




Kaon LT Status Update

December 16th, 2020

Richard Trotta


$$P_{\text{HMS}} = -3.266$$
$$\theta_{\text{HMS}} = 12.53$$

- 55, 45, 30, 15, 5 μA
 - 5154, 5155, 5156, 5157, 5158

$$P_{\text{SHMS}} = 6.842$$
$$\theta_{\text{SHMS}} = 6.495$$

- 55, 45, 30, 15, 5 μA
 - 5154, 5155, 5156, 5157, 5158

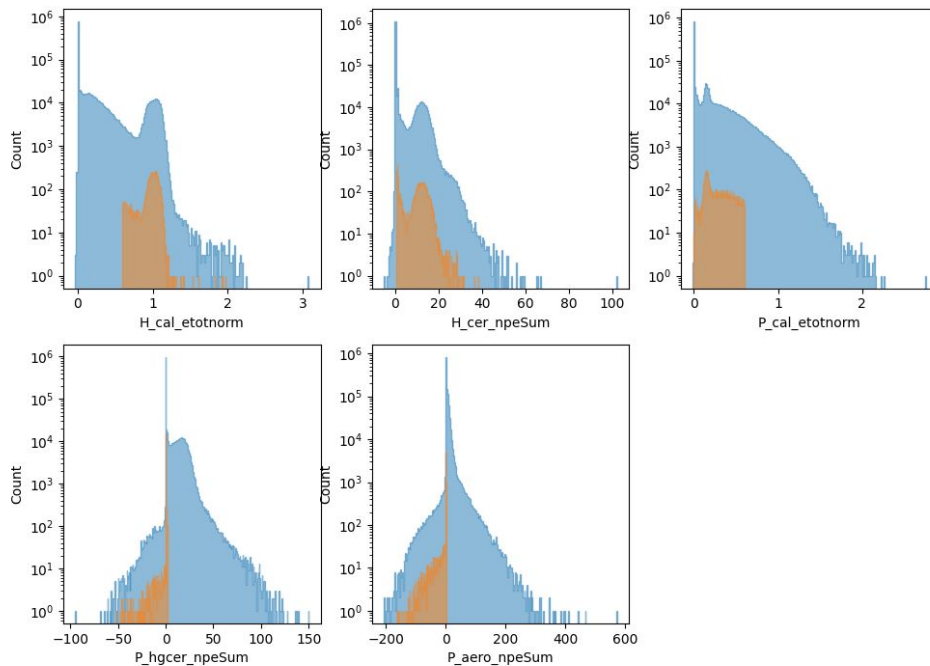
Cuts

Electron
Cer > 0.5
2.0 > Cal > 0.6

Proton
Hgger < 1.5
Aero < 1.5
0 < Cal <= 0.6

- abs(I-SetCurrent) < |10|uA
- Delta
 - HMS, (-8<delta<8)
 - SHMS, (-10<delta<20)
- start time
 - H(P).hod.goodstarttime == 1

$$Y_{scaler} = \frac{N_{scaler}}{Q_{tot}}$$



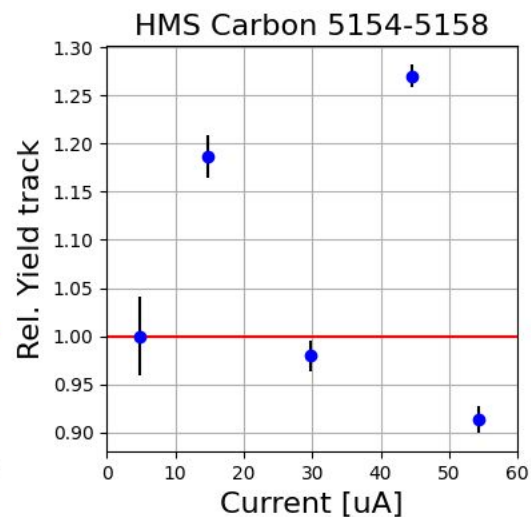
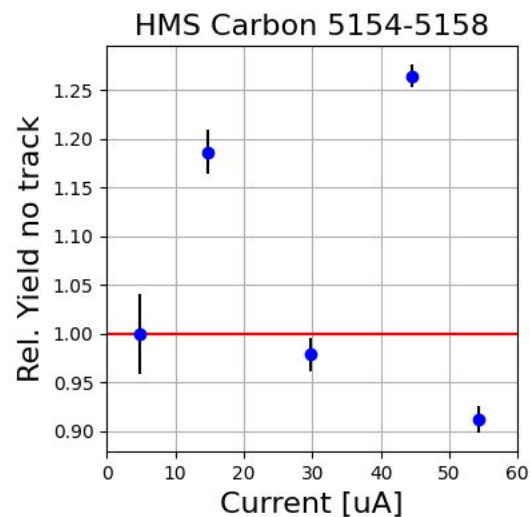
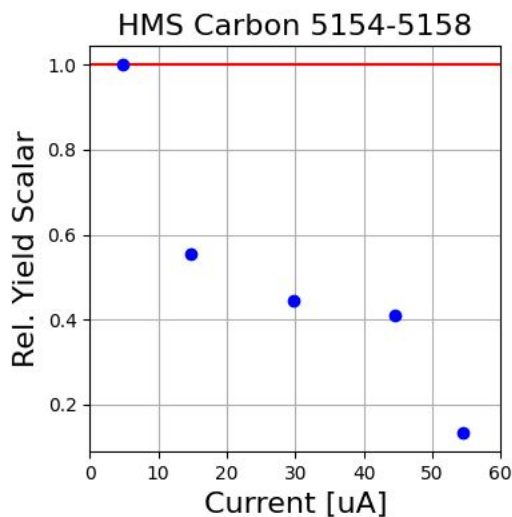
$$N_{scaler} = \Sigma(trigscaler)$$

$$N_{scaler} = \Sigma(trigscaler) - EDTM_{scaler}$$

$$P_{HMS} = -3.266$$

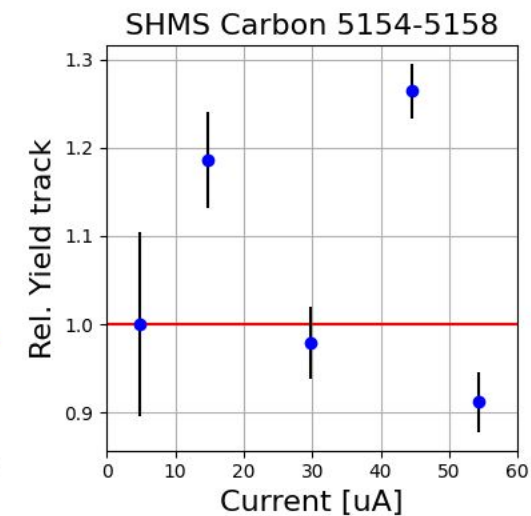
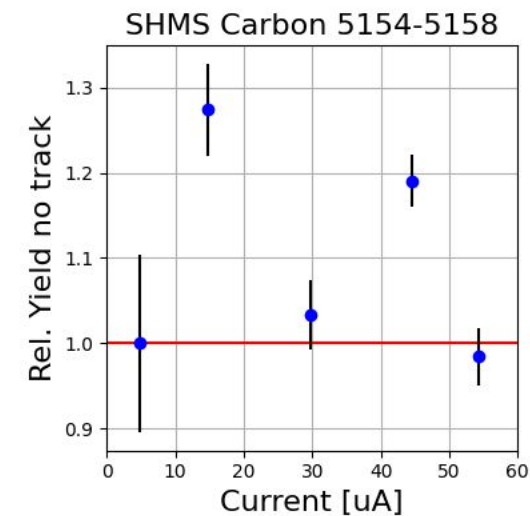
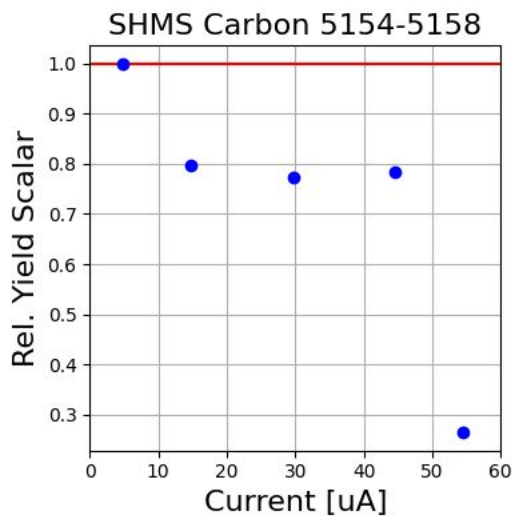
Electron
Cer > 0.5
2.0 > Cal > 0.6

