

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: P521918

Luminaire Tested: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521918
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6489.1 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

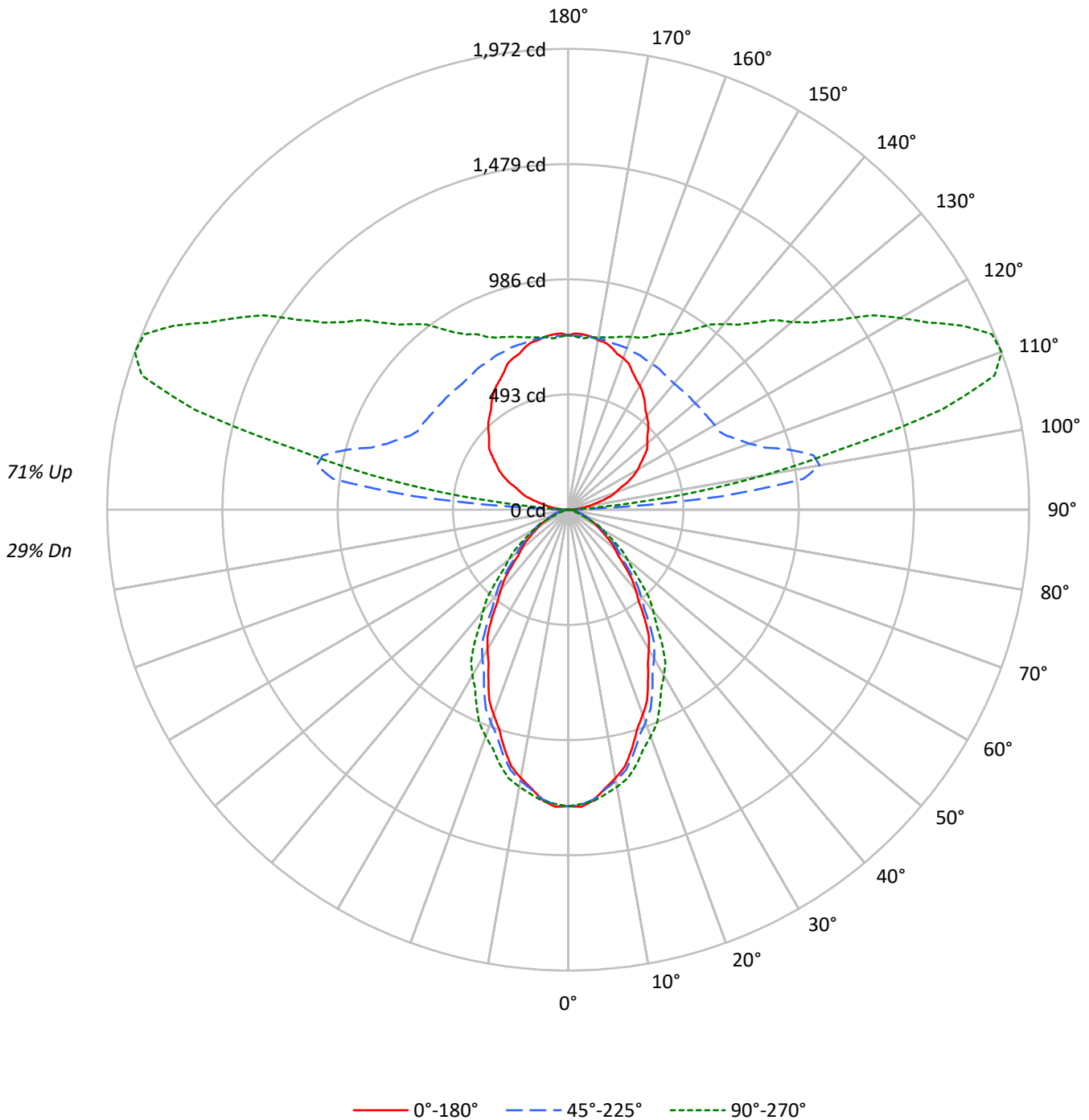
Input Watts (W): 52.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29				
1	94	90	86	83	84	81	78	75	63	61	60	48	46	45	33	32	32	25				
2	86	79	74	69	77	71	67	63	56	53	50	43	41	39	30	29	28	22				
3	79	70	63	58	70	63	58	53	50	46	43	38	36	34	27	26	25	20				
4	72	62	55	50	65	56	50	45	45	41	37	35	32	29	25	23	22	18				
5	66	56	48	43	60	51	44	39	41	36	33	31	28	26	23	21	19	16				
6	61	50	43	37	55	46	39	34	37	32	29	28	25	23	21	19	17	14				
7	57	45	38	33	51	41	35	30	33	29	25	26	23	21	19	17	16	13				
8	53	41	34	29	47	38	31	27	31	26	23	24	21	19	18	16	14	12				
9	49	38	31	26	44	34	28	24	28	24	20	22	19	17	17	15	13	11				
10	46	35	28	23	41	32	26	22	26	22	19	21	17	15	15	13	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11710	11710	11710
5°	11564	11523	11590
10°	10926	11025	11281
15°	10086	10320	10783
20°	9160	9503	10133
25°	8215	8663	9440
30°	7346	7826	8722
35°	6423	6887	7872
40°	5407	5835	6814
45°	4462	4847	5690
50°	3725	4061	4741
55°	3162	3484	3915
60°	2703	3021	3124
65°	2153	2541	2019
70°	1907	1983	1233
75°	1768	1608	756
80°	1626	1477	654
85°	1471	1355	529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5690 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.4	1.8
10°-20°	302.8	4.7
20°-30°	392.2	6.0
30°-40°	384.1	5.9
40°-50°	294.0	4.5
50°-60°	195.9	3.0
60°-70°	106.9	1.6
70°-80°	44.6	0.7
80°-90°	12.6	0.2
90°-100°	340.3	5.2
100°-110°	968.4	14.9
110°-120°	927.8	14.3
120°-130°	734.4	11.3
130°-140°	589.4	9.1
140°-150°	461.5	7.1
