

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: P520259

Luminaire Tested: **SQ4-F-100U-125D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520259  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-100U-125D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

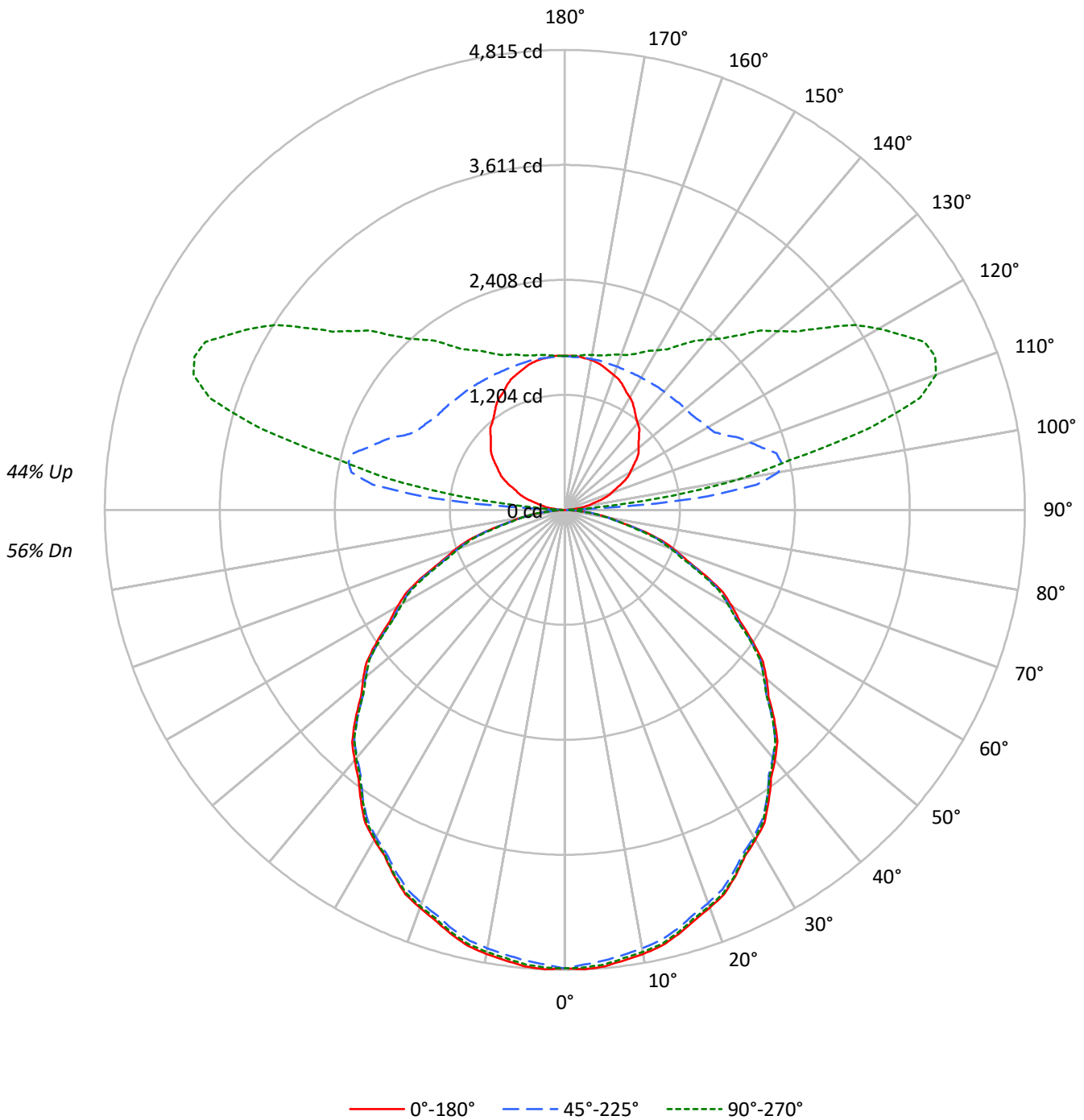
Lumens per Lamp: N/A  
Luminaire Lumens: 23569.3 lumens  
Efficiency: N/A  
Efficacy: 109.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 215.6  
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14

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

	0°	45°	90°
0°	14763	14763	14763
5°	14811	14624	14746
10°	14743	14562	14677
15°	14644	14468	14586
20°	14509	14345	14457
25°	14344	14192	14308
30°	14167	14045	14119
35°	13966	13846	13856
40°	13735	13587	13629
45°	13478	13329	13352
50°	13184	13032	12994
55°	12848	12664	12636
60°	12431	12155	12090
65°	11785	11535	11382
70°	10975	10690	10547
75°	9764	9543	9261
80°	7954	7720	7674
85°	4753	5406	5406



