

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: P564697

Luminaire Tested: **SQ4-PW1-050U-125D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564697  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-050U-125D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20640.2 lumens  
Efficiency: N/A  
Efficacy: 123.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

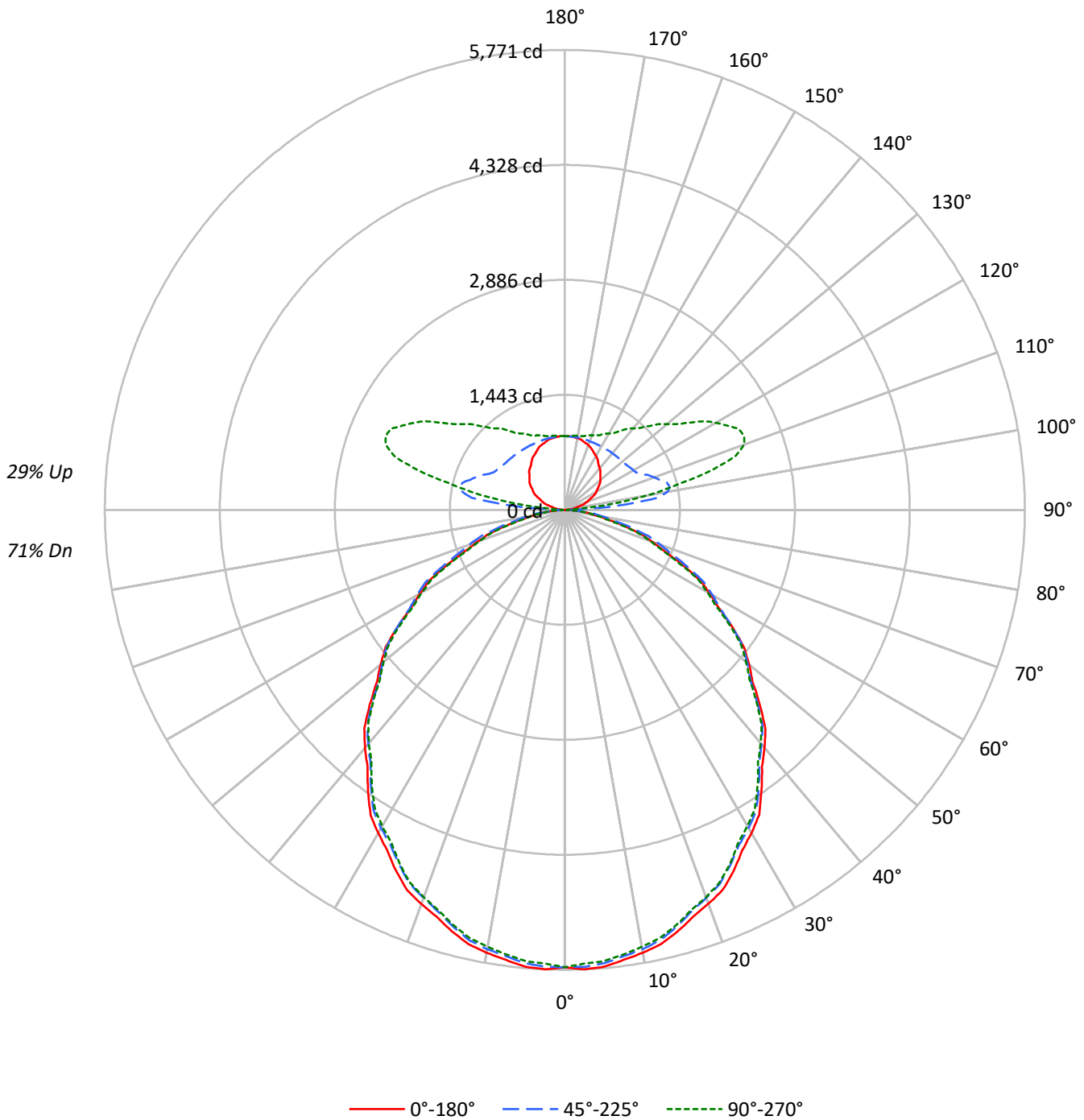
Input Watts (W): 167  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	75	75	75	71
1	103	98	94	91	97	93	90	86	84	81	78	75	73	71	67	65	64	60
2	94	86	80	74	88	82	76	71	73	69	65	66	62	59	59	56	54	50
3	85	76	68	62	81	72	65	60	65	59	55	58	54	50	52	49	46	43
4	78	67	59	53	74	64	56	51	58	52	47	52	47	43	47	43	40	37
5	72	60	52	45	68	57	49	44	52	45	41	47	42	38	42	38	35	32
6	66	54	46	40	63	51	44	38	47	40	36	42	37	33	38	34	31	28
7	61	49	41	35	58	47	39	34	42	36	32	39	33	29	35	31	27	25
8	57	44	36	31	54	43	35	30	39	33	28	35	30	26	32	28	24	22
9	53	41	33	28	50	39	32	27	36	30	25	33	27	24	30	25	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	28	23	20	18

