

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: P564693

Luminaire Tested: **SQ4-PW1-050U-125D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564693  
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-835-1D-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20434.5 lumens  
Efficiency: N/A  
Efficacy: 122.4 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

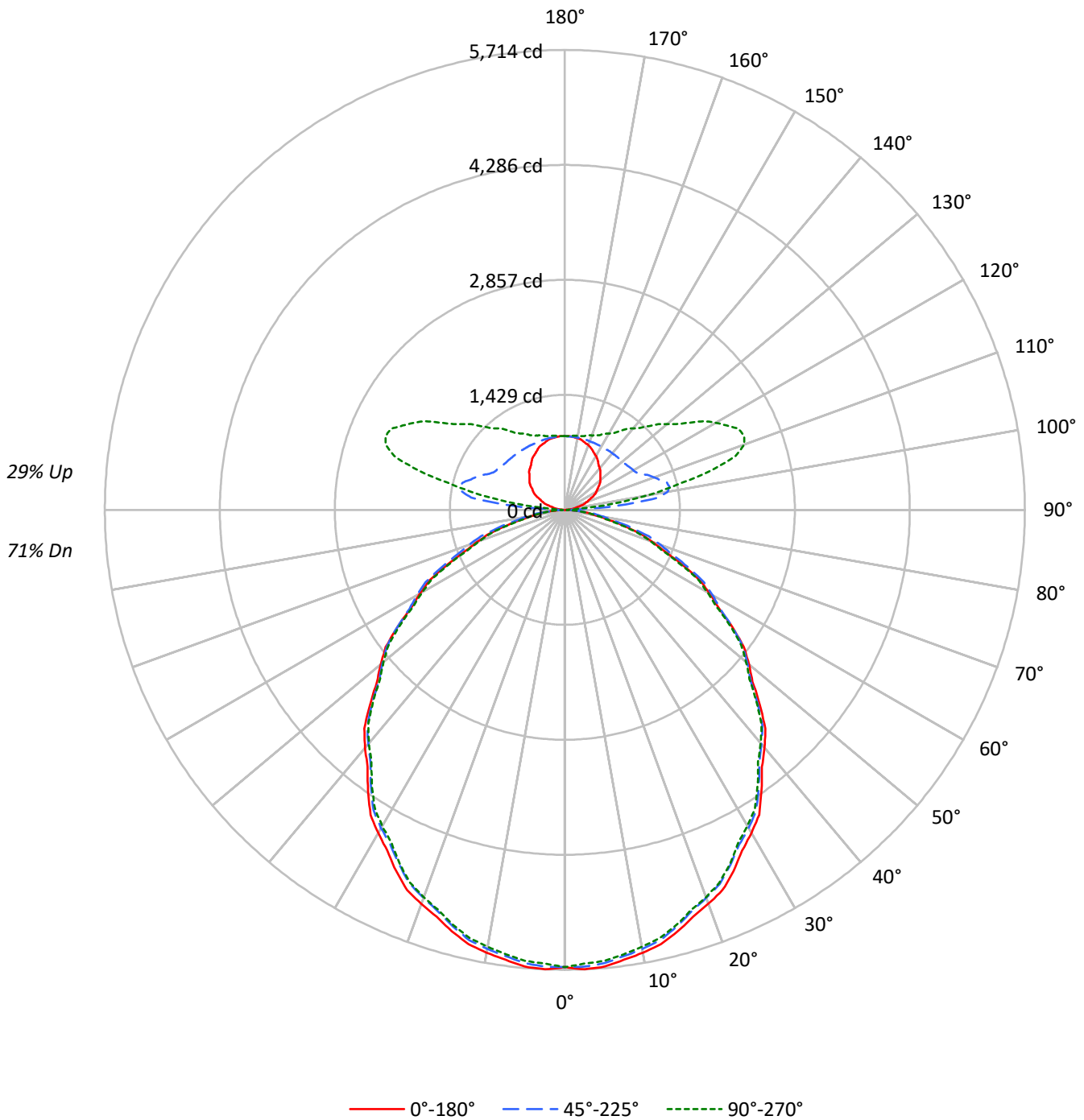
Input Watts (W): 167  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	17473	17473	17473
5°	17586	17447	17370
10°	17445	17305	17211
15°	17261	17069	17005
20°	17054	16792	16760
25°	16816	16511	16460
30°	16461	16212	16105
35°	15993	15768	15674
40°	15494	15253	15193
45°	14891	14696	14631
50°	14274	14154	14059
55°	13608	13608	13393
60°	12778	13024	12562
65°	11693	12276	11402
70°	10307	11297	10038
75°	8803	10112	8565
80°	6826	8512	6914
85°	4414	6535	5829