**Last week



$$P_{SHMS} = 6.842$$

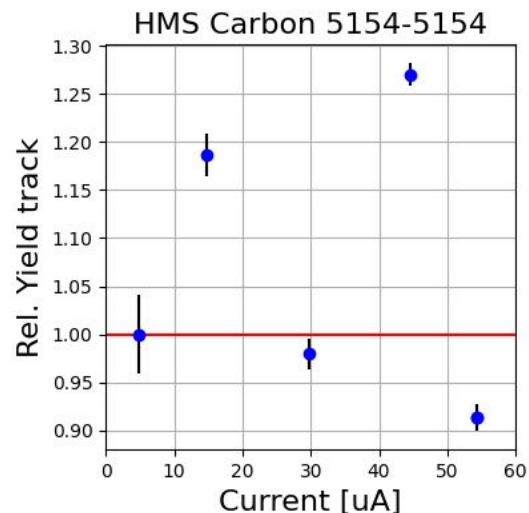
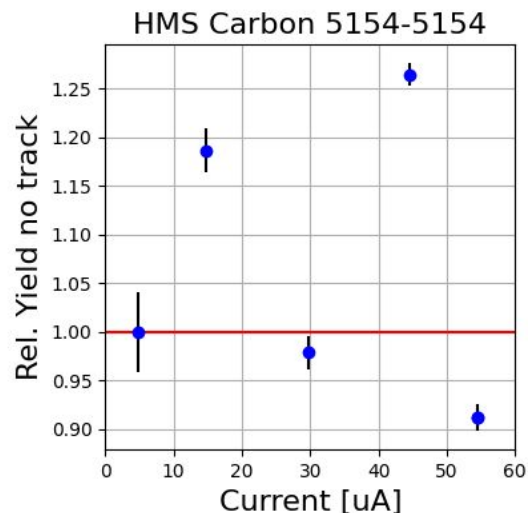
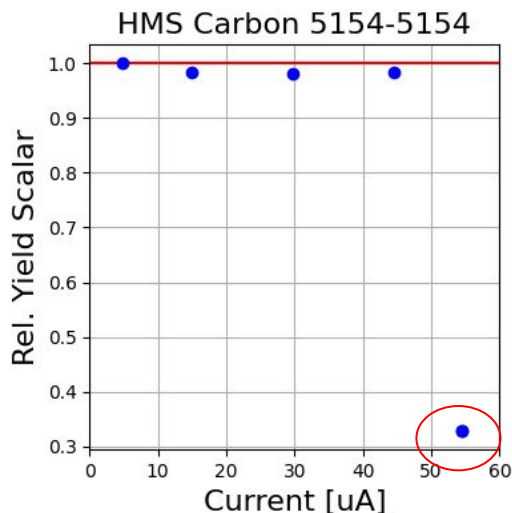
Proton
Hgcer < 1.5
Aero < 1.5
0 < Cal <= 0.6



$$P_{HMS} = -3.266$$

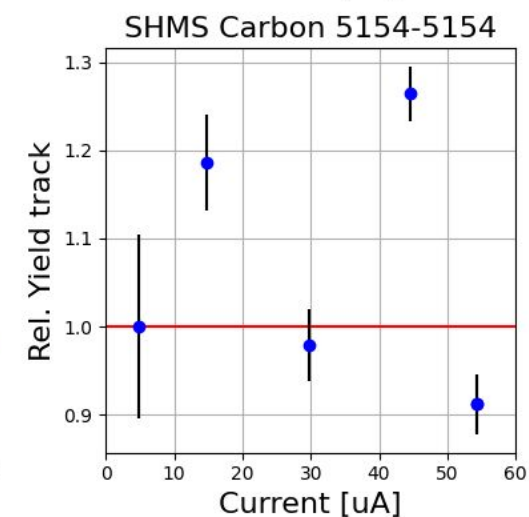
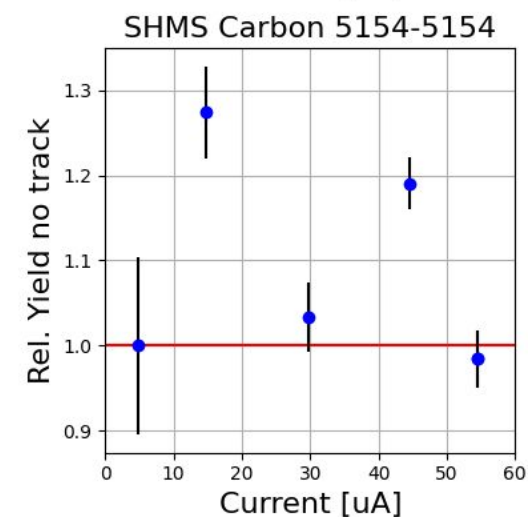
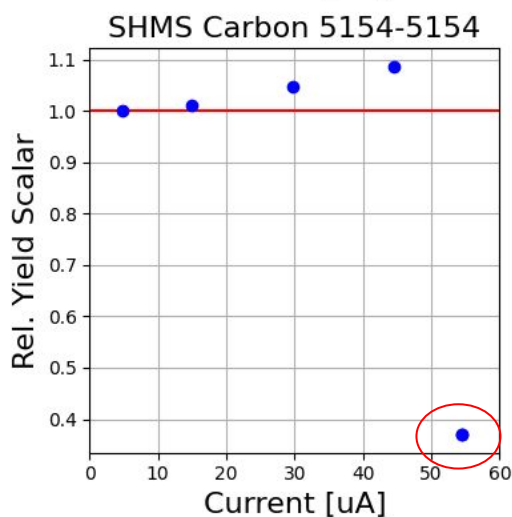
Electron
Cer > 0.5
2.0 > Cal > 0.6

