

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: P521288

Luminaire Tested: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521288
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7570.3 lumens
Efficiency: N/A
Efficacy: 105.7 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

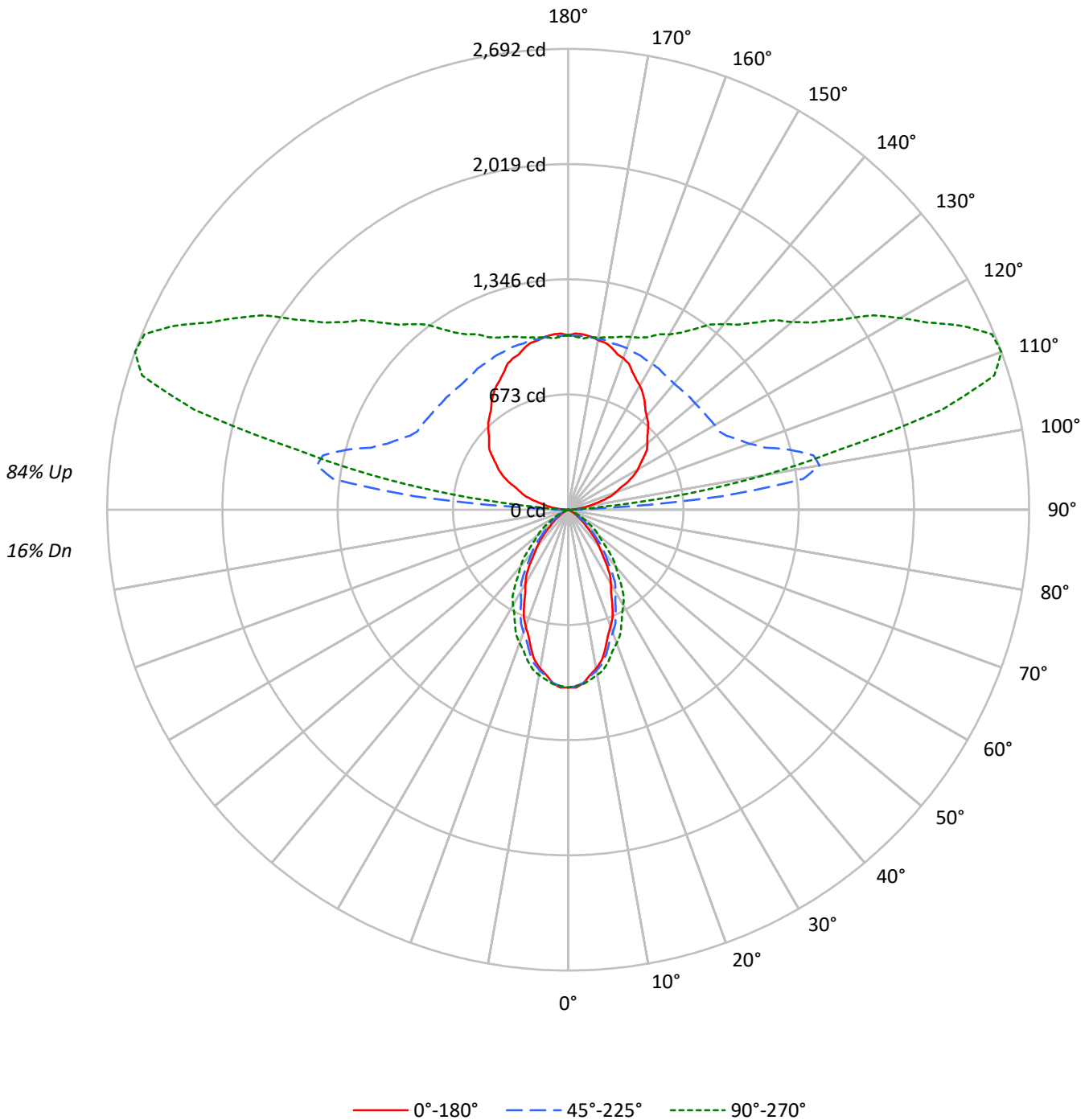
Input Watts (W): 71.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									10	0
RW	70	50	30	10	70	50	30	10	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°	9577	9577	9577
5°	9423	9399	9469
10°	8817	8934	9183
15°	8015	8269	8729
20°	7114	7485	8140
25°	6196	6686	7479
30°	5308	5890	6853
35°	4400	5000	6097
40°	3381	3997	5196
45°	2444	3027	4181
50°	1665	2256	3316
55°	1083	1631	2577
60°	620	1150	1862
65°	164	701	943
70°	81	216	270
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4181 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	1.3
10°-20°	242.2	3.2
20°-30°	303.3	4.0
30°-40°	280.1	3.7
40°-50°	188.2	2.5
50°-60°	97.2	1.3
60°-70°	30.4	0.4
70°-80°	1.9	0.0
80°-90°	0.0	0.0
90°-100°	464.5	6.1
100°-110°	1321.7	17.5
110°-120°	1266.3	16.7
120°-130°	1002.2	13.2
130°-140°	804.5	10.6
140°-150°	629.8	8.3
150°-160°	460.8	6.1
160°-170°	285.4	3.8
170°-180°	96.9	1.3
0°-30°	640.2	8.5
0°-40°	920.4	12.2
0°-60°	1205.8	15.9
0°-90°	1238.2	16.4
90°-120°	3052.5	40.3
90°-150°	5489.0	72.5
90°-180°	6332.0	83.6
0°-180°	7570.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1017	1007	1015	1018	1022	94
15°	839	836	866	895	914	234
25°	609	614	657	702	735	279
35°	391	400	444	496	541	242
45°	187	199	232	277	320	147
55°	67	79	101	130	160	63
65°	8	14	32	39	43	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	50	200	899	311	192	58
105°	205	312	1347	2379	2262	217
115°	382	461	1021	2164	2541	376
125°	539	598	975	1618	1934	482
135°	659	714	963	1366	1545	508
145°	777	817	971	1183	1289	485
155°	888	908	994	1069	1112	410
165°	981	984	1006	1028	1043	276
175°	1027	1022	1018	1012	1004	97
180°	1019	1019	1019	1019	1019	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1038.0	1038.0	1038.0	1038.0	1038.0
2.5°	1040.4	1030.6	1033.2	1033.1	1030.3
5°	1017.4	1007.1	1014.9	1018.5	1022.4
7.5°	974.4	966.4	981.3	992.6	1000.7
10°	941.1	934.2	953.6	968.9	980.2
12.5°	902.5	897.2	920.7	941.7	956.1
15°	839.1	836.2	865.7	894.8	913.9
