

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: P521927

Luminaire Tested: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6983.0 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

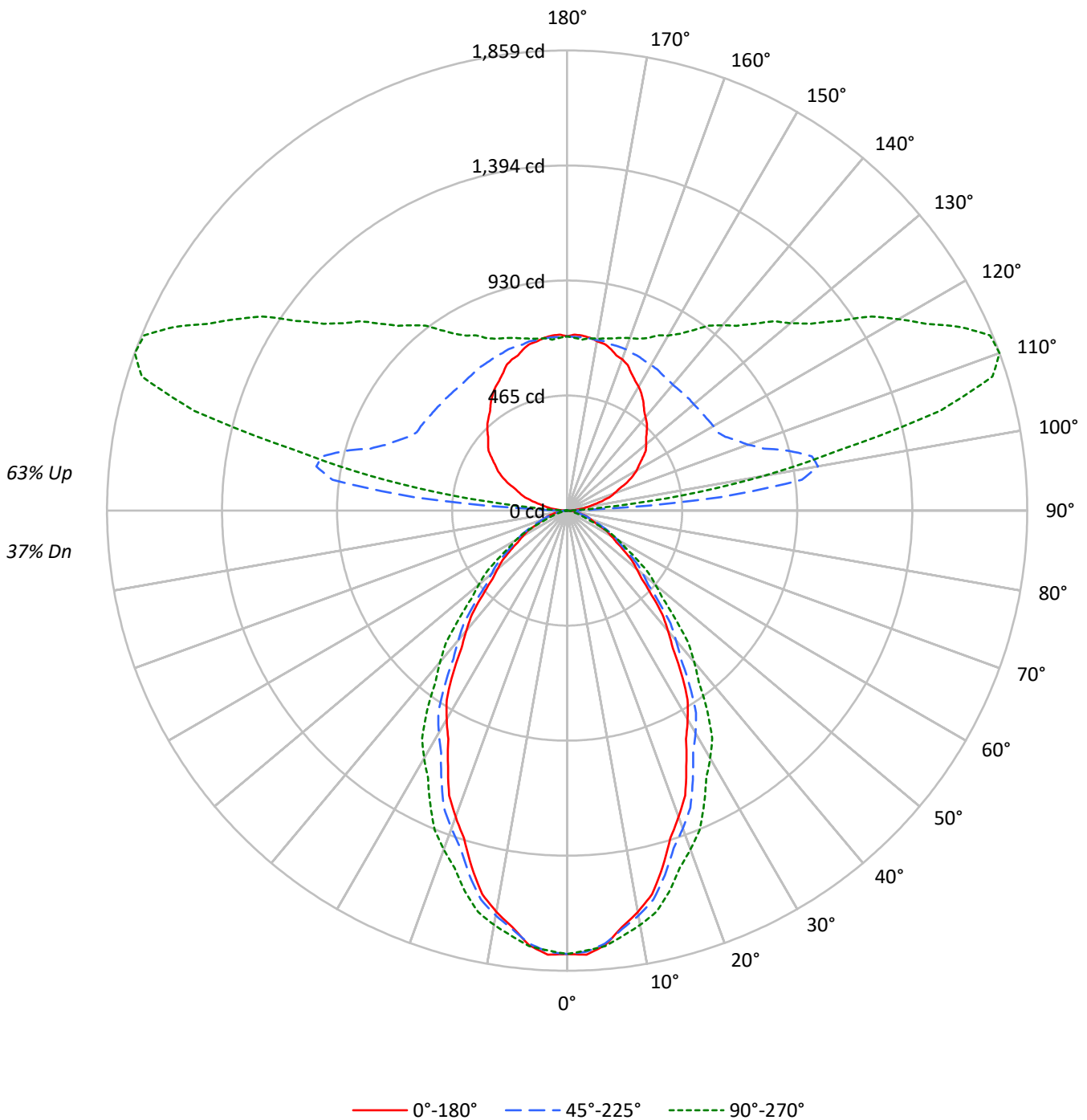
Input Watts (W): 64.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	96	92	88	85	87	84	81	78	68	66	64	54	53	51	41	40	39
2	88	81	76	71	80	74	69	65	61	57	55	48	46	44	37	36	34
3	81	72	66	60	73	66	60	56	54	50	47	44	41	39	33	32	30
4	74	64	57	52	67	59	53	48	49	44	41	39	36	34	31	29	27
5	69	58	50	45	62	53	47	42	44	39	36	36	32	30	28	26	24
6	63	52	45	39	58	48	42	37	40	35	32	33	29	27	26	23	22
7	59	47	40	35	53	44	37	33	37	32	28	30	27	24	24	21	20
8	55	43	36	31	50	40	34	29	34	29	25	28	24	22	22	20	18
9	51	40	33	28	47	37	30	26	31	26	23	26	22	20	21	18	16
10	48	36	30	25	44	34	28	24	29	24	21	24	20	18	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16529	16529	16529
5°	16322	16264	16358
10°	15421	15561	15922
15°	14236	14566	15220
20°	12928	13414	14301
25°	11595	12227	13324
30°	10368	11046	12310
35°	9066	9721	11111
40°	7631	8237	9618
45°	6297	6841	8031
50°	5258	5731	6690
55°	4464	4919	5525
60°	3814	4264	4410
65°	3037	3587	2849
70°	2692	2800	1740
75°	2495	2271	1066
80°	2295	2088	919
85°	2085	1916	752