**Fix to scaler
count
I_cut = 2.5 uA

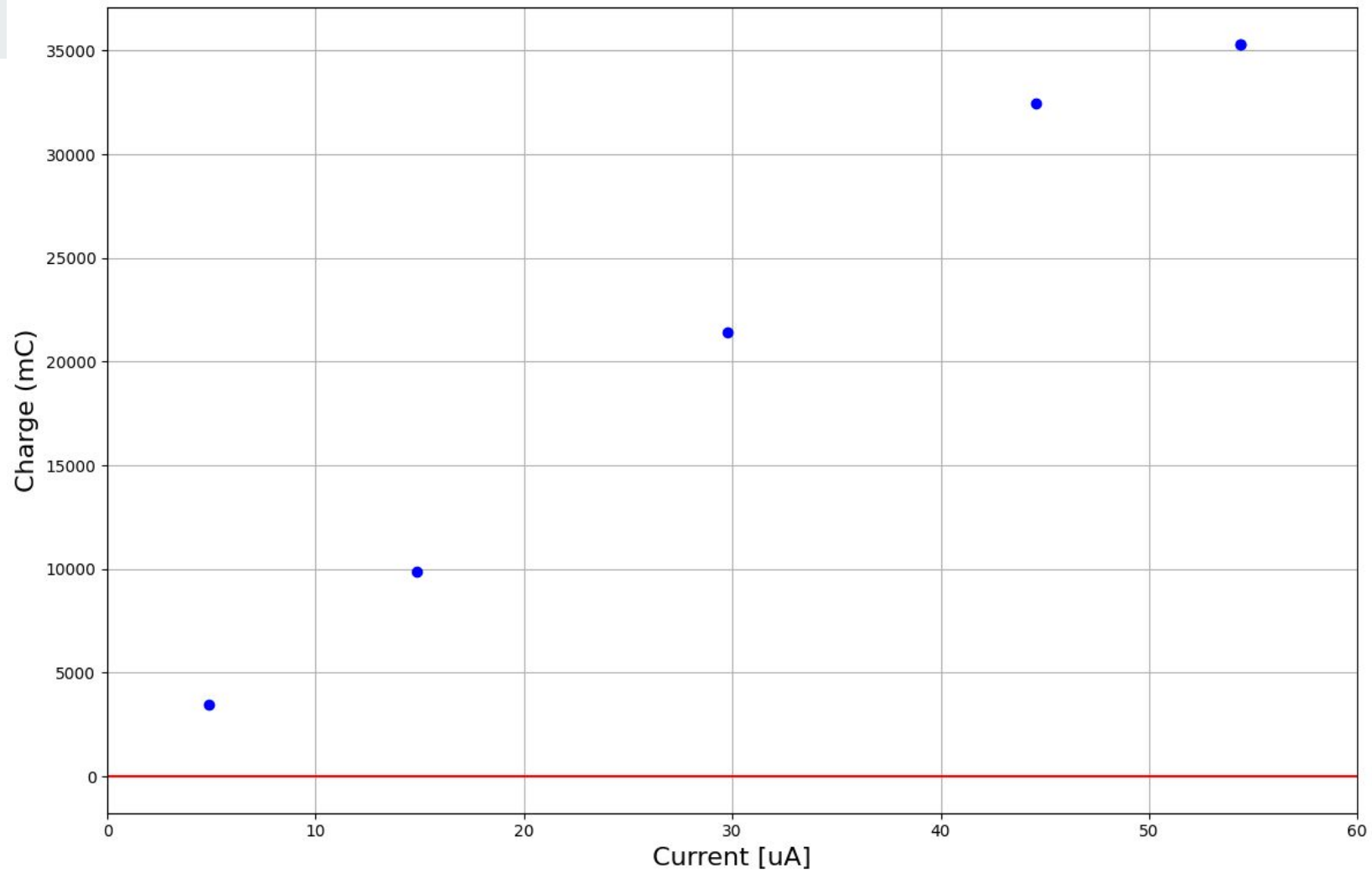


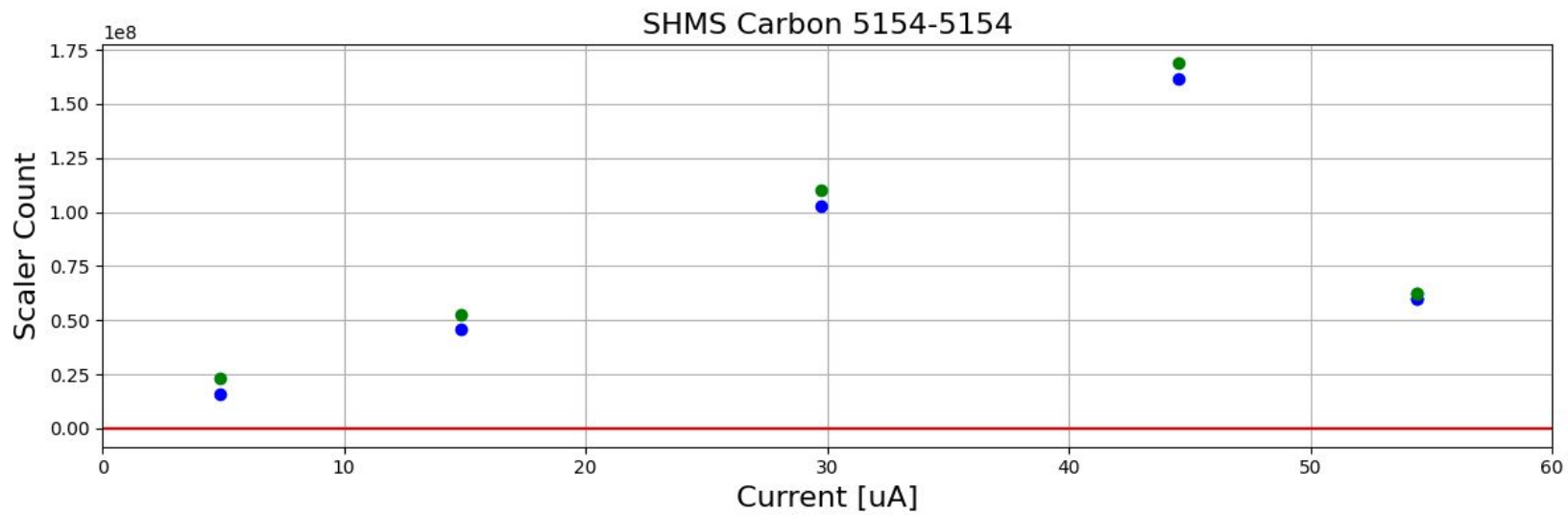
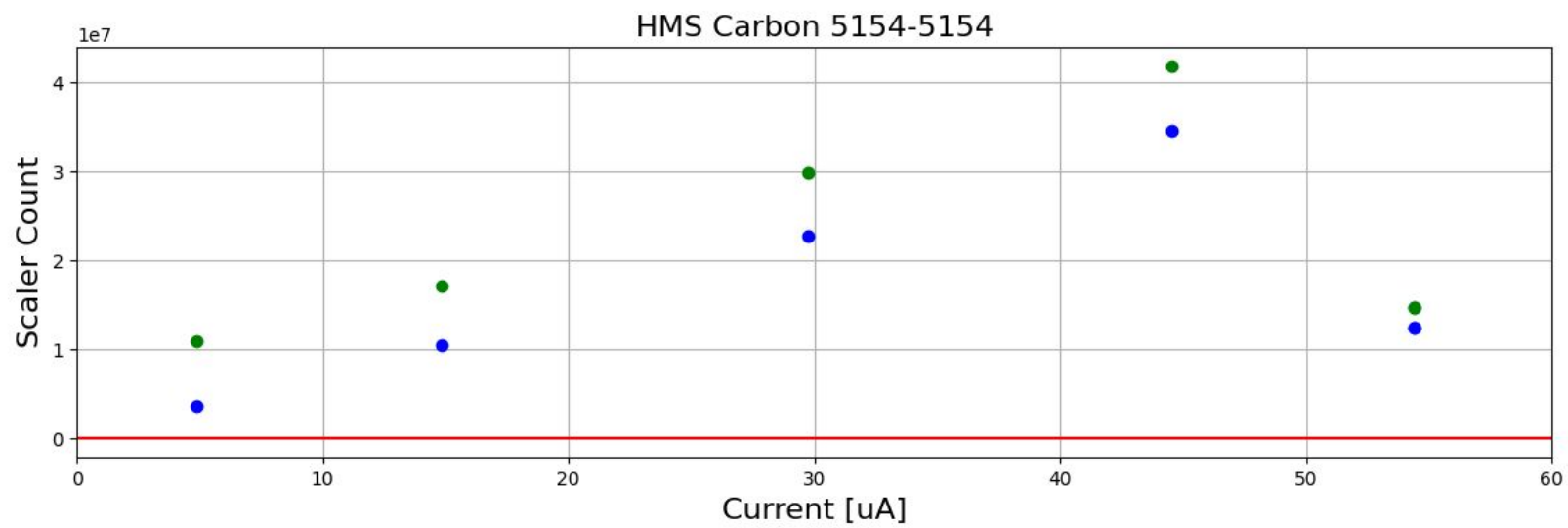
$$P_{SHMS} = 6.842$$

