

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: P521836

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521836
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-075U-100D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 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: 6699.0 lumens
Efficiency: N/A
Efficacy: 101.3 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: General Diffuse

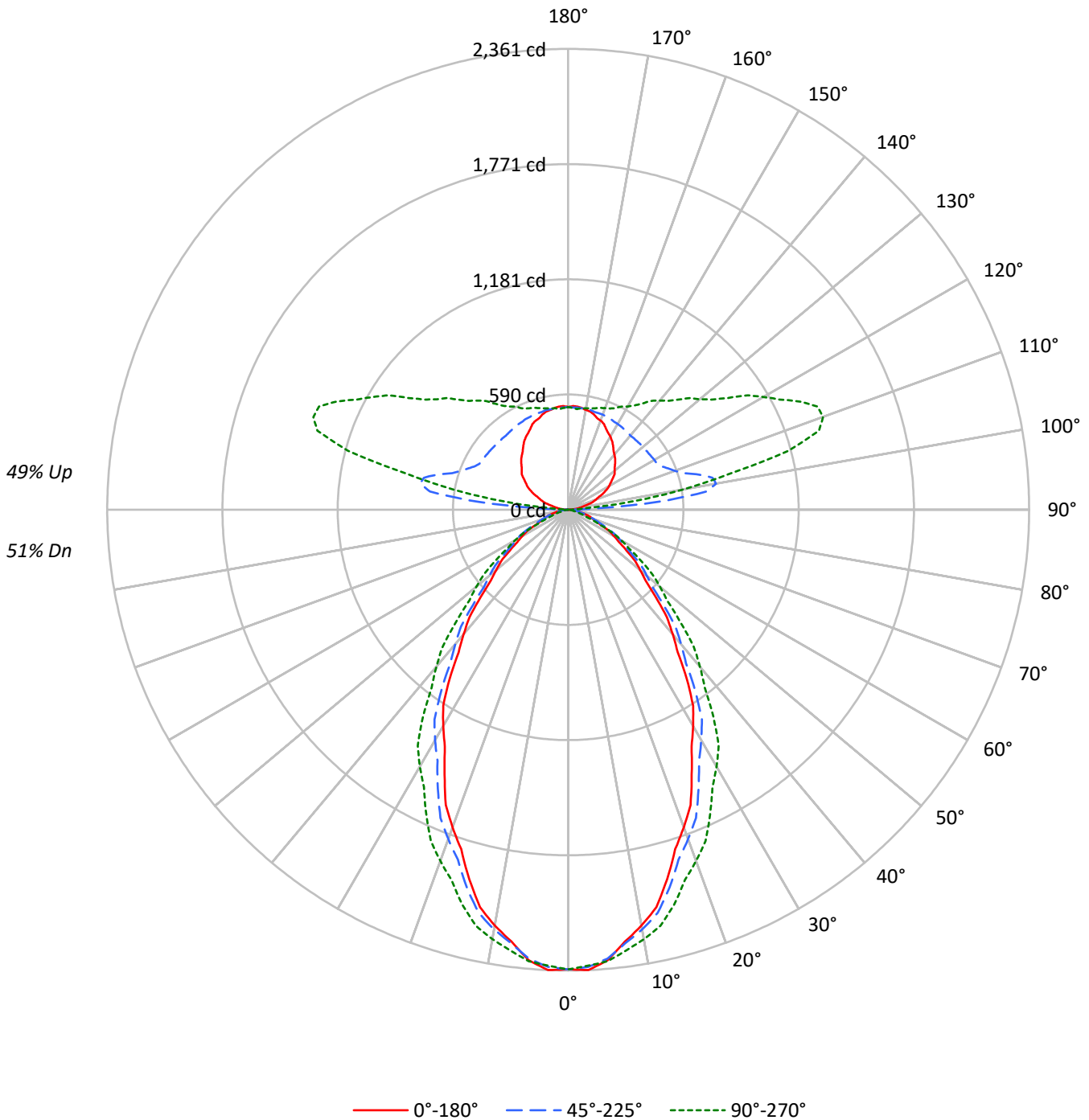
Input Watts (W): 66.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	99	95	92	89	92	88	85	83	75	73	71	63	62	61	52	51	51	45
2	91	85	79	75	84	79	74	70	67	64	61	57	55	53	48	46	45	40
3	84	76	69	64	78	70	65	60	61	56	53	52	49	46	43	41	39	35
4	78	68	60	55	72	63	57	52	55	50	46	47	43	41	40	37	35	32
5	72	61	54	48	66	57	51	46	50	45	41	43	39	36	36	34	31	28
6	67	55	48	42	62	52	45	40	45	40	36	39	35	32	33	31	28	26
7	62	50	43	38	57	47	41	36	42	36	33	36	32	29	31	28	26	23
8	58	46	39	34	54	43	37	32	38	33	29	33	29	26	29	26	23	21
9	54	42	35	31	50	40	34	29	35	30	27	31	27	24	27	24	22	20
10	51	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21728	21728	21728
5°	21457	21380	21504
10°	20272	20456	20930
15°	18714	19148	20007
20°	16994	17633	18800
25°	15242	16073	17515
30°	13629	14521	16183
35°	11918	12779	14606
40°	10031	10828	12645
45°	8279	8993	10557
50°	6911	7534	8796
55°	5868	6466	7264
60°	5015	5606	5796
65°	3993	4716	3744
70°	3539	3679	2285
75°	3280	2984	1401
80°	3018	2747	1206
85°	2731	2519	984

