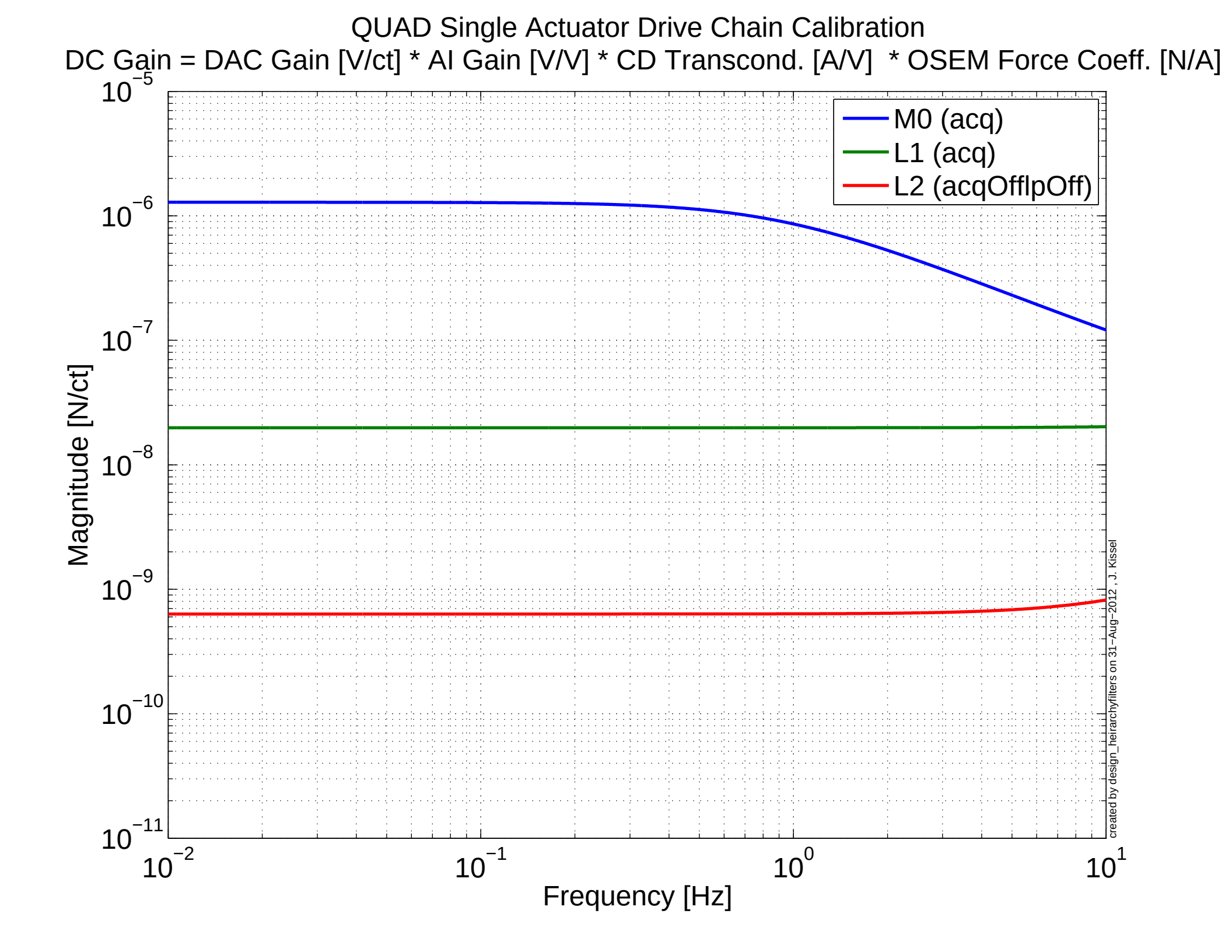
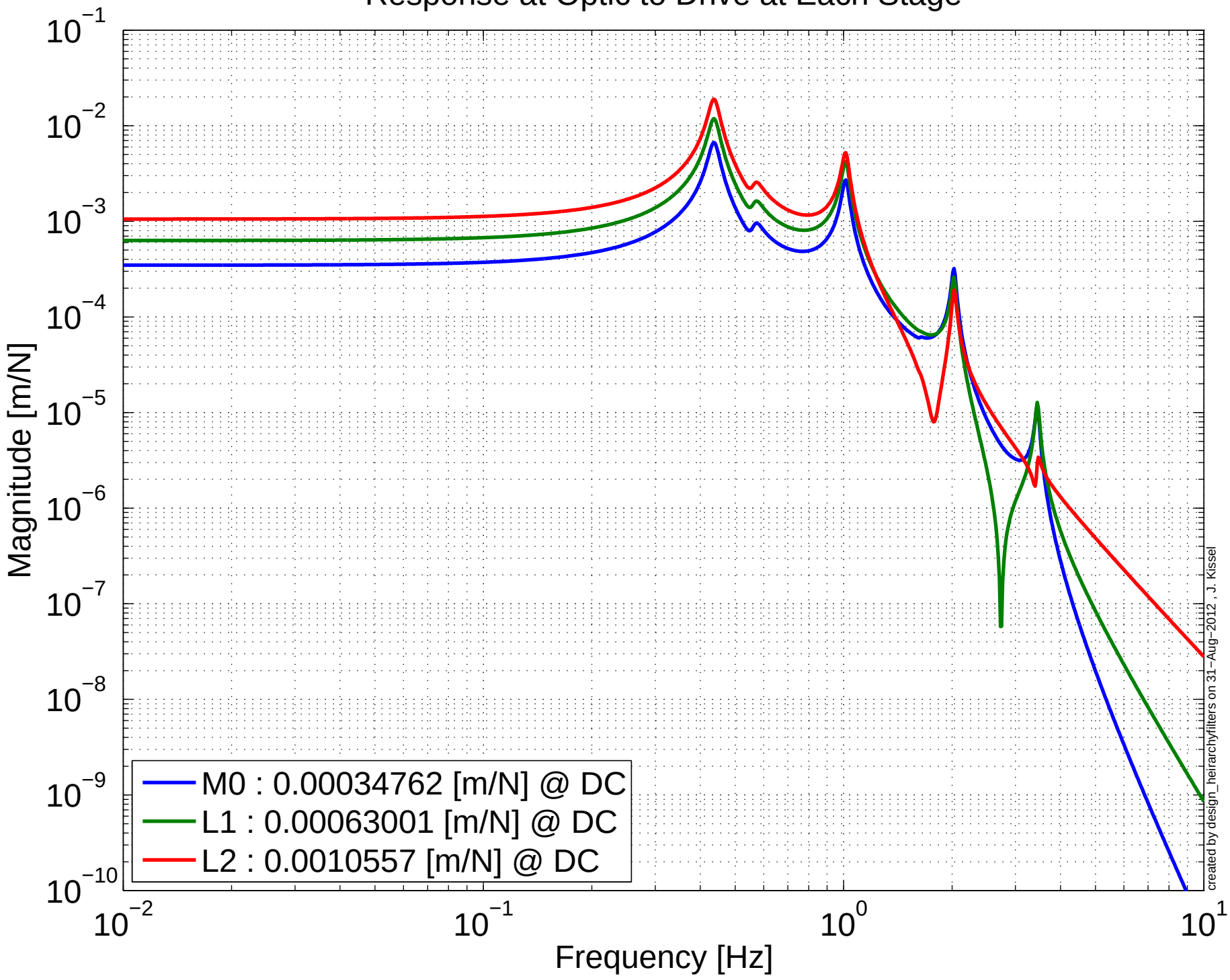
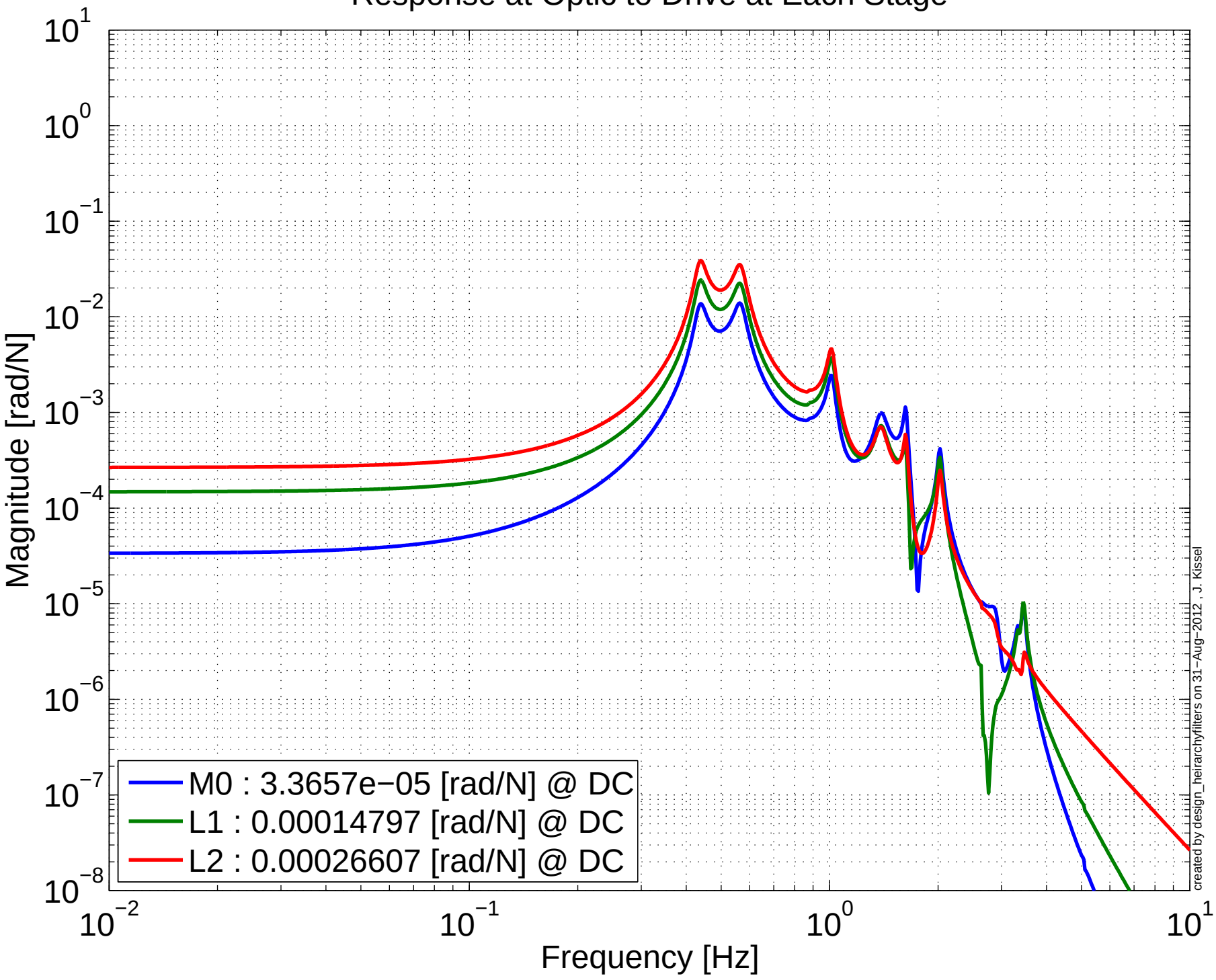
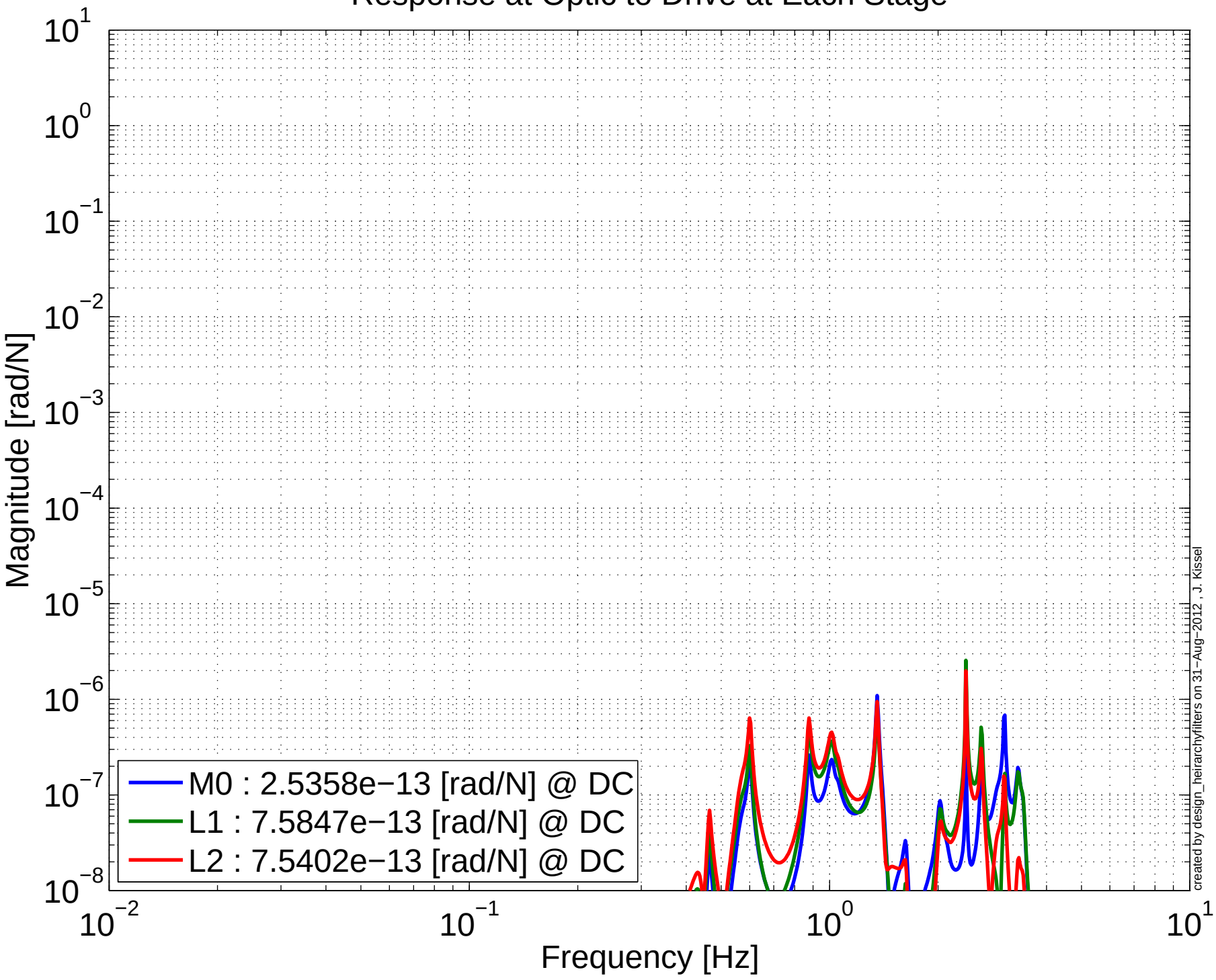
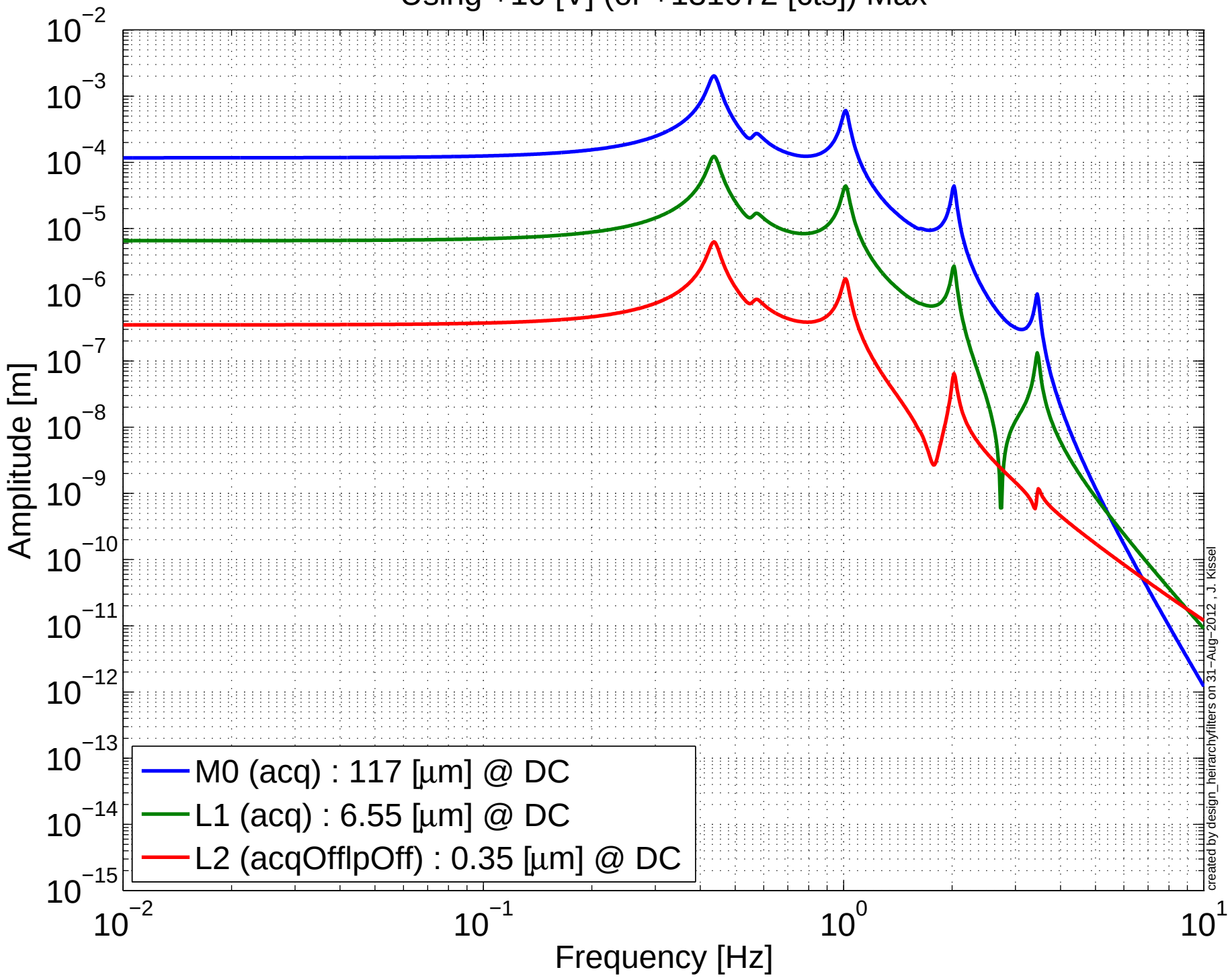
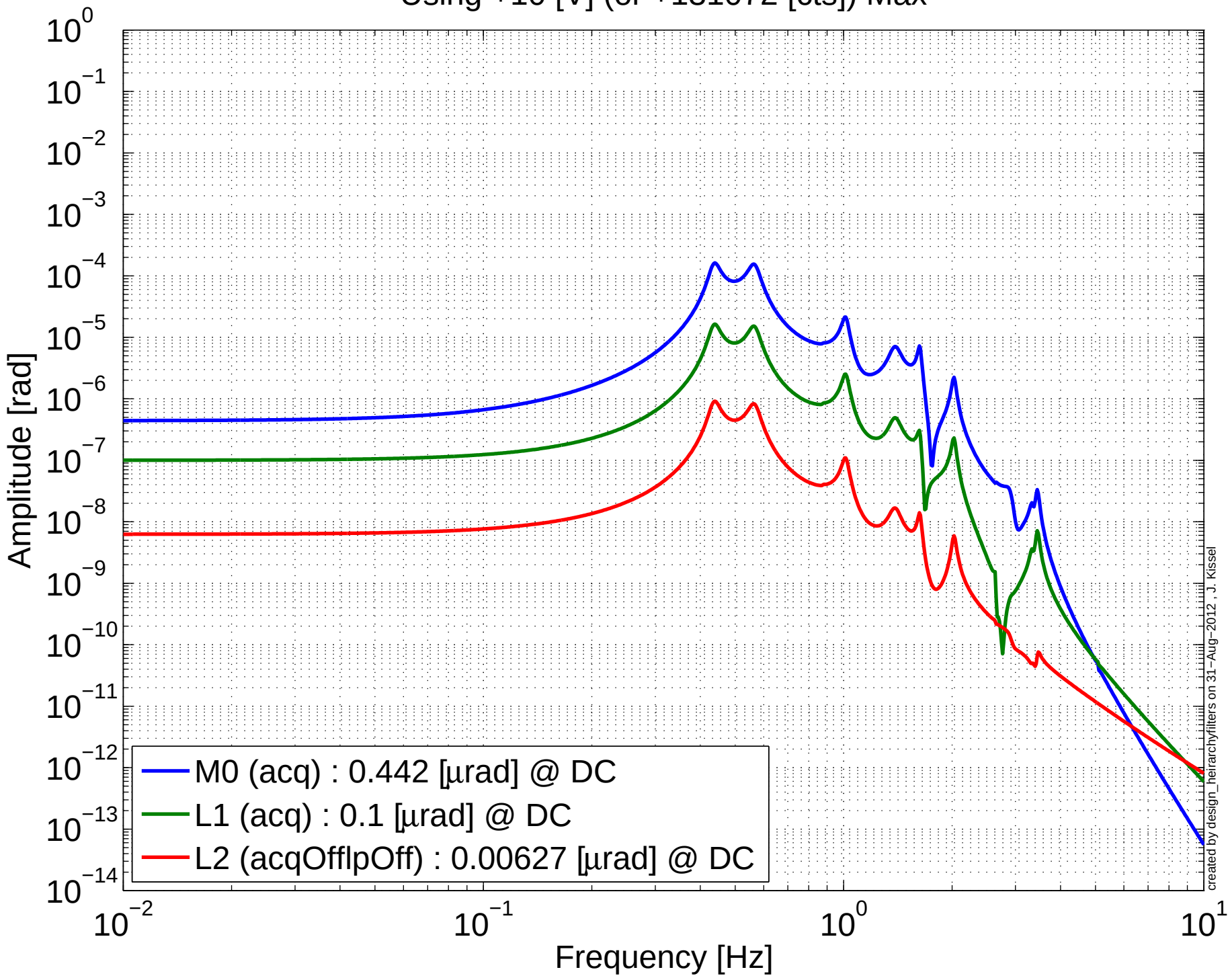

QUAD Single Actuator Drive Chain Calibration
DC Gain = DAC Gain [V/ct] * AI Gain [V/V] * CD Transcond. [A/V] * OSEM Force Coeff. [N/A]
M0 (acq)
L1 (acq)
