

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: P521695

Luminaire Tested: SQ4-F-150U-125D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521695
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12226.3 lumens
Efficiency: N/A
Efficacy: 114.5 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

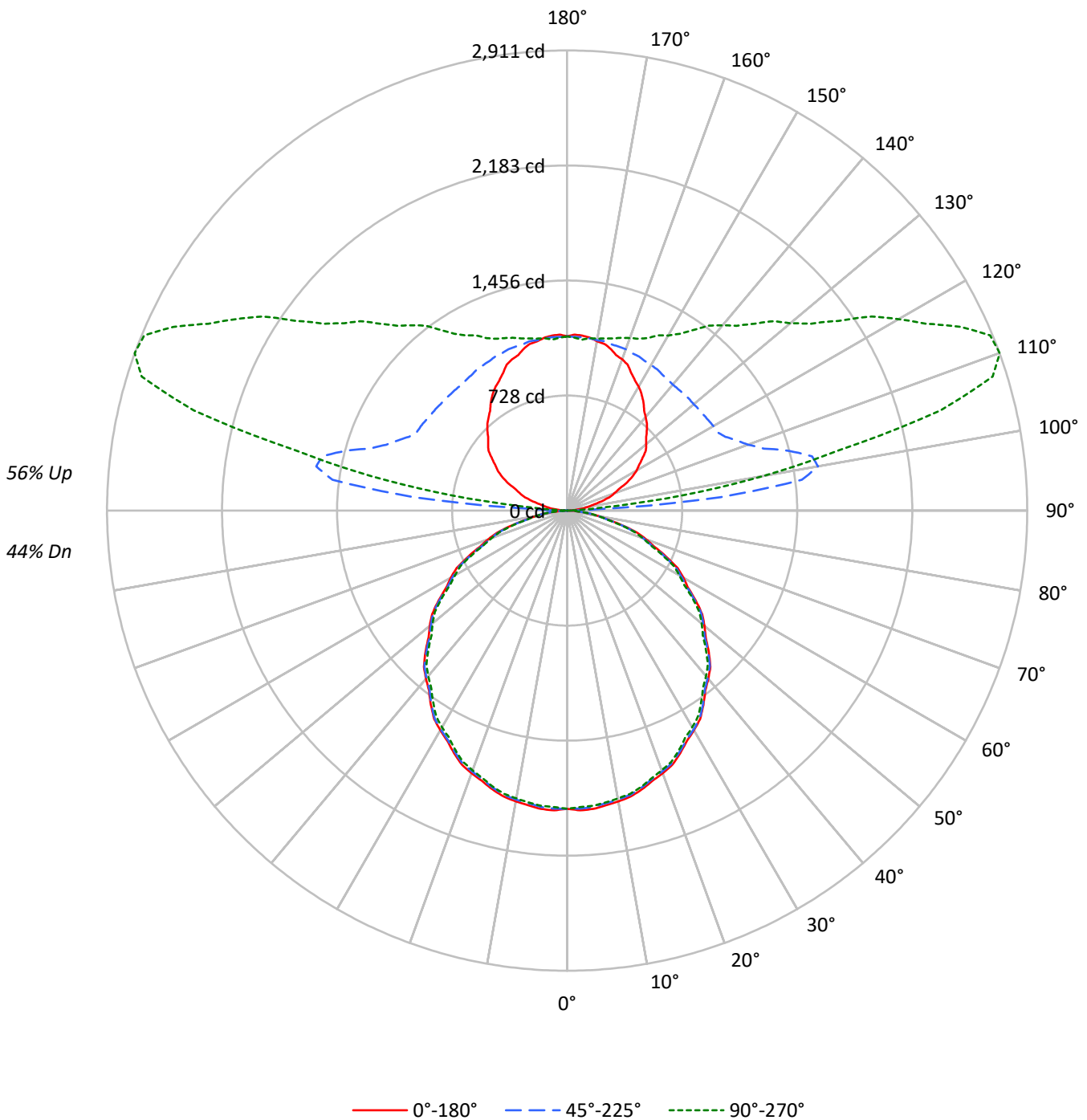
Input Watts (W): 106.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	17403	17403	17403
5°	17547	17432	17364
10°	17498	17391	17322
15°	17444	17335	17286
20°	17362	17251	17169
25°	17233	17138	17022
30°	17098	17042	16866
35°	16922	16863	16654
40°	16724	16662	16463
45°	16538	16431	16174
50°	16278	16143	15951
55°	15978	15828	15579
60°	15675	15389	15122
65°	15068	14751	14457
70°	14319	13817	13650
75°	12947	12576	12355
80°	10664	10664	10499
85°	7558	8649	9093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16538 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.5	1.5
10°-20°	511.3	4.2
20°-30°	773.2	6.3
30°-40°	931.4	7.6
40°-50°	967.0	7.9
50°-60°	876.6	7.2
60°-70°	668.7	5.5
70°-80°	374.0	3.1
80°-90°	97.2	0.8
90°-100°	502.4	4.1
100°-110°	1429.4	11.7
110°-120°	1369.6	11.2
120°-130°	1083.9	8.9
130°-140°	870.0	7.1
140°-150°	681.1	5.6
150°-160°	498.4	4.1
160°-170°	308.7	2.5
170°-180°	104.8	0.9
0°-30°	1463.1	12.0
0°-40°	2394.4	19.6
0°-60°	4238.0	34.7
0°-90°	5378.0	44.0
90°-120°	3301.4	27.0
90°-150°	5936.5	48.6
90°-180°	6848.0	56.0
0°-180°	12226.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1886	1886	1886	1886	1886	
5°	1895	1875	1882	1877	1875	180
15°	1826	1808	1815	1813	1810	515
25°	1693	1676	1684	1671	1672	780
35°	1502	1490	1497	1481	1479	939
45°	1268	1260	1259	1244	1240	977
55°	993	991	984	972	968	887
65°	690	686	676	667	662	684
75°	363	357	353	348	347	384
85°	71	78	82	82	86	89
90°	0	0	0	0	0	5
95°	54	216	972	337	208	62
105°	222	337	1457	2573	2446	235
115°	413	499	1105	2340	2748	407
125°	583	646	1054	1750	2092	522
135°	713	772	1042	1478	1670	550
145°	840	884	1050	1279	1394	525
155°	960	982	1075	1156	1203	444
165°	1061	1065	1088	1111	1128	298
175°	1111	1105	1100	1094	1086	105
180°	1102	1102	1102	1102	1102	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1886.3	1886.3	1886.3	1886.3	1886.3
2.5°	1897.9	1882.5	1887.1	1883.7	1877.2
5°	1894.6	1875.4	1882.2	1876.9	1874.9
7.5°	1880.1	1862.1	1867.9	1864.7	1862.3
10°	1867.7	1850.5	1856.3	1853.1	1849.0
12.5°	1853.6	1835.6	1842.2	1837.4	1835.8
15°	1826.3	1808.1	1814.9	1812.8	1809.7
17.5°	1793.2	1774.8	1781.8	1777.6	1775.2
20°	1768.3	1749.1	1757.0	1748.7	1748.7
