

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: P521060

Luminaire Tested: SQ4-BB-050U-100D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521060
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-050U-100D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5019.6 lumens
Efficiency: N/A
Efficacy: 86.4 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

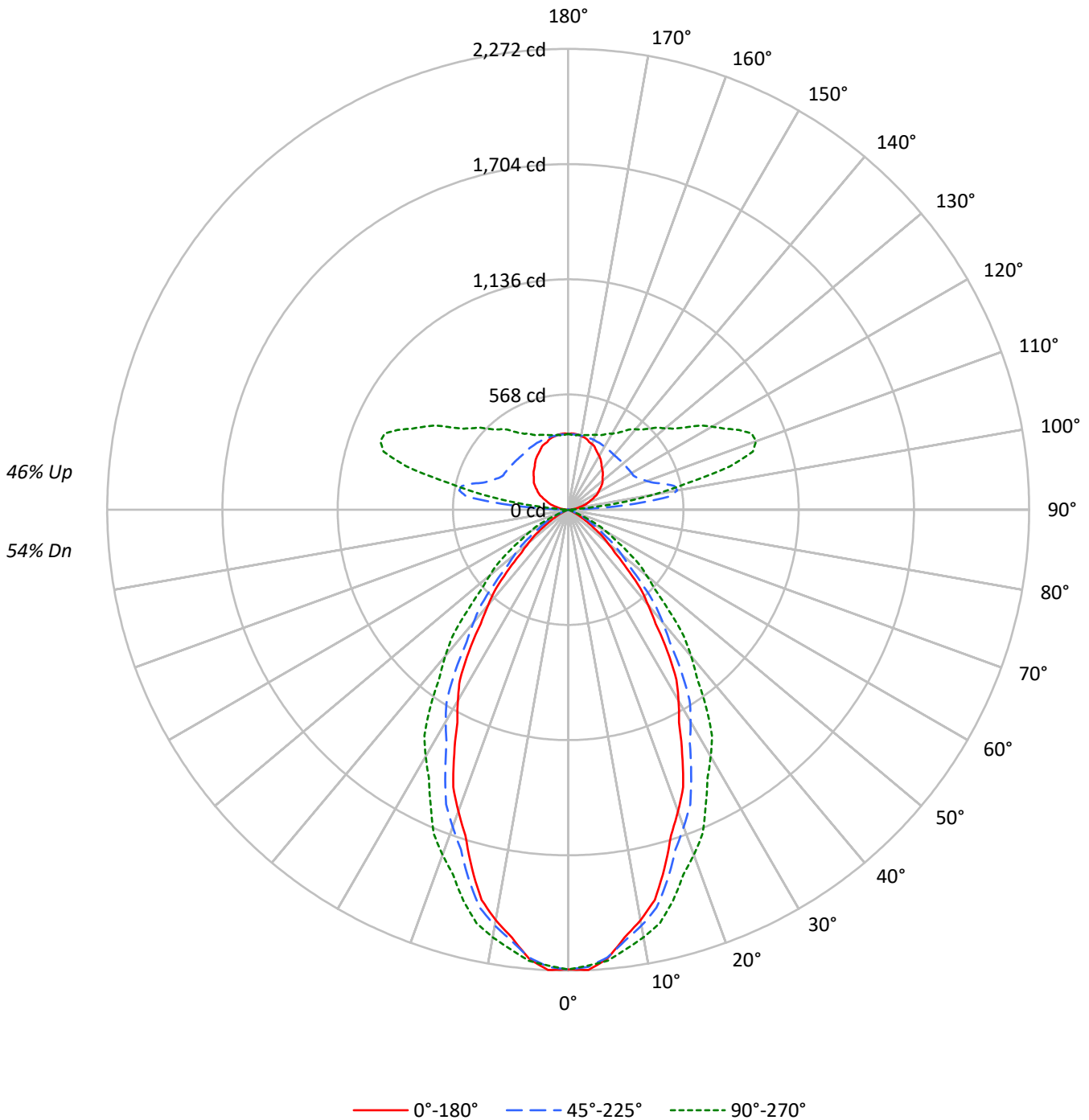
Input Watts (W): 58.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	85	85	85		72	72	72		60	60	60	54
1	101	97	94	91	93	90	88	85	78	76	74		66	65	64		56	55	54	49
2	93	87	82	78	87	81	77	73	71	67	65		61	58	56		51	50	49	44
3	86	78	72	67	80	73	68	64	64	60	57		55	53	50		47	46	44	40
4	80	71	64	59	75	66	60	56	58	54	50		51	48	45		44	42	40	36
5	74	64	57	52	69	60	54	49	53	49	45		47	43	40		41	38	36	33
6	69	59	51	46	65	55	49	44	49	44	40		43	39	36		38	35	33	30
7	65	54	46	41	60	51	44	40	45	40	36		40	36	33		35	32	30	28
8	60	49	42	37	56	47	40	36	42	37	33		37	33	30		33	30	28	25
9	57	46	39	34	53	43	37	33	39	34	30		35	31	28		31	28	25	23
10	53	42	36	31	50	40	34	30	36	31	28		32	28	26		29	26	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20910	20910	20910
5°	20573	20522	20675
10°	19250	19507	20051
15°	17501	18056	19060
20°	15535	16342	17773
25°	13528	14600	16330
30°	11588	12861	14964
35°	9607	10917	13313
40°	7382	8729	11344
45°	5337	6610	9127
50°	3636	4926	7240
55°	2363	3563	5627
60°	1356	2510	4067
65°	358	1533	2059
70°	178	472	591
75°	78	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9127 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.8	4.1
10°-20°	528.9	10.5
20°-30°	662.2	13.2
30°-40°	611.6	12.2
40°-50°	411.0	8.2
50°-60°	212.3	4.2
60°-70°	66.5	1.3
70°-80°	4.2	0.1
80°-90°	0.1	0.0
90°-100°	169.9	3.4
100°-110°	483.4	9.6
110°-120°	463.2	9.2
120°-130°	366.6	7.3
130°-140°	294.2	5.9
140°-150°	230.4	4.6
150°-160°	168.5	3.4
160°-170°	104.4	2.1
170°-180°	35.4	0.7
0°-30°	1397.9	27.8
0°-40°	2009.6	40.0
0°-60°	2632.8	52.5
0°-90°	2703.6	53.9
90°-120°	1116.5	22.2
90°-150°	2007.7	40.0
90°-180°	2316.0	46.1
0°-180°	5019.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2266	2266	2266	2266	2266	
5°	2221	2199	2216	2224	2232	206
15°	1832	1826	1890	1954	1996	510
25°	1329	1340	1434	1532	1604	609
35°	853	874	969	1083	1182	528
45°	409	434	507	605	700	321
55°	147	172	222	284	350	137
65°	16	32	70	85	94	28
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	18	73	329	114	70	21
105°	75	114	493	870	827	79
115°	140	169	374	791	929	137
125°	197	218	356	592	707	176
135°	241	261	352	500	565	186
145°	284	299	355	433	471	178
155°	325	332	364	391	407	150
165°	359	360	368	376	381	101
175°	376	374	372	370	367	36
