

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: P521656

Luminaire Tested: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521656
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 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

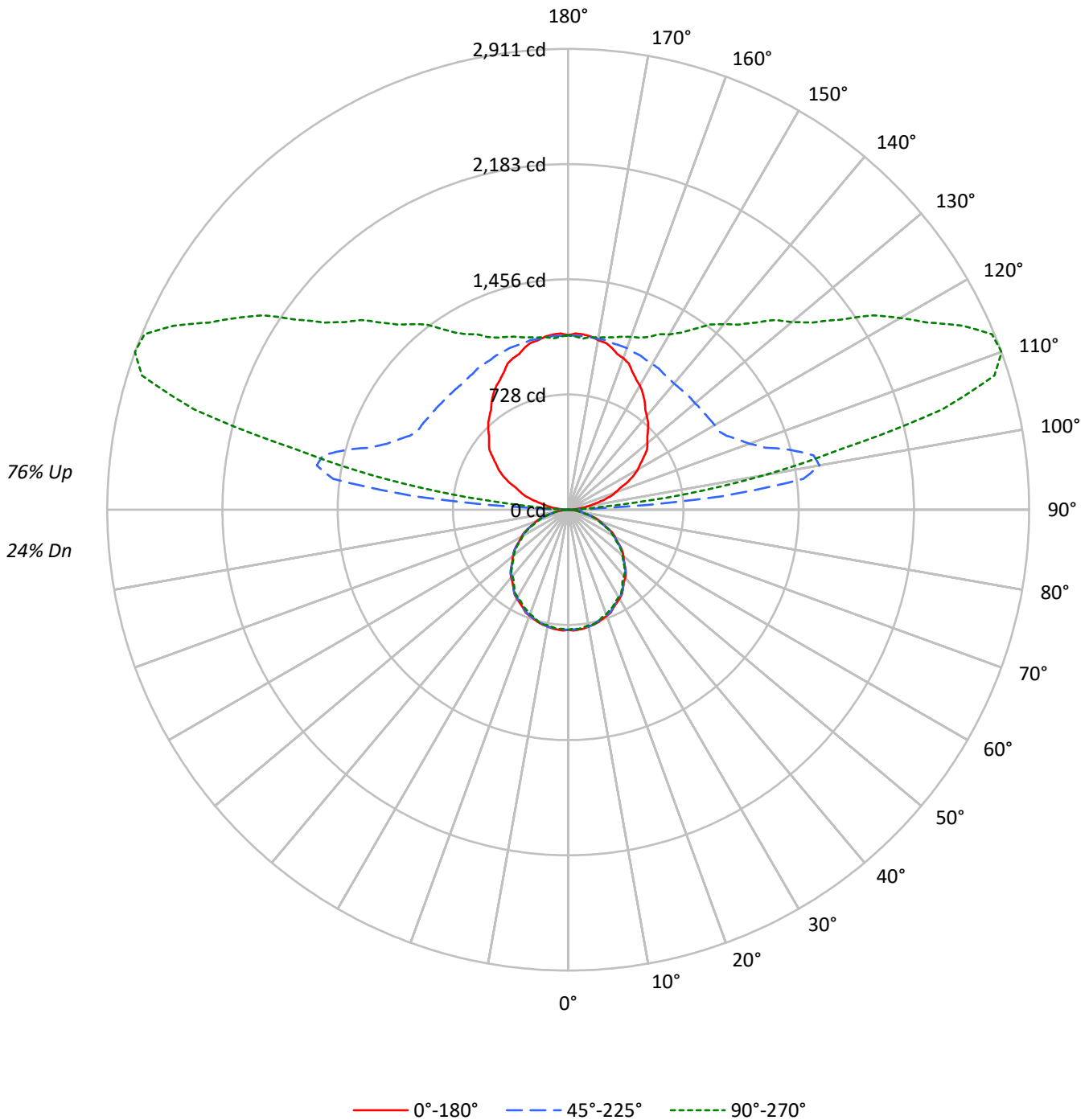
Lumens per Lamp: N/A
Luminaire Lumens: 9005.9 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.8
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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20
2	84	76	71	66	74	68	63	59	53	49	46	38	36	34	25	24	23	17
3	76	67	60	54	67	60	54	49	46	42	39	34	31	29	22	20	19	14
4	69	59	52	46	61	53	46	41	41	36	33	30	27	24	19	18	16	12
5	64	52	45	39	56	47	40	35	36	32	28	27	23	21	17	16	14	10
6	58	47	39	33	52	42	35	30	33	28	24	24	21	18	16	14	12	9
7	54	42	34	29	48	38	31	26	29	25	21	22	18	16	14	12	11	8
8	50	38	31	25	44	34	28	23	27	22	19	20	16	14	13	11	10	7
9	46	35	27	22	41	31	25	20	24	20	17	18	15	13	12	10	9	6
10	43	31	25	20	38	28	22	18	22	18	15	17	13	11	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6997	6997	6997
5°	7043	6995	7005
10°	7009	7028	6941
15°	7027	6957	6987
20°	6999	6969	6898
25°	6920	6879	6836
30°	6900	6857	6791
35°	6794	6794	6689
40°	6742	6680	6593
45°	6615	6615	6521
50°	6535	6491	6402
55°	6425	6359	6259
60°	6281	6167	6071
65°	6032	5897	5783
70°	5751	5554	5414
75°	5126	4980	4905
80°	4235	4176	4123
85°	3070	3398	3398

