

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: P521241

Luminaire Tested: SQ4-BB-125U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521241
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-125U-050D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7099.4 lumens
Efficiency: N/A
Efficacy: 114.3 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: Semi-Indirect

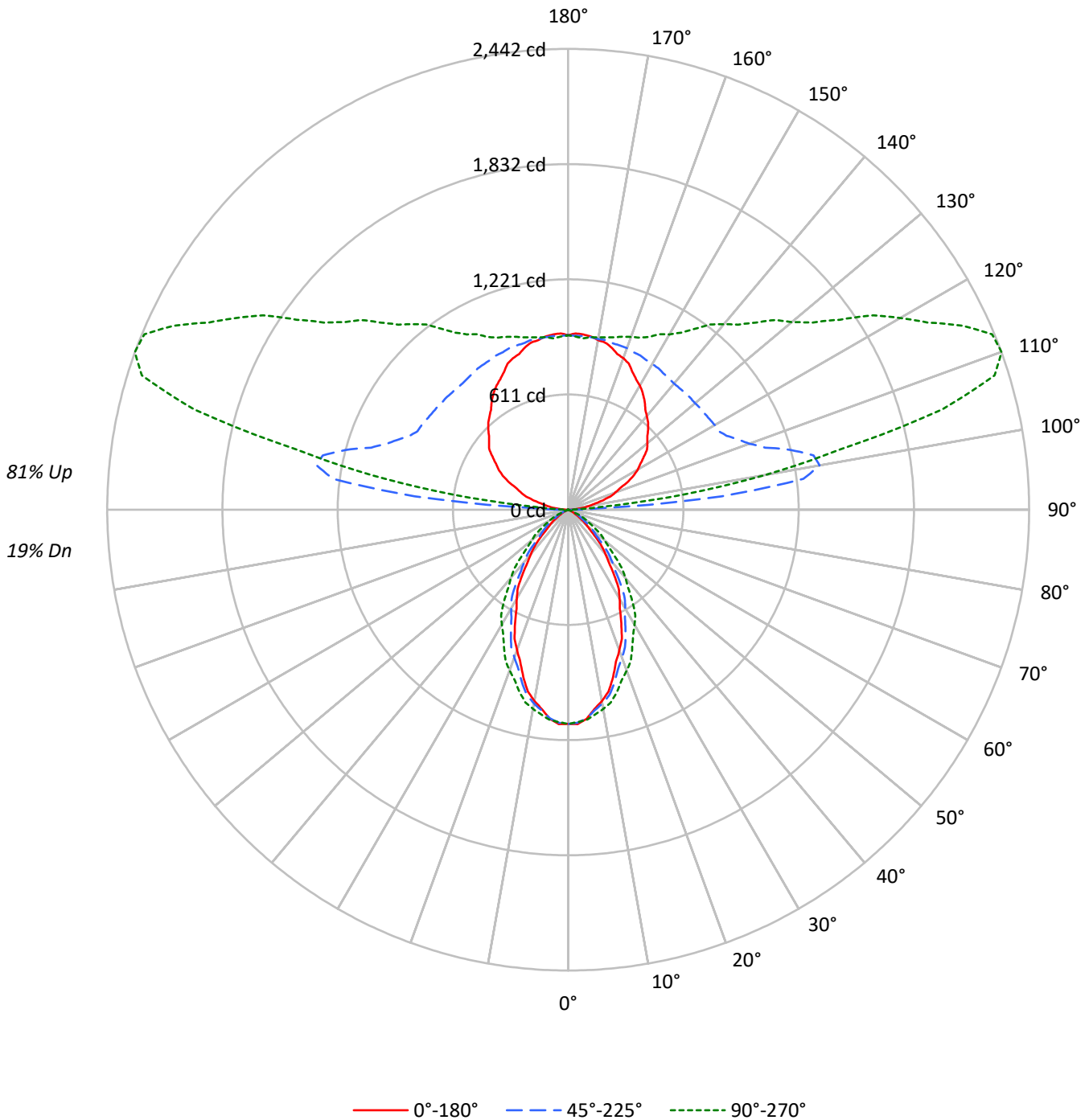
Input Watts (W): 62.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	100	100	100	100	88	88	88	88	66	66	66		46	46	46		28	28	28	19
1	92	88	84	81	81	78	75	72	59	57	55		41	40	40		25	25	25	17
2	84	77	72	67	74	69	64	60	52	49	47		37	36	34		23	23	22	16
3	77	69	62	57	68	61	56	51	47	43	40		34	31	30		21	20	19	14
4	71	61	54	49	62	54	48	44	42	38	35		30	28	26		19	18	17	13
5	65	55	47	42	57	49	43	38	38	34	30		27	25	23		18	17	16	12
6	60	49	42	36	53	44	38	33	34	30	27		25	22	20		16	15	14	11
7	55	44	37	32	49	40	34	29	31	27	24		23	20	18		15	14	13	10
8	51	40	33	28	46	36	30	26	28	24	21		21	18	16		14	13	12	9
9	48	37	30	25	42	33	27	23	26	22	19		19	17	15		13	12	11	8
10	45	34	27	23	40	30	25	21	24	20	17		18	15	13		12	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10472	10472	10472
5°	10303	10277	10354
10°	9640	9770	10042
15°	8765	9043	9546
20°	7780	8184	8901
25°	6775	7311	8178
30°	5803	6441	7494
35°	4812	5467	6667
40°	3697	4372	5681
45°	2672	3310	4571
50°	1820	2467	3626
55°	1184	1784	2818
60°	679	1257	2037
65°	179	766	1030
70°	89	237	297
75°	39	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4571 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.6	1.5
10°-20°	264.9	3.7
20°-30°	331.6	4.7
30°-40°	306.3	4.3
40°-50°	205.8	2.9
50°-60°	106.3	1.5
60°-70°	33.3	0.5
70°-80°	2.1	0.0
80°-90°	0.0	0.0
90°-100°	421.5	5.9
100°-110°	1199.2	16.9
110°-120°	1149.0	16.2
120°-130°	909.4	12.8
130°-140°	729.9	10.3
140°-150°	571.4	8.0
150°-160°	418.1	5.9
160°-170°	259.0	3.6
170°-180°	87.9	1.2
0°-30°	700.1	9.9
0°-40°	1006.4	14.2
0°-60°	1318.5	18.6
0°-90°	1354.0	19.1
90°-120°	2769.7	39.0
90°-150°	4980.4	70.2
90°-180°	5745.0	80.9
0°-180°	7099.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1135	1135	1135	1135	1135	
5°	1112	1101	1110	1114	1118	103
15°	918	914	947	978	999	256
25°	666	671	718	767	803	305
35°	427	438	485	542	592	265
45°	205	217	254	303	350	161
55°	74	86	111	142	175	69
65°	8	16	35	42	47	14
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	46	182	816	282	174	52
105°	186	283	1222	2159	2052	197
115°	346	419	927	1963	2305	341
125°	489	542	884	1468	1755	438
135°	598	648	874	1240	1402	461
145°	705	741	881	1073	1169	440
155°	805	824	902	970	1009	372
165°	890	893	913	932	946	250