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10557 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.0	3.2
10°-20°	561.8	8.4
20°-30°	727.8	10.9
30°-40°	712.7	10.6
40°-50°	545.5	8.1
50°-60°	363.5	5.4
60°-70°	198.4	3.0
70°-80°	82.7	1.2
80°-90°	23.4	0.3
90°-100°	239.7	3.6
100°-110°	682.0	10.2
110°-120°	653.4	9.8
120°-130°	517.2	7.7
130°-140°	415.1	6.2
140°-150°	325.0	4.9
150°-160°	237.8	3.5
160°-170°	147.3	2.2
170°-180°	50.0	0.7
0°-30°	1505.6	22.5
0°-40°	2218.3	33.1
0°-60°	3127.2	46.7
0°-90°	3431.6	51.2
90°-120°	1575.1	23.5
90°-150°	2832.3	42.3
90°-180°	3267.0	48.8
0°-180°	6699.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2355	2355	2355	2355	2355	
5°	2317	2294	2308	2314	2322	216
15°	1959	1952	2005	2059	2095	547
25°	1497	1501	1579	1648	1720	689
35°	1058	1063	1135	1211	1297	658
45°	634	647	689	741	809	495
55°	365	380	402	417	452	331
65°	183	198	216	189	172	190
75°	92	92	84	58	39	98
85°	26	26	24	15	9	28
90°	0	0	0	0	0	2
95°	26	103	464	161	99	30
105°	106	161	695	1228	1167	112
115°	197	238	527	1116	1311	194
125°	278	308	503	835	998	249
135°	340	368	497	705	797	262
145°	401	422	501	610	665	250
155°	458	469	513	552	574	212
165°	506	508	519	530	538	142
175°	530	527	525	522	518	50
180°	526	526	526	526	526	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2355.0	2355.0	2355.0	2355.0	2355.0
2.5°	2360.8	2339.8	2345.1	2344.9	2338.5
5°	2316.8	2293.5	2308.5	2313.8	2321.9
7.5°	2230.8	2213.2	2240.5	2260.7	2277.1
10°	2163.8	2148.7	2183.5	2212.9	2234.1
12.5°	2086.1	2073.4	2116.5	2156.0	2183.7
15°	1959.2	1952.1	2004.7	2059.2	2094.6
17.5°	1823.4	1820.0	1880.3	1943.9	1989.2
20°	1730.8	1729.8	1795.9	1862.2	1914.8
22.5°	1637.4	1639.7	1709.1	1778.1	1837.9
25°	1497.3	1501.4	1578.9	1647.8	1720.5
27.5°	1367.7	1369.6	1449.8	1522.4	1600.0
30°	1279.3	1284.3	1363.0	1438.2	1519.0
32.5°	1190.8	1196.7	1273.7	1351.4	1433.9
35°	1058.1	1063.2	1134.6	1211.0	1296.8
37.5°	921.3	928.2	991.6	1063.8	1148.3
40°	832.9	843.0	899.0	967.0	1049.9
42.5°	747.7	760.3	812.2	876.7	951.5
