

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: P521593

Luminaire Tested: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521593
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-100U-125D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10154.5 lumens
Efficiency: N/A
Efficacy: 115.5 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

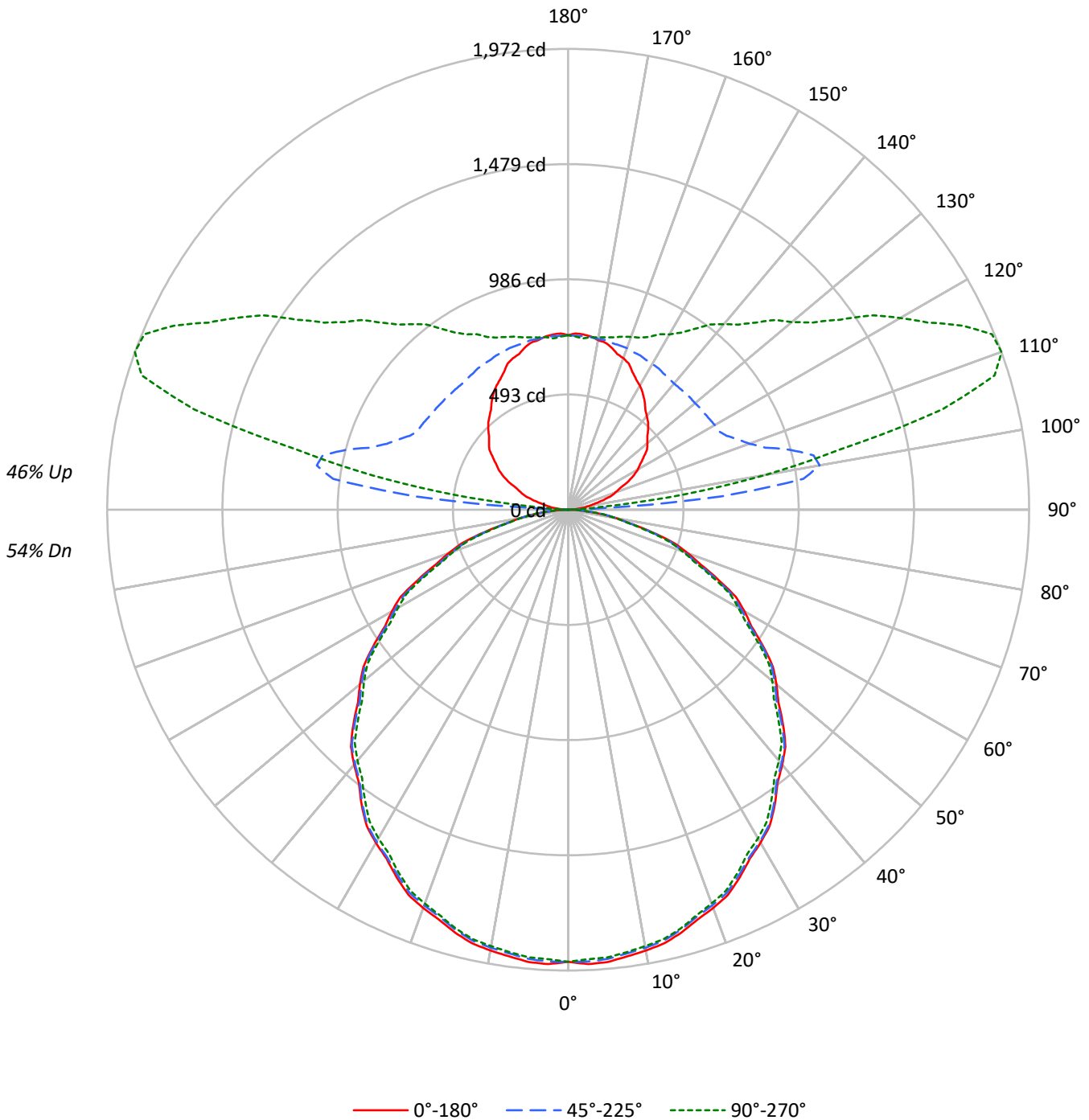
Input Watts (W): 87.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54				54
1	99	94	90	87	91	87	84	81	75	72	70	63	62	60	53	52	50				45	
2	90	82	76	70	83	76	71	66	65	61	58	56	52	50	46	44	42				38	
3	82	72	64	58	75	67	60	55	58	53	48	49	45	42	41	38	36				32	
4	75	64	55	49	69	59	52	47	51	45	41	43	39	36	36	33	31				27	
5	68	57	48	42	63	53	45	40	46	40	35	39	34	31	33	29	27				23	
6	63	51	42	36	58	47	40	35	41	35	31	35	30	27	30	26	23				20	
7	58	46	38	32	54	43	35	30	37	31	27	32	27	24	27	23	21				18	
8	54	41	34	28	50	39	32	27	34	28	24	29	25	21	25	21	18				16	
9	50	38	30	25	47	35	29	24	31	25	21	27	22	19	23	19	17				14	
10	47	35	27	22	44	33	26	21	29	23	19	25	20	17	21	18	15				13	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17846	17846	17846
5°	17993	17876	17807
10°	17943	17834	17764
15°	17888	17777	17726
20°	17805	17690	17606
25°	17671	17575	17456
30°	17532	17476	17295
35°	17353	17293	17078
40°	17151	17087	16882
45°	16960	16849	16586
50°	16692	16555	16357
55°	16385	16232	15976
60°	16074	15780	15507
65°	15450	15127	14825
70°	14683	14168	13998
75°	13275	12897	12673
80°	10934	10934	10770
85°	7749	8871	9326