175°	932	927	923	918	911	88
180°	925	925	925	925	925	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1135.0	1135.0	1135.0	1135.0	1135.0
2.5°	1137.6	1126.9	1129.7	1129.7	1126.7
5°	1112.5	1101.2	1109.7	1113.7	1118.0
7.5°	1065.5	1056.7	1073.1	1085.3	1094.3
10°	1029.0	1021.5	1042.8	1059.5	1071.9
12.5°	986.9	981.1	1006.7	1029.7	1045.5
15°	917.6	914.3	946.7	978.4	999.4
17.5°	843.3	843.2	880.1	919.6	944.8
20°	792.4	794.0	833.5	877.0	906.6
22.5°	741.4	745.2	787.4	832.8	866.6
25°	665.5	670.9	718.2	767.4	803.3
27.5°	592.6	600.4	650.3	701.3	745.1
30°	544.7	553.8	604.6	658.3	703.4
32.5°	497.7	508.6	558.0	614.8	660.8
35°	427.2	437.9	485.4	542.5	591.9
37.5°	354.4	364.9	411.3	467.5	520.9
40°	307.0	318.8	363.0	417.5	471.7
42.5°	263.9	275.7	317.3	370.8	422.0
45°	204.8	217.2	253.7	303.1	350.3
47.5°	155.8	169.3	201.3	246.0	289.1
50°	126.8	140.3	171.9	211.2	252.6
52.5°	103.6	116.6	145.1	182.2	220.1
55°	73.6	85.9	110.9	142.4	175.2
57.5°	50.8	61.5	83.9	110.2	135.8
60°	36.8	47.0	68.1	89.4	110.4
62.5°	24.5	33.8	54.5	70.8	84.9
65°	8.2	15.8	35.1	42.4	47.2
67.5°	4.2	5.0	18.5	19.5	21.1
70°	3.3	3.3	8.8	9.4	11.0
72.5°	2.4	2.4	3.5	4.5	4.8
75°	1.1	1.1	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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°	14.1	74.6	173.0	50.4	38.0
95°	45.7	181.5	815.9	282.4	174.1
97.5°	84.1	212.7	1256.6	899.2	616.2
100°	110.8	231.1	1352.2	1369.7	1055.1
102.5°	140.3	251.0	1331.1	1753.2	1478.5
105°	186.4	282.7	1222.1	2158.7	2052.1
107.5°	233.2	319.5	1094.8	2273.0	2367.9
110°	265.5	346.3	1021.6	2229.2	2442.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	296.5	373.2	972.4	2125.8	2429.8
115°	346.4	418.6	926.7	1963.1	2305.3
117.5°	390.4	458.1	899.6	1785.3	2147.7
120°	425.5	482.3	896.8	1683.7	2031.0
122.5°	453.7	510.4	889.8	1594.5	1917.0
125°	488.8	542.1	884.5	1467.8	1754.9
127.5°	527.2	577.0	881.7	1392.1	1628.7
130°	546.9	596.7	877.5	1339.3	1545.7
132.5°	568.0	616.5	877.5	1298.2	1488.0
135°	597.9	647.7	873.9	1239.8	1401.5
137.5°	626.0	674.5	873.6	1190.5	1330.1
140°	647.1	697.0	872.2	1149.5	1283.6
142.5°	671.0	712.6	876.4	1116.9	1237.2
145°	705.1	741.2	881.0	1073.1	1169.4
147.5°	734.3	769.4	888.7	1028.8	1112.0
150°	759.6	783.7	891.5	1014.2	1072.6
152.5°	779.3	804.8	894.3	994.4	1048.7
155°	805.4	824.3	902.1	969.8	1009.3
157.5°	837.7	849.1	903.8	958.6	986.8
160°	854.6	863.2	910.9	950.1	974.2
162.5°	864.4	874.4	912.3	942.9	961.5
165°	889.8	893.2	912.6	932.3	946.0
167.5°	907.0	903.9	920.7	929.6	935.1
170°	912.6	910.9	917.9	919.8	926.7
172.5°	925.3	919.4	922.1	917.0	922.5
175°	932.0	926.8	923.2	917.7	910.9
177.5°	934.8	926.5	922.1	916.5	917.9
180°	924.9	924.9	924.9	924.9	924.9

(END OF REPORT)