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

	0°	45°	90°
0°	17649	17649	17649
5°	17763	17622	17545
10°	17621	17479	17384
15°	17434	17241	17177
20°	17226	16961	16928
25°	16985	16677	16625
30°	16627	16375	16267
35°	16154	15926	15831
40°	15650	15407	15346
45°	15042	14844	14778
50°	14418	14297	14200
55°	13744	13744	13528
60°	12906	13155	12688
65°	11811	12399	11517
70°	10411	11412	10138
75°	8892	10213	8652
80°	6895	8597	6985
85°	4460	6602	5889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	540.4	2.6
10°-20°	1525.7	7.4
20°-30°	2263.1	11.0
30°-40°	2648.0	12.8
40°-50°	2636.2	12.8
50°-60°	2276.4	11.0
60°-70°	1638.6	7.9
70°-80°	859.3	4.2
80°-90°	216.6	1.0
90°-100°	443.8	2.2
100°-110°	1205.5	5.8
110°-120°	1239.5	6.0
120°-130°	991.0	4.8
130°-140°	778.7	3.8
140°-150°	597.1	2.9
150°-160°	429.4	2.1
160°-170°	262.6	1.3
170°-180°	88.5	0.4
0°-30°	4329.1	21.0
0°-40°	6977.1	33.8
0°-60°	11889.8	57.6
0°-90°	14604.3	70.8
90°-120°	2888.8	14.0
90°-150°	5255.5	25.5
90°-180°	6036.0	29.2
0°-180°	20640.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5739	5739	5739	5739	5739	
5°	5754	5690	5708	5693	5683	545
15°	5476	5407	5415	5405	5395	1543
25°	5006	4922	4914	4884	4899	2302
35°	4303	4243	4242	4202	4217	2690
45°	3458	3429	3413	3403	3398	2668
55°	2563	2558	2563	2528	2523	2287
65°	1623	1672	1704	1637	1583	1608
75°	748	818	860	802	728	802
85°	126	166	187	177	167	167
90°	3	12	21	27	27	9
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	922	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	922	933	930	88
180°	924	924	924	924	924	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5738.7	5738.7	5738.7	5738.7	5738.7
2.5°	5771.0	5723.6	5738.7	5725.9	5698.2
5°	5753.9	5689.6	5708.3	5693.0	5683.1
7.5°	5695.2	5635.9	5649.7	5633.4	5627.4
10°	5642.6	5583.3	5597.1	5576.7	5566.8
12.5°	5581.9	5518.7	5532.4	5512.0	5506.1
15°	5475.8	5406.6	5415.1	5404.8	5394.9
17.5°	5352.4	5282.2	5283.6	5267.4	5265.4
20°	5263.4	5189.3	5182.5	5162.5	5172.4
22.5°	5166.3	5088.2	5081.4	5053.4	5067.2
25°	5005.5	4921.5	4914.5	4884.5	4899.4
27.5°	4819.5	4736.4	4736.6	4694.5	4710.3
30°	4682.0	4602.9	4611.2	4561.1	4580.8
32.5°	4536.3	4465.2	4469.6	4419.5	4439.3
35°	4302.7	4243.4	4242.1	4202.0	4216.8
37.5°	4064.1	4011.7	4003.4	3980.3	3984.2
40°	3898.3	3853.8	3837.6	3822.4	3822.4
42.5°	3724.3	3683.8	3667.7	3656.5	3652.5
45°	3458.4	3428.7	3412.9	3402.6	3397.7
47.5°	3195.5	3167.8	3154.0	3146.8	3141.9
50°	3013.4	2993.7	2988.2	2972.9	2967.9
52.5°	2831.4	2819.6	2814.2	2794.9	2790.0
55°	2563.4	2558.5	2563.4	2527.9	2523.0
57.5°	2284.4	2292.3	2308.6	2260.8	2249.0
60°	2098.3	2118.1	2138.7	2082.7	2062.9
62.5°	1908.2	1939.8	1968.8	1904.5	1876.8
65°	1623.0	1672.4	1703.9	1636.9	1582.6
67.5°	1348.0	1409.3	1447.1	1374.9	1313.6
70°	1157.8	1227.1	1269.1	1196.7	1127.5
72.5°	992.0	1069.1	1103.2	1034.9	965.7
75°	748.3	817.5	859.5	802.2	728.1
77.5°	530.9	596.1	631.0	581.1	519.8
80°	389.3	458.5	485.4	443.8	394.4
82.5°	276.1	333.4	351.9	326.9	293.3
85°	126.4	166.0	187.1	176.7	166.9
87.5°	33.0	62.4	81.0	82.3	86.2
90°	3.0	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.0	90.6	76.7
95°	65.4	242.7	772.8	336.3	225.9
97.5°	108.2	268.0	1184.8	921.8	647.4
100°	136.7	285.0	1310.9	1328.8	1073.1
102.5°	165.3	301.9	1344.1	1643.4	1417.9
105°	214.0	333.2	1325.7	2018.6	1899.4
107.5°	264.5	369.8	1249.0	2212.3	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.4	1134.9	2218.8	2433.2
115°	380.5	461.9	1061.2	2111.2	2404.7
117.5°	426.8	504.7	1014.2	1958.6	2289.4
120°	457.8	533.3	992.8	1856.3	2184.8
122.5°	483.9	559.5	978.5	1753.8	2070.6
125°	523.2	595.8	960.1	1617.7	1908.3
127.5°	558.2	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.2	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	699.9	933.4	1317.7	1486.2
137.5°	661.7	725.0	929.8	1249.9	1391.7
140°	680.7	741.7	927.4	1206.7	1334.6
142.5°	699.7	756.1	925.0	1173.0	1279.9
145°	728.3	780.6	921.5	1119.6	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.5	918.5	1053.4	1105.8
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°	862.0	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.7	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.5	947.1	949.4
170°	912.5	918.4	921.5	942.3	942.3
172.5°	917.3	920.8	921.5	937.5	937.5
175°	924.4	927.3	921.5	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.4
180°	924.4	924.4	924.4	924.4	924.4

(END OF REPORT)