

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: P519951

Luminaire Tested: **SQ4-F-050U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519951  
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-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

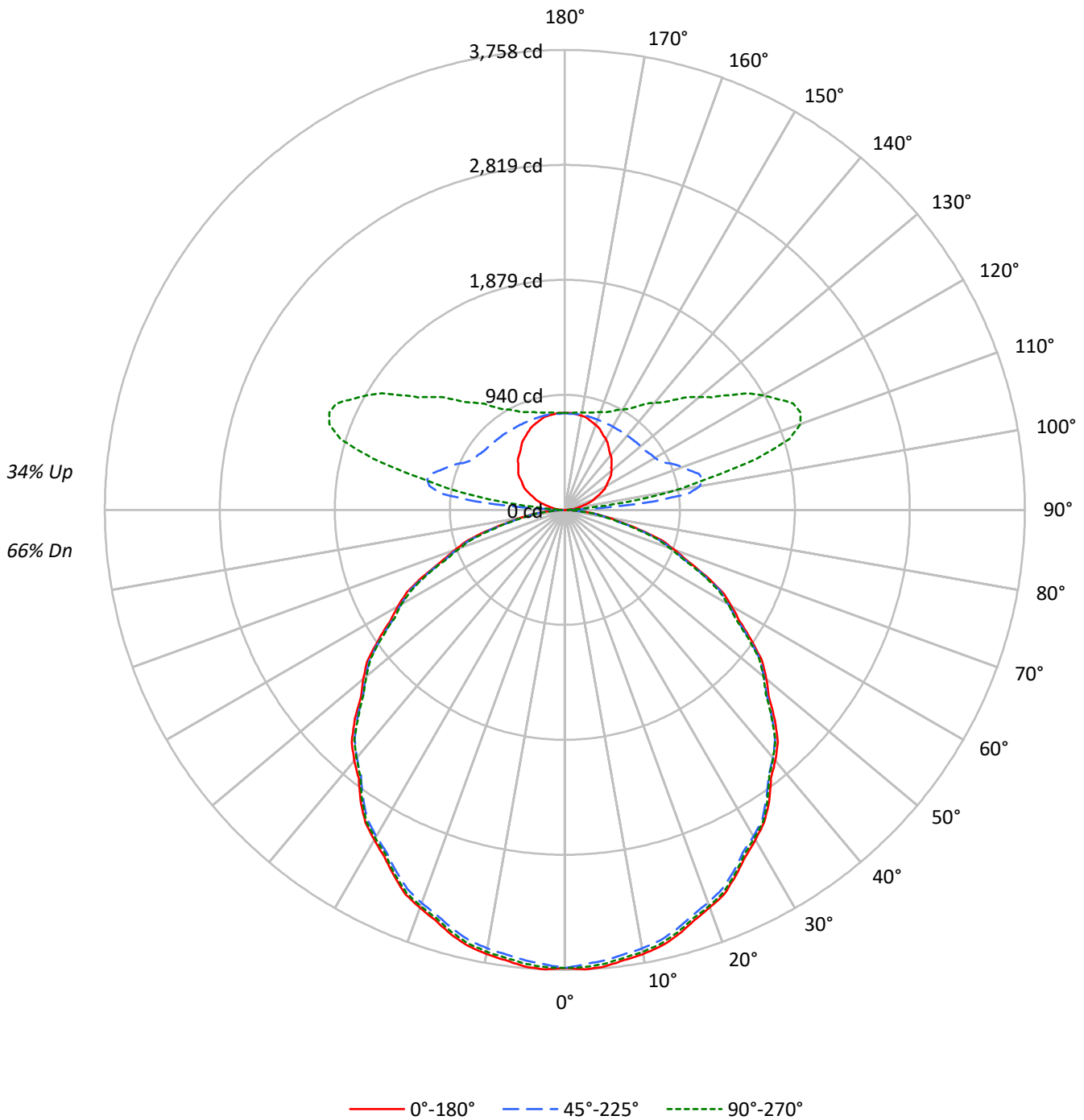
Lumens per Lamp: N/A  
Luminaire Lumens: 15380.5 lumens  
Efficiency: N/A  
Efficacy: 108.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 141.9  
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	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°	11514	11514	11514
5°	11566	11408	11495
10°	11507	11363	11451
15°	11437	11282	11372
20°	11320	11185	11278
25°	11196	11065	11153
30°	11060	10941	10996
35°	10921	10786	10843
40°	10739	10616	10626
45°	10550	10405	10371
50°	10278	10155	10131
55°	9976	9865	9796
60°	9673	9499	9467
65°	9200	8994	8919
70°	8549	8341	8180
75°	7633	7388	7236
80°	6280	6052	5781
85°	3716	4079	4171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	353.4	2.3
10°-20°	1006.3	6.5
20°-30°	1511.2	9.8
30°-40°	1803.4	11.7
40°-50°	1848.5	12.0
50°-60°	1646.1	10.7
60°-70°	1227.1	8.0
70°-80°	664.4	4.3
80°-90°	154.3	1.0
90°-100°	379.8	2.5
100°-110°	1031.8	6.7
110°-120°	1060.8	6.9
120°-130°	848.2	5.5
130°-140°	666.4	4.3
140°-150°	511.0	3.3
150°-160°	367.5	2.4
160°-170°	224.7	1.5
170°-180°	75.7	0.5
0°-30°	2870.8	18.7
0°-40°	4674.2	30.4
0°-60°	8168.8	53.1
0°-90°	10214.5	66.4
90°-120°	2472.4	16.1
90°-150°	4498.0	29.2
90°-180°	5166.0	33.6
0°-180°	15380.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3744	3744	3744	3744	3744	
5°	3746	3739	3695	3728	3723	355
15°	3592	3580	3544	3572	3572	1012
25°	3299	3292	3261	3279	3287	1520
35°	2909	2896	2873	2878	2888	1816
45°	2426	2413	2392	2380	2385	1866
55°	1860	1863	1840	1822	1827	1665
65°	1264	1259	1236	1223	1226	1250
75°	642	635	622	609	609	684
85°	105	115	116	118	118	147
90°	3	10	18	23	23	6
95°	56	208	662	288	193	59
105°	183	285	1135	1728	1626	195
115°	326	395	908	1807	2058	321
125°	448	510	822	1384	1633	399
135°	539	599	799	1128	1272	417
145°	623	668	789	958	1030	391
155°	705	730	784	860	885	325
165°	763	773	786	819	822	215
175°	791	794	789	799	796	75
180°	791	791	791	791	791	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3743.9	3743.9	3743.9	3743.9	3743.9
2.5°	3758.4	3750.4	3717.3	3743.9	3739.9
5°	3746.5	3739.0	3695.2	3728.5	3723.4
7.5°	3711.6	3704.1	3665.3	3696.1	3691.5
10°	3684.9	3677.3	3638.6	3669.4	3666.8
12.5°	3649.9	3642.4	3603.6	3634.4	3632.0
15°	3592.3	3579.8	3543.6	3571.8	3571.8