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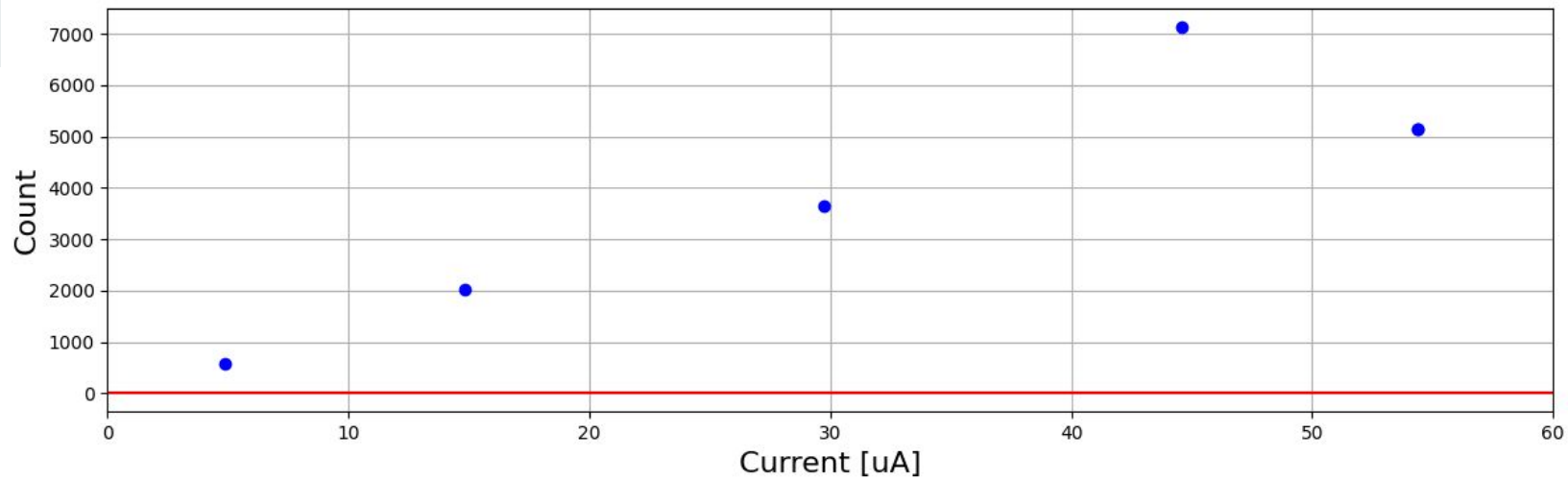