22.5°	1740.2	1721.0	1730.5	1718.1	1720.5
25°	1692.8	1675.6	1683.5	1671.1	1672.1
27.5°	1641.3	1625.1	1635.3	1619.3	1618.7
30°	1604.9	1588.7	1599.7	1582.1	1583.1
32.5°	1564.3	1550.5	1559.9	1543.2	1542.6
35°	1502.4	1490.3	1497.2	1480.6	1478.6
37.5°	1435.0	1426.0	1429.0	1413.2	1412.4
40°	1388.6	1380.5	1383.4	1366.9	1366.9
42.5°	1341.4	1334.1	1336.2	1318.0	1318.0
45°	1267.5	1260.5	1259.3	1243.6	1239.6
47.5°	1188.7	1183.0	1179.4	1165.3	1163.4
50°	1134.1	1130.0	1124.7	1112.3	1111.3
52.5°	1076.9	1075.3	1069.3	1056.0	1055.0
55°	993.3	991.3	984.0	971.5	968.5
57.5°	905.8	903.8	895.2	883.0	879.9
60°	849.5	843.4	834.0	822.5	819.5
62.5°	788.3	781.4	771.9	761.3	760.7
65°	690.2	686.1	675.7	667.3	662.2
67.5°	597.9	588.8	578.4	571.6	570.5
70°	530.8	521.7	512.2	507.0	506.0
72.5°	463.8	456.3	447.6	442.4	442.2
75°	363.2	357.1	352.8	347.6	346.6
77.5°	263.6	262.0	260.3	254.7	254.7
80°	200.7	200.7	200.7	197.6	197.6
82.5°	144.4	148.5	148.6	147.1	147.1
85°	71.4	78.5	81.7	81.8	85.9
87.5°	19.9	27.2	32.3	33.2	35.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.8	88.9	206.2	60.0	45.3
95°	54.5	216.4	972.5	336.6	207.5
97.5°	100.2	253.5	1497.8	1071.8	734.4
100°	132.0	275.5	1611.8	1632.6	1257.6
102.5°	167.3	299.2	1586.6	2089.8	1762.3
105°	222.2	336.9	1456.7	2573.1	2446.0
107.5°	277.9	380.8	1305.0	2709.3	2822.4
110°	316.5	412.8	1217.8	2657.2	2911.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	353.4	444.8	1159.1	2533.9	2896.2
115°	412.9	499.0	1104.6	2340.0	2747.8
117.5°	465.3	546.1	1072.3	2128.0	2560.0
120°	507.2	574.9	1068.9	2006.9	2420.8
122.5°	540.8	608.4	1060.6	1900.6	2285.0
125°	582.7	646.2	1054.3	1749.5	2091.8
127.5°	628.4	687.8	1050.9	1659.3	1941.3
130°	651.8	711.3	1045.9	1596.4	1842.4
132.5°	677.0	734.8	1045.9	1547.4	1773.6
135°	712.6	772.1	1041.7	1477.8	1670.5
137.5°	746.2	804.0	1041.3	1419.0	1585.4
140°	771.3	830.7	1039.6	1370.2	1530.1
142.5°	799.8	849.4	1044.6	1331.3	1474.7
145°	840.5	883.5	1050.1	1279.1	1393.8
147.5°	875.3	917.1	1059.3	1226.3	1325.5
150°	905.5	934.2	1062.7	1208.9	1278.5
152.5°	928.9	959.3	1066.0	1185.3	1250.0
155°	960.0	982.5	1075.2	1156.0	1203.1
157.5°	998.5	1012.0	1077.3	1142.6	1176.3
160°	1018.6	1028.9	1085.7	1132.5	1161.2
162.5°	1030.4	1042.3	1087.4	1123.9	1146.1
165°	1060.6	1064.7	1087.8	1111.2	1127.6
167.5°	1081.1	1077.4	1097.4	1108.1	1114.6
170°	1087.8	1085.8	1094.1	1096.4	1104.6
172.5°	1102.9	1095.9	1099.1	1093.0	1099.5
175°	1110.9	1104.7	1100.4	1093.9	1085.7
177.5°	1114.2	1104.4	1099.1	1092.5	1094.1
180°	1102.5	1102.5	1102.5	1102.5	1102.5

(END OF REPORT)