**SNS-PPU HB CM ACL**

1. CM THERMOMETRY
2. CM LIQUID LEVEL SENSORS
3. CM CRYOGENIC VALVES
   1. JT VALVE
   2. COOLDOWN/WARMUP VALVES
4. CAVITY TUNING
5. CAVITY HEATERS
6. WINDOW HEATERS
7. CM VACUUM
   1. CM BEAMLINE VAC PRIOR TO COOLDOWN
   2. CM COUPLER VAC PRIOR TO COOLDOWN
   3. CM INSULATING VAC PRIOR TO COOLDOWN
   4. CM BEAMLINE VAC AT 2k
   5. CM COUPLER VAC AT 2K
   6. CM INSULATING VAC AT 2K
8. CM CRYOGENIC CIRCUITS (LEAK CHECKING)
   1. CM 2K CIRCUIT
   2. CM 4K CIRCUIT
   3. CM 50K CIRCUIT

**LCLS-II CM (SLAC REPORT) ACL** (Those with values are the only ones they truly cared about the number, the remainder are informative only)

1. MAX GRADIENT (>= 19 MV/m)
2. USEABLE GRADIENT (>= 19 MV/m)
3. GRADIENT LIMIT (QUENCH, FE, ADMIN,ETC)
4. Qo AT 16 MV/m
5. COOLDODWN CONDITIONS 1o WAS MEASURED
6. FIELD EMMISION ONSET (>= 16 MV/m)
7. FPC Qext, COLD
8. FPC Qext RANGE LOWER BOUND, COLD
9. FPC Qext RANGE UPPER BOUND, COLD
10. FIELD PROBE QEXT, COLD ( 2.5e11 < X < 7.0e11)
11. HOMc Qext, COLD
12. HOMpu Qext, COLD
13. FPC Qext, WARM
14. FIELD PROBE Qext, WARM (NOT MEASURED)
15. CAVITY RESONANCE FREQUENCY, WARM
16. TUNNER RANGE MIN, COLD
17. TUNER RANGE MAX, COLD
18. PIEZO'S WORK
19. HOMpu NOTCH LOCATION
20. HOMc NOTCH LOCATION
21. MAGNET REACH 18 A
22. HEATERS WORK
23. SENSORS WORK
24. BEAMLINE VACUUM GAUGE SN
25. BEAMLINE VACUUM, PRIOR TO SHIP
26. COUPLER VACUUM GAUGE SN
27. COUPLER VACUUM, PRIOR TO SHIP
28. NIOBIUM MATERIAL VENDOR
29. CAV FINAL HEAT TREAT TEMP

**LCLS-II CAVITY ACL**

1. LOCK FREQUENCY (LOW: 1300.150 MHz; HIGH: 1300.350 MHz)
2. Qext FP (2.5 - 7.0e11)
3. Qext HOM1 (>= 2.7e11)
4. Qext HOM2 (>=2.7e11)
5. INIT\_FEONSET (> 17.5 MV/m)
6. KLOREN (LOW: -0.8 HZ/(MV/m)^2; HIGH: -1.4 HZ/(MV/m)^2)
7. INIT Qo AT 16 MV/m (>= 2.5e10 WITH SS FLANGE)
8. FINAL EMAX MV/m (>= 19 MV/m)
9. CAVITY MEETS SPECS (YES/NO)

**LCLS-II HE CM ACL (DRURY PRESENTATION)**

1. INSTURMENTATION / INTERLOCKS
2. VACUUM SPACES
3. STATIC HEAT LOADS
4. TUNERS WORK (MECHANICAL / PIEZO)
5. TUNERS RANGE
6. CAVITY FREQUENCY / PASSBANDS
7. Qext'S : FPC, FP, HOMs
8. MAX GRADIENT
9. USABLE GRADIENT
10. Qo
11. FIELD EMISSION
12. HOMs
13. CAVITY CONTROLLABLE
    1. MICROPHONICS
    2. LORENTZ DETUNING
    3. PRESSURE SENSITIVITY

