

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: P521412

Luminaire Tested: SQ4-F-050U-075D-92765-1D-UNV-STD-W-4\_6500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521412  
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-050U-075D-92765-1D-UNV-STD-W-4\_6500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5683.1 lumens  
Efficiency: N/A  
Efficacy: 119.9 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: General Diffuse

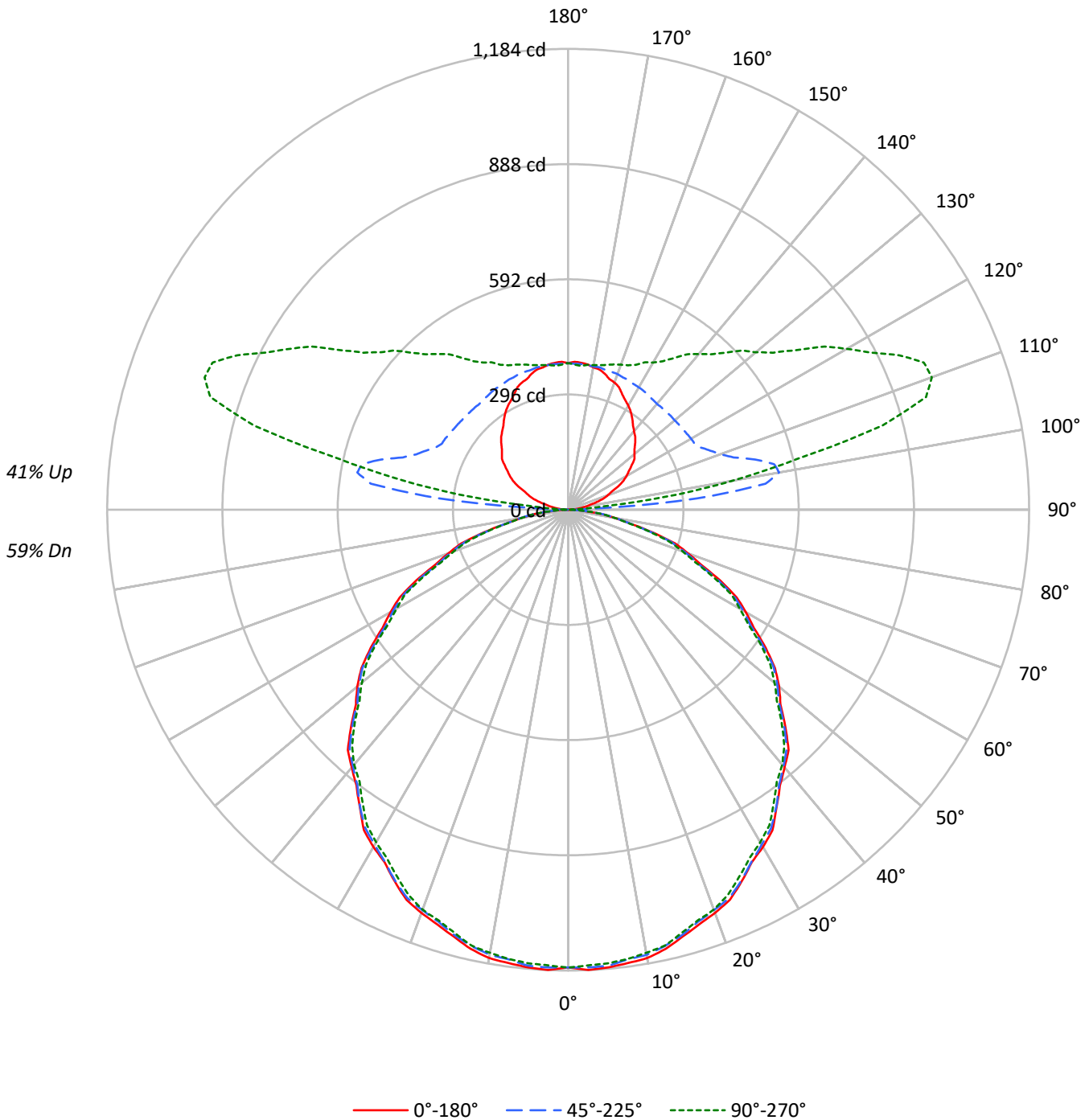
Input Watts (W): 47.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RCR																		
0	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	95	91	88	93	89	85	82	77	75	72	66	65	63	57	55	54	49
2	91	83	77	71	84	78	72	67	67	63	60	58	55	52	50	47	45	41
3	83	73	65	59	77	68	61	56	59	54	50	51	47	44	44	41	38	34
4	75	64	56	50	70	60	53	47	53	47	42	46	41	37	39	36	33	29
5	69	57	49	43	64	54	46	41	47	41	36	41	36	32	35	31	28	25
6	64	51	43	37	59	48	41	35	42	36	32	37	32	28	32	28	25	22
7	59	46	38	32	55	44	36	31	38	32	28	33	29	25	29	25	22	20
8	55	42	34	29	51	40	32	27	35	29	25	31	26	22	26	23	20	17
9	51	38	31	25	47	36	29	24	32	26	22	28	23	20	24	21	18	16
10	48	35	28	23	44	33	26	22	29	24	20	26	21	18	23	19	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10851	10851	10851
5°	10932	10892	10833
10°	10958	10878	10828
15°	10845	10804	10753
20°	10822	10748	10737
25°	10730	10708	10588
30°	10658	10590	10510
35°	10508	10496	10363
40°	10411	10359	10295
45°	10287	10231	10119
50°	10146	10070	9933
55°	9958	9838	9699
60°	9724	9566	9389
65°	9400	9191	9027
70°	8813	8611	8408
75°	7942	7714	7600
80°	6487	6546	6429
85°	4647	5325	5325

