

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: P521240

Luminaire Tested: SQ4-BB-125U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521240
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7021.7 lumens
Efficiency: N/A
Efficacy: 113.1 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

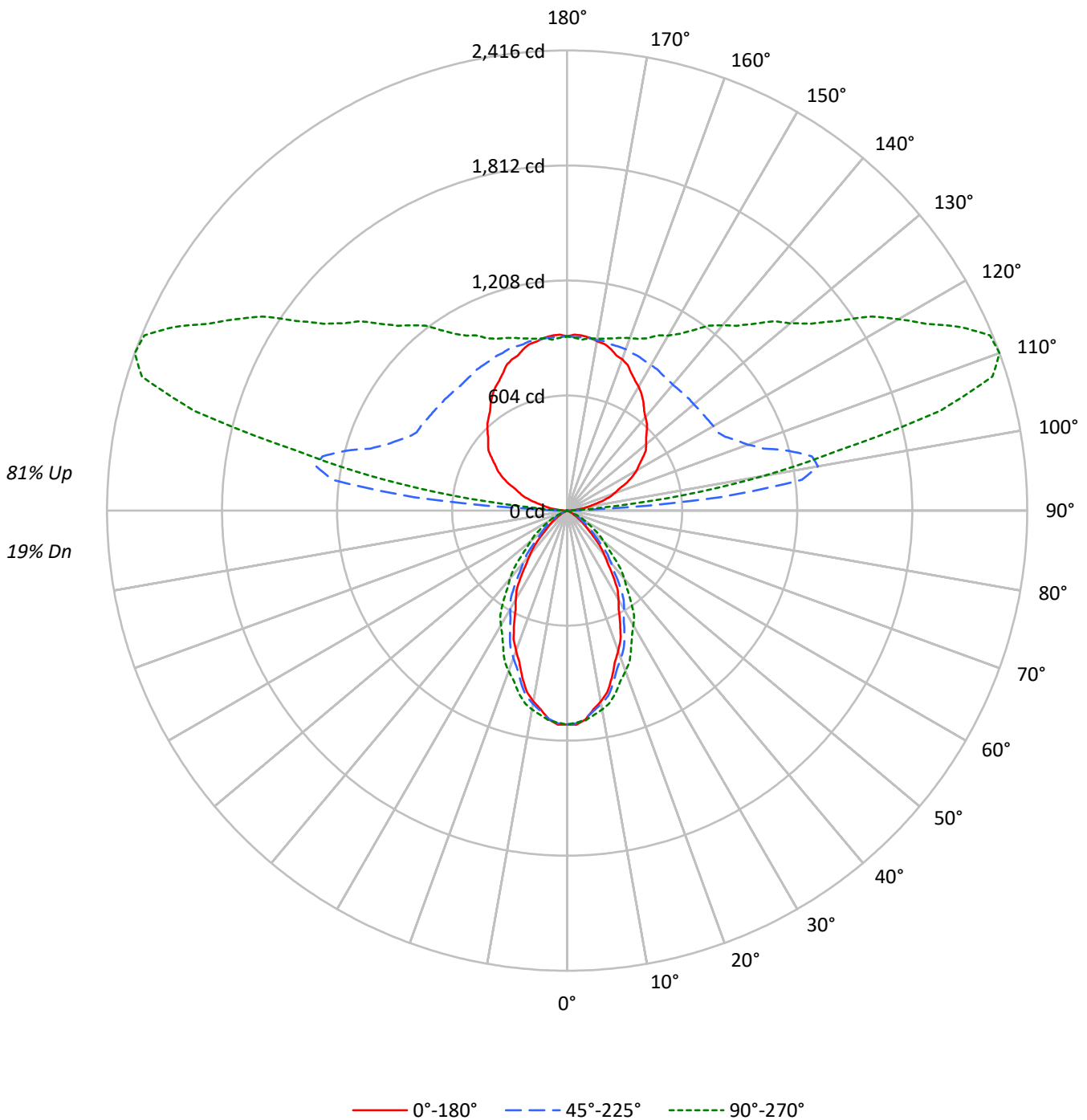
Input Watts (W): 62.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
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°	10357	10357	10357
5°	10190	10165	10240
10°	9535	9662	9932
15°	8668	8943	9441
20°	7695	8094	8804
25°	6700	7232	8089
30°	5740	6371	7412
35°	4759	5407	6595
40°	3657	4324	5619
45°	2643	3274	4521
50°	1801	2440	3585
55°	1171	1765	2786
60°	672	1242	2015
65°	177	760	1020
70°	89	235	294
75°	39	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4521 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	1.5
10°-20°	262.0	3.7
20°-30°	328.0	4.7
30°-40°	303.0	4.3
40°-50°	203.6	2.9
50°-60°	105.2	1.5
60°-70°	32.9	0.5
70°-80°	2.1	0.0
80°-90°	0.0	0.0
90°-100°	416.8	5.9
100°-110°	1186.1	16.9
110°-120°	1136.4	16.2
120°-130°	899.4	12.8
130°-140°	721.9	10.3
140°-150°	565.2	8.0
150°-160°	413.5	5.9
160°-170°	256.2	3.6
170°-180°	86.9	1.2
0°-30°	692.4	9.9
0°-40°	995.4	14.2
0°-60°	1304.1	18.6
0°-90°	1339.2	19.1
90°-120°	2739.4	39.0
90°-150°	4925.9	70.2
90°-180°	5682.0	80.9
0°-180°	7021.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1100	1089	1098	1102	1106	102
15°	908	904	936	968	988	253
25°	658	664	710	759	795	302
35°	422	433	480	537	586	262
45°	203	215	251	300	346	159
55°	73	85	110	141	173	68
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°	45	180	807	279	172	52
105°	184	280	1209	2135	2030	195
115°	343	414	916	1942	2280	337
125°	484	536	875	1452	1736	433
135°	591	641	864	1226	1386	456
145°	697	733	871	1061	1157	436
155°	796	815	892	959	998	368
165°	880	883	903	922	936	247
175°	922	917	913	908	901	87
180°	915	915	915	915	915	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1122.6	1122.6	1122.6	1122.6	1122.6
2.5°	1125.2	1114.6	1117.4	1117.3	1114.3
5°	1100.3	1089.2	1097.6	1101.5	1105.7
7.5°	1053.8	1045.1	1061.3	1073.5	1082.3
10°	1017.8	1010.3	1031.3	1047.9	1060.1
12.5°	976.1	970.3	995.7	1018.4	1034.1