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	535.0	2.6
10°-20°	1510.5	7.4
20°-30°	2240.5	11.0
30°-40°	2621.6	12.8
40°-50°	2609.9	12.8
50°-60°	2253.8	11.0
60°-70°	1622.3	7.9
70°-80°	850.7	4.2
80°-90°	214.4	1.0
90°-100°	439.4	2.2
100°-110°	1193.5	5.8
110°-120°	1227.1	6.0
120°-130°	981.1	4.8
130°-140°	770.9	3.8
140°-150°	591.1	2.9
150°-160°	425.1	2.1
160°-170°	260.0	1.3
170°-180°	87.6	0.4
0°-30°	4286.0	21.0
0°-40°	6907.6	33.8
0°-60°	11771.3	57.6
0°-90°	14458.8	70.8
90°-120°	2860.0	14.0
90°-150°	5203.1	25.5
90°-180°	5976.0	29.2
0°-180°	20434.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5682	5682	5682	5682	5682	
5°	5696	5633	5652	5636	5626	540
15°	5421	5353	5361	5351	5341	1528
25°	4956	4872	4866	4836	4851	2279
35°	4260	4201	4200	4160	4175	2663
45°	3424	3395	3379	3369	3364	2642
55°	2538	2533	2538	2503	2498	2264
65°	1607	1656	1687	1621	1567	1592
75°	741	809	851	794	721	794
85°	125	164	185	175	165	165
90°	3	12	21	26	26	9
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	950	1602	1889	462
135°	624	693	924	1304	1471	482
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	950	249
175°	915	918	912	924	921	87
180°	915	915	915	915	915	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5681.5	5681.5	5681.5	5681.5	5681.5
2.5°	5713.5	5666.6	5681.5	5668.9	5641.5
5°	5696.5	5632.9	5651.5	5636.2	5626.4
7.5°	5638.5	5579.7	5593.4	5577.3	5571.4
10°	5586.4	5527.7	5541.4	5521.1	5511.3
12.5°	5526.3	5463.7	5477.3	5457.1	5451.2
15°	5421.2	5352.7	5361.1	5350.9	5341.1
17.5°	5299.1	5229.6	5231.0	5214.9	5213.0
20°	5211.0	5137.6	5130.9	5111.1	5120.9
22.5°	5114.9	5037.5	5030.8	5003.0	5016.8
25°	4955.7	4872.5	4865.6	4835.9	4850.6
27.5°	4771.5	4689.2	4689.4	4647.7	4663.3
30°	4635.3	4557.0	4565.2	4515.6	4535.2
32.5°	4491.1	4420.7	4425.1	4375.5	4395.0
35°	4259.9	4201.1	4199.8	4160.1	4174.8
37.5°	4023.6	3971.7	3963.5	3940.6	3944.5
40°	3859.4	3815.4	3799.4	3784.3	3784.3
42.5°	3687.2	3647.1	3631.2	3620.1	3616.1
45°	3423.9	3394.6	3378.9	3368.8	3363.9
47.5°	3163.6	3136.2	3122.6	3115.5	3110.6
50°	2983.4	2963.8	2958.4	2943.3	2938.4
52.5°	2803.2	2791.5	2786.2	2767.1	2762.2
55°	2537.9	2533.0	2537.9	2502.8	2497.9
57.5°	2261.6	2269.4	2285.6	2238.3	2226.6
60°	2077.4	2097.0	2117.4	2061.9	2042.3
62.5°	1889.2	1920.5	1949.2	1885.5	1858.1
65°	1606.8	1655.8	1686.9	1620.6	1566.8
67.5°	1334.5	1395.2	1432.6	1361.2	1300.5
70°	1146.3	1214.8	1256.4	1184.8	1116.3
72.5°	982.1	1058.5	1092.3	1024.6	956.1
75°	740.8	809.4	851.0	794.2	720.8
77.5°	525.6	590.2	624.7	575.3	514.6
80°	385.4	454.0	480.6	439.4	390.4
82.5°	273.3	330.1	348.4	323.6	290.3
85°	125.1	164.3	185.2	175.0	165.2
87.5°	32.6	61.8	80.2	81.5	85.4
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	75.9
95°	64.7	240.3	765.1	333.0	223.7
97.5°	107.1	265.4	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.4
102.5°	163.6	298.9	1330.8	1627.0	1403.7
105°	211.9	329.9	1312.5	1998.4	1880.5
107.5°	261.9	366.1	1236.6	2190.2	2223.0
110°	297.2	392.2	1180.1	2228.0	2369.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	327.8	418.2	1123.6	2196.7	2409.0
115°	376.7	457.3	1050.6	2090.1	2380.8
117.5°	422.6	499.7	1004.1	1939.1	2266.6
120°	453.2	528.0	982.9	1837.8	2163.0
122.5°	479.1	553.9	968.8	1736.3	2050.0
125°	517.9	589.9	950.5	1601.6	1889.3
127.5°	552.7	624.0	940.5	1499.4	1746.3
130°	573.9	642.9	935.8	1435.3	1656.8
132.5°	595.0	664.1	931.1	1380.5	1576.8
135°	623.9	692.9	924.1	1304.5	1471.4
137.5°	655.1	717.8	920.5	1237.4	1377.8
140°	673.9	734.3	918.2	1194.7	1321.3
142.5°	692.7	748.6	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.8
147.5°	752.8	797.1	909.3	1066.8	1132.4
150°	774.0	811.4	909.3	1042.9	1094.7
152.5°	790.4	823.2	907.0	1021.5	1064.1
155°	815.2	843.9	906.4	995.3	1024.1
157.5°	839.3	861.7	906.4	977.5	999.4
160°	853.4	873.6	906.4	965.6	982.9
162.5°	867.5	883.1	908.7	956.1	968.8
165°	882.9	894.4	909.3	947.7	950.5
167.5°	898.7	904.5	912.3	937.6	939.9
170°	903.5	909.2	912.3	932.9	932.9
172.5°	908.2	911.6	912.3	928.2	928.2
175°	915.2	918.1	912.3	924.0	921.1
177.5°	917.6	917.6	910.5	919.8	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)