

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: P521782

Luminaire Tested: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521782
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-050U-100D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 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: 5371.5 lumens
Efficiency: N/A
Efficacy: 92.5 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-Direct

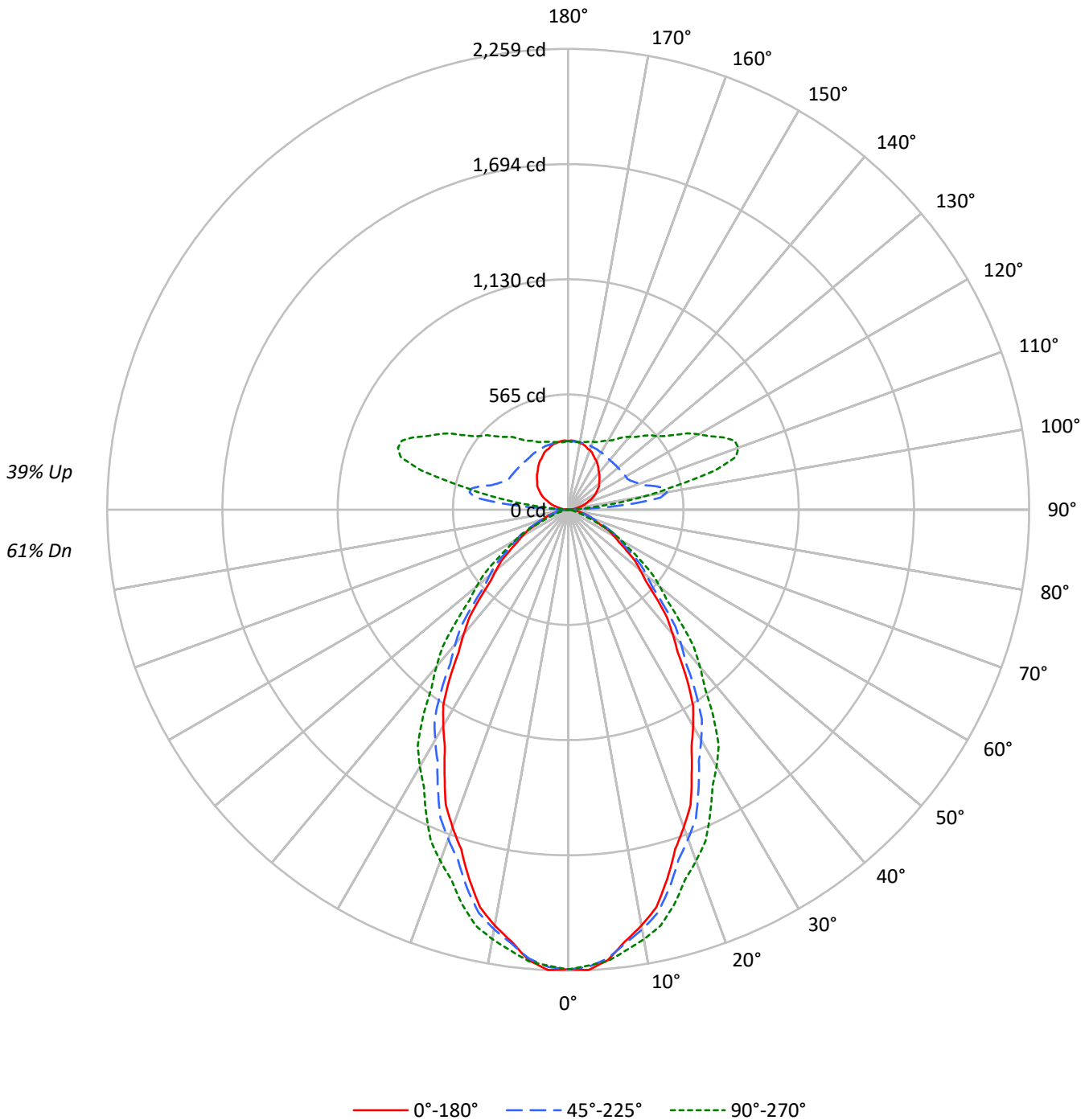
Input Watts (W): 58.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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	110	110	110	110	103	103	103	103	90	90	90	77	77	77	66	66	66	61						61													
1	102	98	94	91	95	92	89	86	81	78	76	70	69	67	61	60	59	54						54													
2	94	87	82	77	88	82	77	73	72	69	66	63	61	59	55	53	52	48						48													
3	87	78	71	66	81	74	68	63	65	61	57	58	54	51	50	48	46	42						42													
4	80	70	63	57	75	66	60	55	59	54	50	52	48	45	46	43	41	38						38													
5	74	63	56	50	69	60	53	48	54	48	44	48	44	40	42	39	37	34						34													
6	69	58	50	45	65	55	48	43	49	44	40	44	40	36	39	36	33	31						31													
7	64	53	45	40	60	50	43	38	45	40	36	40	36	33	36	33	30	28						28													
8	60	48	41	36	56	46	39	35	42	36	32	37	33	30	34	30	27	25						25													
9	56	45	37	33	53	42	36	32	39	33	29	35	30	27	31	28	25	23						23													
10	53	41	34	30	50	39	33	29	36	31	27	32	28	25	29	26	23	22						22													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20788	20788	20788
5°	20528	20455	20574
10°	19395	19571	20024
15°	17905	18320	19142
20°	16259	16871	17986
25°	14583	15378	16757
30°	13039	13892	15483
35°	11403	12226	13974
40°	9597	10359	12098
45°	7920	8604	10100
50°	6613	7208	8415
55°	5614	6186	6949
60°	4798	5364	5545
65°	3820	4510	3582
70°	3388	3520	2188
75°	3137	2855	1340
80°	2890	2625	1158
85°	2615	2403	942

