

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: P520340

Luminaire Tested: **SQ4-F-125U-125D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520340  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-125D-830-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

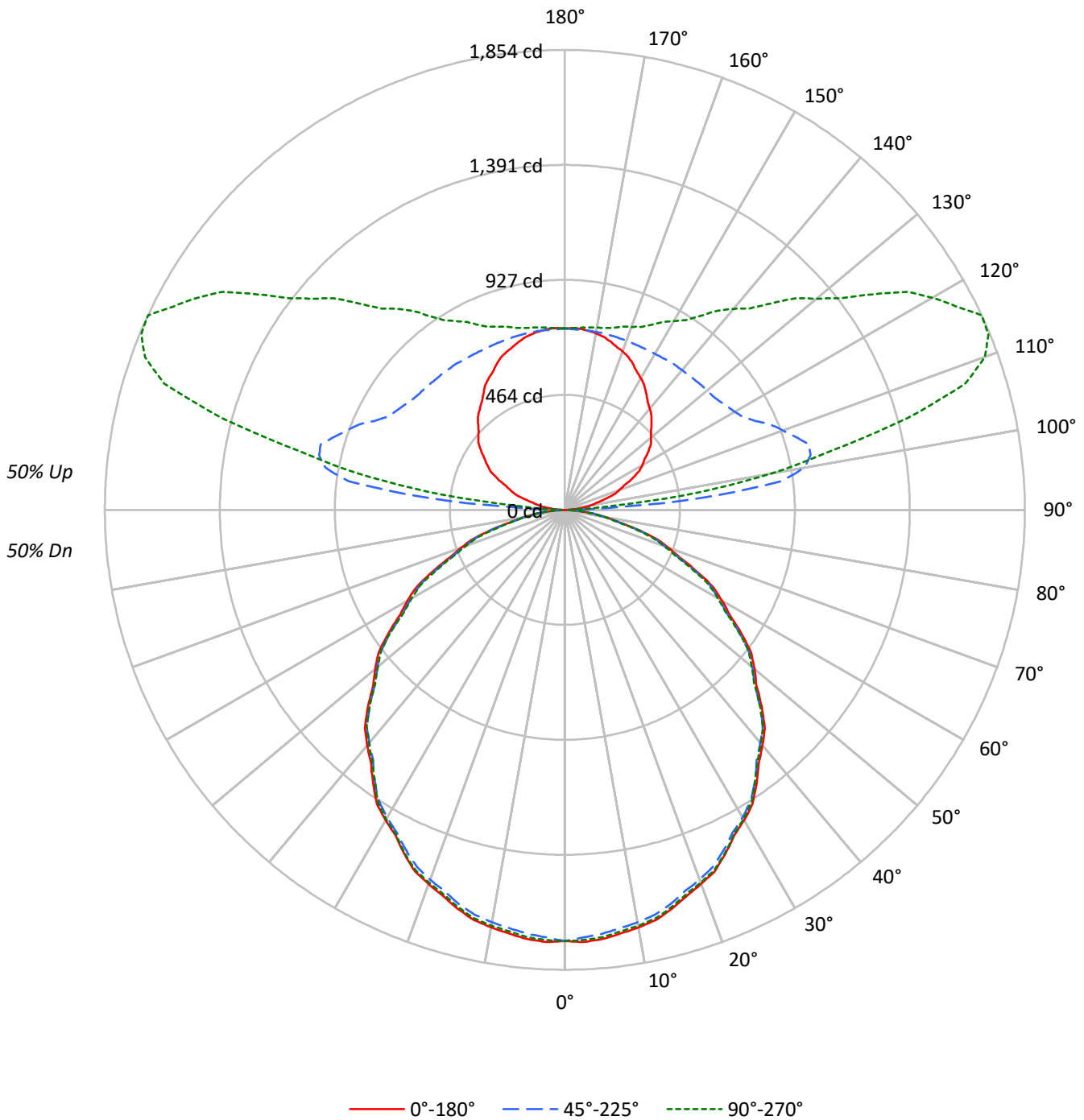
Lumens per Lamp: N/A  
Luminaire Lumens: 9462.9 lumens  
Efficiency: N/A  
Efficacy: 125.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 75.3  
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	90	86	90	86	83	80	73	71	68	61	59	58	50	49	47	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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

	0°	45°	90°
0°	16038	16038	16038
5°	16090	15886	16020
10°	16016	15819	15944
15°	15908	15716	15844
20°	15761	15583	15704
25°	15581	15417	15544
30°	15390	15257	15339
35°	15171	15042	15052
40°	14920	14759	14806
45°	14642	14479	14504
50°	14322	14158	14115
55°	13957	13756	13727
60°	13505	13203	13134
65°	12802	12531	12365
70°	11923	11613	11459
75°	10609	10366	10060
80°	8645	8384	8336
85°	5166	5865	5865