L2 (acqOfflpOff)
Magnitude [N/ct]
Frequency [Hz]
created by design_heirarchyfilters on 31−Aug−2012 , J. Kissel

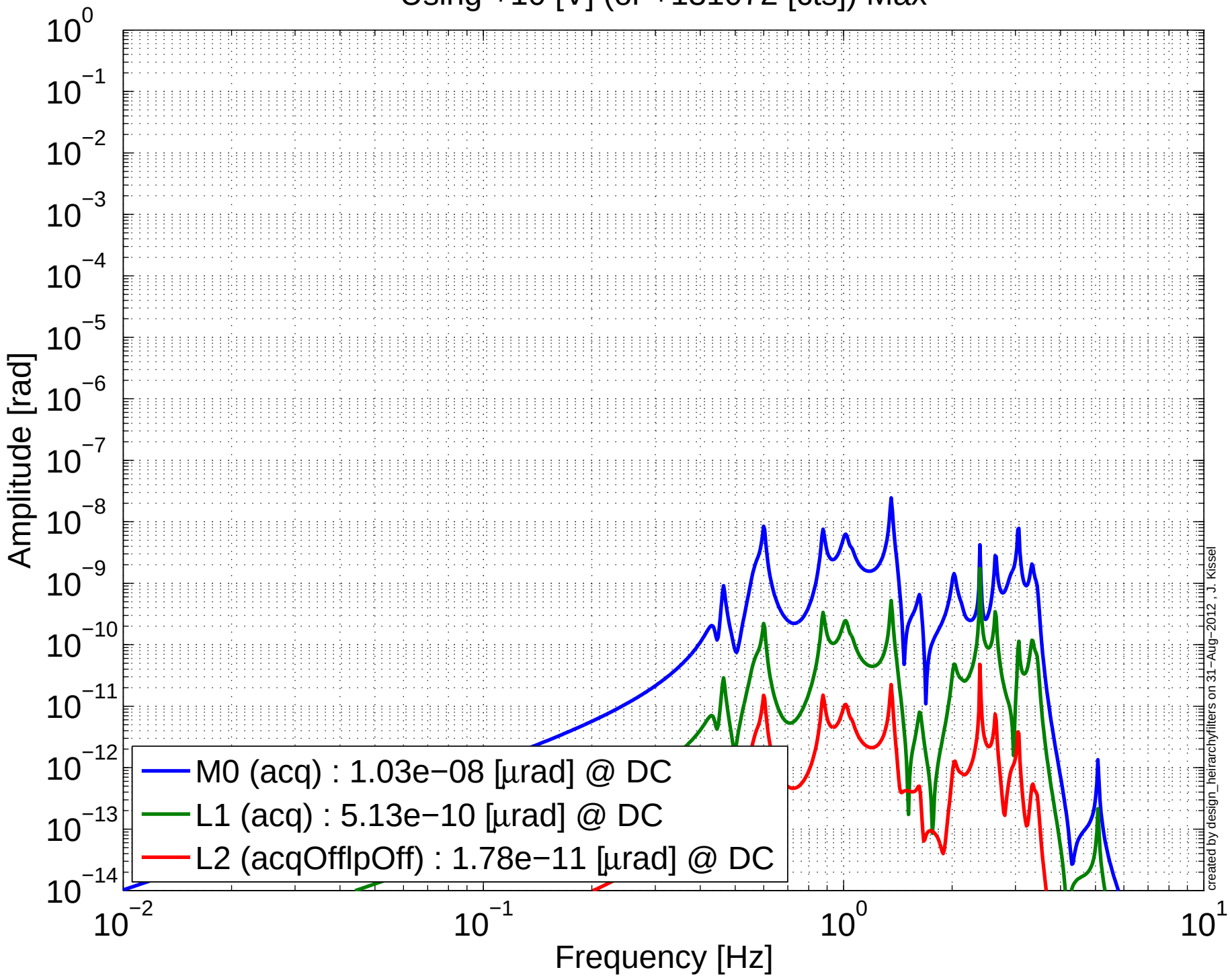

QUAD Transfer Function, L to L
Response at Optic to Drive at Each Stage
Magnitude [m/N]
Frequency [Hz]
M0 : 0.00034762 [m/N] @ DC
L1 : 0.00063001 [m/N] @ DC
L2 : 0.0010557 [m/N] @ DC
created by design_heirarchyfilters on 31−Aug−2012 , J. Kissel

