G12 Analysis Checklist

The following procedures are common for most g12 analyses and have been approved by the g12 procedure review committee in the g12 analysis procedures manuscript [1]. By checking the "yes" boxes below, I hereby confirm that I understood and applied the procedures in accordance with the g12 analysis note. I also understand that if a procedure in the analysis is not done in accordance with the g12 analysis procedures, the box "no" should be checked and a separate analysis note on the procedure is required. If a procedure in the g12 analysis note is not applicable, to the analysis, the box "N/A" should be checked.

Procedure			
Used PART bank reconstruction for the analysis. EVNT was NOT used.	N/A ☐	Yes ☑	No ☐
Momentum corrections as described in the g12 note	N/A ☐	Yes ☑	No ☐
Beam energy correction as described in the g12 note	N/A ☐	Yes ☑	No ☐
Inclusive Good run list as described in table 7. Individual analysis may use a subset of it	N/A ☐	Yes ☑	No ☐
Target density and its uncertainty as described in the g12 note	N/A ☐	Yes ☑	No ☐
Photon flux calculation procedure as described in the g12 note	N/A ☐	Yes ☑	No ☐
Lower limit for the systematic uncertainty of normalized yield is 5.7%	N/A ☐	Yes ☑	No ☐
Photon polarization calculation procedure as described in the g12 note	N/A ☑	Yes ☐	No ☐
Systematic uncertainty of the photon polarization as described in the g12 note	N/A ☑	Yes ☐	No ☐
gsim parameters	N/A ☐	Yes ☑	No ☐

gpp smearing parameters	N/A ☐ Yes ☑ No ☐
DC efficiency map	N/A ☐ Yes ☑ No ☐
EC knockout	N/A ☐ Yes ☑ No ☐
Minimal TOF knockout	N/A ☐ Yes ☑ No ☐
Lepton ID is used	N/A ☐ Yes ☐ No ☑
AUTHOR REMARKS (click below)	

Although the analysis note focuses on pi0 decaying into leptons and a photon, lepton PID was not used. Lepton ID for pi0 can be acheived by conservation of energy, mass.

References

[1] g12 working group *g12 Analysis Procedures, Statistics and Systematics.* 2016