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.0	1.7
10°-20°	467.1	4.9
20°-30°	701.8	7.4
30°-40°	837.3	8.8
40°-50°	858.3	9.1
50°-60°	765.0	8.1
60°-70°	569.5	6.0
70°-80°	308.5	3.3
80°-90°	72.5	0.8
90°-100°	341.9	3.6
100°-110°	921.1	9.7
110°-120°	966.7	10.2
120°-130°	784.4	8.3
130°-140°	615.2	6.5
140°-150°	472.3	5.0
150°-160°	339.6	3.6
160°-170°	207.5	2.2
170°-180°	70.0	0.7
0°-30°	1332.9	14.1
0°-40°	2170.2	22.9
0°-60°	3793.5	40.1
0°-90°	4744.1	50.1
90°-120°	2229.8	23.6
90°-150°	4101.7	43.3
90°-180°	4719.0	49.9
0°-180°	9462.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1738	1738	1738	1738	1738	
5°	1737	1734	1715	1731	1730	165
15°	1666	1662	1645	1660	1659	470
25°	1531	1528	1514	1523	1527	705
35°	1347	1346	1336	1336	1336	842
45°	1122	1119	1110	1108	1112	865
55°	868	865	855	849	853	775
65°	586	583	574	570	566	581
75°	298	298	291	285	282	316
85°	49	55	55	56	55	67
90°	2	6	11	12	12	5
95°	52	186	561	287	198	54
105°	170	265	1019	1524	1430	179
115°	301	368	848	1639	1854	296
125°	411	472	762	1287	1515	367
135°	494	552	740	1039	1176	382
145°	572	616	731	888	954	359
155°	649	673	724	797	822	299
165°	704	712	727	756	760	199
175°	732	731	728	738	737	70
180°	731	731	731	731	731	



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CATALOG NUMBER: SQ4-F-125U-125D-830-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1738.3	1738.3	1738.3	1738.3	1738.3
2.5°	1743.6	1740.6	1725.2	1738.2	1736.0
5°	1737.3	1734.4	1715.3	1730.6	1729.7
7.5°	1722.6	1719.0	1701.5	1715.8	1714.2
10°	1709.5	1706.8	1688.5	1702.8	1701.9
12.5°	1693.5	1690.6	1672.4	1686.8	1686.6
15°	1665.5	1661.8	1645.4	1659.7	1658.8
17.5°	1632.1	1627.7	1611.6	1622.9	1624.8
20°	1605.3	1602.5	1587.1	1597.6	1599.5
22.5°	1577.7	1574.2	1558.0	1570.1	1572.0
25°	1530.6	1527.9	1514.4	1523.1	1526.9
27.5°	1479.0	1479.0	1466.6	1472.7	1475.0
30°	1444.6	1444.6	1432.1	1436.1	1439.8
32.5°	1407.8	1404.8	1393.1	1396.2	1400.0
35°	1347.0	1346.1	1335.5	1335.5	1336.4
37.5°	1284.0	1281.4	1269.8	1270.7	1275.2
40°	1238.8	1237.0	1225.4	1225.5	1229.3
42.5°	1192.9	1191.1	1181.1	1179.6	1181.1
45°	1122.2	1119.3	1109.7	1107.9	1111.6
47.5°	1046.8	1047.5	1036.0	1033.4	1035.5
50°	997.8	997.8	986.4	980.7	983.4
52.5°	946.5	945.0	933.4	927.2	933.7
55°	867.7	864.8	855.2	848.6	853.4
57.5°	786.9	782.6	773.0	765.7	768.3
60°	731.9	725.3	715.5	709.9	711.8
62.5°	674.4	670.8	660.5	651.8	655.8
65°	586.4	582.7	574.0	570.1	566.4
67.5°	500.2	497.7	487.9	483.9	481.4
70°	442.0	437.3	430.5	425.7	424.8
72.5°	385.3	379.9	373.1	369.0	366.6
75°	297.6	297.6	290.8	285.0	282.2
77.5°	214.0	214.7	209.1	207.2	205.8
80°	162.7	162.7	157.8	156.0	156.9
82.5°	113.6	115.8	114.2	111.5	110.2
85°	48.8	55.3	55.4	56.5	55.4
87.5°	8.8	14.8	16.8	15.5	14.0
90°	1.9	5.5	11.1	12.1	12.1
92.5°	22.7	80.2	158.7	76.4	53.1
95°	52.1	186.0	560.6	286.6	198.3
97.5°	83.3	212.9	879.2	734.5	553.8
100°	107.1	223.6	980.5	1025.9	851.0
102.5°	130.1	238.7	1014.0	1244.2	1100.7
105°	170.4	265.1	1018.7	1524.1	1430.2
107.5°	208.4	292.9	975.3	1667.9	1692.1
110°	233.8	313.9	935.8	1712.5	1800.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	260.5	334.8	897.8	1702.7	1847.8
115°	300.8	368.1	848.3	1639.1	1853.9
117.5°	337.5	400.6	809.9	1537.6	1776.9
120°	361.3	422.3	790.6	1464.7	1710.6
122.5°	382.2	442.4	776.4	1390.2	1635.3
125°	410.7	471.7	761.7	1287.4	1515.0
127.5°	438.0	498.1	752.4	1196.7	1400.0
130°	454.4	514.5	748.6	1144.7	1323.2
132.5°	470.8	530.2	745.0	1099.0	1262.9
135°	494.4	551.8	740.2	1038.6	1176.1
137.5°	516.9	572.0	737.9	987.4	1100.3
140°	532.6	585.4	735.6	955.8	1057.8
142.5°	549.0	598.1	734.1	926.4	1012.4
145°	571.7	616.3	731.0	887.9	953.6
147.5°	596.3	635.1	727.8	855.6	907.2
150°	612.8	646.4	726.3	835.3	878.1
152.5°	627.7	657.0	725.5	818.8	853.5
155°	649.1	672.7	724.4	796.8	822.2
157.5°	667.8	686.3	724.6	781.3	798.4
160°	679.7	695.2	725.3	772.2	784.9
162.5°	690.2	702.7	726.1	764.7	773.8
165°	703.9	712.1	727.2	756.2	759.9
167.5°	715.2	719.9	728.2	749.6	751.1
170°	722.6	724.4	728.2	745.9	745.9
172.5°	727.0	727.4	728.9	742.1	742.1
175°	731.9	731.0	728.2	738.4	736.6
177.5°	733.9	732.5	728.7	734.6	733.2
180°	731.0	731.0	731.0	731.0	731.0

(END OF REPORT)