

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: P521488

Luminaire Tested: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521488
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-075U-125D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8855.7 lumens
Efficiency: N/A
Efficacy: 111.7 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

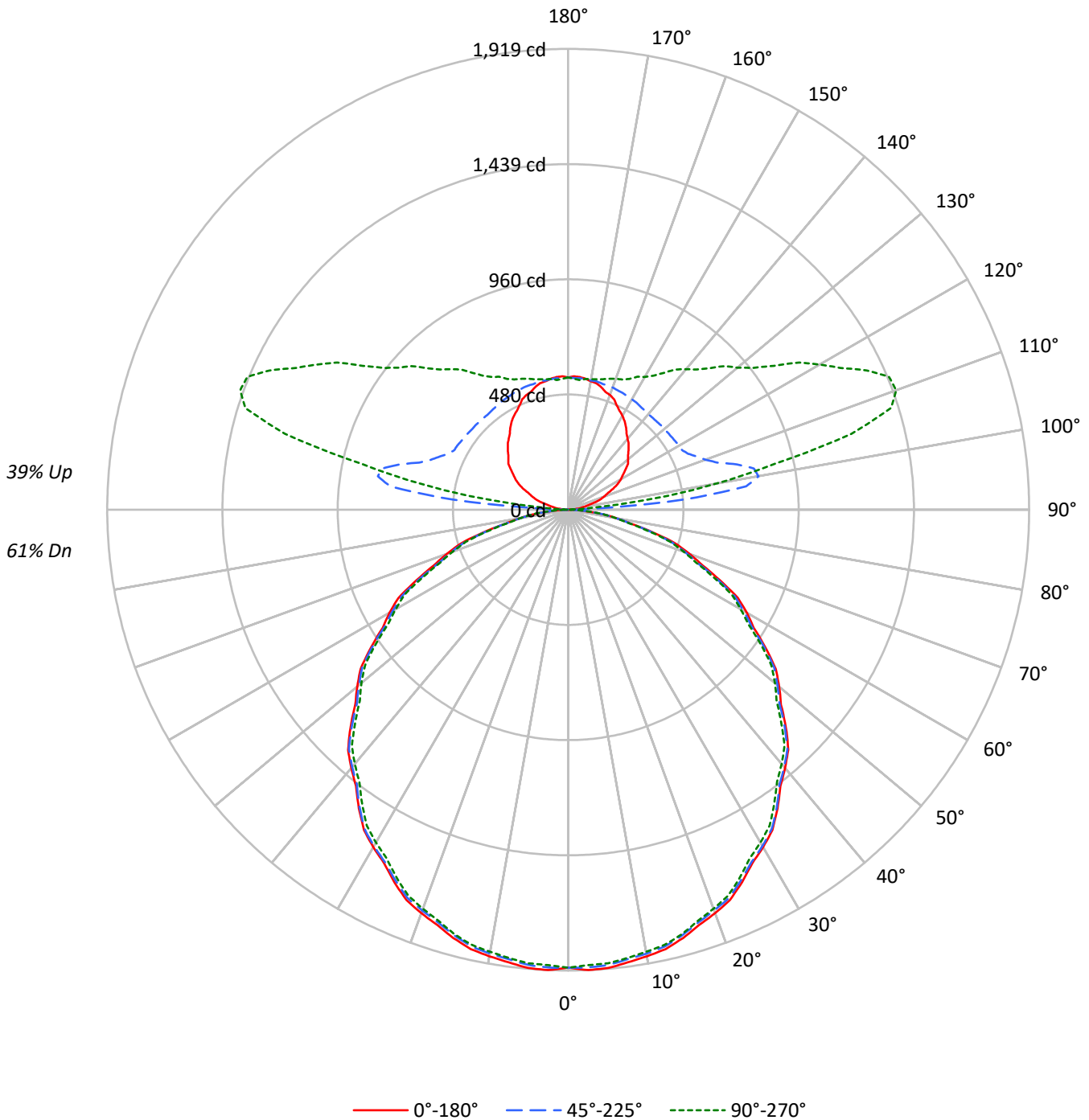
Input Watts (W): 79.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	110	110	110	103	103	103	103	90	90	90		78	78	78		67	67	67	61
1	100	96	92	88	94	90	86	83	78	76	73		68	66	64		59	57	56	51
2	91	83	77	72	85	78	73	68	69	64	60		60	56	53		51	49	47	43
3	83	73	65	59	77	69	62	56	60	55	51		52	48	45		45	42	40	36
4	76	65	56	50	71	61	53	48	53	48	43		47	42	38		40	37	34	31
5	70	58	49	43	65	54	47	41	48	42	37		42	37	33		36	32	29	26
6	64	52	43	37	60	49	41	35	43	37	32		38	33	29		33	29	26	23
7	59	47	38	33	55	44	36	31	39	33	28		34	29	26		30	26	23	20
8	55	42	34	29	51	40	33	28	36	29	25		31	26	23		27	23	20	18
9	51	39	31	26	48	37	29	25	33	27	23		29	24	20		25	21	18	16
10	48	35	28	23	45	34	27	22	30	24	20		27	22	18		23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17596	17596	17596
5°	17740	17625	17557
10°	17691	17583	17514
15°	17637	17527	17478
20°	17554	17441	17359
25°	17423	17327	17210
30°	17286	17231	17052
35°	17109	17050	16838
40°	16910	16846	16645
45°	16722	16612	16353
50°	16458	16323	16128
55°	16155	16003	15751
60°	15849	15559	15290
65°	15234	14913	14616
70°	14478	13971	13801
75°	13090	12715	12494
80°	10786	10786	10616
85°	7643	8744	9189

