

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: P521331

Luminaire Tested: SQ4-BB-150U-125D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521331
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-150U-125D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 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: 10186.2 lumens
Efficiency: N/A
Efficacy: 95.4 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: Semi-Indirect

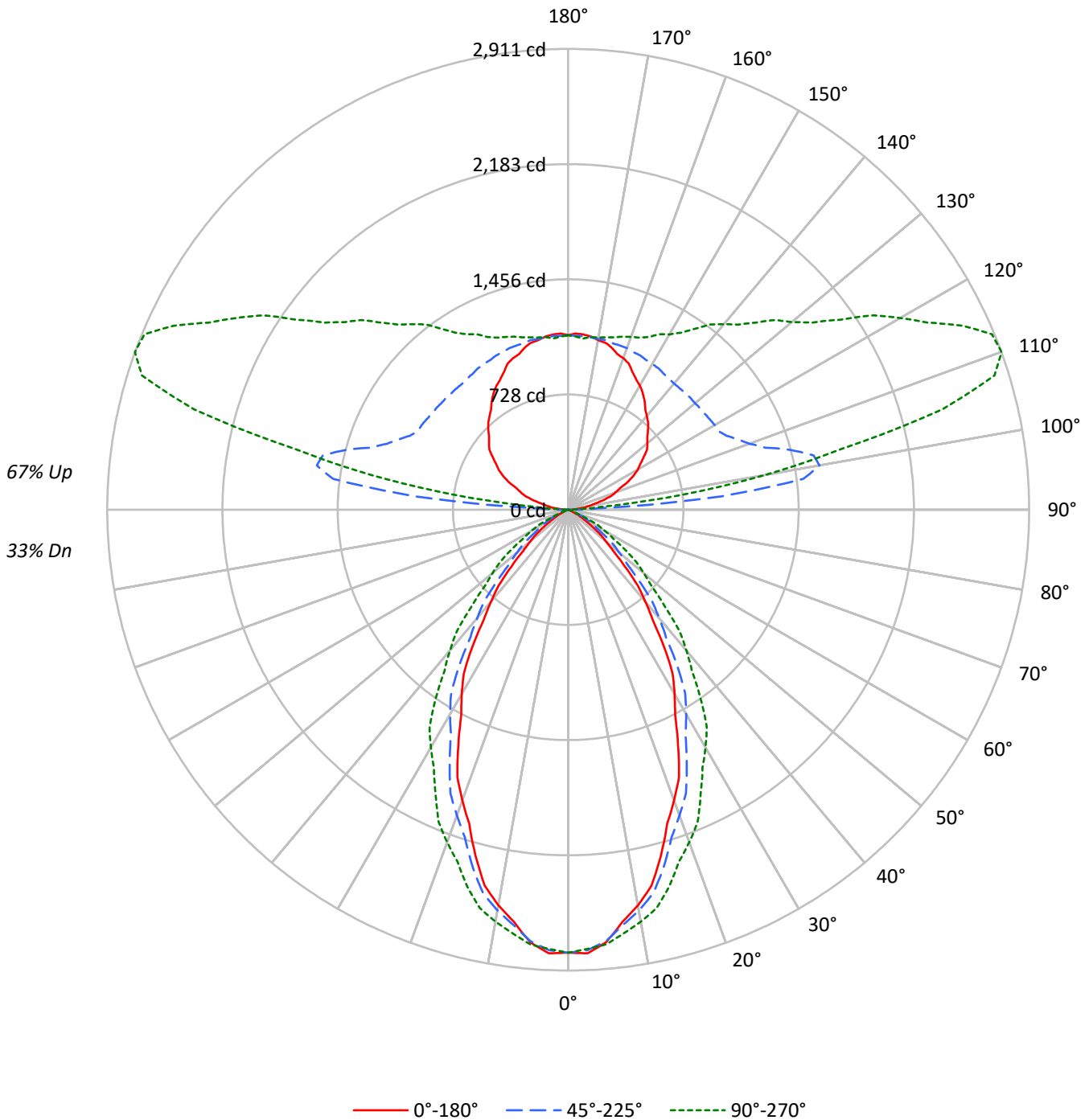
Input Watts (W): 106.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	93	93	93	93	74	74	74		56	56	56		40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63		51	50	49		37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54		46	45	43		34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47		42	40	38		32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41		38	36	33		29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36		35	32	30		27	25	24	20
6	64	53	45	40	58	48	42	37	40	35	32		32	29	27		25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29		30	26	24		23	21	20	17
8	55	44	37	32	50	40	34	30	34	29	26		27	24	22		21	19	18	15
9	51	40	33	29	47	37	31	27	31	27	23		25	22	20		20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21		24	20	18		19	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25816	25816	25816
5°	25400	25337	25526
10°	23767	24084	24755
15°	21607	22292	23533
20°	19179	20176	21944
25°	16702	18026	20161
30°	14307	15878	18474
35°	11862	13479	16436
40°	9114	10777	14005
45°	6588	8160	11269
50°	4488	6082	8938
55°	2918	4398	6946
60°	1674	3098	5021
65°	443	1891	2541
70°	219	585	731
75°	96	50	0
80°	74	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11269 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.4	2.5
10°-20°	653.0	6.4
20°-30°	817.5	8.0
30°-40°	755.1	7.4
40°-50°	507.4	5.0
50°-60°	262.1	2.6
60°-70°	82.1	0.8
70°-80°	5.2	0.1
80°-90°	0.1	0.0
90°-100°	502.4	4.9
100°-110°	1429.4	14.0
110°-120°	1369.6	13.4
120°-130°	1083.9	10.6
130°-140°	870.0	8.5
140°-150°	681.1	6.7
150°-160°	498.4	4.9
160°-170°	308.7	3.0
170°-180°	104.8	1.0
0°-30°	1725.9	16.9
0°-40°	2481.1	24.4
0°-60°	3250.5	31.9
0°-90°	3337.9	32.8
90°-120°	3301.4	32.4
90°-150°	5936.5	58.3
90°-180°	6848.0	67.2
0°-180°	10186.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2798	2798	2798	2798	2798	
5°	2743	2715	2736	2746	2756	254
15°	2262	2254	2334	2412	2464	630
25°	1641	1654	1771	1892	1980	752
35°	1053	1080	1197	1338	1459	652
45°	505	535	625	747	864	397
55°	181	212	273	351	432	169
65°	20	39	87	104	116	34
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	54	216	972	337	208	62
105°	222	337	1457	2573	2446	235
115°	413	499	1105	2340	2748	407
125°	583	646	1054	1750	2092	522
135°	713	772	1042	1478	1670	550
145°	840	884	1050	1279	1394	525
155°	960	982	1075	1156	1203	444
165°	1061	1065	1088	1111	1128	298
