

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: P520221

Luminaire Tested: **SQ4-F-100U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520221
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

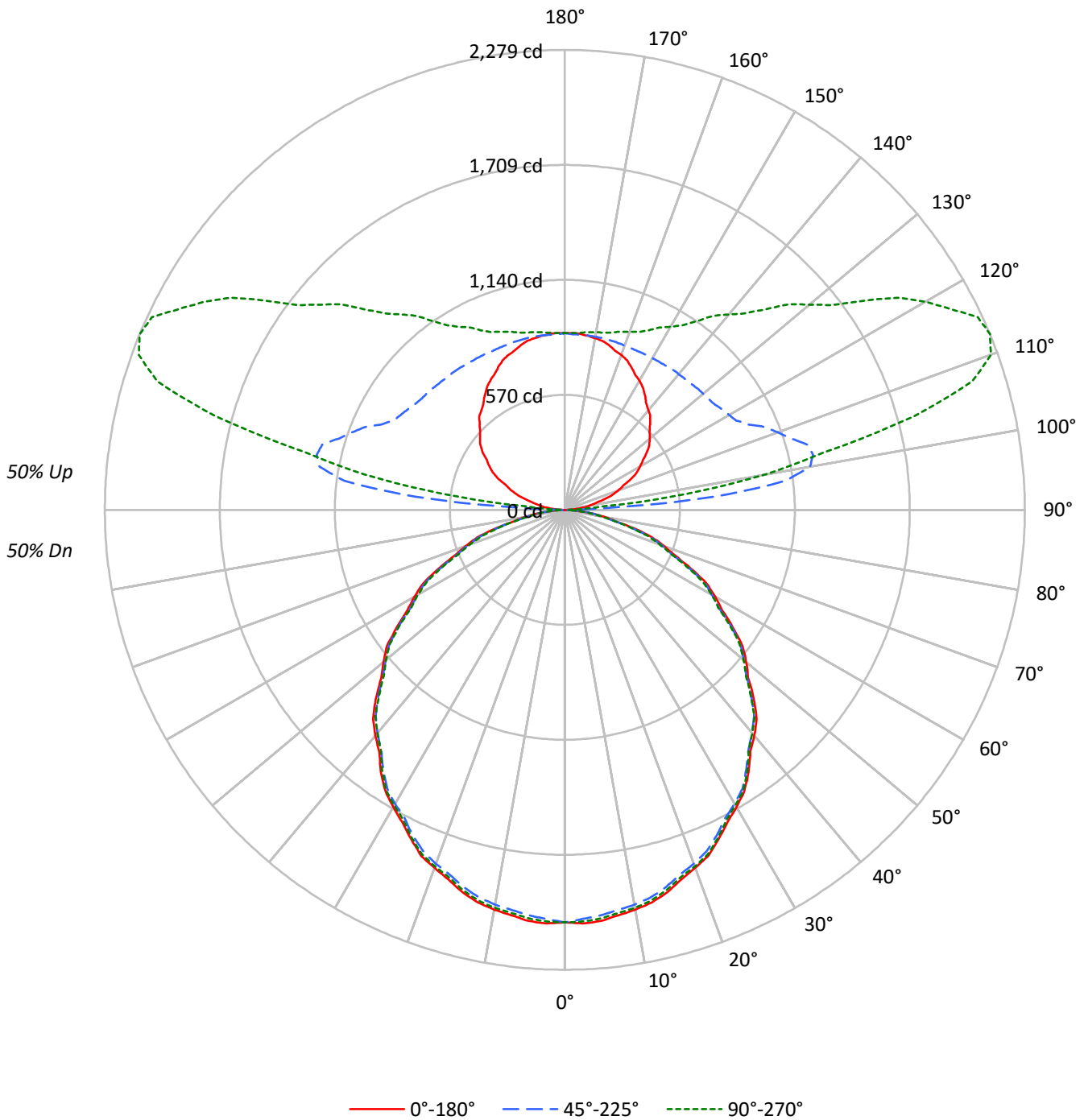
Lumens per Lamp: N/A
Luminaire Lumens: 11263.1 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 90.2
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	31	27	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	19	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12572	12572	12572
5°	12629	12455	12551
10°	12564	12406	12503
15°	12488	12318	12417
20°	12359	12213	12313
25°	12224	12082	12177
30°	12076	11946	12006
35°	11924	11777	11840
40°	11726	11590	11602
45°	11519	11360	11324
50°	11222	11088	11062
55°	10892	10771	10697
60°	10561	10371	10337
65°	10045	9821	9740
70°	9335	9107	8931
75°	8337	8068	7902
80°	6858	6610	6308
85°	4058	4453	4552