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16960 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.1	1.8
10°-20°	524.3	5.2
20°-30°	792.9	7.8
30°-40°	955.1	9.4
40°-50°	991.6	9.8
50°-60°	898.9	8.9
60°-70°	685.7	6.8
70°-80°	383.6	3.8
80°-90°	99.7	1.0
90°-100°	340.3	3.4
100°-110°	968.4	9.5
110°-120°	927.8	9.1
120°-130°	734.4	7.2
130°-140°	589.4	5.8
140°-150°	461.5	4.5
150°-160°	337.6	3.3
160°-170°	209.1	2.1
170°-180°	71.0	0.7
0°-30°	1500.3	14.8
0°-40°	2455.4	24.2
0°-60°	4346.0	42.8
0°-90°	5515.0	54.3
90°-120°	2236.6	22.0
90°-150°	4021.8	39.6
90°-180°	4640.0	45.7
0°-180°	10154.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1934	1934	1934	1934	1934	
5°	1943	1923	1930	1925	1923	184
15°	1873	1854	1861	1859	1856	528
25°	1736	1718	1726	1714	1715	800
35°	1541	1528	1535	1518	1516	963
45°	1300	1293	1291	1275	1271	1001
55°	1019	1017	1009	996	993	910
65°	708	704	693	684	679	702
75°	372	366	362	356	356	394
85°	73	80	84	84	88	91
90°	0	0	0	0	0	4
95°	37	147	659	228	141	42
105°	150	228	987	1743	1657	159
115°	280	338	748	1585	1862	275
125°	395	438	714	1185	1417	353
135°	483	523	706	1001	1132	373
145°	569	599	711	866	944	356
155°	650	666	728	783	815	301
165°	718	721	737	753	764	202
175°	753	748	746	741	736	71
180°	747	747	747	747	747	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1934.3	1934.3	1934.3	1934.3	1934.3
2.5°	1946.2	1930.4	1935.2	1931.6	1925.0
5°	1942.8	1923.1	1930.1	1924.7	1922.7
7.5°	1928.0	1909.5	1915.4	1912.2	1909.7
10°	1915.2	1897.6	1903.6	1900.3	1896.1
12.5°	1900.8	1882.3	1889.1	1884.2	1882.6
15°	1872.8	1854.1	1861.1	1858.9	1855.8
17.5°	1838.8	1820.0	1827.2	1822.9	1820.4
20°	1813.4	1793.7	1801.7	1793.2	1793.2
22.5°	1784.5	1764.8	1774.5	1761.9	1764.4
25°	1735.9	1718.3	1726.4	1713.7	1714.7
27.5°	1683.1	1666.5	1676.9	1660.6	1659.9
30°	1645.7	1629.1	1640.4	1622.4	1623.4
32.5°	1604.1	1590.0	1599.7	1582.5	1581.8
35°	1540.7	1528.2	1535.4	1518.3	1516.3
37.5°	1471.5	1462.4	1465.3	1449.2	1448.4
40°	1424.0	1415.7	1418.7	1401.7	1401.7
42.5°	1375.6	1368.1	1370.3	1351.6	1351.6
45°	1299.8	1292.6	1291.3	1275.3	1271.2
