INTRODUCTION :

A number of years ago while Brian was still at the lab we reviewed and updated the selections for types of defects for NCRs – so that there would be a reasonable but limited set for the purpose of making a Pareto of defect types – For the most part we think they continue to be acceptable – however as one project ends – and another starts , it’s good to review and refresh where needed

As a part of the Lessons Learned for LCLS-II, Liang has made an in depth analysis of the NCR categories used in our Pareto – a draft of her analysis is attached , and excerpt is below listing the catcgoires of NCRs we use today

*From LCLS-II (Liang’s Analysis for L2 ) , There are 22 check boxes (equivalent to type of defects, classification, and categories) in the L2PRD NCR traveler*

* *[1] Shipping Damage;*
* *[2] Dimensional;*
* *Surface Form: [3] Roughness, [4] Flatness, [5] Parallelism;*
* *Surface Damage: [6] Scratches, [7] Dings, [8] Delamination, [9] Plating;*
* *Surface contamination: [10] Stains, [11] Oxidation, [12] Residues;*
* *RF Components: [13] Inspection Failure, [14] RF Test Failure, [15] Leak Test Failure;*
* *[16] CMTF RF Performance; (There are no categories for CMTF NCRs – would we like to add any? What about KPIs from our Customers that have NCRs )*
* *[17] VTA RF Performance; (There are no categories for VTA NCRs – would we like to add any?, what about KPIs from our customers where approval is needed )*
* *Cryomodule: [18] Vacuum, [19] RF, [20] Instrumentation, [21] Mechanical; (are additional needed )*
* *[22] Other (in a few cases , folks did not use already available categories – example shipping , VTA etc, on balance in most cases the “other” were reasonable ) .*