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8031 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.3	2.4
10°-20°	427.4	6.1
20°-30°	553.6	7.9
30°-40°	542.1	7.8
40°-50°	415.0	5.9
50°-60°	276.5	4.0
60°-70°	150.9	2.2
70°-80°	62.9	0.9
80°-90°	17.8	0.3
90°-100°	320.7	4.6
100°-110°	912.7	13.1
110°-120°	874.4	12.5
120°-130°	692.1	9.9
130°-140°	555.5	8.0
140°-150°	434.9	6.2
150°-160°	318.2	4.6
160°-170°	197.1	2.8
170°-180°	66.9	1.0
0°-30°	1145.3	16.4
0°-40°	1687.4	24.2
0°-60°	2378.9	34.1
0°-90°	2610.5	37.4
90°-120°	2107.9	30.2
90°-150°	3790.4	54.3
90°-180°	4373.0	62.6
0°-180°	6983.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1792	1792	1792	1792	1792	
5°	1762	1745	1756	1760	1766	164
15°	1490	1485	1525	1566	1593	416
25°	1139	1142	1201	1254	1309	524
35°	805	809	863	921	986	500
45°	483	492	524	564	616	376
55°	278	289	306	317	344	252
65°	139	151	164	144	130	145
75°	70	70	64	44	30	75
85°	20	20	18	12	7	21
90°	0	0	0	0	0	2
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1791.5	1791.5	1791.5	1791.5	1791.5
2.5°	1795.9	1779.9	1783.9	1783.8	1778.9
5°	1762.4	1744.7	1756.1	1760.1	1766.3
7.5°	1697.0	1683.6	1704.4	1719.7	1732.2
10°	1646.0	1634.5	1661.0	1683.3	1699.5
12.5°	1586.9	1577.2	1610.0	1640.1	1661.1
15°	1490.4	1485.0	1525.0	1566.5	1593.4
17.5°	1387.1	1384.5	1430.3	1478.7	1513.2
20°	1316.7	1315.9	1366.2	1416.6	1456.6
22.5°	1245.6	1247.3	1300.2	1352.6	1398.1
25°	1139.0	1142.1	1201.1	1253.5	1308.8
27.5°	1040.4	1041.8	1102.9	1158.1	1217.1
30°	973.2	977.0	1036.8	1094.0	1155.5
32.5°	905.9	910.3	968.9	1028.0	1090.7
35°	804.9	808.8	863.1	921.2	986.5
37.5°	700.9	706.1	754.3	809.2	873.5
40°	633.6	641.3	683.9	735.6	798.6
42.5°	568.8	578.3	617.9	666.9	723.8
45°	482.6	491.9	524.3	564.0	615.5
47.5°	408.4	419.0	444.0	478.1	522.1
50°	366.3	376.3	399.3	424.6	466.1
52.5°	329.2	339.2	359.7	379.2	414.6
55°	277.5	289.0	305.8	317.4	343.5
57.5°	235.0	246.1	259.4	264.6	280.5
60°	206.7	219.0	231.1	230.5	239.0
62.5°	181.0	191.4	203.4	195.1	195.6
65°	139.1	150.7	164.3	143.6	130.5
67.5°	112.4	114.9	128.9	100.1	84.6
70°	99.8	99.8	103.8	77.5	64.5
72.5°	87.9	87.9	84.3	63.0	49.4
75°	70.0	70.0	63.7	43.7	29.9
77.5°	53.9	53.3	48.7	32.6	21.7
80°	43.2	43.2	39.3	25.7	17.3
82.5°	33.8	33.8	30.5	20.1	12.9
85°	19.7	19.7	18.1	11.7	7.1
87.5°	6.9	6.9	6.3	3.8	3.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)