

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: P520421

Luminaire Tested: **SQ4-F-150U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520421  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

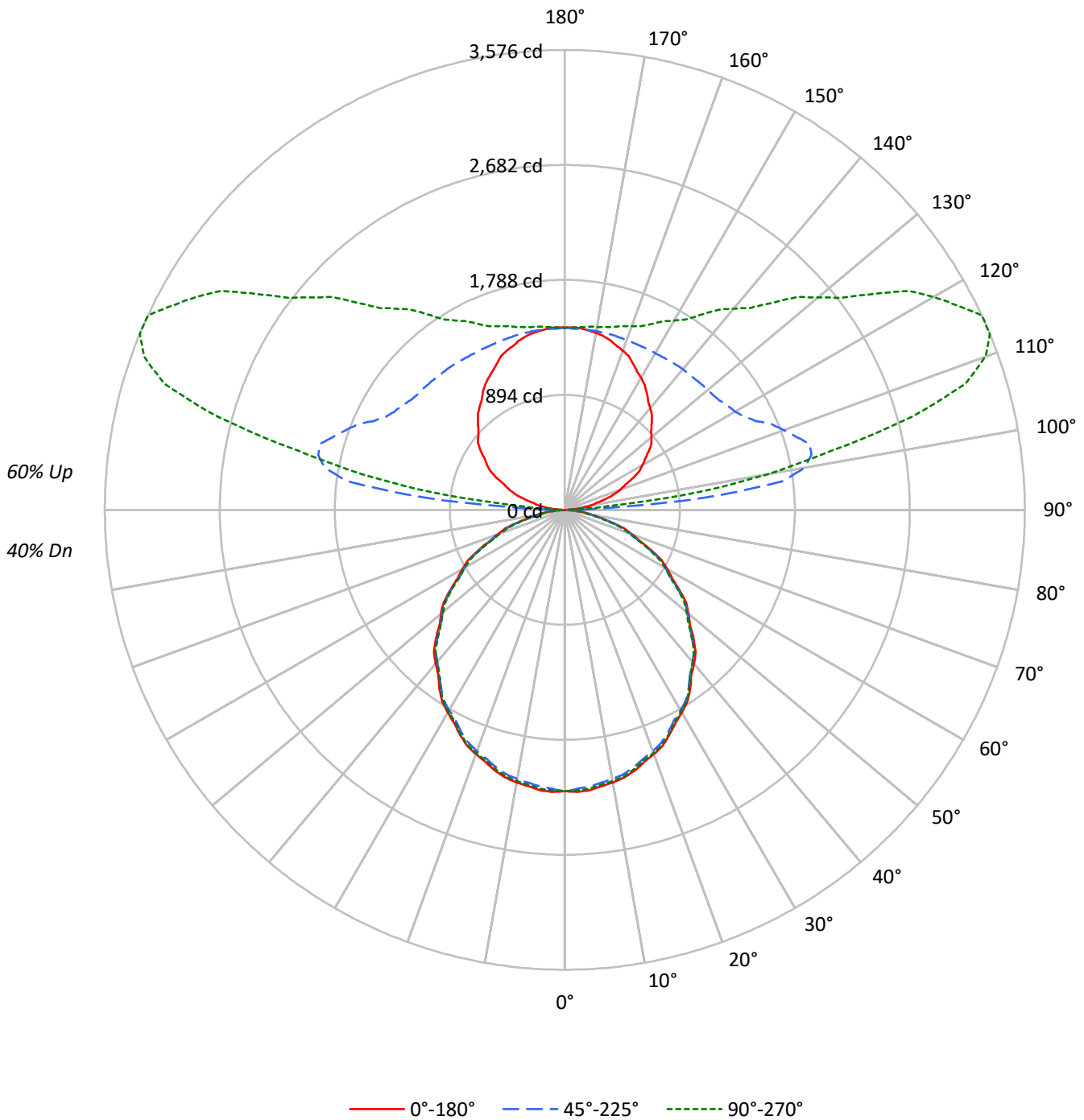
Lumens per Lamp: N/A  
Luminaire Lumens: 15095.3 lumens  
Efficiency: N/A  
Efficacy: 136.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 110.6  
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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