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16722 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.5	2.0
10°-20°	516.9	5.8
20°-30°	781.8	8.8
30°-40°	941.7	10.6
40°-50°	977.7	11.0
50°-60°	886.3	10.0
60°-70°	676.1	7.6
70°-80°	378.2	4.3
80°-90°	98.3	1.1
90°-100°	250.8	2.8
100°-110°	713.5	8.1
110°-120°	683.6	7.7
120°-130°	541.0	6.1
130°-140°	434.3	4.9
140°-150°	340.0	3.8
150°-160°	248.8	2.8
160°-170°	154.1	1.7
170°-180°	52.3	0.6
0°-30°	1479.2	16.7
0°-40°	2420.9	27.3
0°-60°	4284.9	48.4
0°-90°	5437.5	61.4
90°-120°	1647.8	18.6
90°-150°	2963.1	33.5
90°-180°	3418.0	38.6
0°-180°	8855.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1907	1907	1907	1907	1907	
5°	1916	1896	1903	1898	1896	182
15°	1846	1828	1835	1833	1830	521
25°	1712	1694	1702	1690	1691	789
35°	1519	1507	1514	1497	1495	950
45°	1282	1274	1273	1257	1253	987
55°	1004	1002	995	982	979	897
65°	698	694	683	675	670	692
75°	367	361	357	352	350	388
85°	72	79	83	83	87	90
90°	0	0	0	0	0	4
95°	27	108	485	168	104	31
105°	111	168	727	1284	1221	117
115°	206	249	551	1168	1372	203
125°	291	322	526	873	1044	260
135°	356	385	520	738	834	274
145°	420	441	524	638	696	262
155°	479	490	537	577	600	221
165°	529	531	543	555	563	149
175°	554	551	549	546	542	53
180°	550	550	550	550	550	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1907.2	1907.2	1907.2	1907.2	1907.2
2.5°	1918.9	1903.3	1908.0	1904.5	1898.0
5°	1915.5	1896.1	1903.0	1897.7	1895.7
7.5°	1900.9	1882.7	1888.5	1885.4	1882.9
10°	1888.3	1870.9	1876.8	1873.6	1869.5
12.5°	1874.1	1855.9	1862.6	1857.8	1856.1
15°	1846.5	1828.1	1835.0	1832.8	1829.8
17.5°	1813.0	1794.4	1801.5	1797.3	1794.8
20°	1787.9	1768.5	1776.4	1768.0	1768.0
22.5°	1759.4	1740.0	1749.6	1737.1	1739.6
25°	1711.5	1694.1	1702.1	1689.6	1690.6
27.5°	1659.4	1643.1	1653.4	1637.2	1636.6
30°	1622.6	1606.2	1617.4	1599.6	1600.6
32.5°	1581.6	1567.7	1577.2	1560.2	1559.6
35°	1519.0	1506.8	1513.8	1497.0	1495.0
37.5°	1450.8	1441.8	1444.8	1428.8	1428.0
40°	1404.0	1395.8	1398.7	1382.0	1382.0
42.5°	1356.3	1348.9	1351.0	1332.6	1332.6
