

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: P521434

Luminaire Tested: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521434
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-050U-125D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7515.3 lumens
Efficiency: N/A
Efficacy: 105.0 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: Semi-Direct

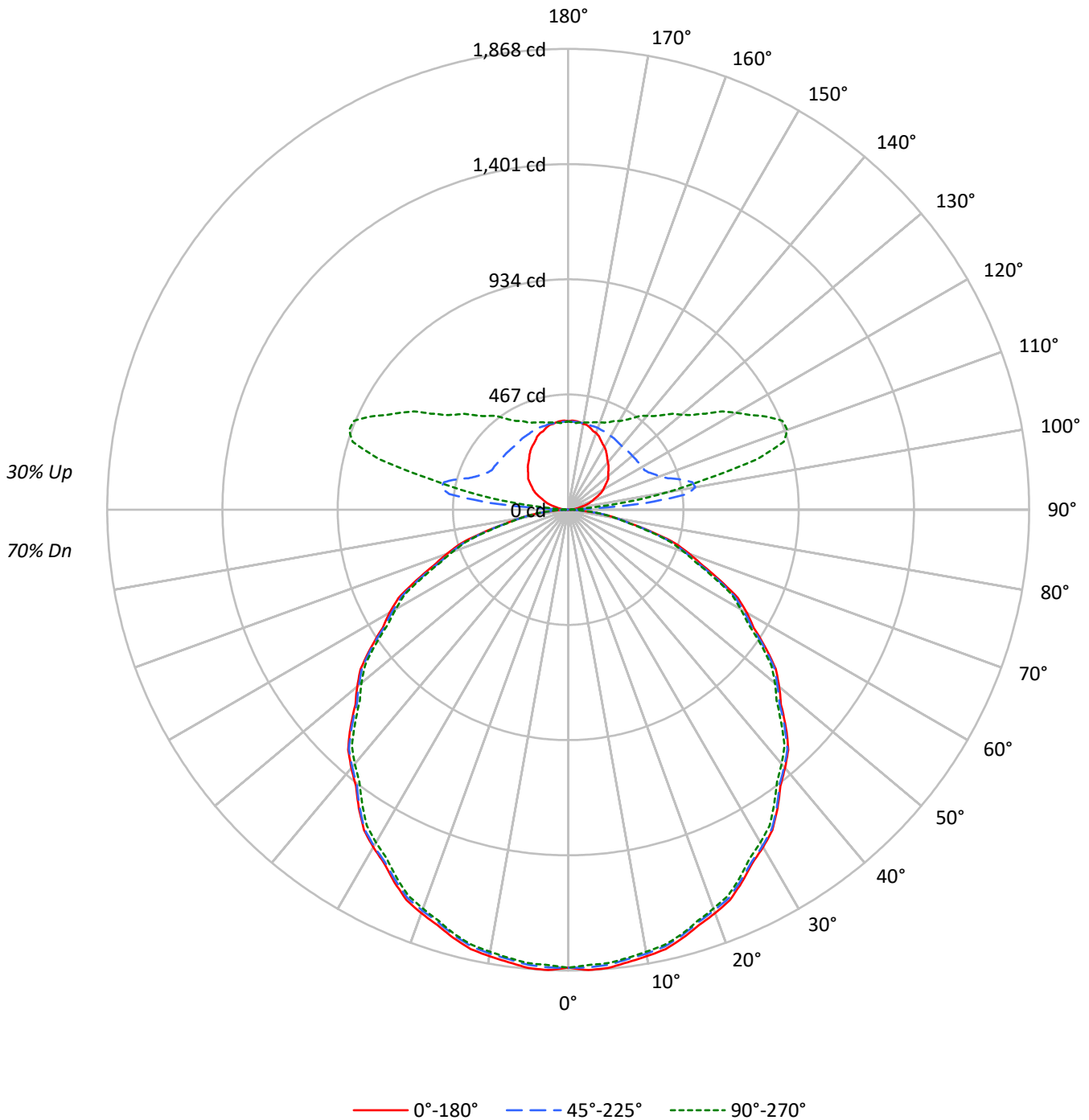
Input Watts (W): 71.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70																				
1	102	98	94	90	96	92	89	86	83	80	78	74	72	70	66	64	63	59																				
2	93	85	79	73	88	81	75	70	72	68	64	65	61	58	58	55	53	49																				
3	85	75	67	61	80	71	64	58	64	58	53	57	53	49	51	47	45	41																				
4	77	66	58	51	73	63	55	49	56	50	45	51	46	42	45	41	38	35																				
5	71	59	50	44	67	56	48	42	50	44	39	45	40	36	41	37	33	30																				
6	65	53	44	38	62	50	42	37	45	39	34	41	36	32	37	33	29	26																				
7	61	48	39	33	57	45	38	32	41	35	30	37	32	28	34	29	26	23																				
8	56	43	35	30	53	41	34	29	38	31	27	34	29	25	31	26	23	21																				
9	52	40	32	26	49	38	31	26	35	28	24	31	26	22	28	24	21	19																				
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17128	17128	17128
5°	17268	17155	17089
10°	17219	17114	17048
15°	17167	17060	17012
20°	17087	16977	16896
25°	16959	16866	16752
30°	16826	16772	16598
35°	16654	16596	16389
40°	16459	16398	16202
45°	16276	16170	15917
50°	16020	15888	15697
55°	15725	15577	15331
60°	15426	15144	14882
65°	14828	14515	14227
70°	14092	13598	13431
75°	12740	12377	12159
80°	10493	10493	10334
85°	7442	8511	8945