HMS Carbon 5154-5154

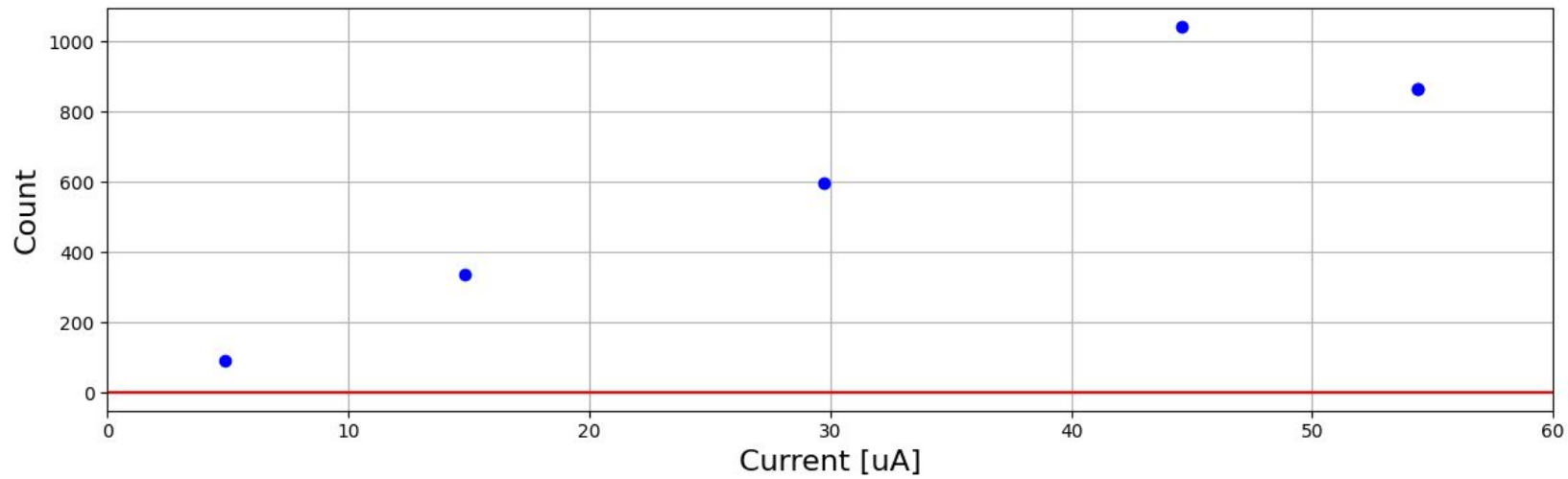




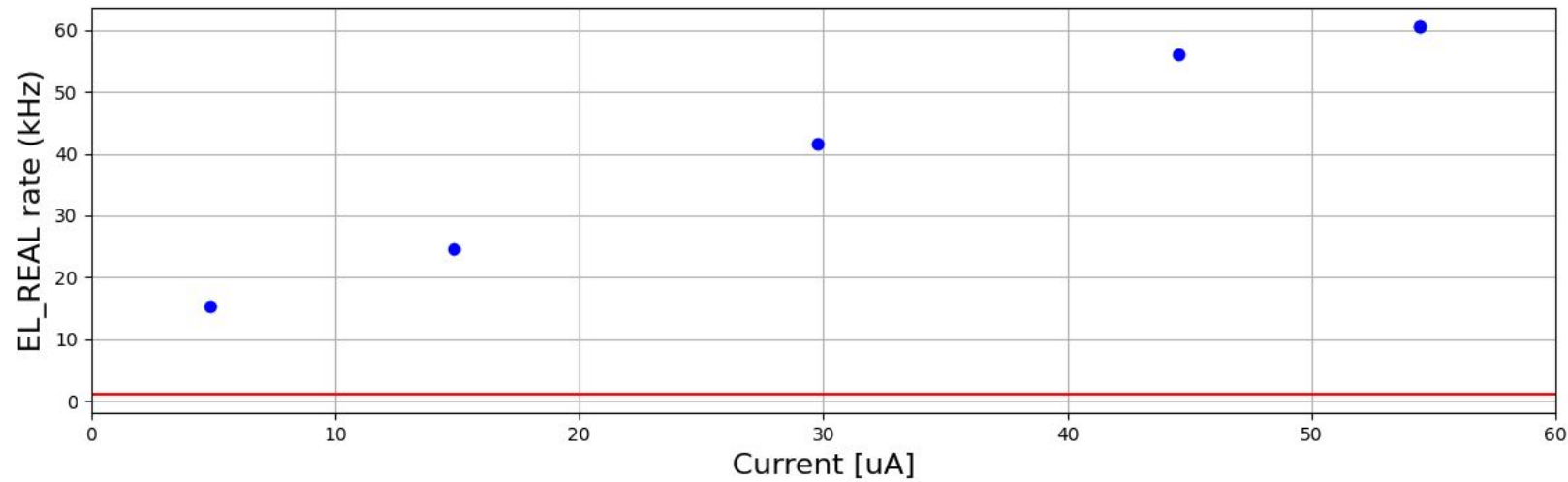
HMS Carbon 5154-5154



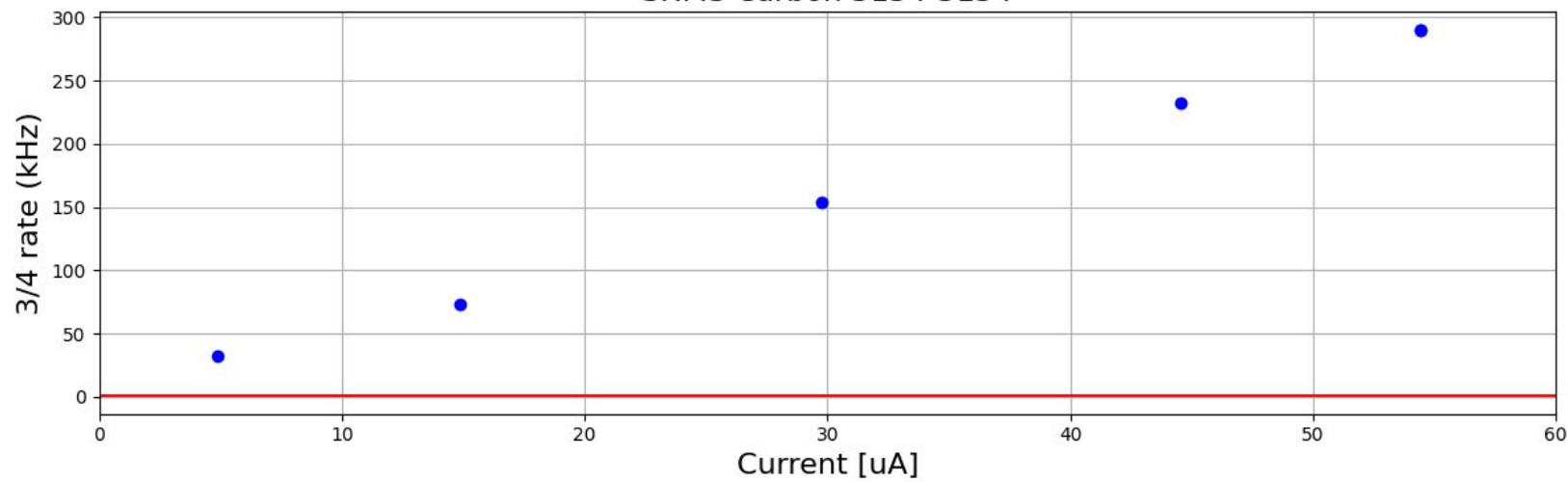
SHMS Carbon 5154-5154



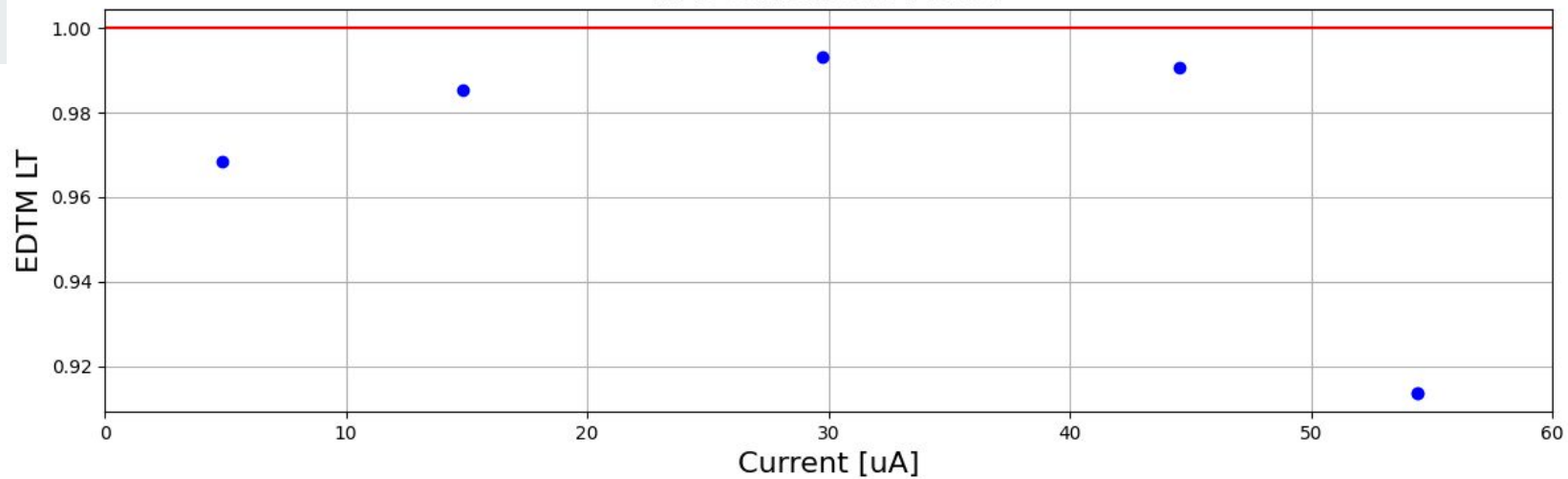
HMS Carbon 5154-5154



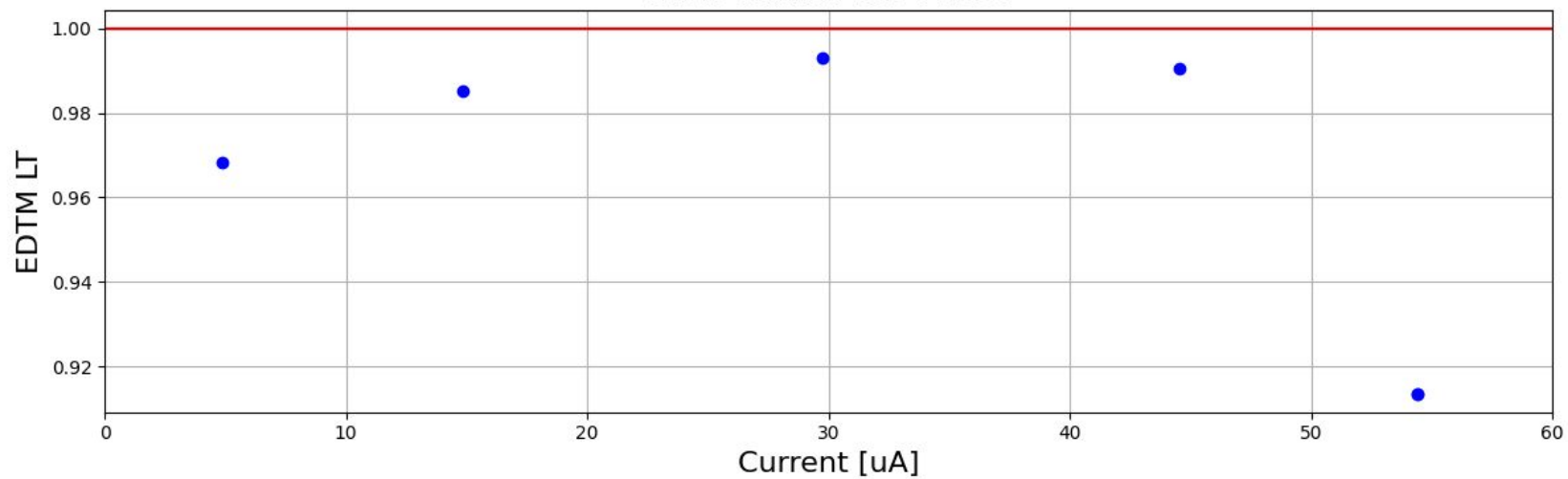
SHMS Carbon 5154-5154



HMS Carbon 5154-5154



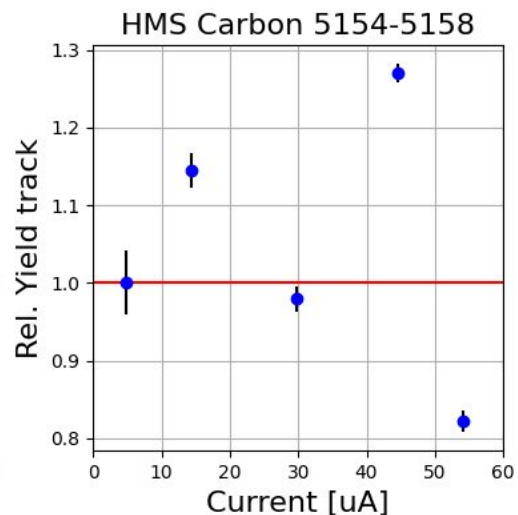
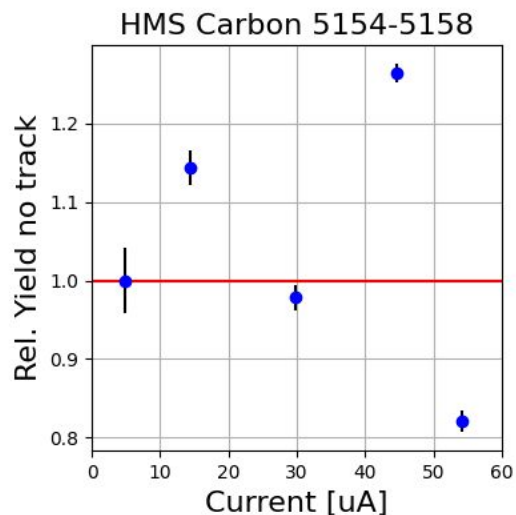
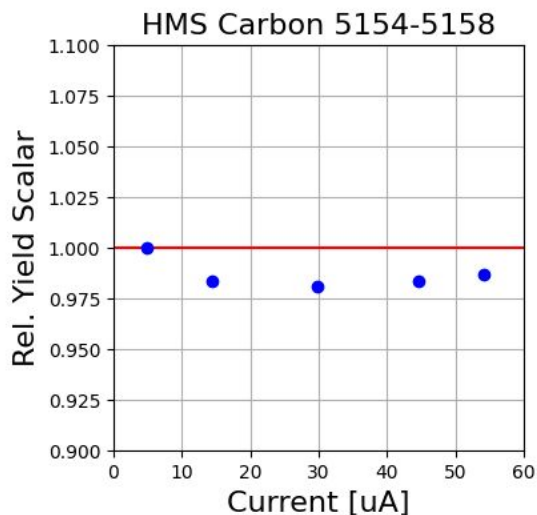
SHMS Carbon 5154-5154