45°	1281.6	1274.4	1273.2	1257.4	1253.3
47.5°	1201.8	1196.1	1192.4	1178.2	1176.3
50°	1146.6	1142.5	1137.2	1124.6	1123.6
52.5°	1088.9	1087.2	1081.1	1067.7	1066.7
55°	1004.3	1002.3	994.9	982.3	979.2
57.5°	915.8	913.8	905.1	892.7	889.7
60°	858.9	852.8	843.2	831.6	828.6
62.5°	797.0	790.0	780.4	769.8	769.1
65°	697.8	693.7	683.1	674.7	669.5
67.5°	604.5	595.3	584.8	577.9	576.9
70°	536.7	527.5	517.9	512.6	511.6
72.5°	468.9	461.3	452.6	447.3	447.1
75°	367.2	361.1	356.7	351.5	350.5
77.5°	266.6	264.9	263.2	257.6	257.6
80°	203.0	203.0	203.0	199.8	199.8
82.5°	146.0	150.1	150.2	148.8	148.8
85°	72.2	79.3	82.6	82.7	86.8
87.5°	20.1	27.5	32.6	33.5	36.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.4	44.4	102.9	30.0	22.6
95°	27.2	108.0	485.4	168.0	103.6
97.5°	50.0	126.5	747.6	535.0	366.6
100°	65.9	137.5	804.5	814.9	627.7
102.5°	83.5	149.4	792.0	1043.1	879.6
105°	110.9	168.2	727.1	1284.3	1220.9
107.5°	138.7	190.1	651.3	1352.3	1408.8
110°	158.0	206.0	607.8	1326.3	1453.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	222.0	578.5	1264.7	1445.6
115°	206.1	249.1	551.3	1168.0	1371.5
117.5°	232.2	272.6	535.2	1062.2	1277.8
120°	253.2	286.9	533.5	1001.7	1208.3
122.5°	269.9	303.7	529.4	948.6	1140.5
125°	290.8	322.5	526.2	873.2	1044.1
127.5°	313.6	343.3	524.5	828.2	969.0
130°	325.4	355.0	522.0	796.8	919.6
132.5°	337.9	366.8	522.0	772.3	885.3
135°	355.7	385.4	519.9	737.6	833.8
137.5°	372.4	401.3	519.7	708.3	791.3
140°	385.0	414.7	518.9	683.9	763.7
142.5°	399.2	424.0	521.4	664.5	736.1
145°	419.5	441.0	524.1	638.4	695.7
147.5°	436.9	457.7	528.7	612.1	661.6
150°	451.9	466.3	530.4	603.4	638.2
152.5°	463.7	478.8	532.1	591.6	623.9
155°	479.1	490.4	536.7	577.0	600.5
157.5°	498.4	505.1	537.7	570.3	587.1
160°	508.4	513.6	541.9	565.3	579.6
162.5°	514.3	520.2	542.8	561.0	572.0
165°	529.4	531.4	543.0	554.7	562.8
167.5°	539.6	537.8	547.8	553.1	556.4
170°	543.0	541.9	546.1	547.2	551.3
172.5°	550.5	547.0	548.6	545.5	548.8
175°	554.5	551.4	549.2	546.0	541.9
177.5°	556.1	551.2	548.6	545.3	546.1
180°	550.3	550.3	550.3	550.3	550.3

(END OF REPORT)