

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: P519957

Luminaire Tested: **SQ4-F-050U-125D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519957  
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-830-1D-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**

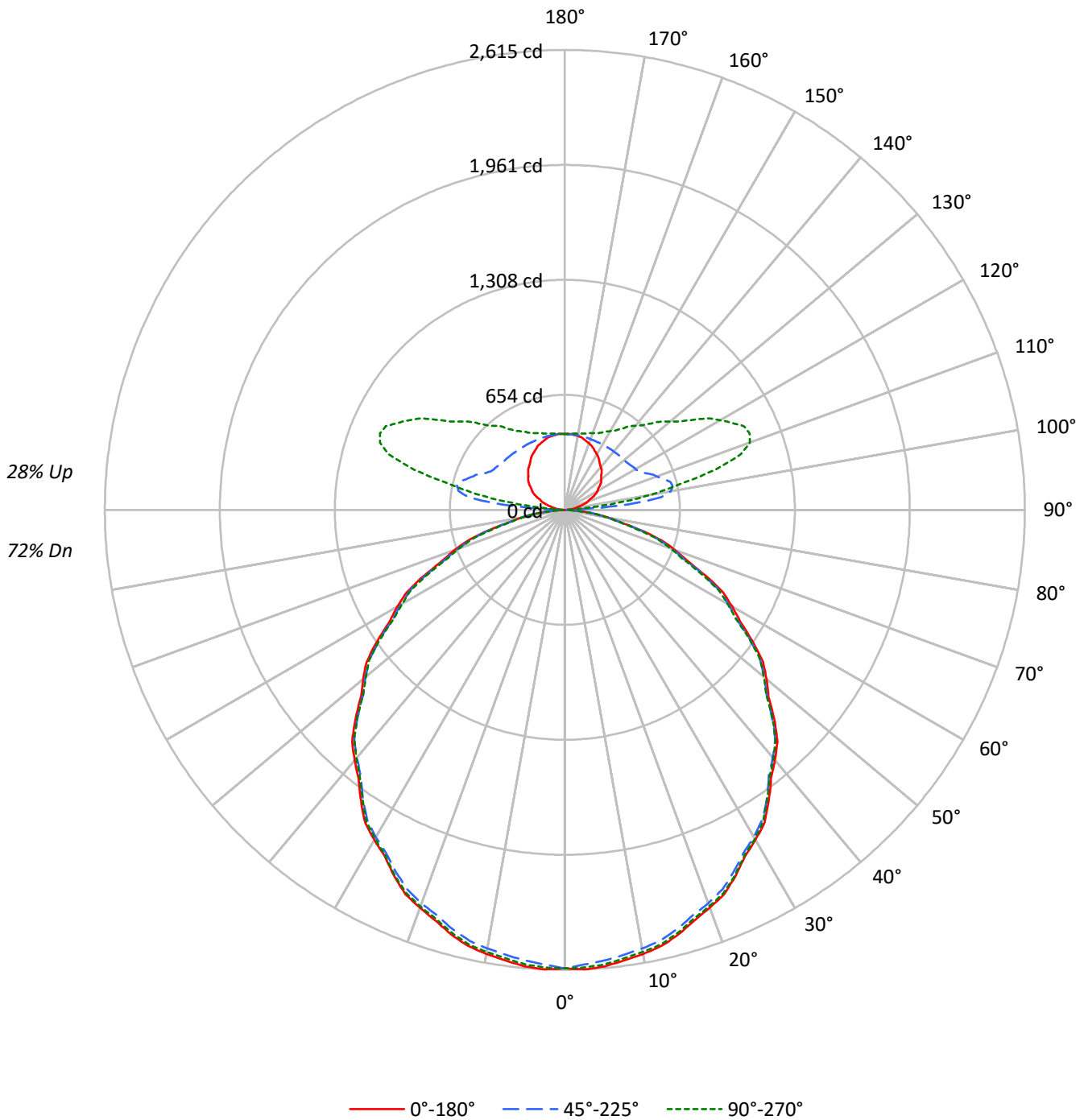
Lumens per Lamp: N/A  
Luminaire Lumens: 9935.5 lumens  
Efficiency: N/A  
Efficacy: 118.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

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



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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	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°	16038	16038	16038
5°	16090	15886	16019
10°	16016	15819	15944
15°	15909	15716	15845
20°	15761	15583	15705
25°	15581	15417	15543
30°	15389	15257	15338
35°	15171	15042	15052
40°	14921	14759	14806
45°	14642	14480	14504
50°	14322	14156	14116
55°	13958	13757	13726
60°	13503	13203	13133
65°	12802	12531	12364
70°	11921	11612	11457
75°	10606	10366	10060
80°	8643	8388	8335
85°	5166	5872	5872



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.0	2.5
10°-20°	700.7	7.1
20°-30°	1052.7	10.6
30°-40°	1256.0	12.6
40°-50°	1287.5	13.0
50°-60°	1147.5	11.5
60°-70°	854.2	8.6
70°-80°	462.8	4.7
80°-90°	107.9	1.1
90°-100°	207.4	2.1
100°-110°	563.3	5.7
110°-120°	579.1	5.8
120°-130°	463.0	4.7
130°-140°	363.8	3.7
140°-150°	279.0	2.8
150°-160°	200.6	2.0
160°-170°	122.7	1.2
170°-180°	41.3	0.4
0°-30°	1999.3	20.1
0°-40°	3255.3	32.8
0°-60°	5690.3	57.3
0°-90°	7115.3	71.6
90°-120°	1349.7	13.6
90°-150°	2455.6	24.7
90°-180°	2820.0	28.4
0°-180°	9935.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2607	2607	2607	2607	2607	
5°	2606	2602	2573	2596	2594	247
15°	2498	2493	2468	2490	2488	704
25°	2296	2292	2272	2285	2290	1057
35°	2020	2019	2003	2003	2005	1263
45°	1683	1679	1665	1662	1667	1297
55°	1302	1297	1283	1273	1280	1162
65°	880	874	861	855	850	871
75°	446	446	436	428	423	474
85°	73	83	83	85	83	101
90°	1	6	10	12	12	4
95°	30	113	361	157	106	32
105°	100	156	619	943	888	106
115°	178	216	496	986	1124	175
125°	244	278	449	756	892	218
135°	294	327	436	616	694	228
145°	340	365	431	523	562	214
155°	385	398	428	470	483	177
165°	417	422	429	447	449	118
175°	432	433	431	436	435	41
180°	432	432	432	432	432	