15°	907.5	904.3	936.3	967.7	988.4
17.5°	834.1	834.0	870.5	909.5	934.5
20°	783.7	785.3	824.4	867.4	896.7
22.5°	733.3	737.0	778.8	823.7	857.1
25°	658.2	663.5	710.4	759.0	794.6
27.5°	586.1	593.9	643.1	693.7	737.0
30°	538.8	547.8	598.0	651.1	695.7
32.5°	492.3	503.0	551.9	608.1	653.6
35°	422.5	433.2	480.1	536.6	585.5
37.5°	350.5	360.9	406.8	462.4	515.2
40°	303.6	315.3	359.0	412.9	466.5
42.5°	261.0	272.7	313.8	366.8	417.4
45°	202.6	214.8	250.9	299.8	346.5
47.5°	154.1	167.4	199.1	243.3	285.9
50°	125.5	138.7	170.0	208.9	249.8
52.5°	102.4	115.3	143.5	180.2	217.7
55°	72.8	85.0	109.7	140.9	173.2
57.5°	50.3	60.8	83.0	109.0	134.4
60°	36.4	46.5	67.3	88.5	109.2
62.5°	24.2	33.5	53.9	70.1	84.0
65°	8.1	15.6	34.8	41.9	46.7
67.5°	4.1	5.0	18.2	19.3	20.9
70°	3.3	3.3	8.7	9.3	10.9
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°	13.9	73.8	171.1	49.8	37.6
95°	45.2	179.6	807.0	279.3	172.2
97.5°	83.1	210.3	1242.8	889.3	609.4
100°	109.6	228.6	1337.4	1354.7	1043.5
102.5°	138.8	248.3	1316.6	1734.0	1462.3
105°	184.4	279.6	1208.7	2135.1	2029.6
107.5°	230.6	316.0	1082.8	2248.1	2342.0
110°	262.6	342.5	1010.5	2204.9	2415.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	369.1	961.8	2102.5	2403.2
115°	342.6	414.0	916.5	1941.7	2280.1
117.5°	386.1	453.1	889.8	1765.8	2124.2
120°	420.9	477.0	887.0	1665.2	2008.8
122.5°	448.7	504.8	880.0	1577.0	1896.1
125°	483.5	536.2	874.8	1451.7	1735.7
127.5°	521.4	570.7	872.0	1376.8	1610.8
130°	540.9	590.2	867.9	1324.7	1528.7
132.5°	561.8	609.7	867.9	1284.0	1471.7
135°	591.3	640.6	864.4	1226.3	1386.1
137.5°	619.1	667.1	864.0	1177.4	1315.5
140°	640.0	689.3	862.6	1137.0	1269.6
142.5°	663.7	704.8	866.8	1104.6	1223.7
145°	697.4	733.1	871.3	1061.3	1156.6
147.5°	726.3	761.0	879.0	1017.6	1099.9
150°	751.3	775.1	881.8	1003.1	1060.9
152.5°	770.8	796.0	884.5	983.5	1037.2
155°	796.5	815.2	892.2	959.2	998.3
157.5°	828.5	839.8	893.9	948.1	976.0
160°	845.2	853.7	900.9	939.7	963.5
162.5°	855.0	864.8	902.3	932.6	951.0
165°	880.0	883.4	902.6	922.1	935.7
167.5°	897.1	894.0	910.6	919.5	924.9
170°	902.6	900.9	907.9	909.7	916.5
172.5°	915.2	909.4	912.0	906.9	912.4
175°	921.8	916.7	913.1	907.7	900.9
177.5°	924.5	916.4	912.0	906.5	907.9
180°	914.8	914.8	914.8	914.8	914.8

(END OF REPORT)