175°	1111	1105	1100	1094	1086	105
180°	1102	1102	1102	1102	1102	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2798.1	2798.1	2798.1	2798.1	2798.1
2.5°	2804.6	2778.1	2785.1	2785.0	2777.5
5°	2742.6	2714.8	2735.8	2745.6	2756.2
7.5°	2626.7	2605.0	2645.4	2675.7	2697.7
10°	2536.9	2518.3	2570.7	2612.0	2642.4
12.5°	2432.9	2418.6	2481.9	2538.6	2577.5
15°	2262.1	2254.1	2333.8	2412.1	2463.8
17.5°	2079.0	2078.8	2169.7	2267.0	2329.2
20°	1953.4	1957.4	2054.9	2162.2	2235.0
22.5°	1827.8	1837.0	1941.2	2053.0	2136.4
25°	1640.7	1653.9	1770.7	1891.8	1980.5
27.5°	1460.9	1480.2	1603.1	1729.0	1837.0
30°	1342.9	1365.4	1490.4	1622.9	1734.1
32.5°	1227.0	1253.7	1375.6	1515.8	1629.1
35°	1053.2	1079.7	1196.7	1337.5	1459.3
37.5°	873.7	899.6	1013.9	1152.6	1284.1
40°	756.7	785.8	894.8	1029.2	1162.8
42.5°	650.6	679.7	782.2	914.2	1040.5
45°	504.9	535.4	625.4	747.2	863.7
47.5°	384.2	417.3	496.3	606.4	712.6
50°	312.7	345.8	423.7	520.8	622.7
52.5°	255.3	287.3	357.7	449.1	542.6
55°	181.4	211.8	273.4	351.1	431.8
57.5°	125.4	151.6	206.8	271.6	334.9
60°	90.7	115.8	167.9	220.5	272.1
62.5°	60.4	83.4	134.3	174.6	209.3
65°	20.3	38.8	86.6	104.5	116.4
67.5°	10.3	12.4	45.5	48.0	52.0
70°	8.1	8.1	21.7	23.1	27.1
72.5°	6.0	6.0	8.7	11.1	11.9
75°	2.7	2.7	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	0.0	0.0	0.0
82.5°	0.3	0.3	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°	16.8	88.9	206.2	60.0	45.3
95°	54.5	216.4	972.5	336.6	207.5
97.5°	100.2	253.5	1497.8	1071.8	734.4
100°	132.0	275.5	1611.8	1632.6	1257.6
102.5°	167.3	299.2	1586.6	2089.8	1762.3
105°	222.2	336.9	1456.7	2573.1	2446.0
107.5°	277.9	380.8	1305.0	2709.3	2822.4
110°	316.5	412.8	1217.8	2657.2	2911.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	353.4	444.8	1159.1	2533.9	2896.2
115°	412.9	499.0	1104.6	2340.0	2747.8
117.5°	465.3	546.1	1072.3	2128.0	2560.0
120°	507.2	574.9	1068.9	2006.9	2420.8
122.5°	540.8	608.4	1060.6	1900.6	2285.0
125°	582.7	646.2	1054.3	1749.5	2091.8
127.5°	628.4	687.8	1050.9	1659.3	1941.3
130°	651.8	711.3	1045.9	1596.4	1842.4
132.5°	677.0	734.8	1045.9	1547.4	1773.6
135°	712.6	772.1	1041.7	1477.8	1670.5
137.5°	746.2	804.0	1041.3	1419.0	1585.4
140°	771.3	830.7	1039.6	1370.2	1530.1
142.5°	799.8	849.4	1044.6	1331.3	1474.7
145°	840.5	883.5	1050.1	1279.1	1393.8
147.5°	875.3	917.1	1059.3	1226.3	1325.5
150°	905.5	934.2	1062.7	1208.9	1278.5
152.5°	928.9	959.3	1066.0	1185.3	1250.0
155°	960.0	982.5	1075.2	1156.0	1203.1
157.5°	998.5	1012.0	1077.3	1142.6	1176.3
160°	1018.6	1028.9	1085.7	1132.5	1161.2
162.5°	1030.4	1042.3	1087.4	1123.9	1146.1
165°	1060.6	1064.7	1087.8	1111.2	1127.6
167.5°	1081.1	1077.4	1097.4	1108.1	1114.6
170°	1087.8	1085.8	1094.1	1096.4	1104.6
172.5°	1102.9	1095.9	1099.1	1093.0	1099.5
175°	1110.9	1104.7	1100.4	1093.9	1085.7
177.5°	1114.2	1104.4	1099.1	1092.5	1094.1
180°	1102.5	1102.5	1102.5	1102.5	1102.5

(END OF REPORT)