

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: P519963

Luminaire Tested: **SQ4-F-050U-125D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519963  
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-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

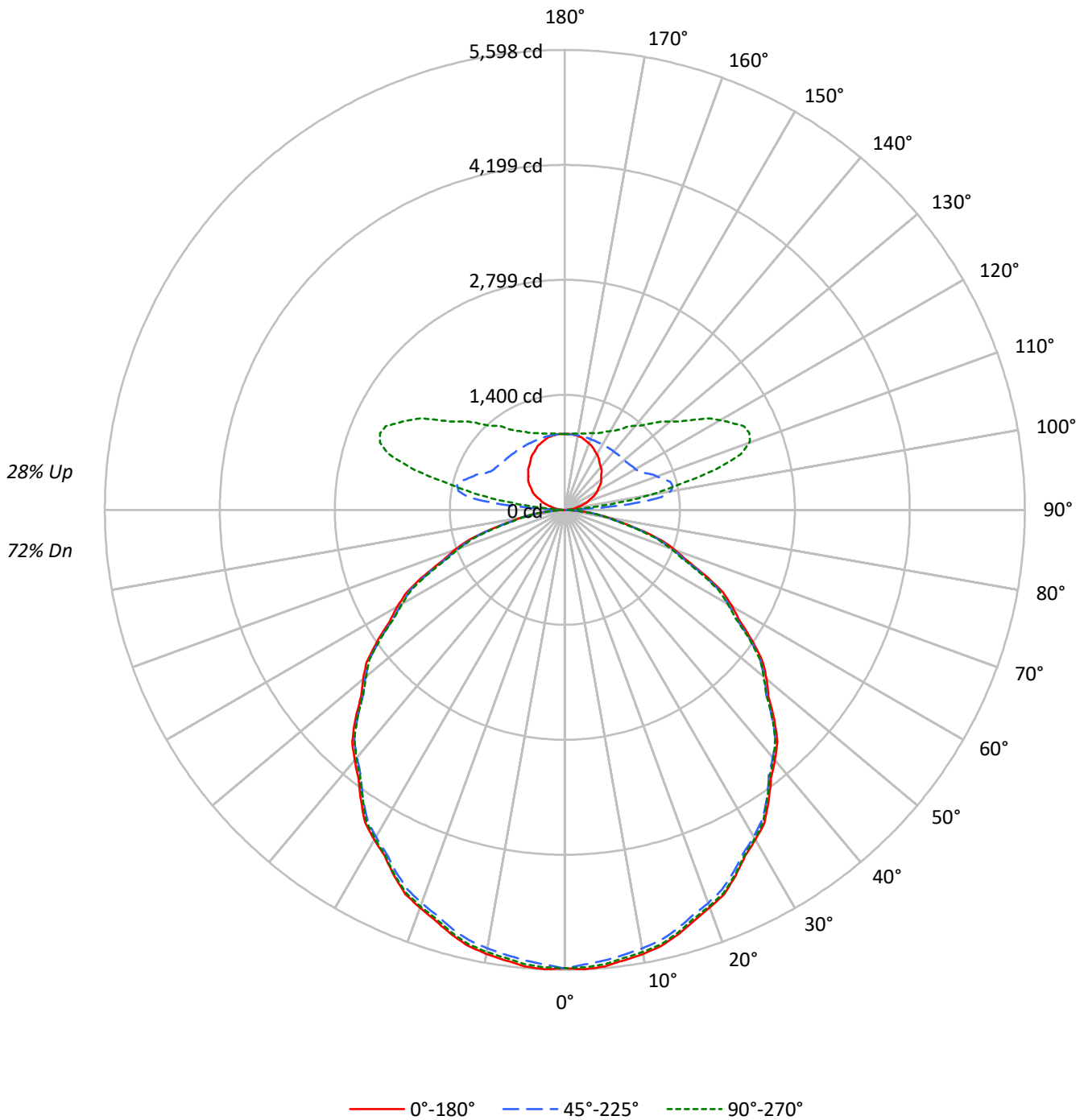
Lumens per Lamp: N/A  
Luminaire Lumens: 21264.1 lumens  
Efficiency: N/A  
Efficacy: 122.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 173.9  
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°	17161	17161	17161
5°	17218	16999	17142
10°	17138	16928	17062
15°	17024	16819	16955
20°	16866	16675	16806
25°	16674	16497	16633
30°	16469	16326	16413
35°	16235	16096	16108
40°	15967	15794	15843
45°	15668	15494	15521
50°	15326	15149	15105
55°	14936	14721	14688
60°	14451	14130	14055
65°	13700	13409	13230
70°	12758	12427	12261
75°	11349	11095	10765
80°	9247	8976	8921
85°	5526	6288	6288



