

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: P562657

Luminaire Tested: **SQ4-PC3-050U-100D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562657  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PC3-050U-100D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 1000 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: 17717.7 lumens  
Efficiency: N/A  
Efficacy: 131.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

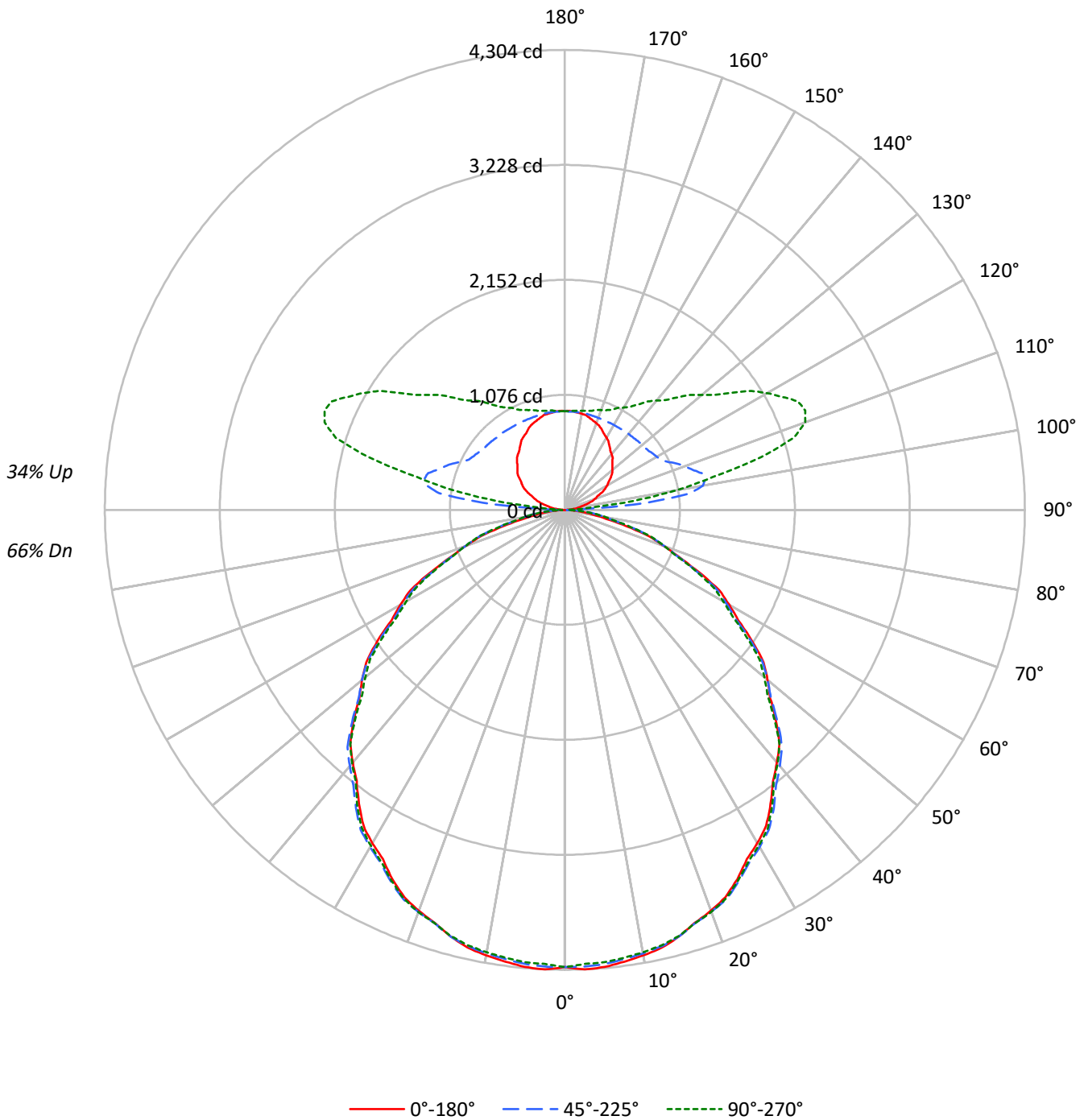
Input Watts (W): 134.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	101	97	93	90	95	91	88	85	81	78	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	70	71	67	63	63	60	57	55	53	51	47
3	84	75	67	61	79	70	64	58	63	57	53	56	51	48	49	46	43	39
4	77	66	58	52	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	36	39	35	32	29
6	65	53	44	38	61	50	43	37	45	39	34	40	35	31	36	32	28	26
7	60	48	40	34	57	45	38	33	41	35	30	37	31	28	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	23	20	18
10	49	36	29	24	46	35	28	23	32	26	22	28	23	20	26	21	18	17