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10287 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.4	2.0
10°-20°	318.7	5.6
20°-30°	482.2	8.5
30°-40°	580.0	10.2
40°-50°	602.2	10.6
50°-60°	545.5	9.6
60°-70°	415.0	7.3
70°-80°	230.6	4.1
80°-90°	59.4	1.0
90°-100°	171.5	3.0
100°-110°	488.0	8.6
110°-120°	467.6	8.2
120°-130°	370.1	6.5
130°-140°	297.0	5.2
140°-150°	232.5	4.1
150°-160°	170.1	3.0
160°-170°	105.4	1.9
170°-180°	35.8	0.6
0°-30°	912.4	16.1
0°-40°	1492.4	26.3
0°-60°	2640.1	46.5
0°-90°	3345.1	58.9
90°-120°	1127.1	19.8
90°-150°	2026.7	35.7
90°-180°	2338.0	41.1
0°-180°	5683.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1176	1176	1176	1176	1176	
5°	1180	1170	1176	1171	1170	112
15°	1135	1126	1131	1130	1126	321
25°	1054	1045	1052	1041	1040	486
35°	933	929	932	921	920	585
45°	788	783	784	776	776	608
55°	619	618	612	606	603	553
65°	431	424	421	414	414	424
75°	223	220	216	214	213	236
85°	44	47	50	50	50	54
90°	0	0	0	0	0	2
95°	19	74	332	115	71	21
105°	76	115	497	878	835	80
115°	141	170	377	799	938	139
125°	199	221	360	597	714	178
135°	243	264	356	504	570	188
145°	287	302	358	437	476	179
155°	328	335	367	395	411	151
165°	362	364	371	379	385	102
175°	379	377	376	374	371	36
180°	376	376	376	376	376	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1176.1	1176.1	1176.1	1176.1	1176.1
2.5°	1183.8	1173.8	1177.0	1174.3	1171.8
5°	1180.4	1169.9	1176.1	1170.7	1169.7
7.5°	1174.8	1162.5	1165.4	1164.3	1164.3
10°	1169.7	1154.0	1161.1	1155.8	1155.8
12.5°	1156.0	1142.8	1148.3	1145.5	1147.2
15°	1135.4	1126.0	1131.1	1130.0	1125.8
17.5°	1117.6	1106.3	1110.1	1108.2	1106.5
20°	1102.2	1091.7	1094.7	1089.4	1093.6
22.5°	1085.1	1074.6	1080.1	1071.3	1071.3
25°	1054.0	1044.6	1051.9	1041.1	1040.1
27.5°	1021.0	1014.9	1019.7	1011.7	1008.8
30°	1000.4	991.0	994.0	988.6	986.5
32.5°	976.4	967.0	970.0	960.4	961.7
35°	933.0	928.8	931.9	921.2	920.1
37.5°	893.5	885.2	890.1	881.3	880.5
40°	864.4	856.0	860.1	854.8	854.8
42.5°	837.8	828.6	831.0	823.9	821.3
