

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: P521354

Luminaire Tested: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521354
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4941.2 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

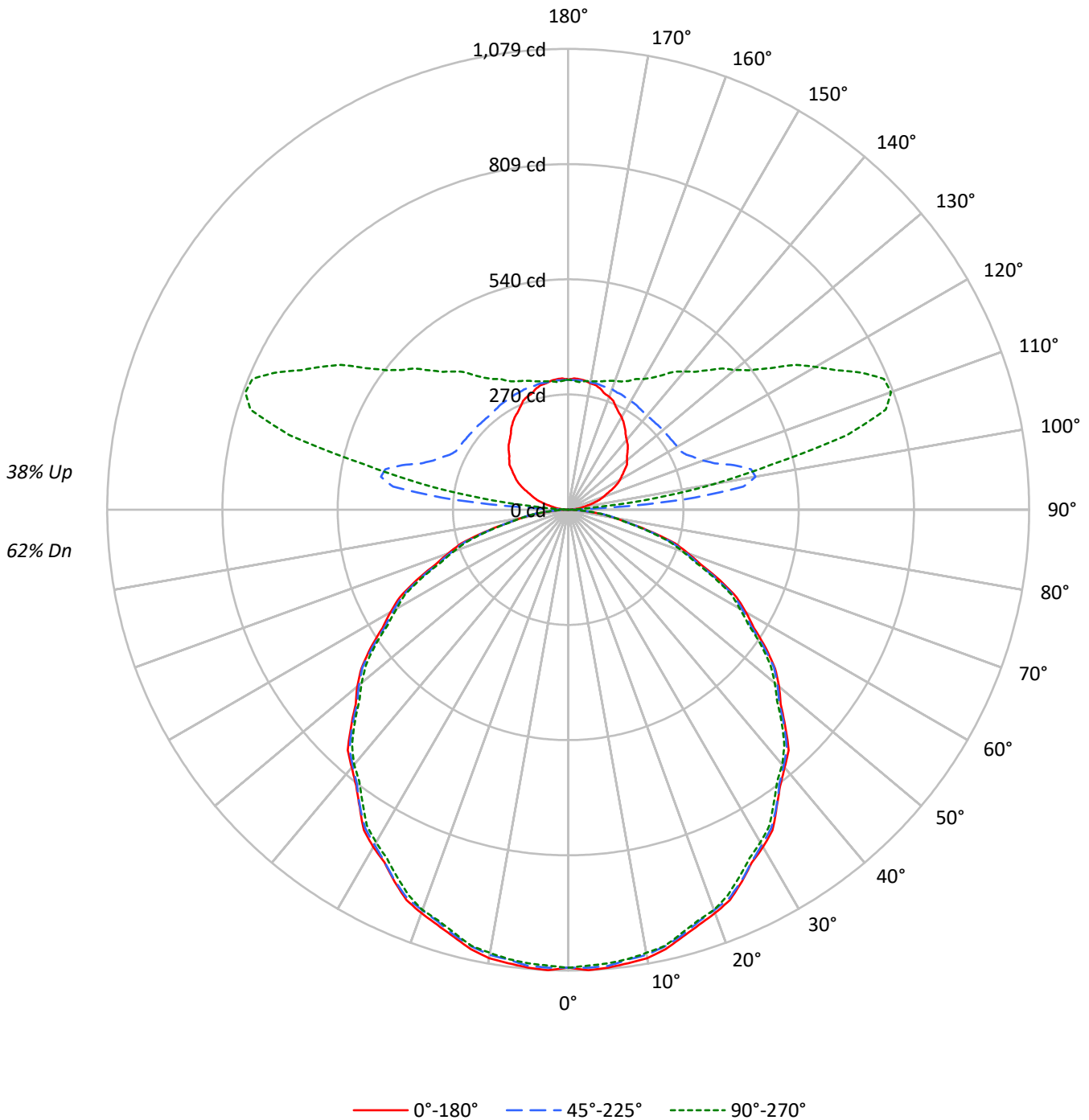
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521354