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	452.9	1.9
10°-20°	1290.0	5.5
20°-30°	1938.0	8.2
30°-40°	2312.4	9.8
40°-50°	2370.3	10.1
50°-60°	2112.7	9.0
60°-70°	1572.7	6.7
70°-80°	852.1	3.6
80°-90°	199.0	0.8
90°-100°	754.6	3.2
100°-110°	2083.1	8.8
110°-120°	2148.4	9.1
120°-130°	1726.4	7.3
130°-140°	1356.8	5.8
140°-150°	1040.6	4.4
150°-160°	747.9	3.2
160°-170°	457.4	1.9
170°-180°	154.2	0.7
0°-30°	3680.9	15.6
0°-40°	5993.3	25.4
0°-60°	10476.4	44.4
0°-90°	13100.1	55.6
90°-120°	4986.1	21.2
90°-150°	9109.8	38.7
90°-180°	10469.0	44.4
0°-180°	23569.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4800	4800	4800	4800	4800	
5°	4798	4790	4737	4779	4777	455
15°	4600	4589	4544	4584	4581	1297
25°	4227	4219	4182	4206	4216	1947
35°	3720	3717	3688	3688	3691	2326
45°	3099	3091	3065	3060	3070	2388
55°	2396	2388	2362	2344	2357	2140
65°	1620	1609	1585	1574	1564	1604
75°	822	822	803	787	779	873
85°	135	153	153	156	153	186
90°	5	10	21	23	26	11
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4800.3	4800.3	4800.3	4800.3	4800.3
2.5°	4815.1	4806.9	4764.4	4800.2	4794.0
5°	4797.7	4790.0	4737.0	4779.1	4776.6
7.5°	4757.0	4747.2	4698.9	4738.4	4733.7
10°	4721.1	4713.4	4663.0	4702.5	4700.0
12.5°	4676.7	4669.0	4618.6	4658.2	4657.7
15°	4599.5	4589.2	4544.1	4583.6	4581.1
17.5°	4507.1	4495.3	4450.6	4481.9	4487.0
20°	4433.1	4425.4	4383.0	4412.1	4417.3
22.5°	4357.0	4347.2	4302.6	4336.0	4341.2
25°	4227.1	4219.3	4182.2	4206.2	4216.5
27.5°	4084.4	4084.4	4050.0	4067.1	4073.3
30°	3989.3	3989.3	3954.9	3965.8	3976.0
32.5°	3887.9	3879.5	3847.1	3855.8	3866.2
35°	3719.8	3717.3	3688.1	3688.2	3690.7
37.5°	3546.0	3538.7	3506.9	3509.3	3521.7
40°	3421.2	3416.1	3384.3	3384.5	3394.9
42.5°	3294.4	3289.3	3261.7	3257.5	3261.7
45°	3098.9	3091.2	3064.6	3059.6	3069.9
47.5°	2890.8	2892.9	2861.2	2854.0	2859.6
50°	2755.6	2755.6	2723.8	2708.1	2715.9
52.5°	2613.9	2609.8	2578.0	2560.4	2578.5
55°	2396.3	2388.5	2361.9	2343.7	2356.6
57.5°	2173.3	2161.3	2134.7	2114.7	2122.0
60°	2021.1	2003.0	1976.2	1960.4	1965.6
62.5°	1862.5	1852.7	1823.9	1799.9	1811.3
65°	1619.5	1609.2	1585.1	1574.3	1564.1
67.5°	1381.2	1374.4	1347.4	1336.1	1329.4
70°	1220.6	1207.6	1188.9	1175.6	1173.0
72.5°	1064.2	1049.2	1030.3	1019.1	1012.4
75°	821.7	821.7	803.1	787.1	779.4
77.5°	590.8	592.8	577.5	572.1	568.6
80°	449.1	449.1	435.9	430.6	433.3
82.5°	313.9	320.1	315.4	308.0	304.4
85°	134.7	152.8	153.2	155.8	153.2
87.5°	24.3	39.8	44.4	40.6	37.0
90°	5.1	10.2	20.6	23.2	25.8
92.5°	46.4	192.6	344.4	125.7	97.9
95°	110.9	408.3	1369.0	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.8
100°	237.2	486.7	2271.2	2287.3	1858.7
102.5°	288.8	520.1	2318.7	2826.1	2419.7
105°	371.3	572.9	2291.9	3499.0	3294.8
107.5°	458.9	638.3	2164.0	3823.4	3898.0
110°	520.7	682.1	2065.0	3893.2	4135.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	576.4	731.7	1972.2	3838.1	4195.0
115°	665.2	803.7	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.8	3220.1	3794.8
122.5°	843.5	973.6	1703.0	3056.5	3601.1
125°	912.7	1038.7	1673.2	2831.5	3323.1
127.5°	971.4	1097.4	1655.7	2641.3	3065.3
130°	1010.6	1136.6	1647.3	2525.0	2910.6
132.5°	1047.7	1167.7	1639.1	2427.1	2776.5
135°	1098.2	1216.7	1626.8	2293.4	2585.8
137.5°	1155.0	1262.8	1620.5	2181.0	2430.6
140°	1185.9	1291.8	1616.5	2106.0	2325.4
142.5°	1221.0	1318.7	1612.3	2039.5	2232.6
145°	1273.5	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.3	1598.4	1835.1	1928.4
152.5°	1390.0	1449.1	1596.3	1797.6	1874.8
155°	1435.9	1483.8	1593.2	1751.7	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1683.0	1704.6
165°	1554.6	1574.7	1601.0	1663.2	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.8	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.2	1613.8	1603.5	1626.7	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.2	1611.2	1611.2	1611.2	1611.2

(END OF REPORT)