



## 14856 - COS/FUV Wavecal lamp template reference files at LP3

Cycle: 24, Proposal Category: ENG/COS

(Availability Mode: RESTRICTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
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### VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	WAVE	COS/FUV	2	09-Nov-2016 12:32:54.0	yes
02	WAVE	COS/FUV	2	09-Nov-2016 12:32:59.0	yes
03	WAVE	COS/FUV	1	09-Nov-2016 12:33:01.0	yes

5 Total Orbits Used

### ABSTRACT

This program obtains COS FUV lamp template data at LP3 for the wavelength calibration of LP3 data. The dispersion coefficients vary with absolute focus position and the lamp template reference file used for wavelength calibration was obtained at LP1 with a different absolute focus than that used for LP3 observations.

### OBSERVING DESCRIPTION

This program follows the outline of the SMOV program 11488, where a long lamp exposure of 1800 sec is used to wait for the OSM mechanism to settle before the lamp template data is taken. The wavecal lamp is regularly flashed during the 1800 sec exposure, using special engineering mode flash durations and separations to sample the drift at defined regular intervals for later analysis.

This program obtains 120 sec lamp exposures with G130M (vis 01), G160M (vis 02), and G140L (vis 03) at all FP-POS and cenwaves, except for 1055 and 1096, given that these modes are currently operated at LP2 only.

Proposal 14856 - Visit 01 - COS/FUV Wavecal lamp template reference files at LP3

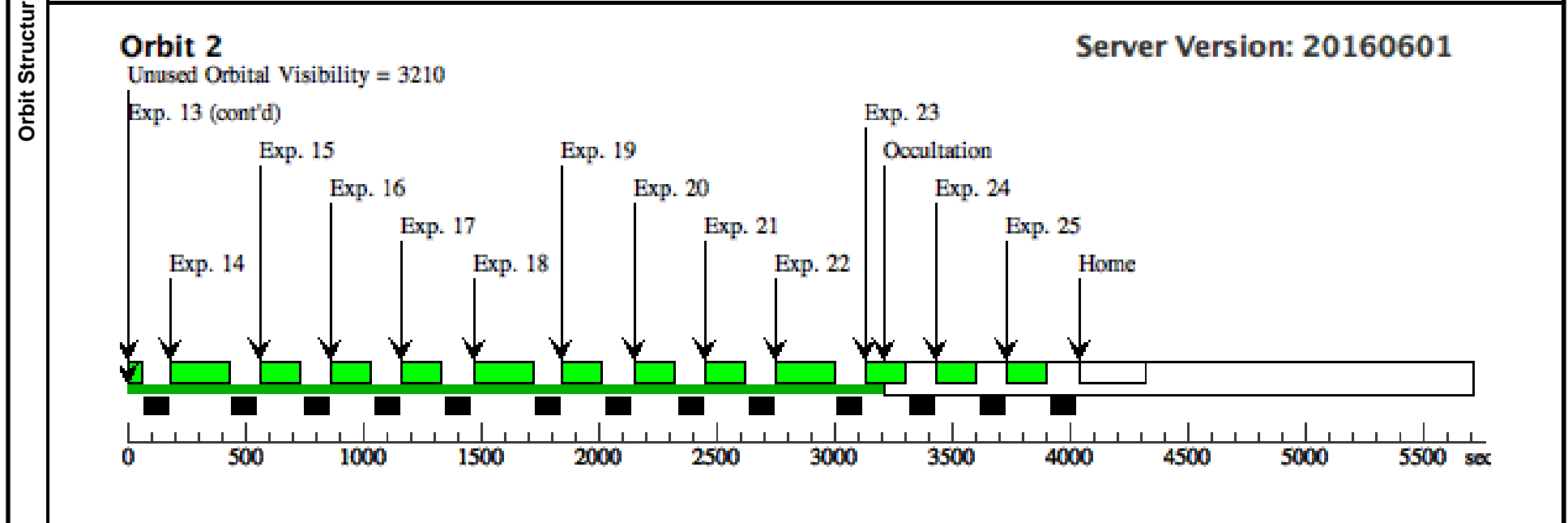
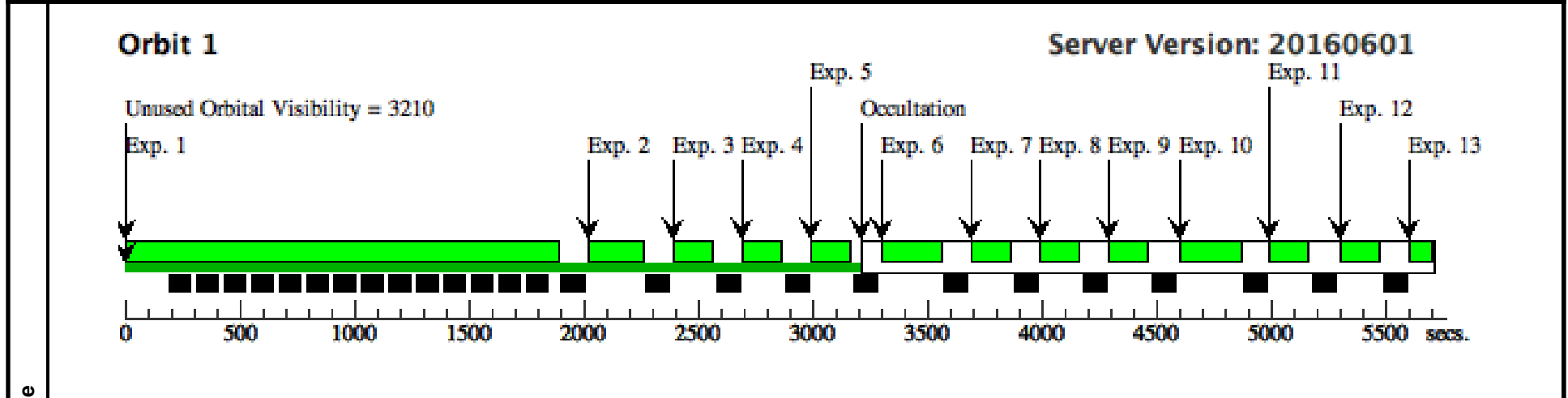
<b>Visit</b>	<p><b>Proposal 14856, Visit 01</b></p> <p><b>Diagnostic Status: Warning</b></p> <p>Scientific Instruments: COS/FUV</p> <p>Special Requirements: (none)</p>	Wed Nov 09 17:33:02 GMT 2016
<b>Diagnostics</b>	<p>(Visit 01) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS</p> <p>(Visit 01) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS</p> <p>(Visit 01) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB SU</p>	