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

	0°	45°	90°
0°	13453	13453	13453
5°	13514	13328	13431
10°	13445	13276	13380
15°	13364	13182	13288
20°	13226	13069	13177
25°	13081	12929	13030
30°	12922	12783	12847
35°	12760	12603	12670
40°	12547	12403	12415
45°	12327	12158	12118
50°	12009	11865	11836
55°	11654	11526	11445
60°	11301	11099	11062
65°	10750	10509	10422
70°	9990	9745	9557
75°	8919	8634	8456
80°	7339	7074	6751
85°	4340	4771	4877



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.4	1.4
10°-20°	587.9	3.9
20°-30°	882.8	5.8
30°-40°	1053.6	7.0
40°-50°	1079.9	7.2
50°-60°	961.6	6.4
60°-70°	716.9	4.7
70°-80°	388.1	2.6
80°-90°	91.3	0.6
90°-100°	657.9	4.4
100°-110°	1778.8	11.8
110°-120°	1870.1	12.4
120°-130°	1519.0	10.1
130°-140°	1191.6	7.9
140°-150°	914.5	6.1
150°-160°	657.7	4.4
160°-170°	401.8	2.7
170°-180°	135.5	0.9
0°-30°	1677.1	11.1
0°-40°	2730.7	18.1
0°-60°	4772.2	31.6
0°-90°	5968.5	39.5
90°-120°	4306.7	28.5
90°-150°	7931.9	52.5
90°-180°	9127.0	60.5
0°-180°	15095.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2187	2187	2187	2187	2187	
5°	2189	2184	2159	2178	2175	208
15°	2099	2091	2070	2087	2087	591
25°	1928	1923	1905	1916	1920	888
35°	1699	1692	1678	1681	1687	1061
45°	1417	1410	1398	1390	1393	1090
55°	1087	1088	1075	1064	1067	973
65°	739	736	722	715	716	730
75°	375	371	363	356	356	400
85°	62	67	68	69	69	86
90°	3	9	20	21	20	8
95°	102	358	1094	566	337	107
105°	331	511	1973	2911	2792	348
115°	582	712	1636	3168	3576	575
125°	797	913	1475	2489	2924	710
135°	955	1069	1435	2010	2275	738
145°	1111	1194	1416	1720	1851	695
155°	1254	1303	1404	1543	1594	578
165°	1365	1379	1410	1464	1472	385
175°	1417	1416	1411	1429	1426	135
180°	1416	1416	1416	1416	1416	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2187.2	2187.2	2187.2	2187.2	2187.2
2.5°	2195.7	2190.9	2171.6	2187.1	2184.9
5°	2188.7	2184.4	2158.7	2178.1	2175.3
7.5°	2168.3	2164.0	2141.3	2159.3	2156.6
10°	2152.7	2148.3	2125.7	2143.6	2142.2
12.5°	2132.3	2127.9	2105.3	2123.2	2121.7
15°	2098.7	2091.3	2070.1	2086.7	2086.7
17.5°	2054.3	2048.6	2029.0	2042.8	2043.1
20°	2020.6	2016.2	1996.6	2011.7	2013.1
22.5°	1987.0	1982.5	1960.5	1974.4	1977.1
25°	1927.5	1923.1	1905.1	1915.7	1920.0
27.5°	1866.3	1859.8	1841.9	1851.4	1854.5
30°	1819.4	1816.5	1799.9	1804.5	1808.9
32.5°	1770.2	1767.2	1753.1	1755.3	1763.3