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10100 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.7	3.8
10°-20°	537.5	10.0
20°-30°	696.3	13.0
30°-40°	681.8	12.7
40°-50°	521.9	9.7
50°-60°	347.8	6.5
60°-70°	189.8	3.5
70°-80°	79.1	1.5
80°-90°	22.4	0.4
90°-100°	153.2	2.9
100°-110°	435.9	8.1
110°-120°	417.6	7.8
120°-130°	330.5	6.2
130°-140°	265.3	4.9
140°-150°	207.7	3.9
150°-160°	152.0	2.8
160°-170°	94.1	1.8
170°-180°	31.9	0.6
0°-30°	1440.5	26.8
0°-40°	2122.3	39.5
0°-60°	2992.0	55.7
0°-90°	3283.2	61.1
90°-120°	1006.7	18.7
90°-150°	1810.2	33.7
90°-180°	2088.0	38.9
0°-180°	5371.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2253	2253	2253	2253	2253	
5°	2216	2194	2209	2214	2222	206
15°	1874	1868	1918	1970	2004	523
25°	1432	1436	1511	1576	1646	659
35°	1012	1017	1086	1159	1241	629
45°	607	619	659	709	774	473
55°	349	364	385	399	432	316
65°	175	190	207	180	164	182
75°	88	88	80	55	38	94
85°	25	25	23	15	9	27
90°	0	0	0	0	0	2
95°	17	66	297	103	63	19
105°	68	103	444	785	746	72
115°	126	152	337	714	838	124
125°	178	197	322	534	638	159
135°	217	235	318	451	509	168
145°	256	269	320	390	425	160
155°	293	300	328	352	367	135
165°	323	325	332	339	344	91
175°	339	337	336	334	331	32
180°	336	336	336	336	336	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2253.1	2253.1	2253.1	2253.1	2253.1
2.5°	2258.6	2238.5	2243.6	2243.5	2237.3
5°	2216.5	2194.3	2208.6	2213.7	2221.5
7.5°	2134.3	2117.5	2143.6	2162.9	2178.6
10°	2070.2	2055.7	2089.0	2117.1	2137.4
12.5°	1995.9	1983.7	2024.9	2062.7	2089.2
15°	1874.5	1867.7	1918.0	1970.1	2004.0
17.5°	1744.6	1741.3	1798.9	1859.8	1903.1
20°	1656.0	1655.0	1718.3	1781.7	1831.9
22.5°	1566.6	1568.7	1635.2	1701.2	1758.4
25°	1432.5	1436.4	1510.6	1576.5	1646.1
27.5°	1308.6	1310.3	1387.1	1456.6	1530.8
30°	1223.9	1228.8	1304.0	1376.0	1453.3
32.5°	1139.3	1144.9	1218.6	1293.0	1371.8
35°	1012.4	1017.2	1085.5	1158.6	1240.7
37.5°	881.5	888.0	948.7	1017.8	1098.6
40°	796.8	806.5	860.1	925.2	1004.5
42.5°	715.4	727.4	777.1	838.8	910.3
