

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: P521291

Luminaire Tested: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521291
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-050D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8057.4 lumens
Efficiency: N/A
Efficacy: 112.1 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

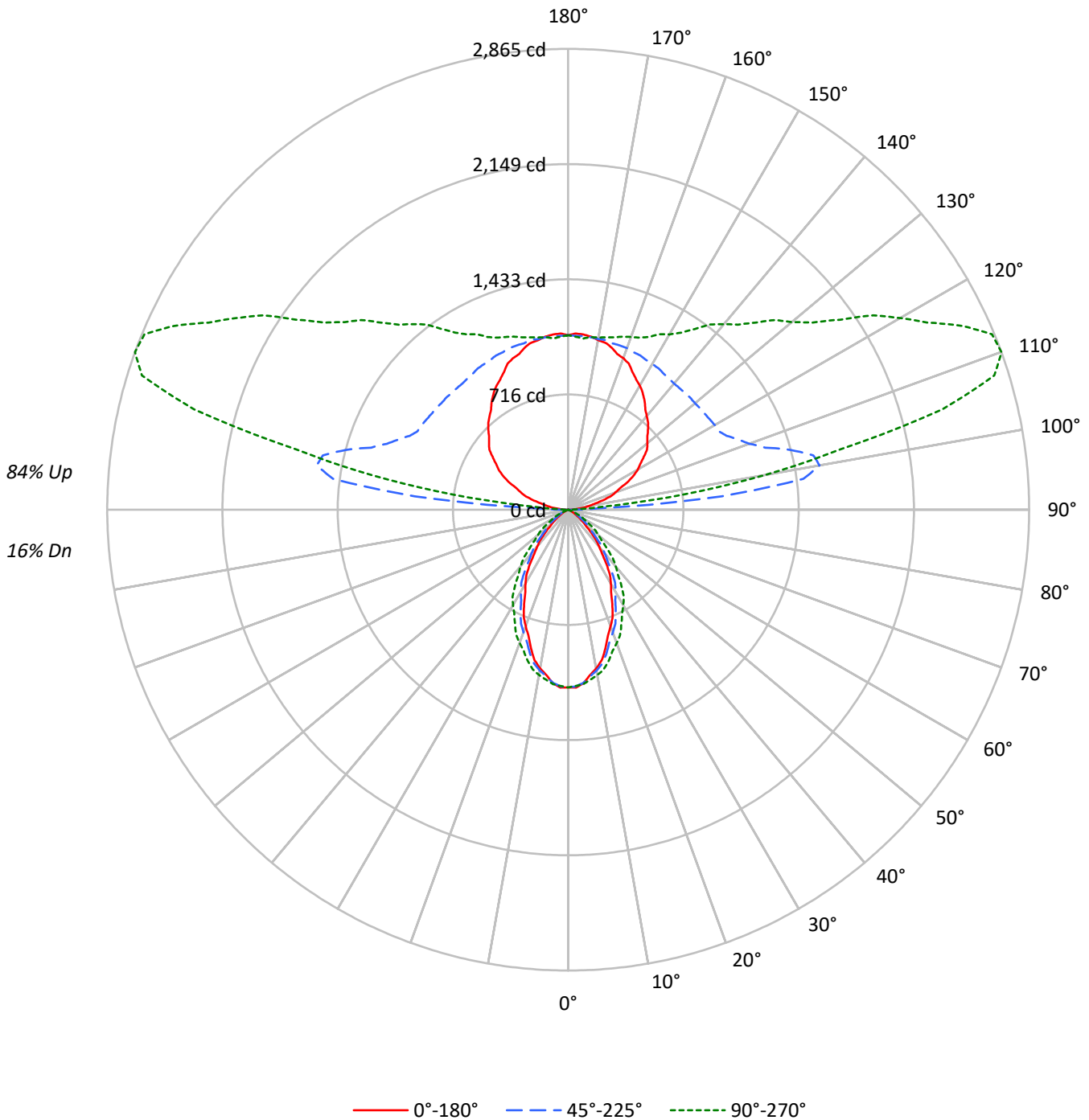
Input Watts (W): 71.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	99	99	99	99	87	87	87	87	65	65	65	44	44	44	25	25	25	16				
1	91	87	83	80	80	77	74	71	57	56	54	40	39	38	23	23	22	15				
2	83	77	71	67	73	68	63	59	51	48	46	35	34	32	21	20	20	13				
3	76	68	61	56	67	60	55	50	45	42	39	32	30	28	19	18	17	12				
4	70	60	53	48	61	53	48	43	41	37	34	29	26	24	18	16	16	11				
5	64	54	46	41	56	48	42	37	36	32	29	26	23	21	16	15	14	10				
6	59	48	41	36	52	43	37	32	33	29	26	24	21	19	15	14	13	9				
7	55	44	36	31	48	39	33	28	30	26	23	22	19	17	14	12	11	8				
8	51	40	32	28	45	35	29	25	27	23	20	20	17	15	13	11	10	8				
9	47	36	29	25	42	32	26	22	25	21	18	18	16	14	12	10	9	7				
10	44	33	26	22	39	30	24	20	23	19	16	17	14	12	11	10	9	7				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10193	10193	10193
5°	10029	10004	10078
10°	9384	9509	9774
15°	8531	8801	9291
20°	7573	7966	8664
25°	6595	7117	7960
30°	5648	6270	7294
35°	4683	5322	6490
40°	3599	4255	5529
45°	2602	3222	4449
50°	1773	2401	3530
55°	1152	1737	2743
60°	661	1223	1982
65°	175	747	1004
70°	86	232	289
75°	39	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4449 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.8	1.3
10°-20°	257.8	3.2
20°-30°	322.8	4.0
30°-40°	298.2	3.7
40°-50°	200.3	2.5
50°-60°	103.5	1.3
60°-70°	32.4	0.4
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	494.4	6.1
100°-110°	1406.7	17.5
110°-120°	1347.8	16.7
120°-130°	1066.7	13.2
130°-140°	856.2	10.6
140°-150°	670.3	8.3
150°-160°	490.5	6.1
160°-170°	303.8	3.8
170°-180°	103.1	1.3
0°-30°	681.4	8.5
0°-40°	979.6	12.2
0°-60°	1283.4	15.9
0°-90°	1317.9	16.4
90°-120°	3249.0	40.3
90°-150°	5842.2	72.5
90°-180°	6740.0	83.6
0°-180°	8057.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1083	1072	1080	1084	1088	100
15°	893	890	921	952	973	249
25°	648	653	699	747	782	297
35°	416	426	472	528	576	258
45°	199	211	247	295	341	157
55°	72	84	108	139	170	67
65°	8	15	34	41	46	14
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	54	213	957	331	204	61
105°	219	332	1434	2532	2407	231
115°	406	491	1087	2303	2704	400
125°	573	636	1038	1722	2059	513
135°	701	760	1025	1454	1644	541
145°	827	870	1033	1259	1372	517
155°	945	967	1058	1138	1184	437
165°	1044	1048	1070	1094	1110	294
175°	1093	1087	1083	1076	1068	104