TEST NUMBER: P519957

CATALOG NUMBER: SQ4-F-050U-125D-830-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2607.4	2607.4	2607.4	2607.4	2607.4
2.5°	2615.4	2610.9	2587.8	2607.3	2603.9
5°	2606.0	2601.7	2572.9	2595.8	2594.4
7.5°	2583.9	2578.5	2552.2	2573.7	2571.2
10°	2564.3	2560.0	2532.8	2554.3	2552.8
12.5°	2540.2	2536.0	2508.7	2530.1	2529.8
15°	2498.3	2492.6	2468.1	2489.6	2488.3
17.5°	2448.1	2441.7	2417.3	2434.4	2437.2
20°	2407.9	2403.7	2380.7	2396.5	2399.3
22.5°	2366.6	2361.2	2337.0	2355.1	2357.9
25°	2295.9	2291.8	2271.6	2284.6	2290.2
27.5°	2218.5	2218.5	2199.8	2209.1	2212.4
30°	2166.8	2166.8	2148.2	2154.0	2159.6
32.5°	2111.7	2107.2	2089.6	2094.3	2099.9
35°	2020.4	2019.0	2003.2	2003.2	2004.6
37.5°	1926.0	1922.1	1904.8	1906.1	1912.8
40°	1858.3	1855.4	1838.2	1838.3	1844.0
42.5°	1789.4	1786.6	1771.6	1769.4	1771.6
45°	1683.3	1679.0	1664.6	1661.9	1667.4
47.5°	1570.1	1571.3	1554.1	1550.2	1553.2
50°	1496.7	1496.7	1479.4	1470.9	1475.2
52.5°	1419.7	1417.5	1400.3	1390.7	1400.6
55°	1301.6	1297.3	1282.9	1273.0	1280.0
57.5°	1180.4	1174.0	1159.5	1148.6	1152.6
60°	1097.7	1087.9	1073.3	1064.8	1067.6
62.5°	1011.7	1006.3	990.7	977.6	983.8
65°	879.6	874.1	861.0	855.1	849.5
67.5°	750.2	746.6	731.9	725.7	722.0
70°	662.9	655.9	645.7	638.5	637.1
72.5°	578.0	569.9	559.7	553.5	549.8
75°	446.3	446.3	436.2	427.5	423.3
77.5°	320.9	322.0	313.7	310.7	308.8
80°	244.0	244.0	236.8	233.9	235.3
82.5°	170.5	173.8	171.4	167.2	165.3
85°	73.2	83.0	83.2	84.6	83.2
87.5°	12.9	21.6	23.8	22.1	19.8
90°	1.4	5.5	9.7	12.5	12.5
92.5°	12.5	56.8	98.6	42.4	35.8
95°	30.5	113.4	361.1	157.2	105.6
97.5°	50.5	125.2	553.6	430.7	302.5
100°	63.9	133.2	612.5	620.9	501.3
102.5°	77.2	141.0	628.0	767.9	662.5
105°	100.0	155.6	619.4	943.1	887.5
107.5°	123.6	172.8	583.6	1033.7	1049.2
110°	140.3	185.1	557.0	1051.4	1118.1

TEST NUMBER: P519957

CATALOG NUMBER: SQ4-F-050U-125D-830-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	154.7	197.3	530.3	1036.7	1136.9
115°	177.8	215.8	495.8	986.4	1123.6
117.5°	199.4	235.8	473.9	915.1	1069.7
120°	213.9	249.1	463.9	867.4	1020.8
122.5°	226.1	261.4	457.2	819.5	967.4
125°	244.4	278.4	448.6	755.9	891.7
127.5°	260.8	294.5	443.8	707.6	824.2
130°	270.8	303.4	441.7	677.4	781.9
132.5°	280.8	313.4	439.4	651.6	744.1
135°	294.5	327.1	436.1	615.7	694.5
137.5°	309.2	338.7	434.4	584.0	650.3
140°	318.0	346.6	433.3	563.8	623.6
142.5°	327.0	353.3	432.3	548.0	598.0
145°	340.3	364.7	430.6	523.1	562.5
147.5°	355.2	376.2	429.1	503.5	534.4
150°	365.2	382.9	429.1	492.2	516.6
152.5°	373.1	388.5	428.0	482.1	502.2
155°	384.8	398.3	427.7	469.7	483.3
157.5°	396.1	406.7	427.7	461.3	471.7
160°	402.8	412.2	427.7	455.7	463.9
162.5°	409.4	416.8	428.9	451.2	457.2
165°	416.7	422.1	429.1	447.3	448.6
167.5°	424.1	426.9	430.6	442.6	443.6
170°	426.4	429.1	430.6	440.3	440.3
172.5°	428.6	430.2	430.6	438.0	438.0
175°	432.0	433.3	430.6	436.1	434.7
177.5°	433.0	433.0	429.7	434.1	432.0
180°	432.0	432.0	432.0	432.0	432.0

(END OF REPORT)