$$P_{HMS} = -3.266$$

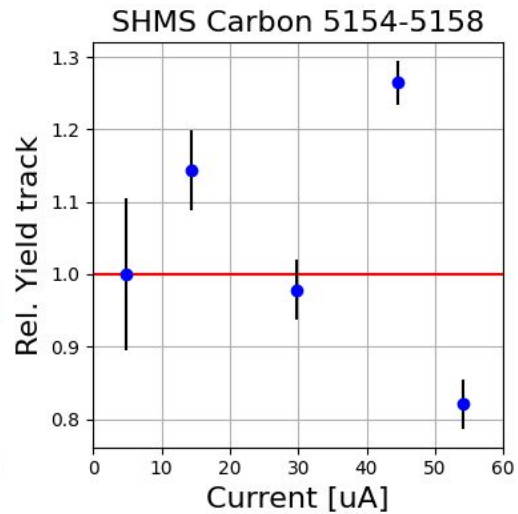
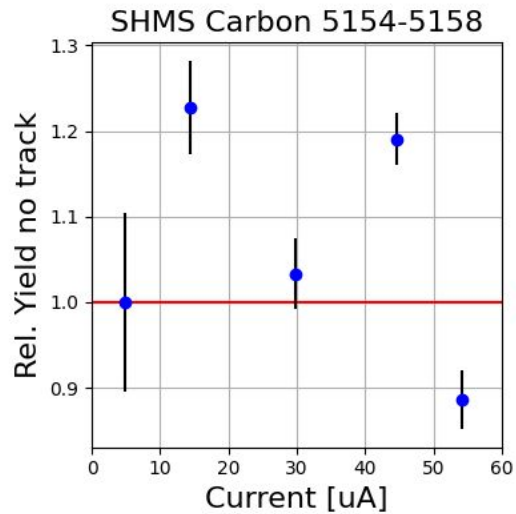
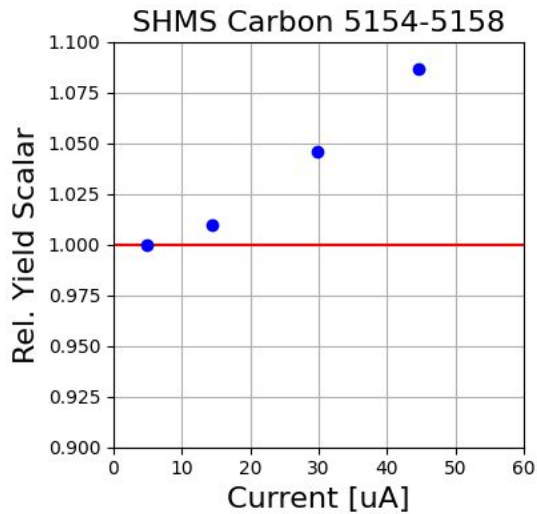
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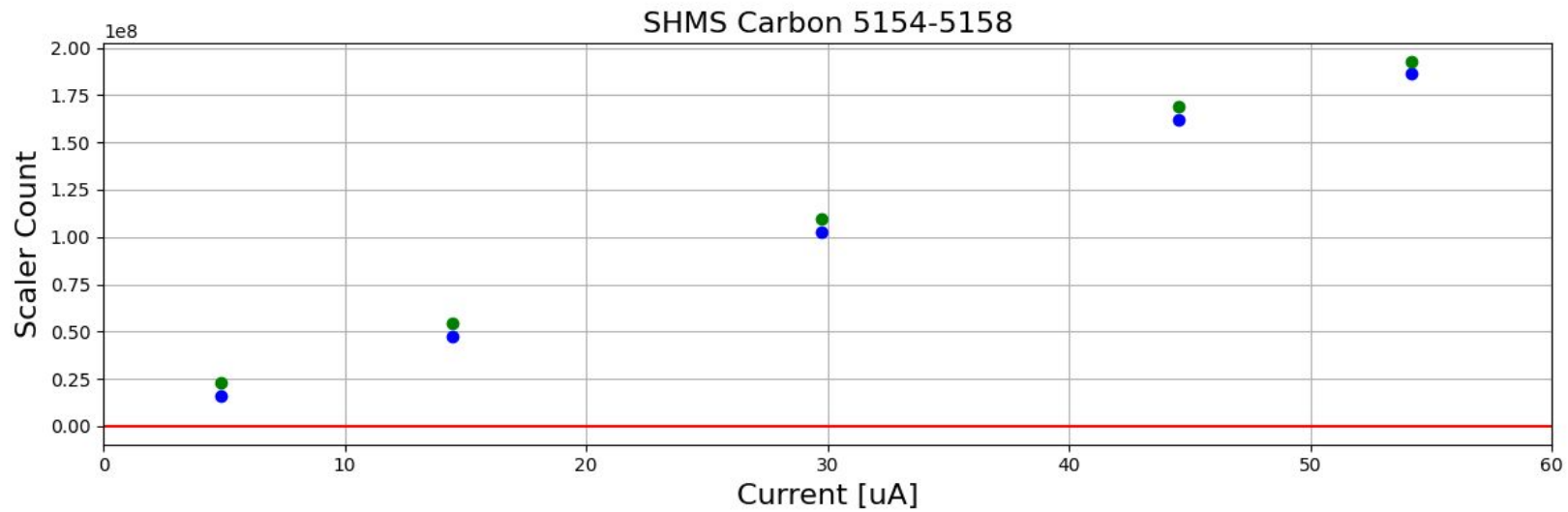
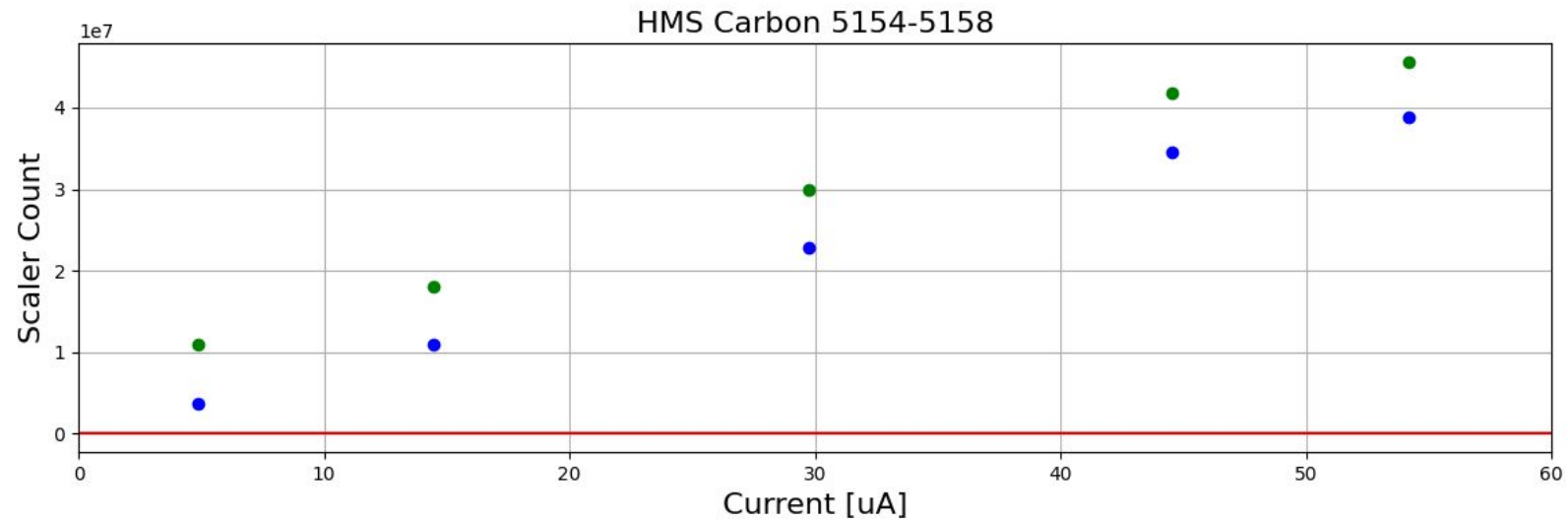
**Fix to scalers
 $I_{cut} = 10 \mu A$