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6615 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	0.8
10°-20°	205.7	2.3
20°-30°	310.8	3.5
30°-40°	374.4	4.2
40°-50°	388.1	4.3
50°-60°	351.9	3.9
60°-70°	267.5	3.0
70°-80°	149.0	1.7
80°-90°	38.4	0.4
90°-100°	502.4	5.6
100°-110°	1429.4	15.9
110°-120°	1369.6	15.2
120°-130°	1083.9	12.0
130°-140°	870.0	9.7
140°-150°	681.1	7.6
150°-160°	498.4	5.5
160°-170°	308.7	3.4
170°-180°	104.8	1.2
0°-30°	588.3	6.5
0°-40°	962.7	10.7
0°-60°	1702.8	18.9
0°-90°	2157.6	24.0
90°-120°	3301.4	36.7
90°-150°	5936.5	65.9
90°-180°	6848.0	76.0
0°-180°	9005.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	760	751	755	756	756	72
15°	736	729	728	728	732	207
25°	680	675	676	672	672	315
35°	603	597	603	596	594	378
45°	507	504	507	498	500	392
55°	399	398	395	391	389	356
65°	276	275	270	267	265	274
75°	144	142	140	138	138	153
85°	29	31	32	33	32	35
90°	0	0	0	0	0	3
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°	758.4	758.4	758.4	758.4	758.4
2.5°	764.2	756.1	757.6	758.3	752.7
5°	760.5	751.4	755.3	756.4	756.4
7.5°	757.2	750.1	752.7	749.5	749.1
10°	748.1	745.1	750.2	742.9	740.9
12.5°	744.0	739.3	740.2	738.8	740.9
15°	735.7	728.6	728.4	728.5	731.5
17.5°	722.9	713.7	719.7	713.3	712.5
20°	712.9	703.8	709.8	702.6	702.6
22.5°	703.0	692.3	698.2	688.4	686.0
25°	679.8	674.8	675.7	671.5	671.5
27.5°	663.5	652.3	656.0	650.2	650.6
30°	647.7	636.6	643.6	635.4	637.4
32.5°	632.0	624.9	628.7	619.7	623.3
35°	603.2	597.2	603.2	596.0	593.9
37.5°	578.0	571.7	573.6	569.0	563.9
40°	559.8	552.7	554.6	548.4	547.4
42.5°	539.9	535.3	535.6	530.2	530.8
45°	507.0	504.0	507.0	497.7	499.8
47.5°	477.6	474.0	473.7	467.5	470.0
50°	455.3	453.3	452.2	446.0	446.0
52.5°	432.1	430.1	429.0	424.4	423.6
55°	399.4	398.4	395.3	391.1	389.1
57.5°	363.6	361.6	359.9	355.5	353.9
60°	340.4	338.4	334.2	329.0	329.0
62.5°	314.8	312.7	307.7	305.8	302.6
65°	276.3	275.3	270.1	266.9	264.9
67.5°	238.0	234.7	232.4	228.4	226.4
70°	213.2	209.1	205.9	202.8	200.7
72.5°	185.8	182.6	179.4	177.9	175.1
75°	143.8	141.8	139.7	137.6	137.6
77.5°	104.5	103.9	101.8	101.8	100.8
80°	79.7	80.7	78.6	78.6	77.6
82.5°	57.3	58.3	57.9	58.7	57.7
85°	29.0	31.0	32.1	33.1	32.1
87.5°	8.3	10.7	12.4	13.2	13.2
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)