180°	373	373	373	373	373	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2266.4	2266.4	2266.4	2266.4	2266.4
2.5°	2271.6	2250.2	2255.8	2255.7	2249.7
5°	2221.4	2198.9	2215.9	2223.8	2232.4
7.5°	2127.6	2110.0	2142.7	2167.2	2185.0
10°	2054.7	2039.7	2082.2	2115.6	2140.3
12.5°	1970.5	1959.0	2010.2	2056.1	2087.6
15°	1832.2	1825.7	1890.3	1953.7	1995.5
17.5°	1683.9	1683.7	1757.4	1836.2	1886.6
20°	1582.2	1585.4	1664.4	1751.3	1810.2
22.5°	1480.4	1487.9	1572.3	1662.9	1730.4
25°	1328.9	1339.6	1434.2	1532.3	1604.1
27.5°	1183.3	1198.9	1298.4	1400.4	1487.9
30°	1087.7	1105.9	1207.2	1314.5	1404.6
32.5°	993.8	1015.5	1114.2	1227.7	1319.5
35°	853.0	874.5	969.3	1083.3	1182.0
37.5°	707.6	728.7	821.2	933.5	1040.1
40°	612.9	636.5	724.8	833.6	941.9
42.5°	527.0	550.5	633.5	740.5	842.7
45°	409.0	433.6	506.6	605.2	699.5
47.5°	311.2	338.0	402.0	491.2	577.2
50°	253.3	280.1	343.2	421.8	504.4
52.5°	206.8	232.7	289.7	363.8	439.5
55°	146.9	171.6	221.5	284.4	349.8
57.5°	101.5	122.8	167.5	220.0	271.3
60°	73.5	93.8	136.0	178.6	220.4
62.5°	48.9	67.6	108.8	141.4	169.5
65°	16.4	31.5	70.2	84.6	94.3
67.5°	8.3	10.0	36.8	38.9	42.1
70°	6.6	6.6	17.5	18.7	21.9
72.5°	4.8	4.8	7.0	9.0	9.6
75°	2.2	2.2	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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°	5.7	30.1	69.8	20.3	15.3
95°	18.4	73.2	328.9	113.8	70.2
97.5°	33.9	85.7	506.5	362.5	248.4
100°	44.7	93.2	545.1	552.1	425.3
102.5°	56.6	101.2	536.6	706.7	596.0
105°	75.1	114.0	492.6	870.2	827.2
107.5°	94.0	128.8	441.3	916.3	954.5
110°	107.0	139.6	411.8	898.6	984.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	119.5	150.4	392.0	856.9	979.5
115°	139.6	168.8	373.6	791.4	929.3
117.5°	157.4	184.7	362.6	719.7	865.8
120°	171.5	194.4	361.5	678.7	818.7
122.5°	182.9	205.8	358.7	642.8	772.8
125°	197.1	218.5	356.5	591.7	707.4
127.5°	212.5	232.6	355.4	561.2	656.5
130°	220.4	240.5	353.7	539.9	623.1
132.5°	229.0	248.5	353.7	523.3	599.8
135°	241.0	261.1	352.3	499.8	564.9
137.5°	252.3	271.9	352.2	479.9	536.2
140°	260.9	281.0	351.6	463.4	517.5
142.5°	270.5	287.3	353.3	450.2	498.7
145°	284.2	298.8	355.1	432.6	471.4
147.5°	296.0	310.2	358.2	414.7	448.3
150°	306.2	315.9	359.4	408.8	432.4
152.5°	314.2	324.4	360.5	400.9	422.8
155°	324.6	332.3	363.6	390.9	406.9
157.5°	337.7	342.3	364.3	386.4	397.8
160°	344.5	348.0	367.2	383.0	392.7
162.5°	348.5	352.5	367.7	380.1	387.6
165°	358.7	360.1	367.9	375.8	381.4
167.5°	365.6	364.4	371.1	374.7	377.0
170°	367.9	367.2	370.0	370.8	373.6
172.5°	373.0	370.6	371.7	369.6	371.9
175°	375.7	373.6	372.1	370.0	367.2
177.5°	376.8	373.5	371.7	369.5	370.0
180°	372.9	372.9	372.9	372.9	372.9

(END OF REPORT)