

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

(formerly Eaton)

Brand: CORELITE

Report Number: P519946

Luminaire Tested: **SQ4-F-050U-100D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519946  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-100D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

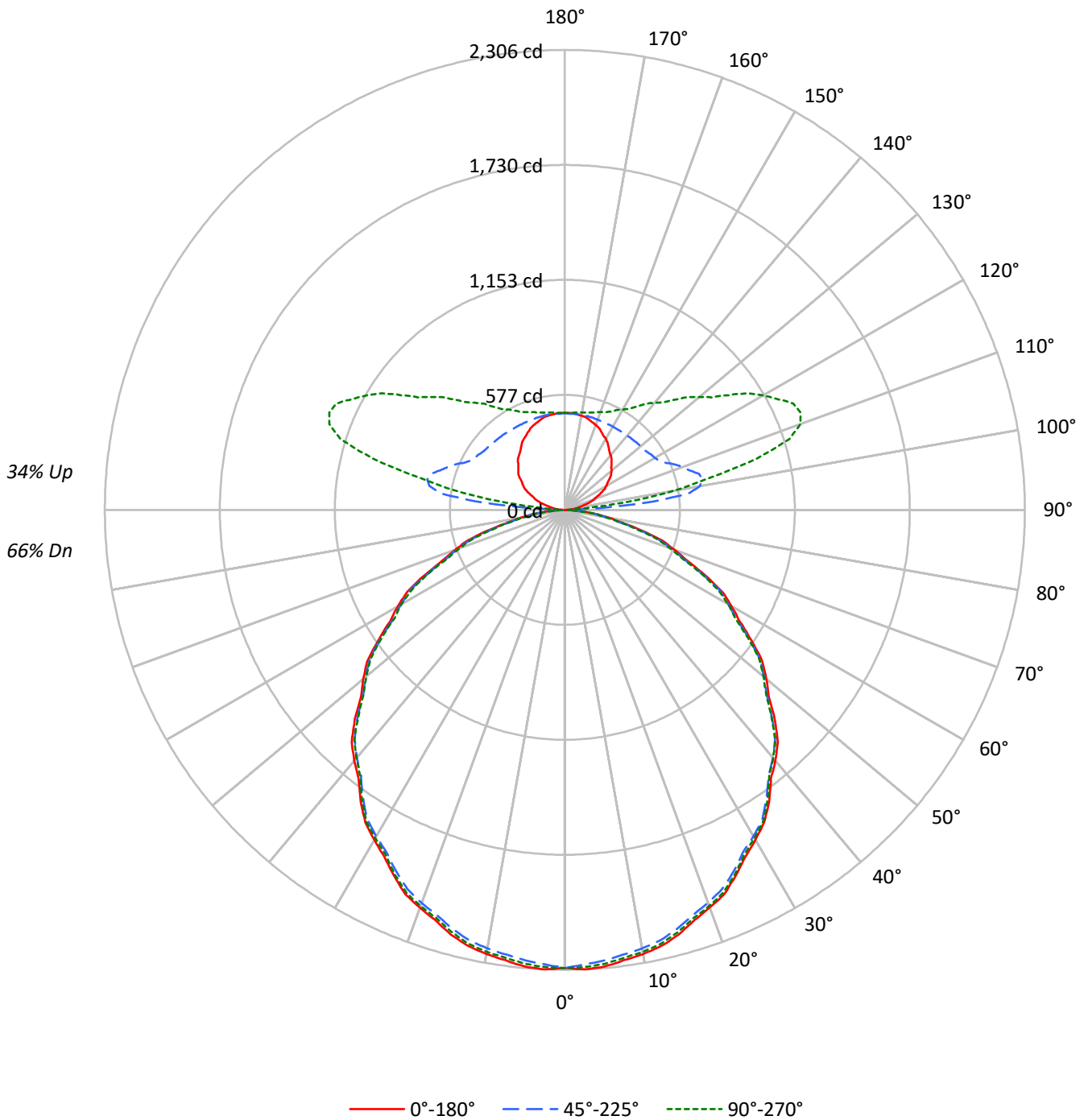
Lumens per Lamp: N/A  
Luminaire Lumens: 9438.5 lumens  
Efficiency: N/A  
Efficacy: 101.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 92.6  
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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

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

	0°	45°	90°
0°	10599	10599	10599
5°	10646	10501	10581
10°	10593	10459	10541
15°	10528	10386	10468
20°	10420	10296	10381
25°	10306	10186	10265
30°	10180	10071	10122
35°	10053	9928	9982
40°	9886	9772	9781
45°	9711	9578	9546
50°	9461	9348	9325
55°	9182	9080	9017
60°	8904	8744	8715
65°	8468	8279	8211
70°	7870	7677	7529
75°	7026	6802	6661
80°	5781	5574	5318
85°	3425	3753	3837