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

	0°	45°	90°
0°	13160	13160	13160
5°	13259	13173	13124
10°	13226	13165	13127
15°	13157	13157	13145
20°	13070	13109	13109
25°	12947	13041	13001
30°	12790	12944	12888
35°	12599	12793	12703
40°	12391	12566	12439
45°	12166	12252	12062
50°	11848	11848	11658
55°	11472	11323	11153
60°	10918	10698	10528
65°	10091	9889	9803
70°	8835	8906	8871
75°	7109	7863	7909
80°	5053	6666	6737
85°	3077	5593	5593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	405.0	2.3
10°-20°	1162.1	6.6
20°-30°	1759.9	9.9
30°-40°	2109.9	11.9
40°-50°	2151.3	12.1
50°-60°	1878.0	10.6
60°-70°	1344.5	7.6
70°-80°	692.5	3.9
80°-90°	178.7	1.0
90°-100°	443.8	2.5
100°-110°	1205.5	6.8
110°-120°	1239.5	7.0
120°-130°	991.0	5.6
130°-140°	778.7	4.4
140°-150°	597.1	3.4
150°-160°	429.4	2.4
160°-170°	262.6	1.5
170°-180°	88.5	0.5
0°-30°	3327.0	18.8
0°-40°	5436.8	30.7
0°-60°	9466.2	53.4
0°-90°	11681.8	65.9
90°-120°	2888.8	16.3
90°-150°	5255.5	29.7
90°-180°	6036.0	34.1
0°-180°	17717.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4279	4279	4279	4279	4279	
5°	4295	4252	4267	4255	4251	408
15°	4132	4098	4132	4132	4128	1165
25°	3816	3788	3843	3831	3831	1756
35°	3356	3348	3407	3384	3384	2099
45°	2797	2790	2817	2781	2773	2153
55°	2140	2112	2112	2080	2080	1907
65°	1387	1356	1359	1347	1347	1371
75°	598	625	662	666	666	647
85°	87	134	158	162	158	119
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	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°	4279.0	4279.0	4279.0	4279.0	4279.0
2.5°	4304.4	4267.2	4279.0	4269.2	4253.7
5°	4294.9	4252.2	4267.1	4255.2	4251.3
7.5°	4264.0	4221.3	4241.0	4233.0	4229.1
10°	4235.4	4192.8	4215.6	4207.6	4203.7
12.5°	4197.4	4157.9	4183.9	4176.0	4175.2
15°	4132.4	4097.6	4132.4	4132.3	4128.5
17.5°	4050.8	4019.0	4056.3	4058.7	4056.3
20°	3993.7	3958.9	4005.6	4001.8	4005.6
22.5°	3924.0	3895.3	3945.4	3935.2	3939.1
25°	3815.5	3788.3	3843.2	3831.3	3831.3
27.5°	3687.1	3667.7	3727.5	3714.8	3714.8
30°	3601.5	3582.1	3645.1	3629.2	3629.2
32.5°	3506.4	3493.2	3553.2	3534.1	3534.1
35°	3355.9	3348.1	3407.4	3383.6	3383.6
37.5°	3200.5	3193.6	3247.3	3218.6	3209.3
40°	3086.4	3082.6	3130.0	3098.3	3098.3
42.5°	2972.3	2968.5	3009.6	2971.5	2971.5
45°	2797.2	2789.5	2817.0	2781.2	2773.4
47.5°	2606.2	2598.5	2615.7	2576.8	2573.0
50°	2476.3	2468.5	2476.3	2440.5	2436.7
52.5°	2343.2	2329.2	2330.5	2294.8	2294.0
55°	2139.5	2112.4	2111.8	2080.1	2080.1
57.5°	1924.0	1888.3	1891.5	1864.5	1860.6
60°	1775.0	1736.3	1739.3	1715.5	1711.6
62.5°	1629.2	1584.3	1593.5	1566.6	1565.8
65°	1386.7	1355.7	1359.0	1347.1	1347.1
67.5°	1153.7	1125.1	1145.8	1136.3	1135.5
70°	982.6	963.2	990.5	990.4	986.6
72.5°	824.1	823.3	857.4	857.4	859.8
75°	598.3	625.4	661.7	665.6	665.6
77.5°	399.4	447.4	487.3	488.9	488.1
80°	285.3	339.5	376.4	384.2	380.4
82.5°	193.3	250.7	281.3	289.1	285.3
85°	87.2	133.7	158.5	162.4	158.5
87.5°	26.0	55.6	67.6	68.6	62.4
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)