

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: P521004

Luminaire Tested: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521004
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-025U-100D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 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: 4484.7 lumens
Efficiency: N/A
Efficacy: 79.5 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

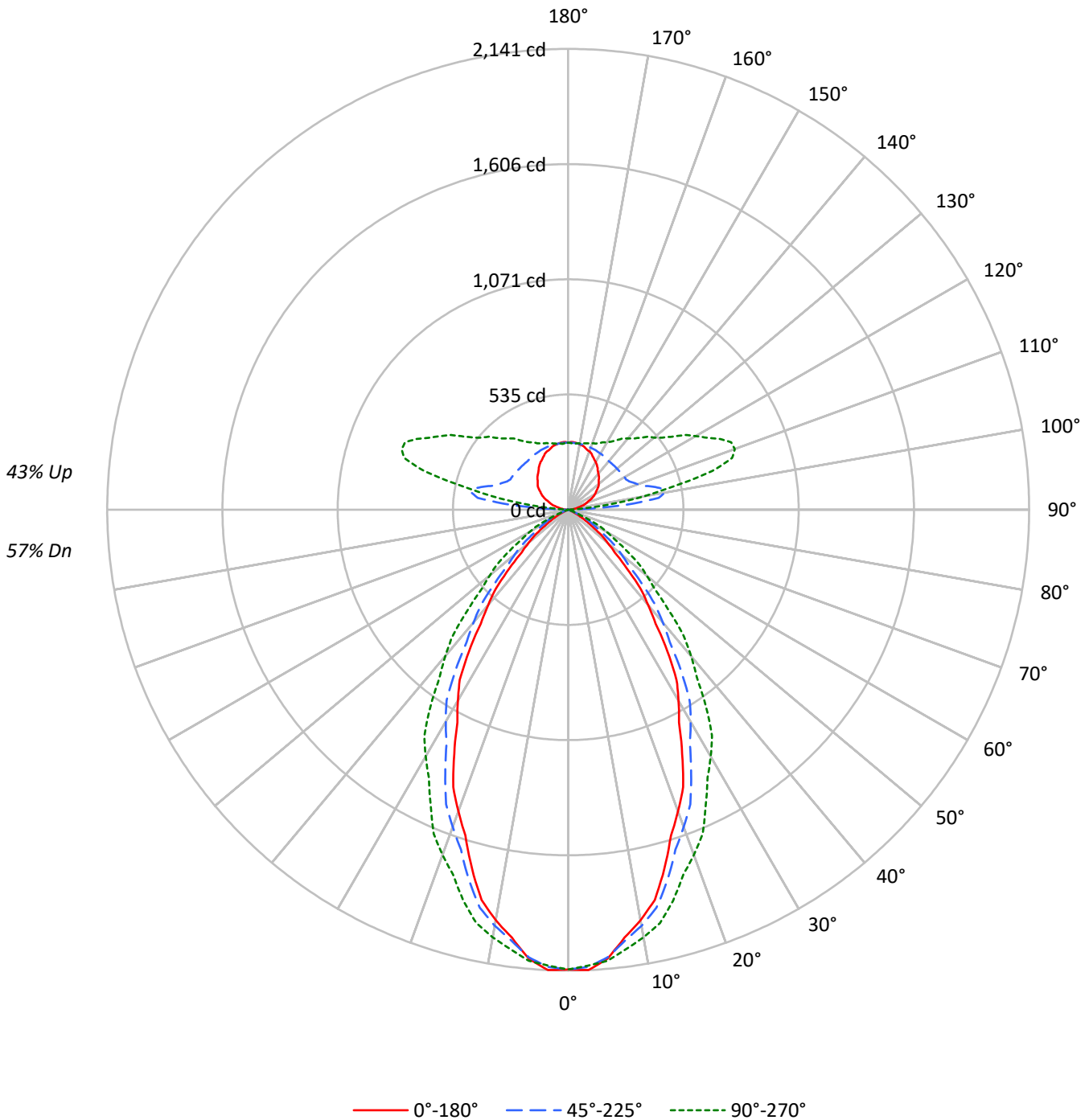
Input Watts (W): 56.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	101	98	95	92	94	91	89	86	79	77	76	68	67	66	58	57	57	52
2	94	88	83	78	88	82	78	74	72	69	66	63	60	58	54	52	51	47
3	87	79	73	68	81	74	69	65	66	61	58	57	54	52	50	48	46	42
4	81	72	65	60	76	67	61	57	60	55	52	53	49	46	46	43	41	38
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	43	40	38	35
6	70	59	52	47	66	56	50	45	50	45	41	45	41	38	39	37	34	32
7	65	54	47	42	61	52	45	41	46	41	38	41	37	34	37	34	31	29
8	61	50	43	38	57	48	41	37	43	38	34	38	34	32	34	31	29	27
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25
10	54	43	36	32	51	41	35	31	37	32	29	34	30	27	30	27	25	23

