

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: P521108

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521108
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-100D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK 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: 5815.3 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

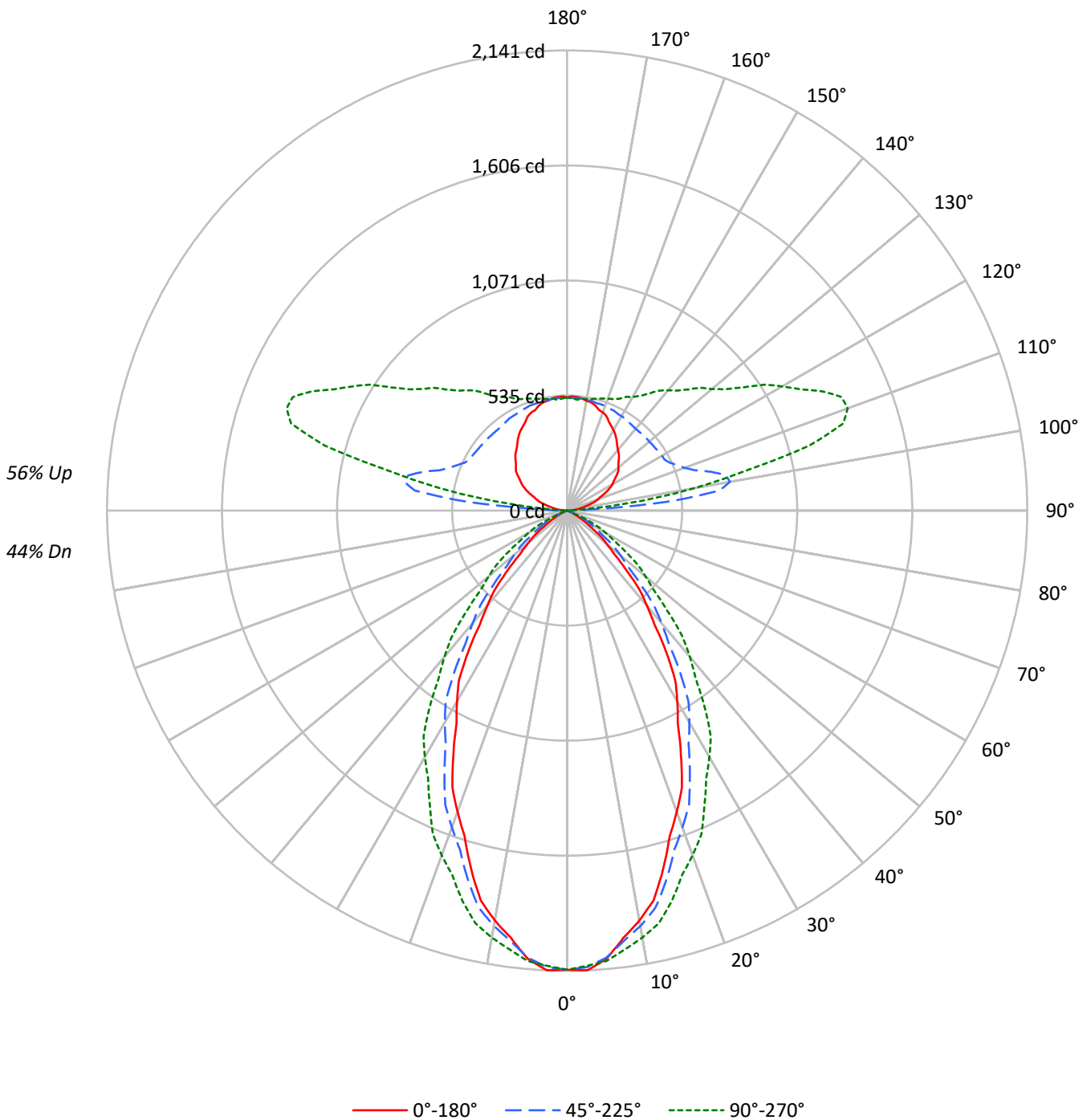
Input Watts (W): 66.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
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	106	106	106	106	97	97	97	97	80	80	80		65	65	65		50	50	50	44
1	98	94	91	88	90	87	84	81	72	70	69		59	58	57		47	46	46	40
2	91	84	79	75	83	78	73	69	65	62	59		54	52	50		43	42	41	36
3	84	75	69	64	77	70	64	60	59	55	52		49	46	44		40	38	37	33
4	77	68	61	56	71	63	57	52	54	49	46		45	42	39		37	35	33	30
5	72	61	54	49	66	57	51	46	49	44	41		41	38	35		34	32	30	27
6	67	56	49	43	61	52	46	41	45	40	36		38	34	32		32	29	27	24
7	62	51	44	39	57	48	41	37	41	36	33		35	31	29		29	27	25	22
8	58	47	40	35	53	44	37	33	38	33	30		32	29	26		27	25	23	21
9	54	43	36	32	50	40	34	30	35	30	27		30	27	24		26	23	21	19
10	51	40	33	29	47	37	31	27	33	28	25		28	25	22		24	21	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19706	19706	19706
5°	19390	19342	19485
10°	18142	18384	18897
15°	16493	17016	17964
20°	14640	15401	16750
25°	12749	13759	15390
30°	10921	12120	14102
35°	9054	10289	12546
40°	6957	8226	10690
45°	5029	6229	8602
50°	3426	4642	6822
55°	2228	3357	5302
60°	1277	2364	3833
65°	338	1443	1941
70°	167	445	558
75°	75	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8602 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.9	3.4
10°-20°	498.5	8.6
20°-30°	624.1	10.7
30°-40°	576.4	9.9
40°-50°	387.3	6.7
50°-60°	200.1	3.4
60°-70°	62.7	1.1
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	239.7	4.1
100°-110°	682.0	11.7
110°-120°	653.4	11.2