47.5°	1219.0	1213.1	1209.4	1194.9	1193.1
50°	1162.9	1158.8	1153.4	1140.6	1139.6
52.5°	1104.4	1102.7	1096.5	1082.9	1081.9
55°	1018.6	1016.6	1009.1	996.3	993.2
57.5°	928.9	926.8	918.0	905.4	902.3
60°	871.1	864.9	855.2	843.5	840.4
62.5°	808.3	801.3	791.6	780.7	780.1
65°	707.7	703.6	692.9	684.3	679.1
67.5°	613.1	603.7	593.1	586.1	585.1
70°	544.3	535.0	525.2	519.9	518.9
72.5°	475.6	467.9	459.0	453.7	453.5
75°	372.4	366.2	361.8	356.5	355.5
77.5°	270.4	268.7	267.0	261.2	261.2
80°	205.8	205.8	205.8	202.7	202.7
82.5°	148.1	152.3	152.4	150.9	150.9
85°	73.2	80.5	83.8	83.9	88.1
87.5°	20.4	27.8	33.1	34.0	36.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.4	60.2	139.7	40.7	30.7
95°	36.9	146.6	658.9	228.0	140.6
97.5°	67.9	171.7	1014.7	726.1	497.6
100°	89.5	186.6	1092.0	1106.1	852.0
102.5°	113.3	202.7	1074.9	1415.8	1193.9
105°	150.5	228.3	986.9	1743.2	1657.1
107.5°	188.3	258.0	884.1	1835.5	1912.1
110°	214.4	279.7	825.0	1800.2	1972.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	301.3	785.2	1716.7	1962.1
115°	279.7	338.0	748.3	1585.3	1861.6
117.5°	315.2	369.9	726.5	1441.7	1734.4
120°	343.6	389.5	724.2	1359.6	1640.1
122.5°	366.4	412.2	718.5	1287.6	1548.1
125°	394.8	437.8	714.2	1185.3	1417.1
127.5°	425.7	466.0	712.0	1124.1	1315.2
130°	441.6	481.9	708.6	1081.5	1248.2
132.5°	458.7	497.8	708.6	1048.3	1201.6
135°	482.8	523.1	705.7	1001.2	1131.7
137.5°	505.5	544.7	705.4	961.3	1074.1
140°	522.6	562.8	704.3	928.3	1036.6
142.5°	541.9	575.5	707.7	901.9	999.1
145°	569.4	598.6	711.4	866.5	944.3
147.5°	593.0	621.3	717.7	830.8	898.0
150°	613.4	632.9	719.9	819.0	866.2
152.5°	629.3	649.9	722.2	803.0	846.9
155°	650.3	665.6	728.4	783.1	815.1
157.5°	676.5	685.6	729.9	774.1	796.9
160°	690.1	697.1	735.5	767.2	786.7
162.5°	698.1	706.1	736.7	761.4	776.4
165°	718.5	721.3	737.0	752.8	763.9
167.5°	732.4	729.9	743.5	750.7	755.1
170°	737.0	735.6	741.2	742.8	748.3
172.5°	747.2	742.5	744.6	740.5	744.9
175°	752.6	748.4	745.5	741.1	735.5
177.5°	754.9	748.2	744.6	740.1	741.2
180°	746.9	746.9	746.9	746.9	746.9

(END OF REPORT)