45°	634.5	646.6	689.2	741.4	809.1
47.5°	536.9	550.9	583.6	628.6	686.3
50°	481.5	494.7	524.9	558.2	612.8
52.5°	432.8	445.9	472.9	498.5	545.0
55°	364.8	379.9	402.0	417.2	451.6
57.5°	309.0	323.5	341.0	347.9	368.7
60°	271.8	287.9	303.8	303.0	314.1
62.5°	237.9	251.6	267.4	256.5	257.1
65°	182.9	198.1	216.0	188.7	171.5
67.5°	147.8	151.0	169.5	131.6	111.2
70°	131.2	131.2	136.4	101.9	84.7
72.5°	115.5	115.5	110.8	82.9	64.9
75°	92.0	92.0	83.7	57.5	39.3
77.5°	70.9	70.1	64.1	42.9	28.5
80°	56.8	56.8	51.7	33.8	22.7
82.5°	44.4	44.4	40.1	26.4	16.9
85°	25.8	25.8	23.8	15.4	9.3
87.5°	9.1	9.1	8.3	4.9	4.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.0	42.4	98.4	28.6	21.6
95°	26.0	103.2	464.0	160.6	99.0
97.5°	47.8	120.9	714.6	511.3	350.4
100°	63.0	131.4	769.0	778.9	600.0
102.5°	79.8	142.8	757.0	997.0	840.8
105°	106.0	160.8	695.0	1227.6	1167.0
107.5°	132.6	181.7	622.6	1292.6	1346.6
110°	151.0	197.0	581.0	1267.8	1389.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	168.6	212.2	553.0	1208.9	1381.8
115°	197.0	238.1	527.0	1116.4	1311.0
117.5°	222.0	260.5	511.6	1015.3	1221.4
120°	242.0	274.3	510.0	957.5	1155.0
122.5°	258.0	290.3	506.0	906.8	1090.2
125°	278.0	308.3	503.0	834.7	998.0
127.5°	299.8	328.2	501.4	791.7	926.2
130°	311.0	339.4	499.0	761.7	879.0
132.5°	323.0	350.6	499.0	738.3	846.2
135°	340.0	368.4	497.0	705.1	797.0
137.5°	356.0	383.6	496.8	677.0	756.4
140°	368.0	396.4	496.0	653.7	730.0
142.5°	381.6	405.3	498.4	635.2	703.6
145°	401.0	421.5	501.0	610.2	665.0
147.5°	417.6	437.5	505.4	585.1	632.4
150°	432.0	445.7	507.0	576.8	610.0
152.5°	443.2	457.7	508.6	565.5	596.4
155°	458.0	468.8	513.0	551.5	574.0
157.5°	476.4	482.9	514.0	545.2	561.2
160°	486.0	490.9	518.0	540.3	554.0
162.5°	491.6	497.3	518.8	536.2	546.8
165°	506.0	508.0	519.0	530.2	538.0
167.5°	515.8	514.0	523.6	528.7	531.8
170°	519.0	518.0	522.0	523.1	527.0
172.5°	526.2	522.9	524.4	521.5	524.6
175°	530.0	527.1	525.0	521.9	518.0
177.5°	531.6	526.9	524.4	521.2	522.0
180°	526.0	526.0	526.0	526.0	526.0

(END OF REPORT)