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	526.5	2.5
10°-20°	1499.5	7.1
20°-30°	2252.9	10.6
30°-40°	2688.1	12.6
40°-50°	2755.4	13.0
50°-60°	2456.0	11.5
60°-70°	1828.3	8.6
70°-80°	990.5	4.7
80°-90°	231.0	1.1
90°-100°	443.8	2.1
100°-110°	1205.5	5.7
110°-120°	1239.5	5.8
120°-130°	991.0	4.7
130°-140°	778.7	3.7
140°-150°	597.1	2.8
150°-160°	429.4	2.0
160°-170°	262.6	1.2
170°-180°	88.5	0.4
0°-30°	4279.0	20.1
0°-40°	6967.1	32.8
0°-60°	12178.5	57.3
0°-90°	15228.2	71.6
90°-120°	2888.8	13.6
90°-150°	5255.5	24.7
90°-180°	6036.0	28.4
0°-180°	21264.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5580	5580	5580	5580	5580	
5°	5577	5568	5506	5556	5553	529
15°	5347	5335	5282	5328	5325	1507
25°	4914	4905	4862	4890	4902	2263
35°	4324	4321	4287	4287	4290	2704
45°	3602	3593	3562	3557	3569	2776
55°	2786	2776	2746	2724	2739	2488
65°	1883	1871	1843	1830	1818	1864
75°	955	955	934	915	906	1014
85°	157	178	178	181	178	216
90°	3	12	21	27	27	8
95°	65	243	773	336	226	69
105°	214	333	1326	2019	1899	227
115°	380	462	1061	2111	2405	375
125°	523	596	960	1618	1908	466
135°	630	700	933	1318	1486	487
145°	728	781	921	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	921	933	930	88
180°	924	924	924	924	924	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5580.2	5580.2	5580.2	5580.2	5580.2
2.5°	5597.5	5587.8	5538.5	5580.1	5572.9
5°	5577.2	5568.2	5506.5	5555.6	5552.7
7.5°	5530.0	5518.5	5462.4	5508.3	5502.9
10°	5488.1	5479.2	5420.6	5466.6	5463.6
12.5°	5436.5	5427.5	5369.0	5415.0	5414.4
15°	5346.9	5334.9	5282.4	5328.4	5325.3
17.5°	5239.4	5225.6	5173.7	5210.0	5216.1
20°	5153.4	5144.4	5095.1	5128.9	5135.0
22.5°	5065.0	5053.5	5001.7	5040.5	5046.5
25°	4913.8	4904.8	4861.6	4889.5	4901.6
27.5°	4748.0	4748.0	4708.1	4727.9	4735.1
30°	4637.5	4637.5	4597.5	4610.1	4622.0
32.5°	4519.5	4509.8	4472.2	4482.3	4494.3
35°	4324.2	4321.1	4287.3	4287.4	4290.4
37.5°	4122.1	4113.7	4076.7	4079.4	4093.8
40°	3977.1	3971.2	3934.2	3934.4	3946.4
42.5°	3829.7	3823.7	3791.7	3786.8	3791.7
45°	3602.4	3593.4	3562.5	3556.6	3568.7
47.5°	3360.4	3362.9	3326.1	3317.6	3324.2
50°	3203.2	3203.2	3166.3	3148.1	3157.1
52.5°	3038.6	3033.8	2996.9	2976.4	2997.5
55°	2785.6	2776.5	2745.6	2724.4	2739.4
57.5°	2526.3	2512.5	2481.5	2458.3	2466.7
60°	2349.4	2328.5	2297.2	2278.9	2285.0
62.5°	2165.2	2153.7	2120.3	2092.4	2105.6
65°	1882.6	1870.6	1842.7	1830.1	1818.1
67.5°	1605.6	1597.8	1566.3	1553.2	1545.4
70°	1418.8	1403.8	1382.0	1366.6	1363.6
72.5°	1237.1	1219.7	1197.8	1184.7	1176.9
75°	955.1	955.1	933.7	915.0	906.0
77.5°	686.7	689.1	671.4	665.1	660.9
80°	522.1	522.1	506.8	500.7	503.7
82.5°	364.9	372.1	366.7	358.0	353.8
85°	156.6	177.7	178.2	181.1	178.2
87.5°	27.7	46.2	51.0	47.2	42.4
90°	2.9	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.1	90.7	76.7
95°	65.4	242.7	772.9	336.4	225.9
97.5°	108.2	268.1	1184.8	921.7	647.4
100°	136.7	285.0	1310.9	1328.9	1073.0
102.5°	165.2	301.8	1344.2	1643.4	1417.9
105°	214.0	333.1	1325.7	2018.6	1899.4
107.5°	264.6	369.7	1249.0	2212.2	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.3	1134.9	2218.8	2433.3
115°	380.4	461.9	1061.2	2111.1	2404.7
117.5°	426.9	504.8	1014.2	1958.6	2289.3
120°	457.8	533.3	992.8	1856.3	2184.7
122.5°	483.9	559.5	978.5	1753.9	2070.6
125°	523.1	595.8	960.1	1617.6	1908.3
127.5°	558.3	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.3	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	700.0	933.4	1317.7	1486.3
137.5°	661.7	725.1	929.8	1249.9	1391.7
140°	680.7	741.8	927.4	1206.8	1334.6
142.5°	699.8	756.1	925.1	1173.0	1279.9
145°	728.2	780.6	921.4	1119.5	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.6	918.5	1053.4	1105.7
152.5°	798.4	831.5	916.1	1031.8	1074.8
155°	823.4	852.4	915.5	1005.3	1034.4
157.5°	847.7	870.4	915.5	987.4	1009.4
160°	862.1	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.8	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.4	947.0	949.4
170°	912.5	918.4	921.4	942.2	942.2
172.5°	917.3	920.7	921.4	937.5	937.5
175°	924.5	927.3	921.4	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.5
180°	924.5	924.5	924.5	924.5	924.5

(END OF REPORT)