45°	788.4	783.1	784.1	775.5	775.5
47.5°	739.5	735.7	734.2	725.4	727.1
50°	706.9	700.7	701.6	692.0	692.0
52.5°	669.2	669.7	665.6	659.3	654.2
55°	619.1	618.1	611.6	606.2	603.0
57.5°	565.6	560.7	556.1	548.8	548.2
60°	527.0	523.9	518.4	511.9	508.8
62.5°	487.6	484.4	479.0	473.4	472.8
65°	430.6	424.3	421.0	414.5	413.5
67.5°	368.7	363.7	359.5	354.3	353.7
70°	326.7	322.5	319.2	314.8	311.7
72.5°	288.1	281.4	278.1	274.6	272.3
75°	222.8	219.7	216.4	214.2	213.2
77.5°	159.8	160.0	160.0	157.2	156.2
80°	122.1	123.2	123.2	122.1	121.0
82.5°	88.7	90.6	91.5	90.4	90.2
85°	43.9	47.1	50.3	50.3	50.3
87.5°	12.0	16.2	19.7	20.5	19.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	30.4	70.4	20.5	15.5
95°	18.6	73.9	332.0	114.9	70.8
97.5°	34.2	86.5	511.3	365.9	250.7
100°	45.1	94.1	550.3	557.4	429.3
102.5°	57.1	102.2	541.7	713.5	601.6
105°	75.8	115.0	497.3	878.4	835.1
107.5°	94.9	130.0	445.5	925.0	963.6
110°	108.1	140.9	415.7	907.2	993.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	120.6	151.8	395.7	865.1	988.8
115°	141.0	170.4	377.1	798.9	938.1
117.5°	158.9	186.4	366.1	726.5	874.0
120°	173.2	196.3	364.9	685.1	826.5
122.5°	184.6	207.7	362.1	648.9	780.1
125°	198.9	220.6	359.9	597.3	714.1
127.5°	214.5	234.8	358.8	566.5	662.8
130°	222.5	242.8	357.1	545.0	629.0
132.5°	231.1	250.9	357.1	528.3	605.5
135°	243.3	263.6	355.6	504.5	570.3
137.5°	254.7	274.5	355.5	484.4	541.3
140°	263.3	283.6	354.9	467.8	522.4
142.5°	273.1	290.0	356.6	454.5	503.5
145°	286.9	301.6	358.5	436.7	475.8
147.5°	298.8	313.1	361.6	418.7	452.5
150°	309.1	318.9	362.8	412.7	436.5
152.5°	317.1	327.5	363.9	404.7	426.8
155°	327.7	335.4	367.1	394.6	410.7
157.5°	340.9	345.5	367.8	390.1	401.6
160°	347.8	351.3	370.7	386.6	396.4
162.5°	351.8	355.8	371.2	383.7	391.3
165°	362.1	363.5	371.4	379.4	385.0
167.5°	369.1	367.8	374.7	378.3	380.5
170°	371.4	370.7	373.5	374.3	377.1
172.5°	376.5	374.2	375.2	373.1	375.4
175°	379.2	377.1	375.7	373.5	370.7
177.5°	380.4	377.0	375.2	373.0	373.5
180°	376.4	376.4	376.4	376.4	376.4

(END OF REPORT)