180°	1085	1085	1085	1085	1085	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1104.8	1104.8	1104.8	1104.8	1104.8
2.5°	1107.3	1096.9	1099.6	1099.6	1096.6
5°	1082.9	1071.9	1080.2	1084.0	1088.2
7.5°	1037.1	1028.5	1044.5	1056.4	1065.1
10°	1001.6	994.3	1015.0	1031.3	1043.3
12.5°	960.6	954.9	979.9	1002.3	1017.6
15°	893.1	890.0	921.4	952.4	972.7
17.5°	820.9	820.7	856.7	895.1	919.6
20°	771.3	772.8	811.3	853.7	882.4
22.5°	721.7	725.3	766.4	810.6	843.5
25°	647.8	653.0	699.1	746.9	781.9
27.5°	576.8	584.4	632.9	682.6	725.3
30°	530.2	539.1	588.5	640.8	684.7
32.5°	484.5	495.0	543.1	598.5	643.2
35°	415.8	426.3	472.5	528.1	576.2
37.5°	345.0	355.2	400.3	455.1	507.0
40°	298.8	310.3	353.3	406.3	459.1
42.5°	256.9	268.4	308.8	360.9	410.8
45°	199.4	211.4	246.9	295.0	341.0
47.5°	151.7	164.7	195.9	239.4	281.3
50°	123.5	136.5	167.3	205.6	245.9
52.5°	100.8	113.4	141.2	177.3	214.2
55°	71.6	83.6	108.0	138.6	170.5
57.5°	49.5	59.8	81.7	107.2	132.2
60°	35.8	45.7	66.3	87.0	107.4
62.5°	23.8	32.9	53.0	68.9	82.6
65°	8.0	15.3	34.2	41.3	46.0
67.5°	4.1	4.9	18.0	19.0	20.5
70°	3.2	3.2	8.6	9.1	10.7
72.5°	2.4	2.4	3.4	4.4	4.7
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°	16.5	87.5	203.0	59.1	44.6
95°	53.6	213.0	957.1	331.3	204.2
97.5°	98.6	249.5	1474.0	1054.7	722.8
100°	129.9	271.1	1586.2	1606.7	1237.6
102.5°	164.6	294.5	1561.5	2056.6	1734.3
105°	218.6	331.6	1433.6	2532.2	2407.2
107.5°	273.5	374.8	1284.2	2666.3	2777.6
110°	311.5	406.3	1198.4	2615.0	2865.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	347.8	437.7	1140.7	2493.7	2850.2
115°	406.4	491.1	1087.0	2302.8	2704.2
117.5°	457.9	537.4	1055.3	2094.2	2519.4
120°	499.2	565.7	1052.0	1975.0	2382.4
122.5°	532.2	598.7	1043.7	1870.4	2248.8
125°	573.4	636.0	1037.5	1721.8	2058.6
127.5°	618.4	676.9	1034.2	1632.9	1910.5
130°	641.5	700.0	1029.3	1571.1	1813.1
132.5°	666.3	723.1	1029.3	1522.8	1745.5
135°	701.3	759.8	1025.2	1454.4	1644.0
137.5°	734.3	791.2	1024.7	1396.5	1560.2
140°	759.1	817.6	1023.1	1348.5	1505.8
142.5°	787.1	835.9	1028.0	1310.1	1451.3
145°	827.1	869.5	1033.4	1258.7	1371.7
147.5°	861.4	902.5	1042.5	1206.8	1304.4
150°	891.1	919.3	1045.8	1189.7	1258.2
152.5°	914.2	944.0	1049.1	1166.5	1230.2
155°	944.7	966.9	1058.2	1137.6	1184.0
157.5°	982.7	996.0	1060.2	1124.5	1157.6
160°	1002.5	1012.6	1068.5	1114.5	1142.7
162.5°	1014.0	1025.7	1070.1	1106.1	1127.9
165°	1043.7	1047.8	1070.5	1093.6	1109.7
167.5°	1063.9	1060.3	1080.0	1090.5	1096.9
170°	1070.5	1068.5	1076.7	1079.0	1087.0
172.5°	1085.4	1078.5	1081.7	1075.6	1082.1
175°	1093.2	1087.2	1082.9	1076.5	1068.5
177.5°	1096.5	1086.8	1081.7	1075.1	1076.7
180°	1085.0	1085.0	1085.0	1085.0	1085.0

(END OF REPORT)