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

TEST NUMBER: P521004

CATALOG NUMBER: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.9	4.3
10°-20°	498.5	11.1
20°-30°	624.1	13.9
30°-40°	576.4	12.9
40°-50°	387.3	8.6
50°-60°	200.1	4.5
60°-70°	62.7	1.4
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	142.1	3.2
100°-110°	404.2	9.0
110°-120°	387.3	8.6
120°-130°	306.6	6.8
130°-140°	246.0	5.5
140°-150°	192.6	4.3
150°-160°	140.9	3.1
160°-170°	87.3	1.9
170°-180°	29.6	0.7
0°-30°	1317.5	29.4
0°-40°	1893.9	42.2
0°-60°	2481.3	55.3
0°-90°	2547.9	56.8
90°-120°	933.6	20.8
90°-150°	1678.9	37.4
90°-180°	1937.0	43.2
0°-180°	4484.7	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°	15	61	275	95	59	18
105°	63	95	412	728	692	66
115°	117	141	312	662	777	115
125°	165	183	298	495	592	147
135°	202	218	295	418	472	156
145°	238	250	297	362	394	148
155°	272	278	304	327	340	126
165°	300	301	308	314	319	84
175°	314	312	311	309	307	30
180°	312	312	312	312	312	

TEST NUMBER: P521004

CATALOG NUMBER: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_3500K

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°	4.7	25.1	58.3	17.0	12.8
95°	15.4	61.2	275.0	95.2	58.7
97.5°	28.3	71.7	423.6	303.1	207.7
100°	37.3	77.9	455.8	461.7	355.7
102.5°	47.3	84.6	448.7	591.0	498.4
105°	62.8	95.3	412.0	727.7	691.7
107.5°	78.6	107.7	369.0	766.2	798.2
110°	89.5	116.7	344.4	751.5	823.3

TEST NUMBER: P521004

CATALOG NUMBER: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	99.9	125.8	327.8	716.6	819.1
115°	116.8	141.1	312.4	661.8	777.1
117.5°	131.6	154.4	303.3	601.8	724.0
120°	143.4	162.6	302.3	567.6	684.6
122.5°	152.9	172.1	299.9	537.5	646.2
125°	164.8	182.8	298.2	494.8	591.6
127.5°	177.7	194.5	297.2	469.3	549.0
130°	184.3	201.2	295.8	451.5	521.0
132.5°	191.5	207.8	295.8	437.6	501.6
135°	201.5	218.3	294.6	417.9	472.4
137.5°	211.0	227.4	294.5	401.3	448.4
140°	218.1	234.9	294.0	387.5	432.7
142.5°	226.2	240.2	295.4	376.5	417.1
145°	237.7	249.9	297.0	361.7	394.2
147.5°	247.5	259.4	299.6	346.8	374.9
150°	256.1	264.2	300.5	341.9	361.6
152.5°	262.7	271.3	301.5	335.2	353.5
155°	271.5	277.9	304.1	326.9	340.2
157.5°	282.4	286.2	304.7	323.1	332.7
160°	288.1	291.0	307.0	320.3	328.4
162.5°	291.4	294.8	307.5	317.9	324.1
165°	299.9	301.1	307.6	314.3	318.9
167.5°	305.7	304.7	310.4	313.4	315.2
170°	307.6	307.1	309.4	310.1	312.4
172.5°	311.9	309.9	310.8	309.1	311.0
175°	314.2	312.4	311.2	309.4	307.0
177.5°	315.1	312.3	310.8	309.0	309.4
180°	311.8	311.8	311.8	311.8	311.8

(END OF REPORT)