120°-130°	517.2	8.9
130°-140°	415.1	7.1
140°-150°	325.0	5.6
150°-160°	237.8	4.1
160°-170°	147.3	2.5
170°-180°	50.0	0.9
0°-30°	1317.5	22.7
0°-40°	1893.9	32.6
0°-60°	2481.3	42.7
0°-90°	2547.9	43.8
90°-120°	1575.1	27.1
90°-150°	2832.3	48.7
90°-180°	3267.0	56.2
0°-180°	5815.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2136	2136	2136	2136	2136	
5°	2094	2072	2088	2096	2104	194
15°	1727	1721	1782	1841	1881	481
25°	1252	1262	1352	1444	1512	574
35°	804	824	914	1021	1114	498
45°	385	409	477	570	659	303
55°	138	162	209	268	330	129
65°	16	30	66	80	89	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
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°	2135.9	2135.9	2135.9	2135.9	2135.9
2.5°	2140.9	2120.7	2126.0	2125.9	2120.2
5°	2093.6	2072.3	2088.4	2095.8	2103.9
7.5°	2005.1	1988.5	2019.4	2042.5	2059.2
10°	1936.5	1922.3	1962.3	1993.8	2017.1
12.5°	1857.1	1846.2	1894.5	1937.8	1967.5
15°	1726.7	1720.7	1781.5	1841.3	1880.7
17.5°	1587.0	1586.8	1656.2	1730.5	1778.0
20°	1491.1	1494.1	1568.6	1650.5	1706.0
22.5°	1395.2	1402.3	1481.8	1567.2	1630.8
25°	1252.4	1262.5	1351.6	1444.1	1511.8
27.5°	1115.2	1129.9	1223.7	1319.8	1402.2
30°	1025.1	1042.3	1137.7	1238.8	1323.7
32.5°	936.6	957.0	1050.1	1157.0	1243.5
35°	803.9	824.1	913.5	1021.0	1113.9
37.5°	666.9	686.7	774.0	879.8	980.2
40°	577.6	599.9	683.0	785.6	887.6
42.5°	496.6	518.9	597.1	697.8	794.2
45°	385.4	408.7	477.4	570.4	659.3
47.5°	293.3	318.5	378.8	462.9	544.0
50°	238.7	264.0	323.4	397.5	475.3
52.5°	194.9	219.3	273.0	342.8	414.2
55°	138.5	161.7	208.7	268.0	329.6
57.5°	95.7	115.7	157.9	207.4	255.6
60°	69.2	88.4	128.1	168.3	207.7
62.5°	46.1	63.7	102.5	133.3	159.8
65°	15.5	29.6	66.1	79.8	88.9
67.5°	7.9	9.5	34.7	36.6	39.7
70°	6.2	6.2	16.5	17.6	20.7
72.5°	4.5	4.5	6.6	8.5	9.1
75°	2.1	2.1	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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)