

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: P521358

Luminaire Tested: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521358  
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\_5000K  
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 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5293.3 lumens  
Efficiency: N/A  
Efficacy: 115.6 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

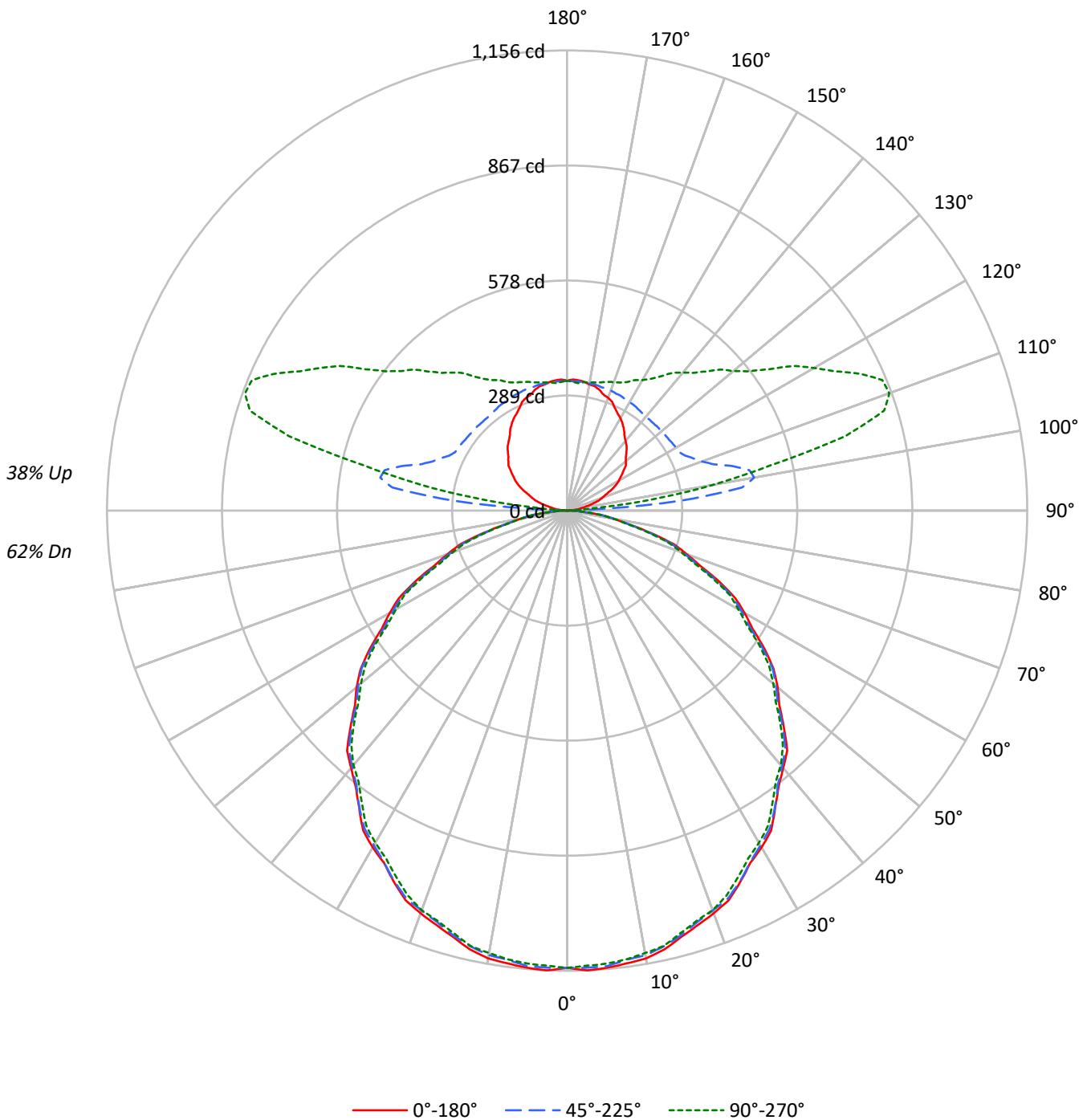
Input Watts (W): 45.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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°	10598	10598	10598
5°	10678	10639	10580
10°	10703	10624	10575
15°	10592	10553	10502
20°	10569	10498	10487
25°	10479	10458	10341
30°	10410	10342	10265
35°	10263	10252	10122
40°	10169	10118	10054
45°	10047	9992	9882
50°	9911	9835	9700
55°	9727	9609	9474
60°	9497	9342	9169
65°	9182	8975	8815
70°	8608	8411	8211
75°	7757	7532	7422
80°	6339	6392	6280
85°	4541	5208	5208

