

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: P519961

Luminaire Tested: **SQ4-F-050U-125D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519961
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-125D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

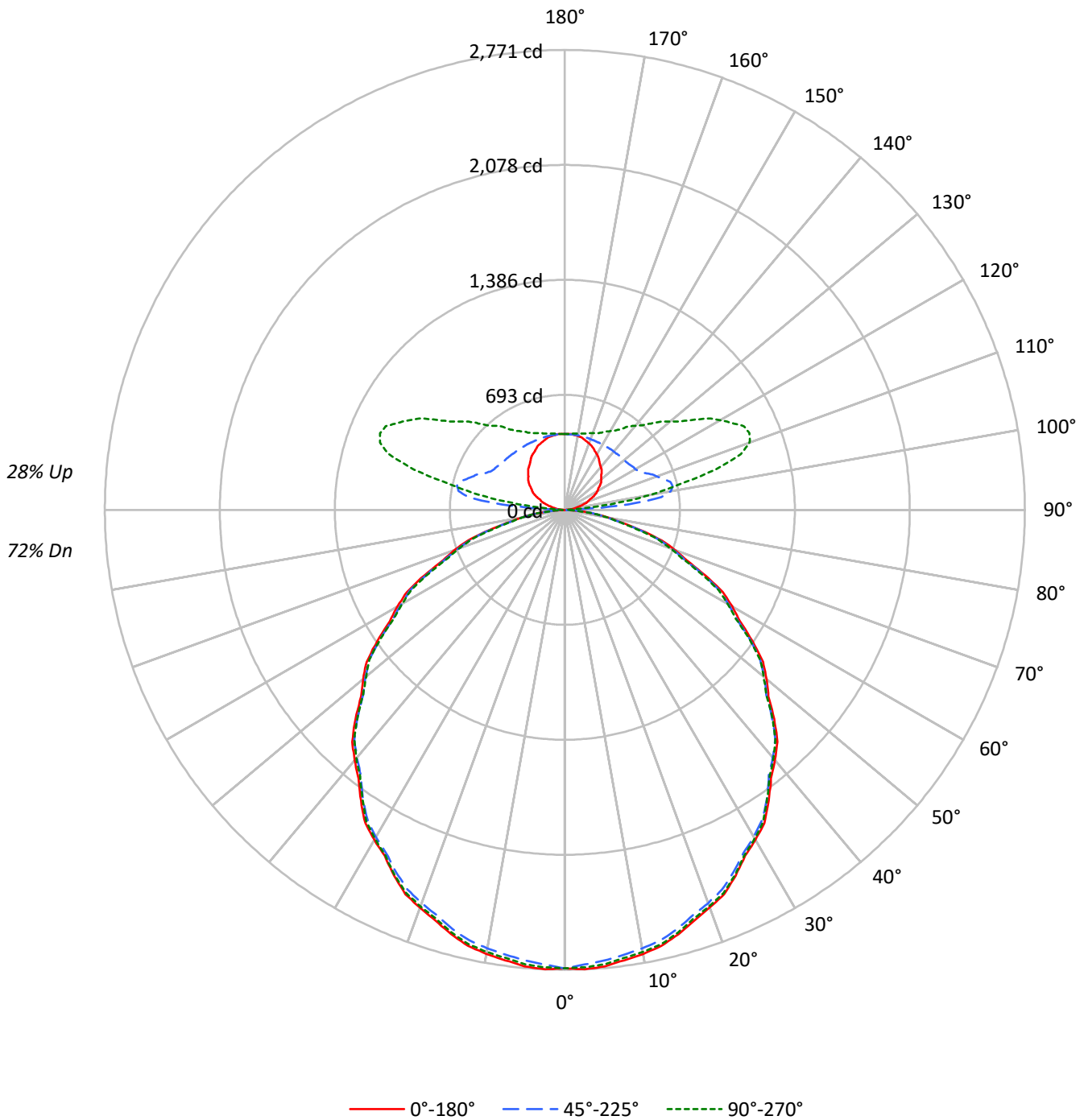
Lumens per Lamp: N/A
Luminaire Lumens: 10526.1 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 83.8
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



