

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: P521476

Luminaire Tested: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521476  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 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: 7822.9 lumens  
Efficiency: N/A  
Efficacy: 118.7 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: General Diffuse

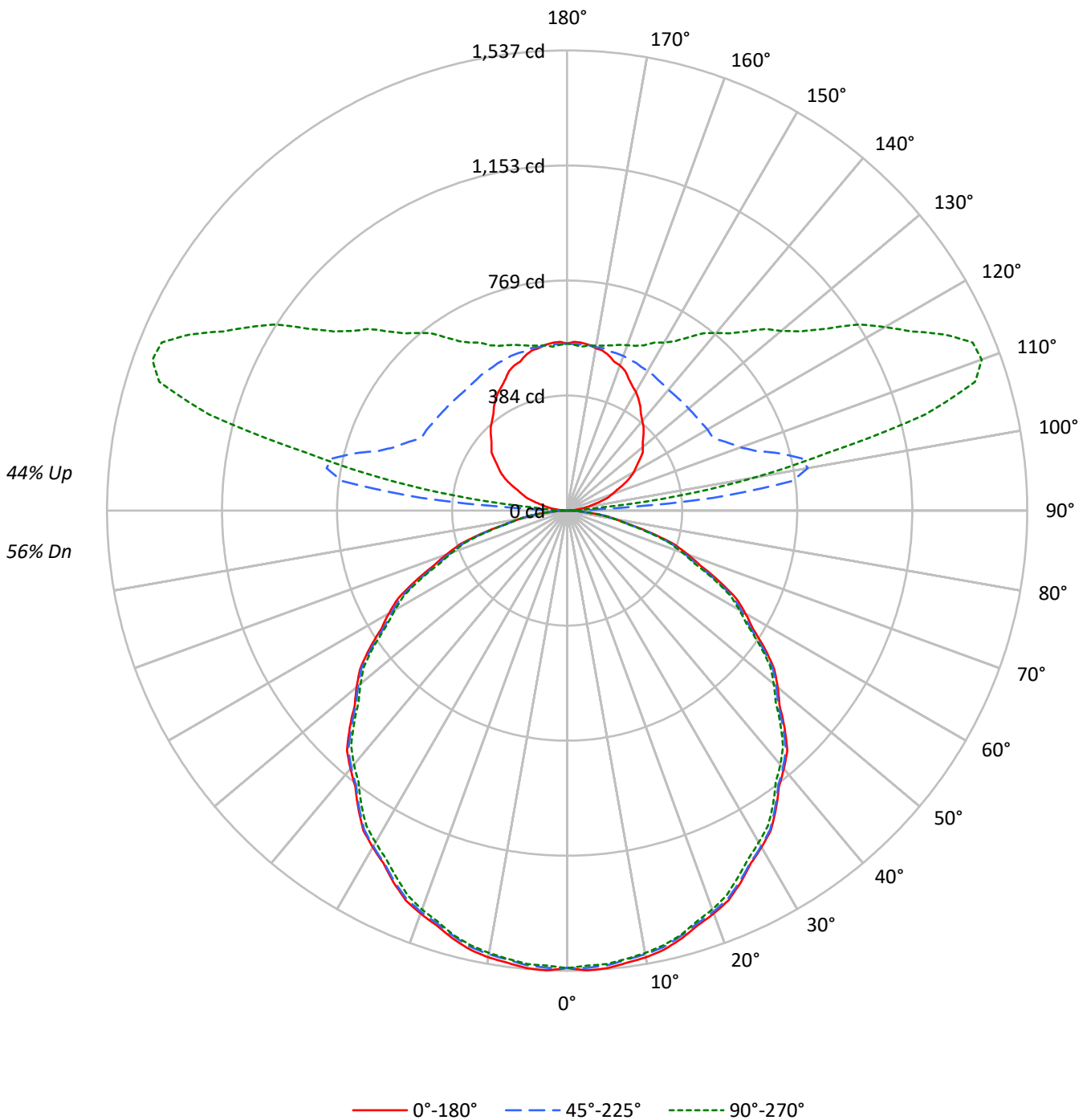
Input Watts (W): 65.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	108	108	108	108	101	101	101	101	86	86	86		73	73	73		61	61	61	56
1	99	94	90	87	92	88	84	81	76	73	71		64	63	61		54	53	52	47
2	90	82	76	71	83	77	71	66	66	62	58		56	53	51		47	45	43	39
3	82	72	65	59	76	67	61	55	58	53	49		50	46	43		42	39	36	33
4	75	64	56	49	69	60	52	47	52	46	41		44	40	36		37	34	31	28
5	69	57	48	42	63	53	46	40	46	40	36		39	35	31		33	30	27	24
6	63	51	43	37	58	48	40	35	41	35	31		36	31	27		30	27	24	21
7	58	46	38	32	54	43	36	30	37	32	27		32	28	24		28	24	21	18
8	54	42	34	28	50	39	32	27	34	28	24		30	25	21		25	22	19	16
9	50	38	30	25	47	36	29	24	31	26	22		27	23	19		23	20	17	15
10	47	35	27	23	44	33	26	22	29	23	19		25	21	17		22	18	15	13