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10047 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.8	2.1
10°-20°	311.3	5.9
20°-30°	471.0	8.9
30°-40°	566.5	10.7
40°-50°	588.1	11.1
50°-60°	532.8	10.1
60°-70°	405.3	7.7
70°-80°	225.3	4.3
80°-90°	58.0	1.1
90°-100°	148.6	2.8
100°-110°	422.9	8.0
110°-120°	405.2	7.7
120°-130°	320.7	6.1
130°-140°	257.4	4.9
140°-150°	201.5	3.8
150°-160°	147.4	2.8
160°-170°	91.3	1.7
170°-180°	31.0	0.6
0°-30°	891.1	16.8
0°-40°	1457.6	27.5
0°-60°	2578.5	48.7
0°-90°	3267.2	61.7
90°-120°	976.8	18.5
90°-150°	1756.4	33.2
90°-180°	2026.0	38.3
0°-180°	5293.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1153	1143	1149	1143	1142	110
15°	1109	1100	1105	1104	1100	314
25°	1029	1020	1027	1017	1016	474
35°	911	907	910	900	899	571
45°	770	765	766	757	757	594
55°	605	604	597	592	589	540
65°	421	414	411	405	404	414
75°	218	214	211	209	208	230
85°	43	46	49	49	49	53
90°	0	0	0	0	0	2
95°	16	64	288	100	61	18
105°	66	100	431	761	724	70
115°	122	148	327	692	813	120
125°	172	191	312	518	619	154
135°	211	228	308	437	494	163
145°	249	261	311	378	412	155
155°	284	291	318	342	356	131
165°	314	315	322	329	334	88
175°	329	327	326	324	321	31
180°	326	326	326	326	326	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1148.7	1148.7	1148.7	1148.7	1148.7
2.5°	1156.2	1146.4	1149.5	1147.0	1144.5
5°	1152.9	1142.7	1148.7	1143.4	1142.4
7.5°	1147.4	1135.4	1138.2	1137.2	1137.2
10°	1142.4	1127.1	1134.0	1128.8	1128.8
12.5°	1129.0	1116.1	1121.5	1118.8	1120.4
15°	1108.9	1099.7	1104.8	1103.6	1099.5
17.5°	1091.6	1080.5	1084.3	1082.3	1080.7
20°	1076.5	1066.3	1069.2	1064.0	1068.1
22.5°	1059.8	1049.5	1055.0	1046.4	1046.4
25°	1029.4	1020.2	1027.3	1016.9	1015.8
27.5°	997.2	991.3	996.0	988.1	985.3
30°	977.1	967.9	970.8	965.6	963.5
32.5°	953.7	944.5	947.4	938.0	939.3
35°	911.2	907.1	910.2	899.7	898.7
37.5°	872.7	864.5	869.4	860.8	860.0
40°	844.3	836.1	840.1	834.8	834.8
42.5°	818.3	809.3	811.6	804.7	802.2
45°	770.0	764.9	765.8	757.4	757.4
47.5°	722.3	718.6	717.0	708.5	710.1
50°	690.5	684.3	685.2	675.8	675.8
52.5°	653.6	654.1	650.1	643.9	639.0
55°	604.7	603.7	597.4	592.1	589.0
57.5°	552.4	547.7	543.2	536.0	535.4
60°	514.7	511.6	506.3	500.0	496.9
62.5°	476.2	473.1	467.8	462.4	461.8
65°	420.6	414.4	411.1	404.8	403.8
67.5°	360.1	355.2	351.1	346.1	345.4
70°	319.1	315.0	311.8	307.5	304.4
72.5°	281.4	274.9	271.6	268.2	265.9
75°	217.6	214.5	211.3	209.2	208.2
77.5°	156.1	156.3	156.3	153.6	152.5
80°	119.3	120.3	120.3	119.2	118.2
82.5°	86.6	88.5	89.3	88.3	88.1
85°	42.9	46.0	49.2	49.2	49.2
87.5°	11.7	15.8	19.2	20.1	19.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.0	26.3	61.0	17.8	13.4
95°	16.1	64.0	287.7	99.6	61.4
97.5°	29.6	75.0	443.1	317.1	217.3
100°	39.1	81.5	476.9	483.0	372.1
102.5°	49.5	88.5	469.4	618.3	521.4
105°	65.7	99.7	431.0	761.3	723.7
107.5°	82.2	112.7	386.1	801.6	835.1
110°	93.6	122.1	360.3	786.2	861.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	131.6	342.9	749.7	856.9
115°	122.2	147.6	326.8	692.3	813.0
117.5°	137.7	161.6	317.3	629.6	757.4
120°	150.1	170.1	316.3	593.8	716.2
122.5°	160.0	180.0	313.8	562.3	676.1
125°	172.4	191.2	311.9	517.6	618.9
127.5°	185.9	203.5	310.9	490.9	574.4
130°	192.9	210.4	309.4	472.3	545.1
132.5°	200.3	217.4	309.4	457.8	524.7
135°	210.8	228.4	308.2	437.2	494.2
137.5°	220.8	237.9	308.1	419.8	469.1
140°	228.2	245.8	307.6	405.4	452.7
142.5°	236.6	251.3	309.1	393.9	436.3
145°	248.7	261.4	310.7	378.4	412.4
147.5°	259.0	271.3	313.4	362.8	392.2
150°	267.9	276.4	314.4	357.7	378.3
152.5°	274.8	283.8	315.4	350.7	369.8
155°	284.0	290.7	318.1	342.0	355.9
157.5°	295.4	299.4	318.7	338.1	348.0
160°	301.4	304.4	321.2	335.1	343.5
162.5°	304.9	308.4	321.7	332.5	339.1
165°	313.8	315.0	321.8	328.8	333.6
167.5°	319.9	318.8	324.7	327.8	329.8
170°	321.8	321.2	323.7	324.4	326.8
172.5°	326.3	324.2	325.2	323.4	325.3
175°	328.7	326.8	325.6	323.6	321.2
177.5°	329.7	326.7	325.2	323.2	323.7
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)