TEST NUMBER: P519961
CATALOG NUMBER: SQ4-F-050U-125D-835-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P519961

CATALOG NUMBER: SQ4-F-050U-125D-835-1D-UNV-STD-W-6

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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16990	16990	16990
5°	17046	16831	16971
10°	16968	16759	16892
15°	16854	16651	16787
20°	16698	16509	16638
25°	16508	16333	16467
30°	16304	16164	16250
35°	16072	15936	15947
40°	15808	15637	15686
45°	15512	15340	15367
50°	15173	14998	14954
55°	14787	14574	14542
60°	14307	13989	13914
65°	13563	13276	13099
70°	12632	12303	12139
75°	11236	10984	10659
80°	9153	8884	8830
85°	5469	6224	6224



TEST NUMBER: P519961

CATALOG NUMBER: SQ4-F-050U-125D-835-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.6	2.5
10°-20°	742.3	7.1
20°-30°	1115.2	10.6
30°-40°	1330.7	12.6
40°-50°	1364.0	13.0
50°-60°	1215.8	11.5
60°-70°	905.0	8.6
70°-80°	490.3	4.7
80°-90°	114.3	1.1
90°-100°	219.7	2.1
100°-110°	596.8	5.7
110°-120°	613.6	5.8
120°-130°	490.5	4.7
130°-140°	385.5	3.7
140°-150°	295.5	2.8
150°-160°	212.5	2.0
160°-170°	130.0	1.2
170°-180°	43.8	0.4
0°-30°	2118.2	20.1
0°-40°	3448.8	32.8
0°-60°	6028.6	57.3
0°-90°	7538.3	71.6
90°-120°	1430.0	13.6
90°-150°	2601.6	24.7
90°-180°	2988.0	28.4
0°-180°	10526.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2762	2762	2762	2762	2762	
5°	2761	2756	2726	2750	2749	262
15°	2647	2641	2615	2638	2636	746
25°	2432	2428	2407	2420	2426	1120
35°	2140	2139	2122	2122	2124	1339
45°	1783	1779	1764	1761	1767	1374
55°	1379	1374	1359	1349	1356	1231
65°	932	926	912	906	900	923
75°	473	473	462	453	448	502
85°	78	88	88	90	88	107
90°	2	6	10	13	13	4
95°	32	120	383	166	112	34
105°	106	165	656	999	940	113
115°	188	229	525	1045	1190	186
125°	259	295	475	801	945	231
135°	312	346	462	652	736	241
145°	360	386	456	554	596	226
155°	408	422	453	498	512	188
165°	441	447	455	474	475	125
175°	458	459	456	462	460	43
180°	458	458	458	458	458	