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

	0°	45°	90°
0°	14097	14097	14097
5°	14210	14122	14082
10°	14195	14096	14057
15°	14128	14047	14017
20°	14064	14002	13918
25°	13956	13902	13750
30°	13836	13803	13633
35°	13696	13648	13504
40°	13559	13508	13342
45°	13401	13291	13139
50°	13174	13083	12930
55°	12989	12801	12648
60°	12688	12433	12256
65°	12278	11931	11745
70°	11564	11192	10993
75°	10441	10174	10024
80°	8623	8623	8512
85°	6066	6966	7188

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13401 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.7	1.8
10°-20°	414.4	5.3
20°-30°	626.6	8.0
30°-40°	754.6	9.6
40°-50°	783.7	10.0
50°-60°	710.4	9.1
60°-70°	541.0	6.9
70°-80°	302.3	3.9
80°-90°	78.4	1.0
90°-100°	254.3	3.3
100°-110°	723.6	9.3
110°-120°	693.3	8.9
120°-130°	548.7	7.0
130°-140°	440.5	5.6
140°-150°	344.8	4.4
150°-160°	252.3	3.2
160°-170°	156.3	2.0
170°-180°	53.0	0.7
0°-30°	1185.7	15.2
0°-40°	1940.3	24.8
0°-60°	3434.3	43.9
0°-90°	4356.0	55.7
90°-120°	1671.3	21.4
90°-150°	3005.3	38.4
90°-180°	3467.0	44.3
0°-180°	7822.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1534	1520	1525	1520	1520	146
15°	1479	1466	1471	1468	1468	417
25°	1371	1360	1366	1355	1351	631
35°	1216	1209	1212	1200	1199	761
45°	1027	1021	1019	1008	1007	791
55°	808	804	796	786	786	720
65°	562	556	546	539	538	554
75°	293	289	285	281	281	310
85°	57	61	66	67	68	71
90°	0	0	0	0	0	3
95°	28	110	492	170	105	32
105°	112	171	737	1303	1238	119
115°	209	253	559	1185	1391	206
125°	295	327	534	886	1059	264
135°	361	391	527	748	846	278
145°	426	447	532	648	706	266
155°	486	497	544	585	609	225
165°	537	539	551	563	571	151
175°	562	559	557	554	550	53
180°	558	558	558	558	558	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1527.9	1527.9	1527.9	1527.9	1527.9
2.5°	1537.3	1524.8	1528.8	1526.1	1521.1
5°	1534.3	1519.8	1524.8	1520.5	1520.5
7.5°	1523.7	1509.8	1513.1	1510.5	1510.5
10°	1515.2	1499.6	1504.6	1500.4	1500.4
12.5°	1501.6	1487.7	1492.7	1488.5	1487.6
15°	1479.1	1465.6	1470.6	1467.5	1467.5
17.5°	1452.0	1439.1	1445.6	1440.5	1438.8
20°	1432.4	1417.9	1426.1	1417.6	1417.6
22.5°	1408.7	1395.8	1403.2	1392.9	1391.3
25°	1370.9	1359.5	1365.6	1354.9	1350.7
27.5°	1328.5	1316.2	1325.3	1313.3	1311.1
30°	1298.7	1287.3	1295.6	1282.8	1279.7