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16276 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.7	2.3
10°-20°	503.2	6.7
20°-30°	761.0	10.1
30°-40°	916.6	12.2
40°-50°	951.6	12.7
50°-60°	862.7	11.5
60°-70°	658.1	8.8
70°-80°	368.1	4.9
80°-90°	95.7	1.3
90°-100°	163.0	2.2
100°-110°	463.9	6.2
110°-120°	444.5	5.9
120°-130°	351.8	4.7
130°-140°	282.4	3.8
140°-150°	221.1	2.9
150°-160°	161.8	2.2
160°-170°	100.2	1.3
170°-180°	34.0	0.5
0°-30°	1439.8	19.2
0°-40°	2356.4	31.4
0°-60°	4170.7	55.5
0°-90°	5292.6	70.4
90°-120°	1071.5	14.3
90°-150°	1926.7	25.6
90°-180°	2223.0	29.6
0°-180°	7515.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1856	1856	1856	1856	1856	
5°	1864	1846	1852	1847	1845	177
15°	1797	1779	1786	1784	1781	507
25°	1666	1649	1657	1645	1646	768
35°	1479	1467	1474	1457	1455	924
45°	1247	1240	1239	1224	1220	961
55°	978	976	968	956	953	873
65°	679	675	665	657	652	673
75°	357	351	347	342	341	378
85°	70	77	80	80	84	87
90°	0	0	0	0	0	3
95°	18	70	316	109	67	20
105°	72	109	473	835	794	76
115°	134	162	358	760	892	132
125°	189	210	342	568	679	169
135°	231	251	338	480	542	178
145°	273	287	341	415	452	170
155°	312	319	349	375	390	144
165°	344	346	353	361	366	97
175°	360	358	357	355	352	34
180°	358	358	358	358	358	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1856.4	1856.4	1856.4	1856.4	1856.4
2.5°	1867.8	1852.6	1857.2	1853.8	1847.4
5°	1864.5	1845.6	1852.3	1847.1	1845.2
7.5°	1850.2	1832.5	1838.2	1835.1	1832.7
10°	1838.0	1821.1	1826.8	1823.7	1819.7
12.5°	1824.2	1806.5	1813.0	1808.3	1806.7
15°	1797.3	1779.4	1786.1	1784.0	1781.0
17.5°	1764.7	1746.6	1753.5	1749.4	1747.0
20°	1740.3	1721.3	1729.1	1720.9	1720.9
22.5°	1712.6	1693.7	1703.0	1690.8	1693.2
25°	1665.9	1649.0	1656.8	1644.6	1645.6
27.5°	1615.2	1599.3	1609.3	1593.6	1593.0
30°	1579.4	1563.4	1574.3	1557.0	1558.0
32.5°	1539.5	1525.9	1535.2	1518.7	1518.1
35°	1478.6	1466.6	1473.5	1457.1	1455.1
37.5°	1412.2	1403.4	1406.3	1390.8	1390.0
40°	1366.6	1358.6	1361.5	1345.2	1345.2
42.5°	1320.1	1312.9	1315.0	1297.1	1297.1