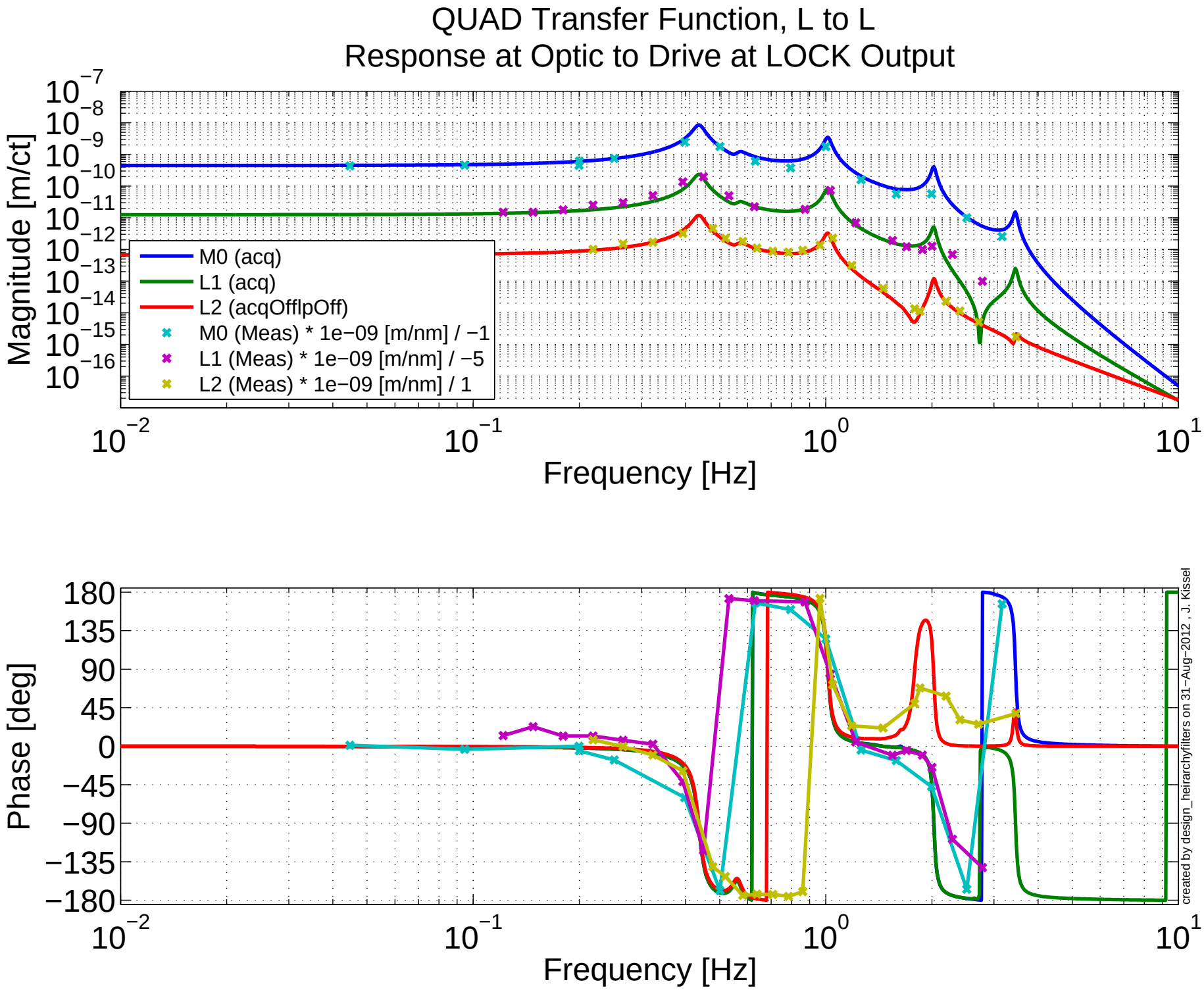

QUAD Transfer Function, L to P
Response at Optic to Drive at Each Stage
Magnitude [rad/N]
Frequency [Hz]
M0 : 3.3657e−05 [rad/N] @ DC
L1 : 0.00014797 [rad/N] @ DC
L2 : 0.00026607 [rad/N] @ DC
created by design_heirarchyfilters on 31−Aug−2012 , J. Kissel

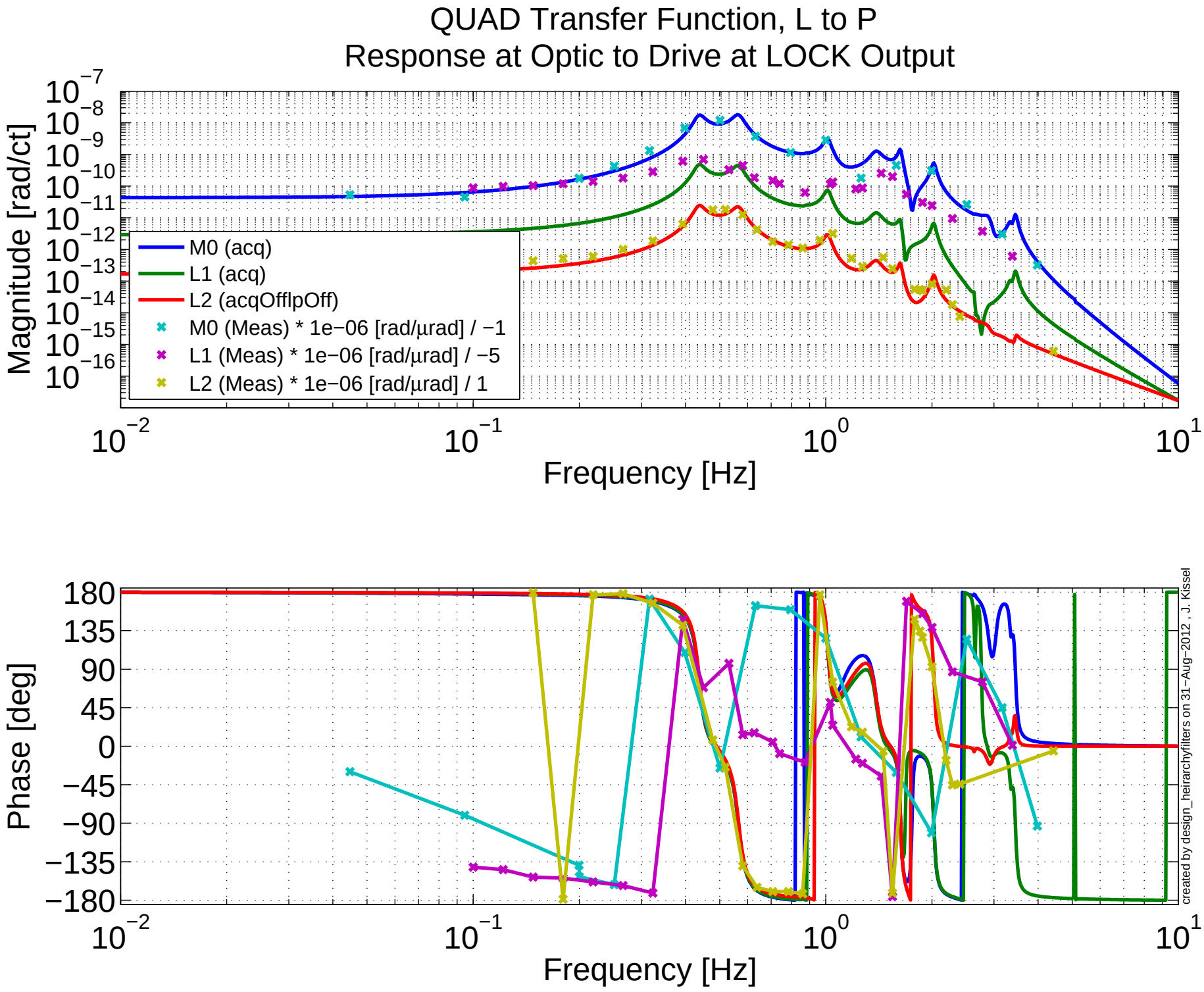

QUAD Transfer Function, L to Y
Response at Optic to Drive at Each Stage
