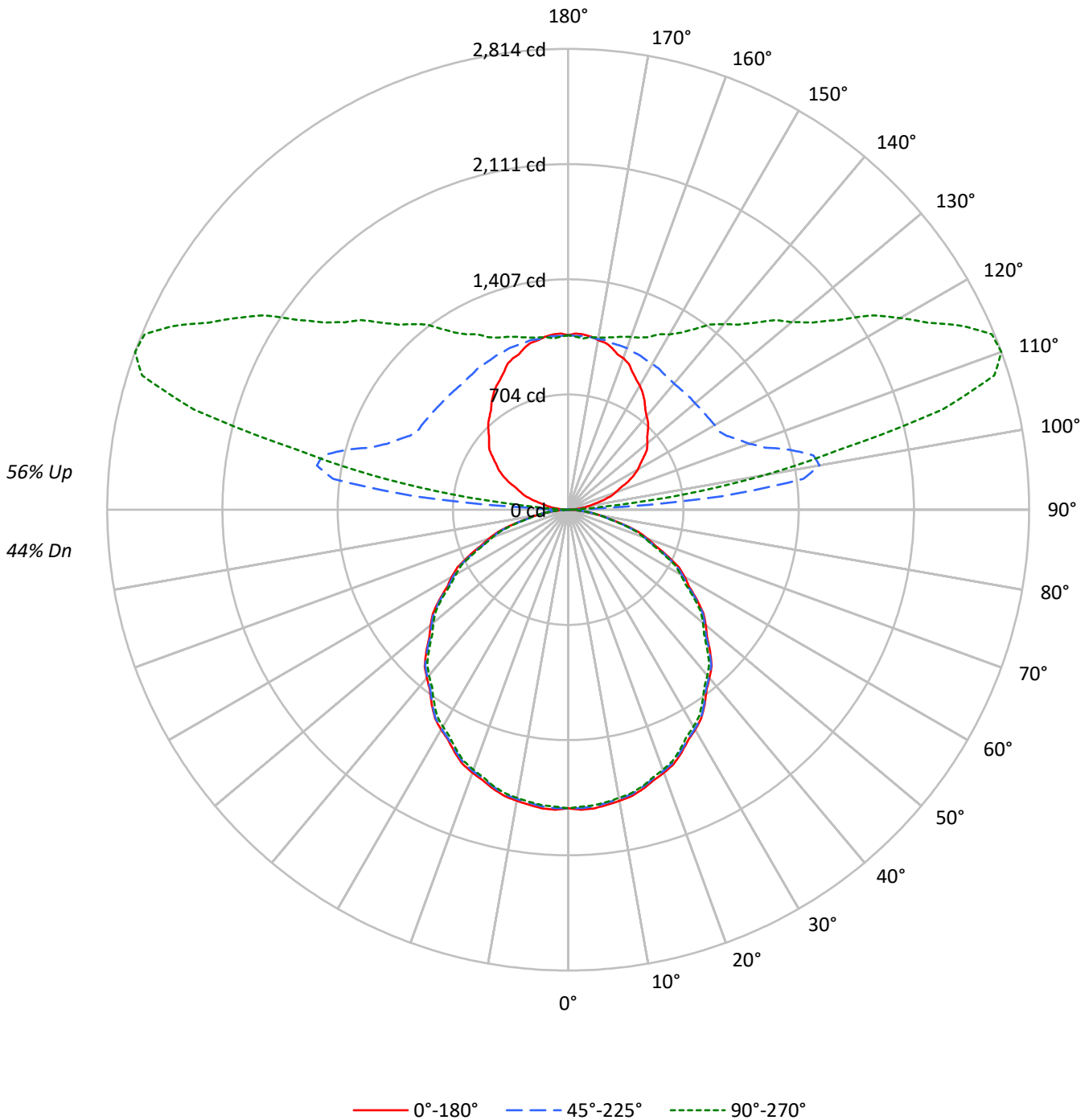
Input Watts (W): 107
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	16819	16819	16819
5°	16958	16847	16782
10°	16910	16807	16742
15°	16859	16754	16706
20°	16780	16672	16593
25°	16654	16563	16451
30°	16524	16470	16300
35°	16354	16298	16095
40°	16163	16103	15910
45°	15984	15879	15631
50°	15731	15602	15416
55°	15442	15297	15056
60°	15149	14873	14614
65°	14561	14256	13972
70°	13838	13353	13191
75°	12512	12156	11942
80°	10308	10308	10148
85°	7304	8363	8786

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15984 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.5	1.5
10°-20°	494.1	4.2
20°-30°	747.3	6.3
30°-40°	900.1	7.6
40°-50°	934.5	7.9
50°-60°	847.2	7.2
60°-70°	646.3	5.5
70°-80°	361.5	3.1
80°-90°	94.0	0.8
90°-100°	485.5	4.1
100°-110°	1381.5	11.7
110°-120°	1323.6	11.2
120°-130°	1047.6	8.9
130°-140°	840.8	7.1
140°-150°	658.3	5.6
150°-160°	481.7	4.1
160°-170°	298.3	2.5
170°-180°	101.2	0.9
0°-30°	1414.0	12.0
0°-40°	2314.1	19.6
0°-60°	4095.8	34.7
0°-90°	5197.6	44.0
90°-120°	3190.6	27.0
90°-150°	5737.2	48.6
90°-180°	6618.0	56.0
0°-180°	11816.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1823	1823	1823	1823	1823	
5°	1831	1812	1819	1814	1812	174
15°	1765	1747	1754	1752	1749	498
25°	1636	1619	1627	1615	1616	754
35°	1452	1440	1447	1431	1429	908
45°	1225	1218	1217	1202	1198	944
55°	960	958	951	939	936	858
65°	667	663	653	645	640	661
75°	351	345	341	336	335	371
85°	69	76	79	79	83	86
90°	0	0	0	0	0	5
95°	53	209	940	325	200	60
105°	215	326	1408	2487	2364	227
115°	399	482	1068	2262	2656	393
125°	563	624	1019	1691	2022	504
135°	689	746	1007	1428	1614	531
145°	812	854	1015	1236	1347	507
155°	928	950	1039	1117	1163	429
165°	1025	1029	1051	1074	1090	288
175°	1074	1068	1064	1057	1049	102
180°	1066	1066	1066	1066	1066	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1823.0	1823.0	1823.0	1823.0	1823.0
2.5°	1834.2	1819.3	1823.8	1820.5	1814.2
5°	1831.0	1812.4	1819.0	1814.0	1812.0
7.5°	1817.0	1799.6	1805.2	1802.1	1799.8
10°	1805.0	1788.4	1794.0	1790.9	1787.0
12.5°	1791.4	1774.0	1780.4	1775.8	1774.2
15°	1765.0	1747.4	1754.0	1751.9	1749.0
17.5°	1733.0	1715.2	1722.0	1717.9	1715.6
20°	1709.0	1690.4	1698.0	1690.0	1690.0
22.5°	1681.8	1663.2	1672.4	1660.5	1662.8
25°	1636.0	1619.4	1627.0	1615.0	1616.0
27.5°	1586.2	1570.6	1580.4	1565.0	1564.4
30°	1551.0	1535.4	1546.0	1529.0	1530.0