45°	1247.4	1240.4	1239.3	1223.9	1219.9
47.5°	1169.8	1164.2	1160.7	1146.8	1145.0
50°	1116.1	1112.1	1106.9	1094.6	1093.6
52.5°	1059.8	1058.2	1052.3	1039.2	1038.3
55°	977.6	975.6	968.4	956.1	953.1
57.5°	891.4	889.4	881.0	868.9	866.0
60°	836.0	830.0	820.7	809.5	806.5
62.5°	775.7	769.0	759.6	749.2	748.7
65°	679.2	675.2	664.9	656.7	651.7
67.5°	588.4	579.4	569.2	562.5	561.5
70°	522.4	513.4	504.1	498.9	497.9
72.5°	456.4	449.0	440.5	435.4	435.2
75°	357.4	351.4	347.2	342.1	341.1
77.5°	259.5	257.9	256.2	250.7	250.7
80°	197.5	197.5	197.5	194.5	194.5
82.5°	142.2	146.1	146.2	144.8	144.8
85°	70.3	77.2	80.4	80.5	84.5
87.5°	19.6	26.7	31.8	32.6	35.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.4	28.9	66.9	19.5	14.7
95°	17.7	70.2	315.6	109.3	67.3
97.5°	32.5	82.3	486.1	347.8	238.4
100°	42.9	89.4	523.1	529.9	408.2
102.5°	54.3	97.1	515.0	678.3	572.0
105°	72.1	109.4	472.8	835.1	793.9
107.5°	90.2	123.6	423.5	879.3	916.0
110°	102.7	134.0	395.2	862.4	944.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	114.7	144.4	376.2	822.4	940.0
115°	134.0	161.9	358.5	759.5	891.8
117.5°	151.0	177.2	348.0	690.7	830.9
120°	164.6	186.6	346.9	651.3	785.7
122.5°	175.5	197.5	344.2	616.8	741.6
125°	189.1	209.7	342.2	567.8	678.9
127.5°	203.9	223.2	341.1	538.5	630.1
130°	211.6	230.9	339.5	518.1	598.0
132.5°	219.7	238.5	339.5	502.2	575.6
135°	231.3	250.6	338.1	479.6	542.2
137.5°	242.2	260.9	338.0	460.5	514.6
140°	250.3	269.6	337.4	444.7	496.6
142.5°	259.6	275.7	339.0	432.1	478.6
145°	272.8	286.8	340.8	415.1	452.4
147.5°	284.1	297.6	343.8	398.0	430.2
150°	293.9	303.2	344.9	392.3	415.0
152.5°	301.5	311.3	346.0	384.7	405.7
155°	311.6	318.9	349.0	375.2	390.5
157.5°	324.1	328.5	349.7	370.9	381.8
160°	330.6	333.9	352.4	367.6	376.9
162.5°	334.4	338.3	352.9	364.8	372.0
165°	344.2	345.5	353.1	360.7	366.0
167.5°	350.9	349.7	356.2	359.6	361.8
170°	353.1	352.4	355.1	355.8	358.5
172.5°	358.0	355.7	356.7	354.7	356.9
175°	360.5	358.5	357.1	355.0	352.4
177.5°	361.6	358.4	356.7	354.6	355.1
180°	357.8	357.8	357.8	357.8	357.8

(END OF REPORT)