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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	50	30	10	50	30	10	0																
RCR																																														
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62																												
1	100	96	92	88	94	90	86	83	79	76	74	68	66	65	59	58	56	52																												
2	91	83	77	72	85	78	73	68	69	64	61	60	57	54	52	49	47	43																												
3	83	73	66	60	77	69	62	57	60	55	51	53	49	45	46	42	40	36																												
4	76	65	56	50	71	61	53	48	54	48	43	47	42	39	41	37	34	31																												
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	33	30	27																												
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	33	29	26	23																												
7	59	47	38	33	55	44	37	31	39	33	28	34	29	26	30	26	23	21																												
8	55	42	34	29	51	40	33	28	36	30	25	31	27	23	28	24	21	18																												
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	19	16																												
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9893	9893	9893
5°	9967	9931	9876
10°	9991	9918	9872
15°	9888	9851	9804
20°	9866	9800	9790
25°	9782	9763	9653
30°	9717	9655	9582
35°	9580	9569	9449
40°	9492	9445	9386
45°	9379	9327	9225
50°	9251	9182	9056
55°	9080	8969	8844
60°	8866	8722	8560
65°	8571	8379	8230
70°	8036	7850	7666
75°	7240	7033	6926
80°	5914	5967	5866
85°	4234	4859	4859

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9379 cd/sqm

TEST NUMBER: P521354

CATALOG NUMBER: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.6	2.1
10°-20°	290.6	5.9
20°-30°	439.7	8.9
30°-40°	528.8	10.7
40°-50°	549.0	11.1
50°-60°	497.4	10.1
60°-70°	378.4	7.7
70°-80°	210.3	4.3
80°-90°	54.2	1.1
90°-100°	138.8	2.8
100°-110°	394.8	8.0
110°-120°	378.2	7.7
120°-130°	299.4	6.1
130°-140°	240.3	4.9
140°-150°	188.1	3.8
150°-160°	137.6	2.8
160°-170°	85.3	1.7
170°-180°	28.9	0.6
0°-30°	831.8	16.8
0°-40°	1360.6	27.5
0°-60°	2407.0	48.7
0°-90°	3049.8	61.7
90°-120°	911.8	18.5
90°-150°	1639.5	33.2
90°-180°	1891.0	38.3
0°-180°	4941.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1076	1067	1072	1067	1066	102
15°	1035	1027	1031	1030	1026	293
25°	961	952	959	949	948	443
35°	851	847	850	840	839	533
45°	719	714	715	707	707	555
55°	564	564	558	553	550	504
65°	393	387	384	378	377	386
75°	203	200	197	195	194	215
85°	40	43	46	46	46	49
90°	0	0	0	0	0	2
95°	15	60	269	93	57	17
105°	61	93	402	711	676	65
115°	114	138	305	646	759	112
125°	161	178	291	483	578	144
135°	197	213	288	408	461	152
145°	232	244	290	353	385	145
155°	265	271	297	319	332	123
165°	293	294	300	307	311	82
175°	307	305	304	302	300	29
180°	304	304	304	304	304	