17.5°	3516.3	3506.7	3473.1	3496.8	3497.3
20°	3458.8	3451.2	3417.6	3443.4	3445.9
22.5°	3401.2	3393.7	3355.9	3379.7	3384.3
25°	3299.4	3291.9	3260.9	3279.0	3286.6
27.5°	3194.6	3183.5	3153.0	3169.0	3174.5
30°	3114.5	3109.4	3081.0	3088.9	3096.4
32.5°	3030.1	3025.1	3000.8	3004.8	3018.3
35°	2908.9	2896.3	2872.9	2878.2	2888.2
37.5°	2765.5	2759.4	2736.7	2733.8	2743.4
40°	2675.0	2664.9	2644.2	2639.2	2646.7
42.5°	2576.3	2566.2	2541.4	2536.4	2546.0
45°	2425.7	2413.1	2392.3	2379.6	2384.6
47.5°	2257.2	2257.2	2235.6	2220.8	2228.4
50°	2148.2	2148.2	2122.5	2109.9	2117.4
52.5°	2035.1	2037.1	2009.5	2002.7	2000.2
55°	1860.5	1862.9	1839.9	1822.0	1827.0
57.5°	1691.8	1686.3	1659.4	1647.7	1650.2
60°	1572.6	1565.1	1544.4	1526.7	1539.2
62.5°	1451.4	1447.8	1427.2	1407.1	1405.6
65°	1264.3	1259.2	1236.0	1223.2	1225.7
67.5°	1078.2	1072.2	1051.0	1032.6	1039.2
70°	950.8	950.8	927.6	917.2	909.7
72.5°	833.6	823.6	806.3	791.9	786.3
75°	642.4	634.9	621.8	609.0	609.0
77.5°	467.7	461.1	452.8	444.0	441.5
80°	354.6	352.1	341.7	338.9	326.4
82.5°	249.8	249.3	243.0	236.4	235.9
85°	105.3	115.4	115.6	118.2	118.2
87.5°	19.0	32.6	32.4	29.3	29.3
90°	2.6	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.7	77.6	65.6
95°	55.9	207.7	661.5	287.9	193.3
97.5°	92.6	229.4	1014.1	789.0	554.1
100°	117.1	243.8	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.6	1213.5
105°	183.2	285.2	1134.7	1727.7	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.1	1926.1	2047.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	361.5	971.3	1899.0	2082.6
115°	325.6	395.3	908.2	1806.8	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.8
122.5°	414.2	478.9	837.5	1501.1	1772.2
125°	447.8	510.0	821.7	1384.5	1633.3
127.5°	477.8	539.4	813.1	1296.2	1509.6
130°	496.0	555.8	809.0	1240.7	1432.3
132.5°	514.4	574.2	804.9	1193.4	1363.1
135°	539.3	599.1	798.9	1127.7	1272.0
137.5°	566.3	620.6	795.7	1069.7	1191.1
140°	582.6	634.8	793.8	1032.8	1142.3
142.5°	598.9	647.2	791.7	1004.0	1095.5
145°	623.3	668.1	788.7	958.2	1030.4
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.0	701.4	786.1	901.6	946.4
152.5°	683.4	711.7	784.0	883.1	920.0
155°	704.7	729.6	783.6	860.5	885.3
157.5°	725.6	745.0	783.6	845.1	863.9
160°	737.7	755.2	783.6	834.8	849.7
162.5°	750.0	763.4	785.6	826.5	837.5
165°	763.2	773.2	786.1	819.3	821.7
167.5°	777.0	781.9	788.7	810.5	812.6
170°	781.0	786.0	788.7	806.4	806.4
172.5°	785.1	788.1	788.7	802.4	802.4
175°	791.2	793.7	788.7	798.8	796.3
177.5°	793.3	793.3	787.1	795.1	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)