150°-160°	337.6	5.2
160°-170°	209.1	3.2
170°-180°	71.0	1.1
0°-30°	811.5	12.5
0°-40°	1195.6	18.4
0°-60°	1685.5	26.0
0°-90°	1849.5	28.5
90°-120°	2236.6	34.5
90°-150°	4021.8	62.0
90°-180°	4640.0	71.5
0°-180°	6489.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1249	1236	1244	1247	1251	116
15°	1056	1052	1080	1110	1129	295
25°	807	809	851	888	927	371
35°	570	573	612	653	699	355
45°	342	348	372	400	436	267
55°	197	205	217	225	243	178
65°	99	107	116	102	92	102
75°	50	50	45	31	21	53
85°	14	14	13	8	5	15
90°	0	0	0	0	0	2
95°	37	147	659	228	141	42
105°	150	228	987	1743	1657	159
115°	280	338	748	1585	1862	275
125°	395	438	714	1185	1417	353
135°	483	523	706	1001	1132	373
145°	569	599	711	866	944	356
155°	650	666	728	783	815	301
165°	718	721	737	753	764	202
175°	753	748	746	741	736	71
180°	747	747	747	747	747	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1269.2	1269.2	1269.2	1269.2	1269.2
2.5°	1272.4	1261.0	1263.9	1263.8	1260.3
5°	1248.6	1236.1	1244.2	1247.1	1251.4
7.5°	1202.3	1192.8	1207.5	1218.4	1227.2
10°	1166.2	1158.0	1176.8	1192.6	1204.1
12.5°	1124.3	1117.5	1140.7	1162.0	1176.9
15°	1055.9	1052.1	1080.4	1109.8	1128.9
17.5°	982.8	980.9	1013.4	1047.7	1072.1
20°	932.9	932.3	967.9	1003.7	1032.0
22.5°	882.5	883.7	921.2	958.3	990.6
25°	807.0	809.2	851.0	888.1	927.3
27.5°	737.2	738.1	781.4	820.5	862.3
30°	689.5	692.2	734.6	775.1	818.7
32.5°	641.8	645.0	686.5	728.4	772.8
35°	570.3	573.0	611.5	652.7	698.9
37.5°	496.6	500.3	534.4	573.3	618.9
40°	448.9	454.3	484.5	521.2	565.8
42.5°	403.0	409.7	437.7	472.5	512.8
45°	342.0	348.5	371.5	399.6	436.1
47.5°	289.4	296.9	314.6	338.8	369.9
50°	259.5	266.6	282.9	300.9	330.3
52.5°	233.2	240.3	254.9	268.7	293.7
55°	196.6	204.8	216.6	224.9	243.4
57.5°	166.5	174.4	183.8	187.5	198.7
60°	146.5	155.2	163.7	163.3	169.3