Proposal 14856 - Visit 01 - COS/FUV Wavecal lamp template reference files at LP3

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1291 A	FLASH=S0120D030 ;			1800 Secs (1800 Secs) [==>]	[1]
	2		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1291 A	FP-POS=1			120 Secs (120 Secs) [==>]	[1]
	3		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1291 A	FP-POS=2			120 Secs (120 Secs) [==>]	[1]
	4		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1291 A	FP-POS=3			120 Secs (120 Secs) [==>]	[1]
	5		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1291 A	FP-POS=4			120 Secs (120 Secs) [==>]	[1]
	6		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1222 A	FP-POS=1			120 Secs (120 Secs) [==>]	[1]
	7		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1222 A	FP-POS=2			120 Secs (120 Secs) [==>]	[1]
	8		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1222 A	FP-POS=3			120 Secs (120 Secs) [==>]	[1]
	9		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1222 A	FP-POS=4			120 Secs (120 Secs) [==>]	[1]
	10		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1300 A	FP-POS=1			120 Secs (120 Secs) [==>]	[1]
	11		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1300 A	FP-POS=2			120 Secs (120 Secs) [==>]	[1]
	12		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1300 A	FP-POS=3			120 Secs (120 Secs) [==>]	[1]
	13		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1300 A	FP-POS=4			120 Secs (120 Secs) [==>]	[1]
	14		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1309 A	FP-POS=1			120 Secs (120 Secs) [==>]	[2]
	15		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1309 A	FP-POS=2			120 Secs (120 Secs) [==>]	[2]
	16		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1309 A	FP-POS=3			120 Secs (120 Secs) [==>]	[2]
	17		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1309 A	FP-POS=4			120 Secs (120 Secs) [==>]	[2]
	18		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1318 A	FP-POS=1			120 Secs (120 Secs) [==>]	[2]
	19		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1318 A	FP-POS=2			120 Secs (120 Secs) [==>]	[2]
	20		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1318 A	FP-POS=3			120 Secs (120 Secs) [==>]	[2]
	21		WAVE	COS/FUV, TIME-TAG, WCA	G130M 1318 A	FP-POS=4			120 Secs (120 Secs) [==>]	[2]

Proposal 14856 - Visit 01 - COS/FUV Wavecal lamp template reference files at LP3

22	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1327 A	FP-POS=1	120 Secs (120 Secs)	[2]
23	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1327 A	FP-POS=2	120 Secs (120 Secs)	[2]
24	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1327 A	FP-POS=3	120 Secs (120 Secs)	[2]
25	WAVE	COS/FUV, TIME-TAG, WCA	G130M 1327 A	FP-POS=4	120 Secs (120 Secs)	[2]