Magnitude [rad/N]
Frequency [Hz]
M0 : 2.5358e−13 [rad/N] @ DC
L1 : 7.5847e−13 [rad/N] @ DC
L2 : 7.5402e−13 [rad/N] @ DC
created by design_heirarchyfilters on 31−Aug−2012 , J. Kissel

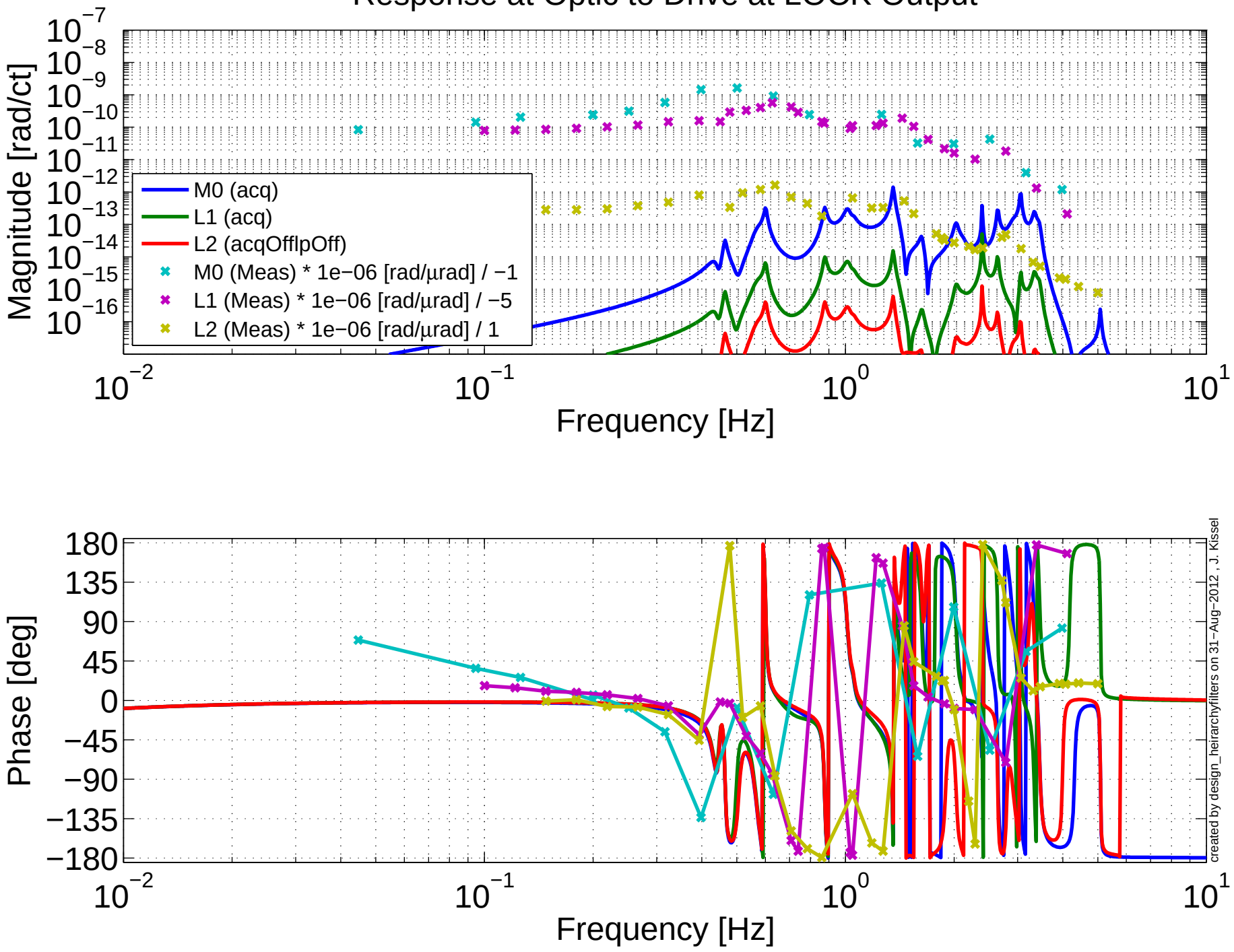

QUAD Maximum Drive at Optic, L to L
Using +10 [V] (or +131072 [cts]) Max
Amplitude [m]
Frequency [Hz]
M0 (acq) : 117 [µm] @ DC
L1 (acq) : 6.55 [µm] @ DC