TEST NUMBER: P521354

CATALOG NUMBER: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1072.3	1072.3	1072.3	1072.3	1072.3
2.5°	1079.3	1070.1	1073.1	1070.7	1068.4
5°	1076.2	1066.6	1072.3	1067.4	1066.4
7.5°	1071.1	1059.8	1062.5	1061.5	1061.5
10°	1066.4	1052.1	1058.6	1053.7	1053.7
12.5°	1053.9	1041.9	1046.9	1044.4	1045.9
15°	1035.2	1026.6	1031.3	1030.2	1026.4
17.5°	1019.0	1008.6	1012.1	1010.3	1008.8
20°	1004.9	995.3	998.1	993.3	997.1
22.5°	989.3	979.7	984.8	976.8	976.8
25°	960.9	952.3	959.0	949.2	948.2
27.5°	930.9	925.3	929.7	922.4	919.7
30°	912.1	903.5	906.3	901.3	899.4
32.5°	890.2	881.6	884.4	875.6	876.8
35°	850.6	846.8	849.6	839.8	838.9
37.5°	814.7	807.0	811.5	803.5	802.7
40°	788.1	780.5	784.2	779.3	779.3
42.5°	763.9	755.5	757.6	751.1	748.8
45°	718.8	714.0	714.8	707.0	707.0
47.5°	674.2	670.8	669.3	661.4	662.9
50°	644.5	638.8	639.7	630.9	630.9
52.5°	610.2	610.5	606.8	601.1	596.5
55°	564.5	563.5	557.6	552.7	549.8
57.5°	515.6	511.2	507.0	500.4	499.8
60°	480.5	477.6	472.7	466.7	463.9
62.5°	444.5	441.7	436.7	431.6	431.1
65°	392.6	386.9	383.8	377.9	377.0
67.5°	336.1	331.6	327.7	323.0	322.5
70°	297.9	294.0	291.0	287.0	284.2
72.5°	262.7	256.6	253.5	250.3	248.2
75°	203.1	200.3	197.3	195.3	194.3
77.5°	145.7	145.9	145.9	143.3	142.4
80°	111.3	112.3	112.3	111.3	110.4
82.5°	80.9	82.6	83.4	82.4	82.2
85°	40.0	42.9	45.9	45.9	45.9
87.5°	10.9	14.8	18.0	18.7	18.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.6	24.6	57.0	16.6	12.5
95°	15.1	59.8	268.6	93.0	57.3
97.5°	27.7	70.0	413.7	296.0	202.8
100°	36.5	76.1	445.1	450.9	347.3
102.5°	46.2	82.6	438.2	577.2	486.7
105°	61.4	93.1	402.3	710.6	675.5
107.5°	76.8	105.2	360.4	748.3	779.5
110°	87.4	114.0	336.3	733.9	804.0

TEST NUMBER: P521354

CATALOG NUMBER: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	97.6	122.8	320.1	699.8	799.9
115°	114.0	137.8	305.1	646.3	758.9
117.5°	128.5	150.8	296.1	587.7	707.0
120°	140.1	158.8	295.2	554.3	668.6
122.5°	149.3	168.0	292.9	524.9	631.1
125°	160.9	178.5	291.2	483.2	577.7
127.5°	173.5	190.0	290.2	458.3	536.1
130°	180.0	196.4	288.9	440.9	508.8
132.5°	187.0	202.9	288.9	427.3	489.8
135°	196.8	213.2	287.7	408.2	461.4
137.5°	206.1	222.0	287.6	391.9	437.9
140°	213.0	229.4	287.1	378.4	422.6
142.5°	220.9	234.6	288.5	367.7	407.3
145°	232.1	244.0	290.0	353.2	384.9
147.5°	241.7	253.3	292.6	338.7	366.1
150°	250.1	258.0	293.5	333.9	353.1
152.5°	256.6	264.9	294.4	327.3	345.2
155°	265.1	271.3	297.0	319.3	332.3
157.5°	275.8	279.5	297.5	315.6	324.9
160°	281.3	284.2	299.9	312.8	320.7
162.5°	284.6	287.9	300.3	310.4	316.5
165°	292.9	294.0	300.4	306.9	311.4
167.5°	298.6	297.6	303.1	306.0	307.8
170°	300.4	299.9	302.2	302.8	305.1
172.5°	304.6	302.7	303.6	301.9	303.7
175°	306.8	305.1	303.9	302.1	299.9
177.5°	307.7	305.0	303.6	301.7	302.2
180°	304.5	304.5	304.5	304.5	304.5

(END OF REPORT)