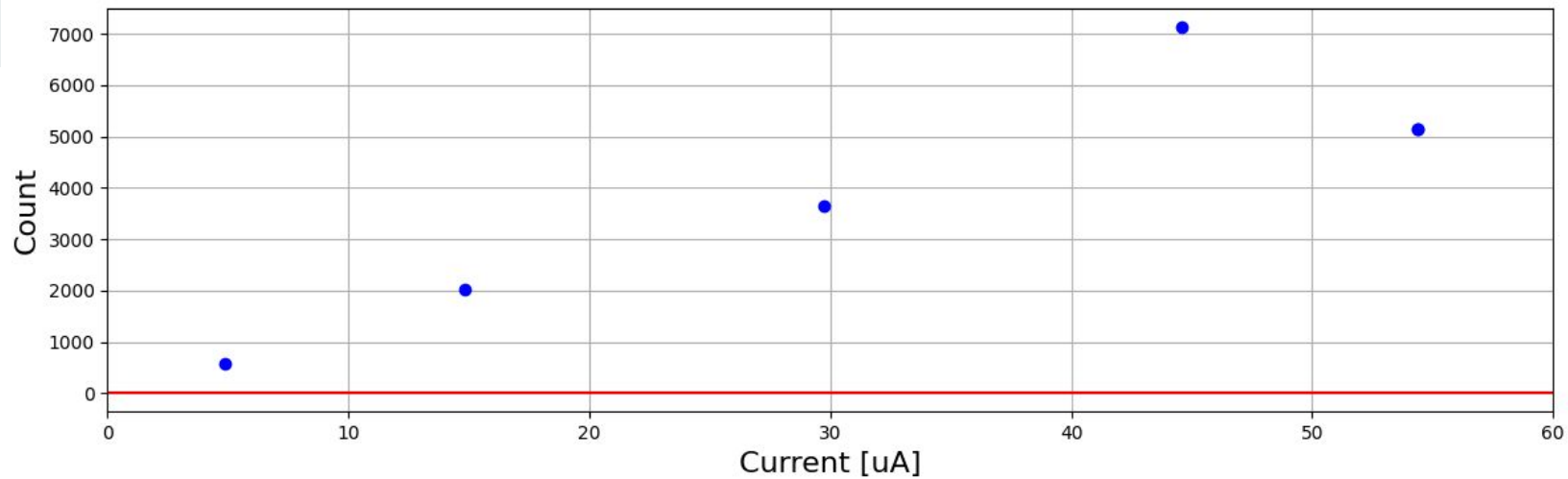
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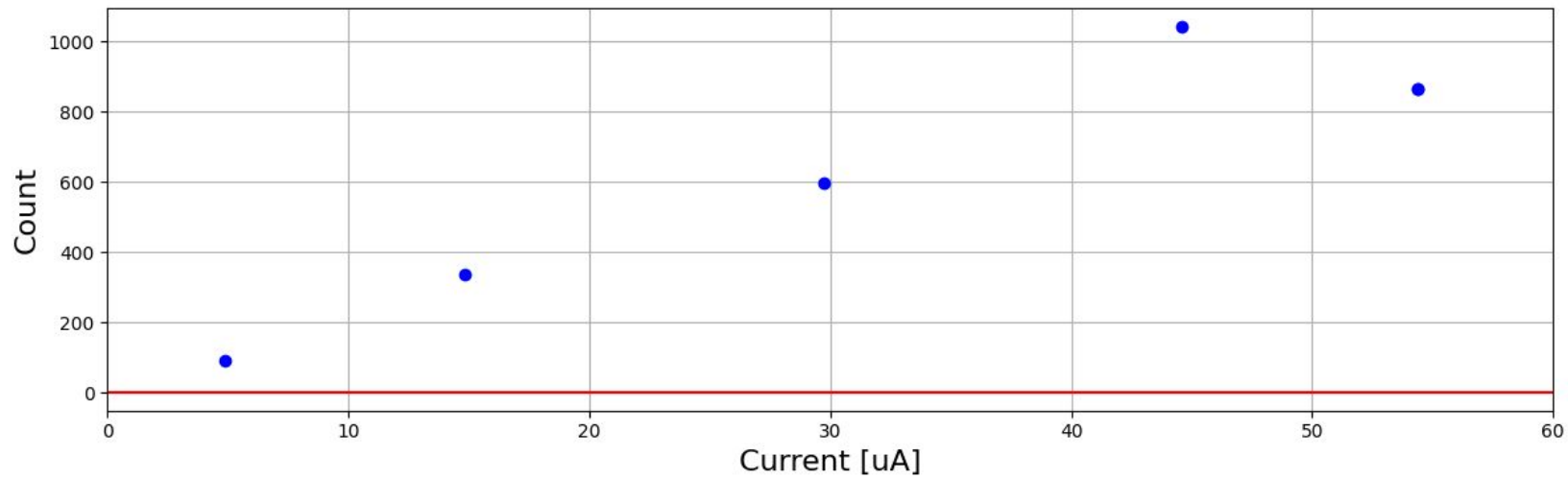