32.5°	1266.5	1256.7	1262.5	1250.5	1248.2
35°	1216.0	1208.7	1211.7	1200.0	1199.0
37.5°	1162.3	1155.2	1158.1	1145.1	1144.3
40°	1125.8	1119.6	1121.6	1107.8	1107.8
42.5°	1088.4	1081.4	1081.7	1068.7	1067.9
45°	1027.1	1020.9	1018.6	1008.0	1007.0
47.5°	962.0	959.1	955.6	945.0	945.0
50°	917.8	915.8	911.5	900.8	900.8
52.5°	872.8	871.6	865.6	856.7	855.0
55°	807.5	804.4	795.8	786.3	786.3
57.5°	736.0	733.5	723.9	716.2	714.3
60°	687.6	683.4	673.8	665.3	664.2
62.5°	637.5	634.2	623.7	616.0	614.1
65°	562.4	556.1	546.5	539.0	538.0
67.5°	483.0	475.9	467.5	461.3	459.2
70°	428.7	422.4	414.9	409.5	407.5
72.5°	375.2	369.0	362.2	358.6	358.2
75°	292.9	288.7	285.4	281.2	281.2
77.5°	212.4	209.9	208.2	206.1	206.1
80°	162.3	162.3	162.3	160.2	160.2
82.5°	116.5	119.0	120.7	119.5	119.5
85°	57.3	61.4	65.8	66.9	67.9
87.5°	16.1	21.1	26.3	27.2	28.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.5	45.0	104.4	30.4	22.9
95°	27.6	109.5	492.3	170.4	105.0
97.5°	50.7	128.3	758.2	542.6	371.8
100°	66.8	139.5	816.0	826.5	636.6
102.5°	84.7	151.5	803.2	1057.9	892.1
105°	112.5	170.6	737.4	1302.6	1238.3
107.5°	140.7	192.8	660.6	1371.6	1428.8
110°	160.2	209.0	616.5	1345.2	1473.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	178.9	225.2	586.8	1282.8	1466.2
115°	209.0	252.6	559.2	1184.6	1391.1
117.5°	235.6	276.4	542.8	1077.3	1296.0
120°	256.8	291.0	541.1	1016.0	1225.5
122.5°	273.8	308.0	536.9	962.1	1156.8
125°	295.0	327.1	533.7	885.7	1058.9
127.5°	318.1	348.2	532.0	840.0	982.8
130°	330.0	360.1	529.5	808.2	932.7
132.5°	342.7	372.0	529.5	783.3	897.9
135°	360.8	390.9	527.4	748.1	845.7
137.5°	377.7	407.0	527.1	718.4	802.6
140°	390.5	420.6	526.3	693.7	774.6
142.5°	404.9	430.0	528.8	673.9	746.6
145°	425.5	447.3	531.6	647.5	705.6
147.5°	443.1	464.3	536.3	620.8	671.0
150°	458.4	472.9	538.0	612.0	647.3
152.5°	470.3	485.6	539.7	600.0	632.8
155°	486.0	497.4	544.3	585.2	609.1
157.5°	505.5	512.3	545.4	578.5	595.5
160°	515.7	520.9	549.6	573.3	587.8
162.5°	521.6	527.6	550.5	569.0	580.2
165°	536.9	539.0	550.7	562.6	570.9
167.5°	547.3	545.4	555.6	561.0	564.3
170°	550.7	549.7	553.9	555.0	559.2
172.5°	558.3	554.8	556.4	553.3	556.6
175°	562.4	559.3	557.1	553.8	549.6
177.5°	564.1	559.1	556.4	553.0	553.9
180°	558.1	558.1	558.1	558.1	558.1

(END OF REPORT)