45°	607.0	618.6	659.4	709.3	774.1
47.5°	513.7	527.0	558.4	601.4	656.7
50°	460.7	473.3	502.2	534.1	586.3
52.5°	414.0	426.6	452.4	476.9	521.4
55°	349.0	363.5	384.6	399.2	432.0
57.5°	295.6	309.5	326.3	332.8	352.7
60°	260.0	275.5	290.7	289.9	300.5
62.5°	227.6	240.7	255.9	245.4	246.0
65°	175.0	189.5	206.6	180.5	164.1
67.5°	141.4	144.5	162.1	125.9	106.4
70°	125.6	125.6	130.5	97.5	81.1
72.5°	110.5	110.5	106.0	79.3	62.1
75°	88.0	88.0	80.1	55.0	37.6
77.5°	67.8	67.0	61.3	41.0	27.3
80°	54.4	54.4	49.4	32.4	21.8
82.5°	42.5	42.5	38.4	25.3	16.2
85°	24.7	24.7	22.7	14.7	8.9
87.5°	8.7	8.7	7.9	4.7	4.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.1	27.1	62.9	18.3	13.8
95°	16.6	66.0	296.6	102.6	63.3
97.5°	30.6	77.3	456.7	326.8	224.0
100°	40.3	84.0	491.5	497.8	383.5
102.5°	51.0	91.2	483.8	637.3	537.4
105°	67.7	102.7	444.2	784.6	745.9
107.5°	84.8	116.1	397.9	826.2	860.7
110°	96.5	125.9	371.3	810.3	887.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.8	135.6	353.4	772.7	883.2
115°	125.9	152.2	336.8	713.6	837.9
117.5°	141.9	166.5	327.0	648.9	780.6
120°	154.7	175.3	326.0	612.0	738.2
122.5°	164.9	185.5	323.4	579.6	696.8
125°	177.7	197.1	321.5	533.5	637.9
127.5°	191.6	209.7	320.5	506.0	592.0
130°	198.8	216.9	318.9	486.8	561.8
132.5°	206.4	224.1	318.9	471.8	540.8
135°	217.3	235.4	317.7	450.7	509.4
137.5°	227.5	245.2	317.5	432.7	483.4
140°	235.2	253.3	317.0	417.8	466.6
142.5°	243.9	259.0	318.5	406.0	449.7
145°	256.3	269.4	320.2	390.0	425.0
147.5°	266.9	279.7	323.0	373.9	404.2
150°	276.1	284.9	324.0	368.6	389.9
152.5°	283.3	292.5	325.1	361.4	381.2
155°	292.7	299.6	327.9	352.5	366.9
157.5°	304.5	308.6	328.5	348.4	358.7
160°	310.6	313.7	331.1	345.3	354.1
162.5°	314.2	317.8	331.6	342.7	349.5
165°	323.4	324.7	331.7	338.9	343.9
167.5°	329.7	328.5	334.7	337.9	339.9
170°	331.7	331.1	333.6	334.3	336.8
172.5°	336.3	334.2	335.2	333.3	335.3
175°	338.7	336.9	335.5	333.6	331.1
177.5°	339.8	336.8	335.2	333.1	333.6
180°	336.2	336.2	336.2	336.2	336.2

(END OF REPORT)