

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: P522022

Luminaire Tested: SQ4-WB-150U-050D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522022
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-150U-050D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 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: 8872.2 lumens
Efficiency: N/A
Efficacy: 123.9 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

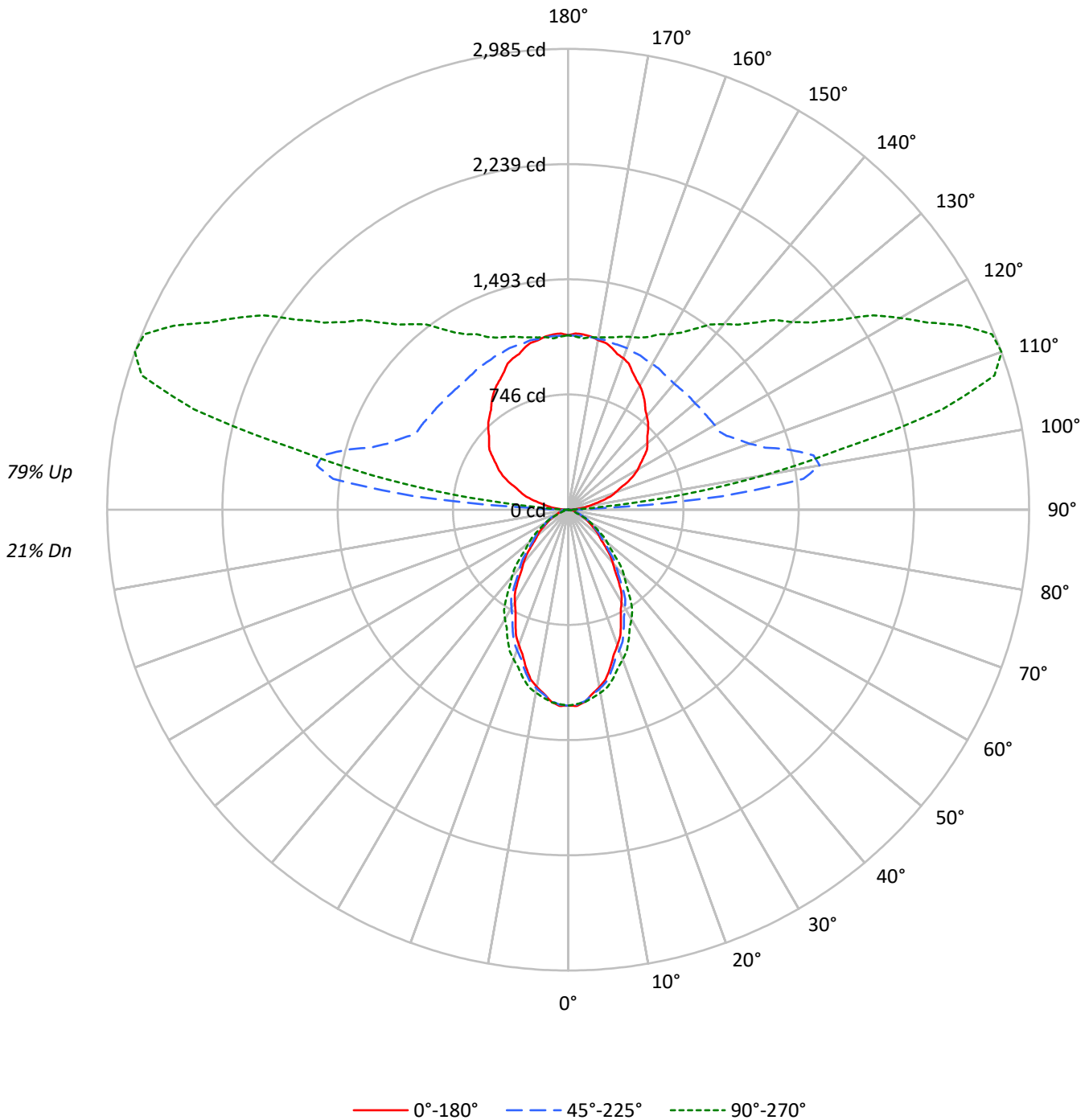
Input Watts (W): 71.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	100	100	100	100	89	89	89	89	67	67	67	47	47	47	29	29	29	21																				
1	92	88	84	81	81	78	75	72	59	57	56	42	41	40	27	26	26	19																				
2	84	77	72	67	74	69	64	60	53	50	47	38	36	34	24	23	22	16																				
3	77	68	62	56	68	61	55	51	47	43	40	34	31	30	22	21	20	14																				
4	70	61	53	48	62	54	48	43	42	38	34	30	28	26	20	18	17	13																				
5	65	54	47	41	57	48	42	37	37	33	30	27	25	23	18	17	15	12																				
6	60	48	41	36	53	43	37	32	34	29	26	25	22	20	17	15	14	10																				
7	55	44	36	31	49	39	33	29	31	26	23	23	20	18	15	14	12	9																				
8	51	40	33	28	45	36	30	25	28	24	21	21	18	16	14	12	11	9																				
9	48	36	29	25	42	33	27	22	26	21	18	19	16	14	13	11	10	8																				
10	44	33	26	22	39	30	24	20	24	19	17	18	15	13	12	11	9	7																				