L2 (acqOfflpOff) : 0.35 [µm] @ DC
created by design_heirarchyfilters on 31−Aug−2012 , J. Kissel


QUAD Maximum Drive at Optic, L to P
Using +10 [V] (or +131072 [cts]) Max
Amplitude [rad]
Frequency [Hz]
M0 (acq) : 0.442 [µrad] @ DC
L1 (acq) : 0.1 [µrad] @ DC
L2 (acqOfflpOff) : 0.00627 [µrad] @ DC
created by design_heirarchyfilters on 31−Aug−2012 , J. Kissel


QUAD Maximum Drive at Optic, L to Y
Using +10 [V] (or +131072 [cts]) Max
Amplitude [rad]
Frequency [Hz]
M0 (acq) : 1.03e−08 [µrad] @ DC
L1 (acq) : 5.13e−10 [µrad] @ DC
L2 (acqOfflpOff) : 1.78e−11 [µrad] @ DC
created by design_heirarchyfilters on 31−Aug−2012 , J. Kissel


QUAD Transfer Function, L to L
Response at Optic to Drive at LOCK Output
Magnitude [m/ct]
Frequency [Hz]
M0 (acq)
L1 (acq)
L2 (acqOfflpOff)
M0 (Meas) * 1e−09 [m/nm] / −1