62.5°	128.2	135.6	144.1	138.2	138.6
65°	98.6	106.7	116.4	101.7	92.5
67.5°	79.6	81.4	91.3	70.9	59.9
70°	70.7	70.7	73.5	54.9	45.7
72.5°	62.3	62.3	59.7	44.7	35.0
75°	49.6	49.6	45.1	31.0	21.2
77.5°	38.2	37.8	34.5	23.1	15.4
80°	30.6	30.6	27.8	18.2	12.3
82.5°	23.9	23.9	21.6	14.3	9.1
85°	13.9	13.9	12.8	8.3	5.0
87.5°	4.9	4.9	4.5	2.7	2.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.4	60.2	139.7	40.7	30.7
95°	36.9	146.6	658.9	228.0	140.6
97.5°	67.9	171.7	1014.7	726.1	497.6
100°	89.5	186.6	1092.0	1106.1	852.0
102.5°	113.3	202.7	1074.9	1415.8	1193.9
105°	150.5	228.3	986.9	1743.2	1657.1
107.5°	188.3	258.0	884.1	1835.5	1912.1
110°	214.4	279.7	825.0	1800.2	1972.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	301.3	785.2	1716.7	1962.1
115°	279.7	338.0	748.3	1585.3	1861.6
117.5°	315.2	369.9	726.5	1441.7	1734.4
120°	343.6	389.5	724.2	1359.6	1640.1
122.5°	366.4	412.2	718.5	1287.6	1548.1
125°	394.8	437.8	714.2	1185.3	1417.1
127.5°	425.7	466.0	712.0	1124.1	1315.2
130°	441.6	481.9	708.6	1081.5	1248.2
132.5°	458.7	497.8	708.6	1048.3	1201.6
135°	482.8	523.1	705.7	1001.2	1131.7
137.5°	505.5	544.7	705.4	961.3	1074.1
140°	522.6	562.8	704.3	928.3	1036.6
142.5°	541.9	575.5	707.7	901.9	999.1
145°	569.4	598.6	711.4	866.5	944.3
147.5°	593.0	621.3	717.7	830.8	898.0
150°	613.4	632.9	719.9	819.0	866.2
152.5°	629.3	649.9	722.2	803.0	846.9
155°	650.3	665.6	728.4	783.1	815.1
157.5°	676.5	685.6	729.9	774.1	796.9
160°	690.1	697.1	735.5	767.2	786.7
162.5°	698.1	706.1	736.7	761.4	776.4
165°	718.5	721.3	737.0	752.8	763.9
167.5°	732.4	729.9	743.5	750.7	755.1
170°	737.0	735.6	741.2	742.8	748.3
172.5°	747.2	742.5	744.6	740.5	744.9
175°	752.6	748.4	745.5	741.1	735.5
177.5°	754.9	748.2	744.6	740.1	741.2
180°	746.9	746.9	746.9	746.9	746.9

(END OF REPORT)