TEST NUMBER: P519961

CATALOG NUMBER: SQ4-F-050U-125D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2762.3	2762.3	2762.3	2762.3	2762.3
2.5°	2770.9	2766.1	2741.7	2762.2	2758.7
5°	2760.8	2756.4	2725.9	2750.2	2748.7
7.5°	2737.4	2731.7	2704.0	2726.7	2724.0
10°	2716.7	2712.3	2683.3	2706.1	2704.6
12.5°	2691.2	2686.7	2657.7	2680.6	2680.2
15°	2646.8	2640.8	2614.9	2637.7	2636.2
17.5°	2593.6	2586.8	2561.1	2579.1	2582.0
20°	2551.0	2546.6	2522.1	2539.0	2541.9
22.5°	2507.2	2501.6	2475.9	2495.2	2498.1
25°	2432.4	2428.0	2406.6	2420.4	2426.4
27.5°	2350.3	2350.3	2330.6	2340.4	2344.0
30°	2295.6	2295.6	2275.9	2282.0	2288.0
32.5°	2237.2	2232.5	2213.8	2218.8	2224.8
35°	2140.5	2139.0	2122.3	2122.3	2123.8
37.5°	2040.5	2036.4	2018.0	2019.4	2026.5
40°	1968.8	1965.8	1947.5	1947.6	1953.6
42.5°	1895.8	1892.8	1876.9	1874.6	1876.9
45°	1783.3	1778.8	1763.5	1760.6	1766.6
47.5°	1663.5	1664.7	1646.5	1642.3	1645.5
50°	1585.6	1585.6	1567.4	1558.4	1562.8
52.5°	1504.2	1501.8	1483.5	1473.4	1483.8
55°	1378.9	1374.4	1359.1	1348.7	1356.1
57.5°	1250.6	1243.8	1228.4	1216.9	1221.1
60°	1163.0	1152.6	1137.2	1128.1	1131.1
62.5°	1071.8	1066.1	1049.6	1035.7	1042.3
65°	931.9	925.9	912.2	906.0	900.0
67.5°	794.8	790.9	775.3	768.9	765.0
70°	702.4	695.0	684.1	676.5	675.0
72.5°	612.4	603.8	592.9	586.4	582.6
75°	472.8	472.8	462.2	452.9	448.5
77.5°	339.9	341.2	332.3	329.3	327.2
80°	258.4	258.4	250.8	247.8	249.3
82.5°	180.6	184.2	181.5	177.3	175.1
85°	77.5	88.0	88.2	89.7	88.2
87.5°	13.7	22.9	25.2	23.3	21.0
90°	1.5	5.8	10.3	13.2	13.2
92.5°	13.2	60.2	104.5	44.8	38.0
95°	32.4	120.1	382.6	166.5	111.9
97.5°	53.6	132.7	586.5	456.3	320.5
100°	67.7	141.1	648.9	657.8	531.2
102.5°	81.8	149.4	665.4	813.5	701.9
105°	106.0	165.0	656.3	999.2	940.3
107.5°	131.0	183.0	618.3	1095.1	1111.5
110°	148.6	196.1	590.0	1114.0	1184.5



TEST NUMBER: P519961

CATALOG NUMBER: SQ4-F-050U-125D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	209.1	561.8	1098.4	1204.5
115°	188.3	228.6	525.3	1045.1	1190.4
117.5°	211.3	249.8	502.0	969.6	1133.3
120°	226.6	264.0	491.4	918.9	1081.5
122.5°	239.5	276.9	484.4	868.1	1025.0
125°	259.0	295.0	475.2	800.8	944.7
127.5°	276.3	312.0	470.2	749.7	873.1
130°	286.9	321.5	467.9	717.6	828.4
132.5°	297.5	332.1	465.5	690.2	788.4
135°	312.0	346.5	462.0	652.3	735.7
137.5°	327.6	358.9	460.2	618.7	689.0
140°	337.0	367.2	459.0	597.4	660.7
142.5°	346.4	374.3	457.9	580.6	633.6
145°	360.5	386.4	456.1	554.2	595.9
147.5°	376.4	398.5	454.6	533.4	566.2
150°	387.0	405.7	454.6	521.5	547.4
152.5°	395.3	411.6	453.5	510.8	532.1
155°	407.6	422.0	453.2	497.7	512.0
157.5°	419.7	430.9	453.2	488.8	499.7
160°	426.7	436.8	453.2	482.8	491.4
162.5°	433.7	441.6	454.3	478.1	484.4
165°	441.4	447.2	454.6	473.9	475.2
167.5°	449.3	452.3	456.1	468.9	469.9
170°	451.7	454.6	456.1	466.4	466.4
172.5°	454.0	455.8	456.1	464.1	464.1
175°	457.6	459.0	456.1	462.0	460.5
177.5°	458.8	458.8	455.2	459.9	457.6
180°	457.6	457.6	457.6	457.6	457.6

(END OF REPORT)