32.5°	1511.8	1498.5	1507.6	1491.4	1490.8
35°	1452.0	1440.3	1447.0	1431.0	1429.0
37.5°	1386.8	1378.2	1381.0	1365.8	1365.0
40°	1342.0	1334.2	1337.0	1321.0	1321.0
42.5°	1296.4	1289.4	1291.4	1273.8	1273.8
45°	1225.0	1218.2	1217.0	1201.9	1198.0
47.5°	1148.8	1143.3	1139.8	1126.2	1124.4
50°	1096.0	1092.1	1087.0	1075.0	1074.0
52.5°	1040.8	1039.2	1033.4	1020.6	1019.6
55°	960.0	958.0	951.0	938.9	936.0
57.5°	875.4	873.4	865.2	853.3	850.4
60°	821.0	815.1	806.0	794.9	792.0
62.5°	761.8	755.2	746.0	735.8	735.2
65°	667.0	663.1	653.0	644.9	640.0
67.5°	577.8	569.0	559.0	552.4	551.4
70°	513.0	504.2	495.0	490.0	489.0
72.5°	448.2	441.0	432.6	427.6	427.4
75°	351.0	345.1	341.0	336.0	335.0
77.5°	254.8	253.2	251.6	246.2	246.2
80°	194.0	194.0	194.0	191.0	191.0
82.5°	139.6	143.5	143.6	142.2	142.2
85°	69.0	75.8	79.0	79.1	83.0
87.5°	19.2	26.2	31.2	32.1	34.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.2	85.9	199.3	58.0	43.8
95°	52.7	209.1	939.9	325.3	200.5
97.5°	96.8	245.0	1447.5	1035.8	709.8
100°	127.6	266.3	1557.7	1577.8	1215.4
102.5°	161.6	289.2	1533.4	2019.7	1703.2
105°	214.7	325.6	1407.8	2486.7	2363.9
107.5°	268.6	368.0	1261.2	2618.4	2727.7
110°	305.9	399.0	1176.9	2568.0	2813.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	341.5	429.9	1120.2	2448.9	2799.0
115°	399.1	482.2	1067.5	2261.5	2655.6
117.5°	449.7	527.7	1036.3	2056.6	2474.1
120°	490.2	555.6	1033.1	1939.5	2339.6
122.5°	522.6	588.0	1025.0	1836.8	2208.4
125°	563.1	624.5	1018.9	1690.8	2021.6
127.5°	607.3	664.7	1015.7	1603.6	1876.1
130°	630.0	687.4	1010.8	1542.9	1780.5
132.5°	654.3	710.1	1010.8	1495.4	1714.1
135°	688.7	746.2	1006.7	1428.3	1614.4
137.5°	721.1	777.0	1006.3	1371.4	1532.2
140°	745.4	802.9	1004.7	1324.2	1478.7
142.5°	773.0	820.9	1009.6	1286.6	1425.2
145°	812.3	853.9	1014.8	1236.1	1347.0
147.5°	845.9	886.3	1023.8	1185.2	1281.0
150°	875.1	902.8	1027.0	1168.3	1235.6
152.5°	897.8	927.1	1030.2	1145.5	1208.1
155°	927.7	949.5	1039.2	1117.2	1162.7
157.5°	965.0	978.1	1041.2	1104.3	1136.8
160°	984.5	994.4	1049.3	1094.5	1122.2
162.5°	995.8	1007.3	1050.9	1086.2	1107.6
165°	1025.0	1028.9	1051.3	1073.9	1089.8
167.5°	1044.8	1041.3	1060.6	1070.9	1077.2
170°	1051.3	1049.3	1057.4	1059.6	1067.5
172.5°	1065.9	1059.2	1062.2	1056.3	1062.6
175°	1073.6	1067.6	1063.5	1057.2	1049.3
177.5°	1076.8	1067.3	1062.2	1055.8	1057.4
180°	1065.5	1065.5	1065.5	1065.5	1065.5

(END OF REPORT)