L1 (Meas) * 1e−09 [m/nm] / −5
L2 (Meas) * 1e−09 [m/nm] / 1
Phase [deg]
Frequency [Hz]
created by design_heirarchyfilters on 31−Aug−2012 , J. Kissel


QUAD Transfer Function, L to P
Response at Optic to Drive at LOCK Output
Magnitude [rad/ct]
M0 (acq)
L1 (acq)
L2 (acqOfflpOff)
M0 (Meas) * 1e−06 [rad/µrad] / −1
L1 (Meas) * 1e−06 [rad/µrad] / −5
L2 (Meas) * 1e−06 [rad/µrad] / 1
Frequency [Hz]
Phase [deg]
Frequency [Hz]
created by design_heirarchyfilters on 31−Aug−2012 , J. Kissel


QUAD Transfer Function, L to Y
Response at Optic to Drive at LOCK Output
Magnitude [rad/ct]
Phase [deg]
Frequency [Hz]
M0 (acq)
L1 (acq)
L2 (acqOfflpOff)
M0 (Meas) * 1e−06 [rad/µrad] / −1
L1 (Meas) * 1e−06 [rad/µrad] / −5
L2 (Meas) * 1e−06 [rad/µrad] / 1
created by design_heirarchyfilters on 31−Aug−2012 , J. Kissel