35°	1699.4	1692.0	1678.4	1681.4	1687.4
37.5°	1615.5	1612.1	1598.8	1597.1	1602.7
40°	1562.7	1556.9	1544.7	1541.8	1546.2
42.5°	1505.1	1499.2	1484.6	1481.8	1487.4
45°	1417.1	1409.7	1397.7	1390.1	1393.1
47.5°	1318.7	1318.7	1306.0	1297.4	1301.8
50°	1255.0	1255.0	1240.0	1232.6	1236.9
52.5°	1189.0	1190.1	1173.9	1170.0	1168.5
55°	1086.8	1088.3	1074.8	1064.4	1067.3
57.5°	988.3	985.2	969.4	962.6	964.1
60°	918.7	914.3	902.2	891.8	899.2
62.5°	847.8	845.9	833.8	822.0	821.2
65°	738.6	735.7	722.1	714.6	716.1
67.5°	629.9	626.4	614.0	603.3	607.1
70°	555.5	555.5	541.9	535.8	531.4
72.5°	487.0	481.1	471.0	462.6	459.3
75°	375.3	370.9	363.3	355.8	355.8
77.5°	273.2	269.4	264.5	259.4	257.9
80°	207.2	205.7	199.7	198.0	190.6
82.5°	145.9	145.7	142.0	138.1	137.8
85°	61.5	67.4	67.6	69.1	69.1
87.5°	11.4	19.6	20.7	18.6	18.3
90°	3.0	9.1	19.8	21.3	19.8
92.5°	43.3	157.7	311.2	135.1	97.8
95°	102.1	358.3	1094.1	566.2	336.8
97.5°	164.0	410.9	1705.4	1411.3	1036.5
100°	210.3	432.3	1895.6	1976.9	1598.4
102.5°	252.9	461.8	1962.7	2405.7	2122.6
105°	330.7	510.9	1973.3	2910.7	2791.6
107.5°	402.6	567.1	1887.0	3225.8	3265.4
110°	458.6	607.6	1810.3	3310.4	3478.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	508.6	648.1	1739.6	3293.5	3576.3
115°	582.1	711.7	1636.5	3168.1	3576.3
117.5°	654.0	775.6	1568.5	2976.4	3439.2
120°	697.9	817.1	1528.4	2838.9	3311.2
122.5°	739.3	856.2	1503.9	2691.4	3167.3
125°	796.9	913.1	1475.0	2489.1	2924.1
127.5°	850.0	964.1	1458.0	2323.9	2706.5
130°	879.2	996.9	1450.6	2221.9	2567.6
132.5°	909.7	1026.2	1443.3	2129.9	2448.1
135°	955.4	1068.7	1435.4	2009.8	2275.0
137.5°	1001.5	1108.4	1428.7	1912.4	2128.5
140°	1033.1	1132.9	1426.3	1849.7	2041.9
142.5°	1063.6	1157.5	1421.4	1793.1	1961.4
145°	1110.8	1194.3	1415.6	1720.2	1851.4
147.5°	1153.8	1227.7	1408.9	1654.3	1755.0
150°	1185.5	1251.0	1406.5	1618.5	1699.0
152.5°	1214.7	1272.0	1405.3	1585.3	1651.4
155°	1254.1	1303.3	1403.5	1543.2	1593.9
157.5°	1294.9	1329.2	1403.8	1513.9	1547.2
160°	1318.0	1346.4	1405.0	1495.4	1519.2
162.5°	1336.4	1359.9	1406.2	1480.6	1498.5
165°	1365.3	1378.7	1409.5	1464.5	1472.0
167.5°	1385.1	1394.4	1409.8	1450.7	1454.3
170°	1397.3	1401.7	1411.0	1444.5	1444.5
172.5°	1407.1	1408.0	1411.0	1437.3	1436.0
175°	1417.1	1415.6	1411.0	1429.2	1426.3
177.5°	1420.5	1416.9	1410.7	1422.9	1419.2
180°	1415.6	1415.6	1415.6	1415.6	1415.6

(END OF REPORT)