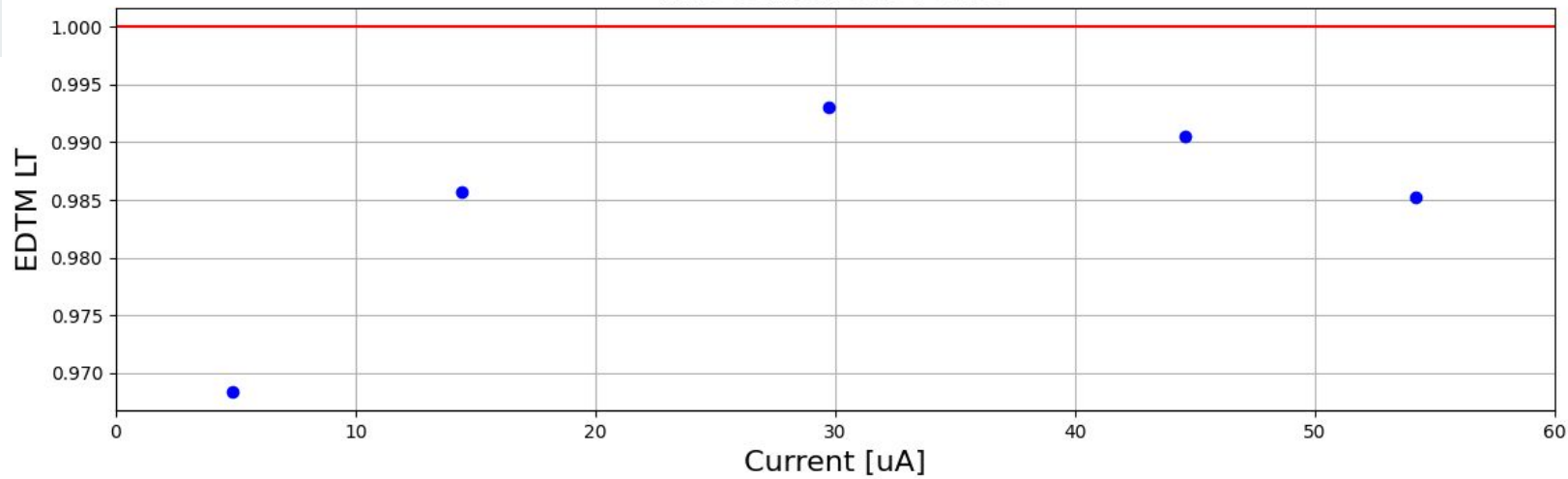
HMS Carbon 5154-5154



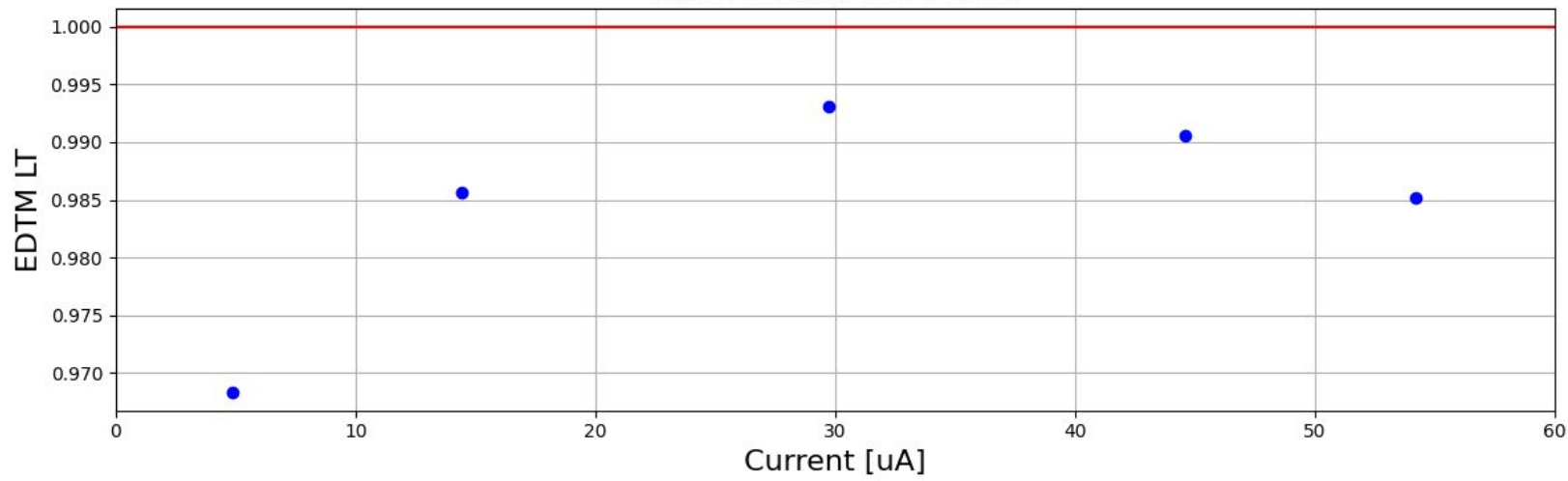
SHMS Carbon 5154-5154



HMS Carbon 5154-5158

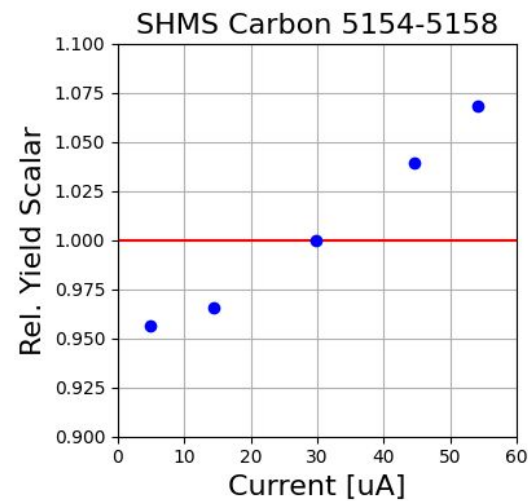
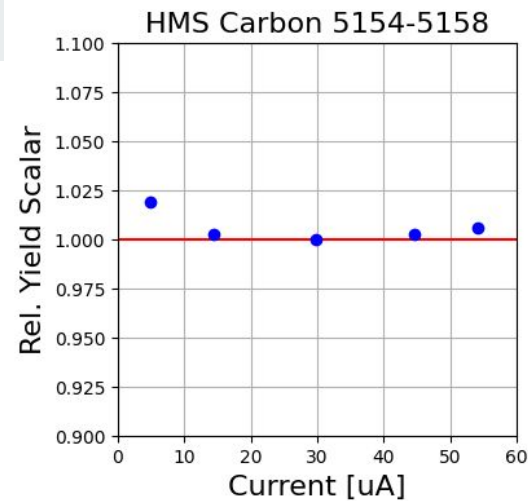
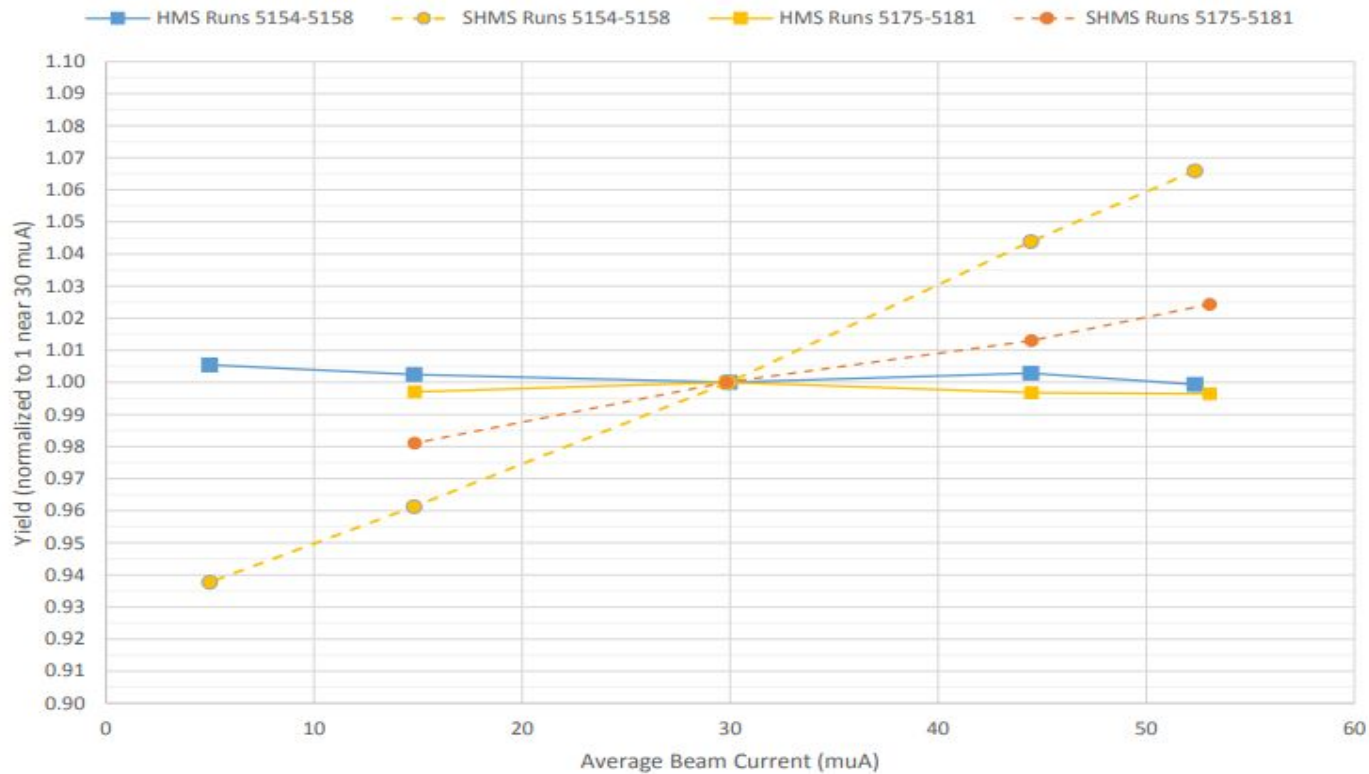


SHMS Carbon 5154-5158



***Normalized to 30 uA

Carbon 1.5%
Normalized 3of4 Scaler Yield vs Current





Extra

Beam during run 5154

Lognumber 3609944. Submitted by cdaq on Mon, 10/15/2018 - 19:17.

Logbooks: HCLLOG
Entry Makers: hszumila

Beam during run 5154

snapshot_1