17.5°	771.2	771.1	804.9	841.0	864.0
20°	724.6	726.1	762.3	802.1	829.1
22.5°	678.0	681.5	720.1	761.6	792.5
25°	608.6	613.5	656.8	701.8	734.7
27.5°	541.9	549.1	594.7	641.4	681.4
30°	498.2	506.5	552.9	602.0	643.3
32.5°	455.2	465.1	510.3	562.3	604.3
35°	390.7	400.5	443.9	496.2	541.3
37.5°	324.1	333.7	376.1	427.5	476.4
40°	280.7	291.5	331.9	381.8	431.4
42.5°	241.3	252.1	290.2	339.1	386.0
45°	187.3	198.6	232.0	277.2	320.4
47.5°	142.5	154.8	184.1	225.0	264.3
50°	116.0	128.3	157.2	193.2	231.0
52.5°	94.7	106.6	132.7	166.6	201.3
55°	67.3	78.6	101.4	130.2	160.2
57.5°	46.5	56.2	76.7	100.8	124.2
60°	33.6	43.0	62.3	81.8	100.9
62.5°	22.4	30.9	49.8	64.8	77.6
65°	7.5	14.4	32.1	38.8	43.2
67.5°	3.8	4.6	16.9	17.8	19.3
70°	3.0	3.0	8.0	8.6	10.0
72.5°	2.2	2.2	3.2	4.1	4.4
75°	1.0	1.0	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°	15.5	82.2	190.7	55.5	41.9
95°	50.4	200.1	899.2	311.2	191.9
97.5°	92.6	234.4	1384.9	991.0	679.1
100°	122.1	254.7	1490.3	1509.6	1162.8
102.5°	154.7	276.7	1467.1	1932.3	1629.5
105°	205.4	311.5	1346.9	2379.1	2261.7
107.5°	257.0	352.1	1206.6	2505.1	2609.7
110°	292.6	381.7	1126.0	2456.9	2691.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.7	411.3	1071.7	2342.9	2677.9
115°	381.8	461.4	1021.3	2163.6	2540.7
117.5°	430.2	504.9	991.5	1967.6	2367.1
120°	469.0	531.5	988.4	1855.6	2238.4
122.5°	500.0	562.5	980.6	1757.3	2112.8
125°	538.8	597.5	974.8	1617.7	1934.1
127.5°	581.0	636.0	971.7	1534.2	1795.0
130°	602.7	657.7	967.1	1476.1	1703.5
132.5°	626.0	679.4	967.1	1430.7	1639.9
135°	658.9	713.9	963.2	1366.5	1544.6
137.5°	689.9	743.4	962.8	1312.0	1465.9
140°	713.2	768.1	961.3	1266.9	1414.7
142.5°	739.5	785.4	965.9	1230.9	1363.6
145°	777.1	816.9	970.9	1182.7	1288.8
147.5°	809.3	848.0	979.5	1133.9	1225.6
150°	837.2	863.7	982.6	1117.8	1182.2
152.5°	858.9	887.0	985.7	1095.9	1155.8
155°	887.6	908.5	994.2	1068.8	1112.4
157.5°	923.3	935.8	996.1	1056.5	1087.6
160°	941.9	951.3	1003.9	1047.1	1073.7
162.5°	952.7	963.7	1005.4	1039.2	1059.7
165°	980.6	984.4	1005.8	1027.5	1042.6
167.5°	999.6	996.2	1014.7	1024.6	1030.6
170°	1005.8	1003.9	1011.6	1013.7	1021.3
172.5°	1019.8	1013.3	1016.3	1010.6	1016.7
175°	1027.1	1021.5	1017.5	1011.5	1003.9
177.5°	1030.2	1021.1	1016.3	1010.1	1011.6
180°	1019.4	1019.4	1019.4	1019.4	1019.4

(END OF REPORT)