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.8	2.3
10°-20°	617.5	6.5
20°-30°	927.3	9.8
30°-40°	1106.7	11.7
40°-50°	1134.4	12.0
50°-60°	1010.2	10.7
60°-70°	753.0	8.0
70°-80°	407.7	4.3
80°-90°	94.7	1.0
90°-100°	233.1	2.5
100°-110°	633.2	6.7
110°-120°	651.0	6.9
120°-130°	520.5	5.5
130°-140°	409.0	4.3
140°-150°	313.6	3.3
150°-160°	225.5	2.4
160°-170°	137.9	1.5
170°-180°	46.5	0.5
0°-30°	1761.7	18.7
0°-40°	2868.4	30.4
0°-60°	5012.9	53.1
0°-90°	6268.3	66.4
90°-120°	1517.2	16.1
90°-150°	2760.3	29.2
90°-180°	3170.0	33.6
0°-180°	9438.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2298	2298	2298	2298	2298	
5°	2299	2294	2268	2288	2285	218
15°	2204	2197	2175	2192	2192	621
25°	2025	2020	2001	2012	2017	933
35°	1785	1777	1763	1766	1772	1114
45°	1489	1481	1468	1460	1463	1145
55°	1142	1143	1129	1118	1121	1022
65°	776	773	758	751	752	767
75°	394	390	382	374	374	420
85°	65	71	71	72	72	90
90°	2	6	11	14	14	4
95°	34	128	406	177	119	36
105°	112	175	696	1060	998	119
115°	200	243	557	1109	1263	197
125°	275	313	504	850	1002	245
135°	331	368	490	692	781	256
145°	382	410	484	588	632	240
155°	432	448	481	528	543	199
165°	468	474	482	503	504	132
175°	486	487	484	490	489	46
180°	486	486	486	486	486	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2297.5	2297.5	2297.5	2297.5	2297.5
2.5°	2306.3	2301.5	2281.2	2297.5	2295.0
5°	2299.1	2294.5	2267.6	2288.0	2284.9
7.5°	2277.7	2273.0	2249.3	2268.2	2265.4
10°	2261.3	2256.7	2232.9	2251.7	2250.3
12.5°	2239.9	2235.2	2211.4	2230.3	2228.8
15°	2204.5	2196.9	2174.6	2191.9	2191.9
17.5°	2157.8	2152.0	2131.4	2145.8	2146.1
20°	2122.5	2117.9	2097.3	2113.1	2114.6
22.5°	2087.2	2082.6	2059.4	2074.0	2076.8
25°	2024.7	2020.1	2001.1	2012.3	2016.8
27.5°	1960.4	1953.6	1934.9	1944.7	1948.2
30°	1911.2	1908.1	1890.7	1895.5	1900.2
32.5°	1859.5	1856.4	1841.5	1843.9	1852.2
35°	1785.1	1777.3	1763.0	1766.2	1772.5
37.5°	1697.1	1693.3	1679.4	1677.7	1683.5
40°	1641.6	1635.4	1622.7	1619.6	1624.3
42.5°	1581.0	1574.8	1559.6	1556.6	1562.4
45°	1488.6	1480.9	1468.1	1460.3	1463.3
47.5°	1385.2	1385.2	1371.9	1362.9	1367.5
50°	1318.3	1318.3	1302.5	1294.7	1299.4
52.5°	1248.9	1250.1	1233.2	1229.0	1227.4
55°	1141.7	1143.2	1129.0	1118.1	1121.2
57.5°	1038.3	1034.8	1018.4	1011.1	1012.7
60°	965.1	960.4	947.7	936.8	944.6
62.5°	890.7	888.5	875.8	863.5	862.6
65°	775.8	772.7	758.5	750.6	752.2
67.5°	661.7	658.0	644.9	633.7	637.7
70°	583.5	583.5	569.2	562.9	558.2
72.5°	511.6	505.4	494.8	485.9	482.5
75°	394.2	389.6	381.6	373.7	373.7
77.5°	287.0	283.0	277.8	272.5	270.9
80°	217.6	216.1	209.8	208.0	200.2
82.5°	153.3	153.0	149.2	145.1	144.8
85°	64.7	70.8	70.9	72.5	72.5
87.5°	11.7	20.0	19.9	17.9	17.9
90°	1.6	6.2	10.9	14.0	14.0
92.5°	14.0	63.8	110.9	47.6	40.2
95°	34.3	127.5	405.9	176.6	118.6
97.5°	56.8	140.8	622.3	484.2	340.0
100°	71.8	149.6	688.5	697.9	563.6
102.5°	86.8	158.6	705.9	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	139.0	194.2	656.0	1161.9	1179.3
110°	157.7	208.0	626.1	1182.0	1256.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.9	596.0	1165.4	1278.0
115°	199.8	242.6	557.4	1108.9	1263.0
117.5°	224.2	265.1	532.6	1028.7	1202.5
120°	240.4	280.2	521.5	975.0	1147.5
122.5°	254.2	293.9	513.9	921.1	1087.6
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.1	499.0	795.4	926.4
130°	304.4	341.1	496.4	761.4	878.9
132.5°	315.7	352.3	494.0	732.3	836.4
135°	331.0	367.6	490.3	692.1	780.6
137.5°	347.5	380.8	488.4	656.5	731.0
140°	357.5	389.6	487.1	633.8	700.9
142.5°	367.5	397.1	485.8	616.1	672.3
145°	382.5	410.0	484.0	588.0	632.2
147.5°	399.4	422.8	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.2	580.7
152.5°	419.3	436.8	481.1	542.0	564.5
155°	432.5	447.8	480.8	528.0	543.3
157.5°	445.2	457.2	480.8	518.6	530.2
160°	452.8	463.5	480.8	512.2	521.5
162.5°	460.2	468.5	482.1	507.2	513.9
165°	468.4	474.5	482.4	502.7	504.3
167.5°	476.8	479.8	484.0	497.4	498.7
170°	479.3	482.3	484.0	494.9	494.9
172.5°	481.8	483.6	484.0	492.4	492.4
175°	485.5	487.0	484.0	490.2	488.7
177.5°	486.8	486.8	483.0	488.0	485.5
180°	485.5	485.5	485.5	485.5	485.5

(END OF REPORT)