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	1.3
10°-20°	302.8	3.4
20°-30°	392.2	4.4
30°-40°	384.1	4.3
40°-50°	294.0	3.3
50°-60°	195.9	2.2
60°-70°	106.9	1.2
70°-80°	44.6	0.5
80°-90°	12.6	0.1
90°-100°	515.2	5.8
100°-110°	1465.8	16.5
110°-120°	1404.4	15.8
120°-130°	1111.5	12.5
130°-140°	892.2	10.1
140°-150°	698.5	7.9
150°-160°	511.1	5.8
160°-170°	316.6	3.6
170°-180°	107.4	1.2
0°-30°	811.5	9.1
0°-40°	1195.6	13.5
0°-60°	1685.5	19.0
0°-90°	1849.5	20.8
90°-120°	3385.4	38.2
90°-150°	6087.6	68.6
90°-180°	7023.0	79.2
0°-180°	8872.2	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	3
95°	56	222	997	345	213	64
105°	228	346	1494	2639	2508	241
115°	423	512	1133	2400	2818	417
125°	598	663	1081	1794	2145	535
135°	731	792	1068	1516	1713	564
145°	862	906	1077	1312	1429	538
155°	984	1008	1103	1185	1234	455
165°	1088	1092	1116	1140	1156	306
175°	1139	1133	1128	1122	1113	108
180°	1131	1131	1131	1131	1131	

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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°	17.2	91.2	211.5	61.6	46.4
95°	55.9	221.9	997.3	345.2	212.8
97.5°	102.7	259.9	1535.9	1099.1	753.1
100°	135.4	282.5	1652.8	1674.2	1289.6
102.5°	171.5	306.9	1627.1	2143.0	1807.2
105°	227.8	345.5	1493.8	2638.6	2508.3
107.5°	285.0	390.5	1338.2	2778.3	2894.3
110°	324.6	423.3	1248.8	2724.8	2985.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	362.4	456.1	1188.6	2598.4	2970.0
115°	423.4	511.7	1132.7	2399.6	2817.8
117.5°	477.2	560.0	1099.6	2182.2	2625.2
120°	520.1	589.5	1096.2	2058.0	2482.5
122.5°	554.5	623.9	1087.6	1949.0	2343.2
125°	597.5	662.7	1081.1	1794.1	2145.0
127.5°	644.4	705.3	1077.7	1701.5	1990.7
130°	668.4	729.4	1072.5	1637.1	1889.3
132.5°	694.2	753.5	1072.5	1586.8	1818.8
135°	730.8	791.7	1068.2	1515.5	1713.0
137.5°	765.2	824.4	1067.8	1455.1	1625.8
140°	791.0	851.9	1066.1	1405.1	1569.0
142.5°	820.2	871.0	1071.2	1365.2	1512.3
145°	861.9	906.0	1076.8	1311.6	1429.3
147.5°	897.6	940.4	1086.3	1257.5	1359.2
150°	928.5	957.9	1089.7	1239.6	1311.1
152.5°	952.6	983.7	1093.2	1215.5	1281.9
155°	984.4	1007.5	1102.6	1185.4	1233.7
157.5°	1023.9	1037.8	1104.8	1171.7	1206.2
160°	1044.6	1055.1	1113.4	1161.3	1190.7
162.5°	1056.6	1068.8	1115.1	1152.6	1175.3
165°	1087.6	1091.8	1115.5	1139.5	1156.3
167.5°	1108.6	1104.8	1125.4	1136.3	1143.0
170°	1115.5	1113.4	1122.0	1124.3	1132.7
172.5°	1131.0	1123.8	1127.1	1120.8	1127.5
175°	1139.2	1132.8	1128.4	1121.8	1113.4
177.5°	1142.6	1132.5	1127.1	1120.3	1122.0
180°	1130.6	1130.6	1130.6	1130.6	1130.6

(END OF REPORT)