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.9	1.7
10°-20°	549.3	4.9
20°-30°	825.0	7.3
30°-40°	984.5	8.7
40°-50°	1009.2	9.0
50°-60°	898.7	8.0
60°-70°	669.9	5.9
70°-80°	362.7	3.2
80°-90°	84.3	0.7
90°-100°	409.9	3.6
100°-110°	1131.5	10.0
110°-120°	1166.9	10.4
120°-130°	937.7	8.3
130°-140°	736.9	6.5
140°-150°	565.2	5.0
150°-160°	406.2	3.6
160°-170°	248.4	2.2
170°-180°	83.8	0.7
0°-30°	1567.2	13.9
0°-40°	2551.8	22.7
0°-60°	4459.6	39.6
0°-90°	5576.6	49.5
90°-120°	2708.3	24.0
90°-150°	4948.1	43.9
90°-180°	5686.0	50.5
0°-180°	11263.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2045	2041	2017	2035	2033	194
15°	1961	1954	1934	1950	1950	552
25°	1801	1797	1780	1790	1794	830
35°	1588	1581	1568	1571	1577	991
45°	1324	1317	1306	1299	1302	1019
55°	1016	1017	1004	995	998	909
65°	690	687	675	668	669	683
75°	351	347	340	332	332	374
85°	58	63	63	64	64	80
90°	3	6	11	13	14	6
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	436	1003	1985	2257	355
125°	496	564	909	1538	1805	441
135°	596	661	884	1246	1404	462
145°	692	740	872	1060	1141	433
155°	780	806	865	951	982	359
165°	844	855	870	903	910	238
175°	875	876	871	884	881	83
180°	875	875	875	875	875	

TEST NUMBER: P520221

CATALOG NUMBER: SQ4-F-100U-100D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2044.0	2044.0	2044.0	2044.0	2044.0
2.5°	2051.8	2047.4	2029.4	2043.9	2041.7
5°	2045.4	2041.2	2017.3	2035.4	2032.8
7.5°	2026.2	2022.2	2001.1	2017.8	2015.3
10°	2011.7	2007.6	1986.4	2003.2	2001.9
12.5°	1992.6	1988.5	1967.4	1984.1	1982.7
15°	1961.1	1954.3	1934.5	1949.9	1949.9
17.5°	1919.6	1914.5	1896.0	1909.0	1909.3
20°	1888.2	1884.1	1865.8	1879.9	1881.2
22.5°	1856.8	1852.7	1832.1	1845.1	1847.6
25°	1801.2	1797.2	1780.2	1790.1	1794.3
27.5°	1744.0	1738.0	1721.3	1730.1	1733.0
30°	1700.3	1697.5	1682.0	1686.3	1690.4
32.5°	1654.3	1651.5	1638.2	1640.4	1647.7
35°	1588.0	1581.2	1568.4	1571.3	1576.8
37.5°	1509.7	1506.4	1494.1	1492.5	1497.6
40°	1460.4	1454.9	1443.5	1440.9	1444.9
42.5°	1406.5	1401.0	1387.4	1384.8	1389.9
45°	1324.3	1317.4	1306.0	1299.1	1301.8
47.5°	1232.3	1232.3	1220.5	1212.5	1216.5
50°	1172.7	1172.7	1158.8	1151.8	1156.0
52.5°	1111.0	1112.2	1097.0	1093.4	1092.0
55°	1015.7	1017.1	1004.4	994.7	997.5
57.5°	923.6	920.6	905.9	899.6	901.0
60°	858.5	854.4	843.1	833.5	840.3
62.5°	792.4	790.4	779.2	768.2	767.4
65°	690.2	687.4	674.8	667.8	669.2
67.5°	588.6	585.4	573.8	563.8	567.3
70°	519.1	519.1	506.4	500.8	496.6
72.5°	455.1	449.6	440.2	432.3	429.2
75°	350.8	346.6	339.5	332.5	332.5
77.5°	255.3	251.8	247.2	242.4	241.0
80°	193.6	192.2	186.6	185.0	178.1
82.5°	136.3	136.0	132.7	129.1	128.8
85°	57.5	63.0	63.1	64.5	64.5
87.5°	10.7	17.8	17.9	16.0	16.2
90°	2.8	5.5	11.2	12.7	14.0
92.5°	25.2	104.7	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.7	198.8
97.5°	99.7	248.4	1101.5	848.1	614.2
100°	128.8	264.4	1233.7	1242.4	1009.6
102.5°	156.8	282.5	1259.4	1535.0	1314.3
105°	201.6	311.2	1244.8	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.8	370.5	1121.7	2114.7	2246.0

TEST NUMBER: P520221

CATALOG NUMBER: SQ4-F-100U-100D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.5	1071.2	2084.7	2278.6
115°	361.3	436.5	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.6	1844.2	2154.2
120°	431.3	505.2	939.6	1749.0	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1537.9	1804.9
127.5°	527.6	596.1	899.3	1434.7	1665.0
130°	548.9	617.4	894.7	1371.5	1581.0
132.5°	569.1	634.3	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.6	1404.5
137.5°	627.4	685.9	880.2	1184.7	1320.2
140°	644.2	701.7	877.9	1143.9	1263.0
142.5°	663.2	716.3	875.8	1107.7	1212.7
145°	691.8	739.6	872.4	1060.4	1141.3
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.3	773.6	868.1	996.7	1047.4
152.5°	755.1	787.1	867.0	976.4	1018.3
155°	780.0	806.0	865.4	951.4	981.6
157.5°	802.9	822.9	865.7	933.3	953.9
160°	816.4	834.2	866.8	923.1	938.2
162.5°	827.6	843.2	867.9	914.1	925.9
165°	844.4	855.3	869.6	903.4	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.4	871.0	893.4	893.4
172.5°	869.6	872.9	871.0	888.9	887.8
175°	875.2	876.5	871.0	883.5	880.8
177.5°	877.4	876.3	870.7	878.5	876.3
180°	875.2	875.2	875.2	875.2	875.2

(END OF REPORT)