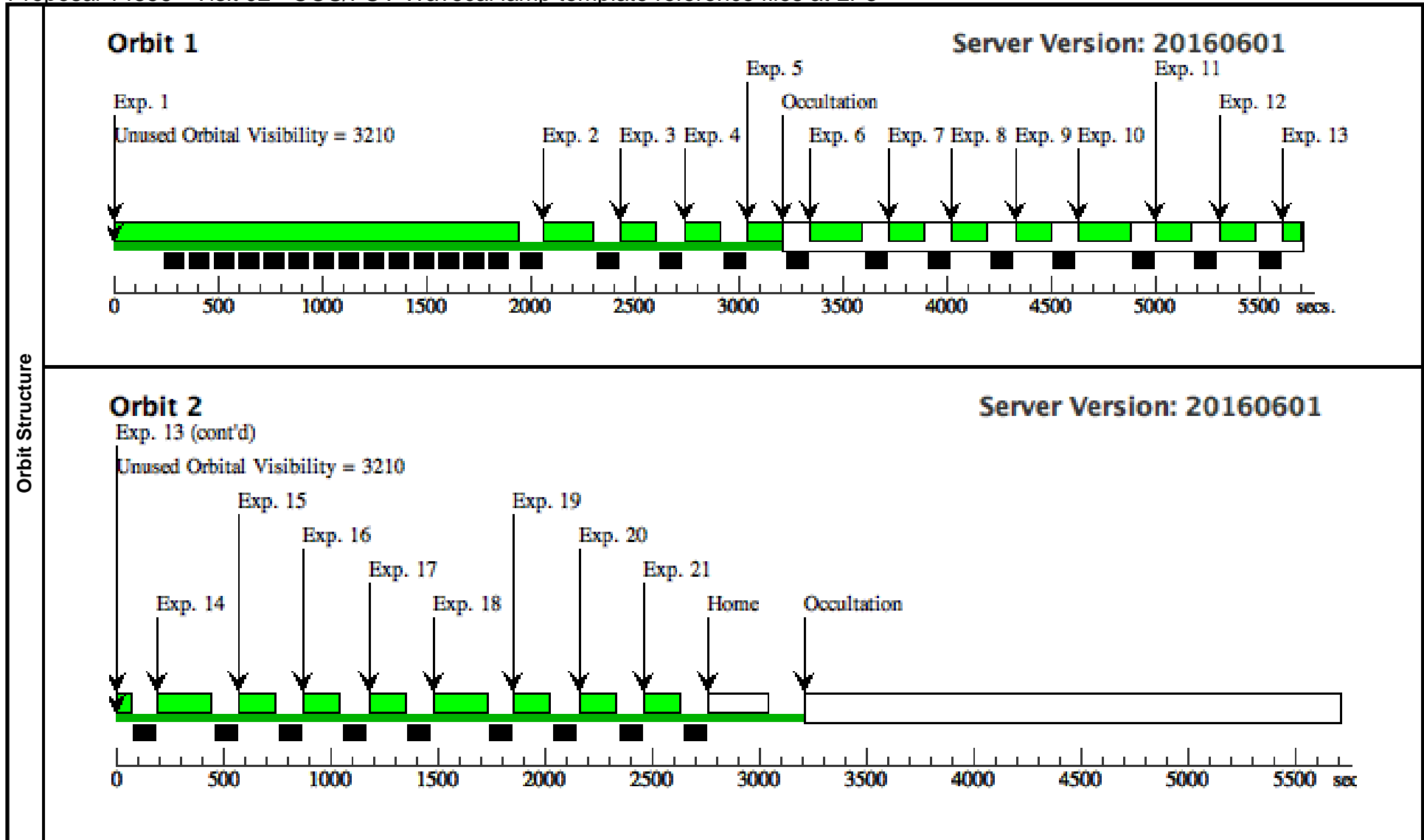


Proposal 14856 - Visit 02 - COS/FUV Wavecal lamp template reference files at LP3

<b>Visit</b>	<p><b>Proposal 14856, Visit 02</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: COS/FUV Special Requirements: (none)</p>	Wed Nov 09 17:33:03 GMT 2016
<b>Diagnostics</b>	<p>(Visit 02) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Visit 02) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS (Visit 02) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB SU</p>	

Proposal 14856 - Visit 02 - COS/FUV Wavecal lamp template reference files at LP3

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1577 A	FLASH=S0120D030 ; FP-POS=3			1800 Secs (1800 Secs) [==>]	[1]
	2		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1577 A	FP-POS=1			120 Secs (120 Secs) [==>]	[1]
	3		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1577 A	FP-POS=2			120 Secs (120 Secs) [==>]	[1]
	4		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1577 A	FP-POS=3			120 Secs (120 Secs) [==>]	[1]
	5		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1577 A	FP-POS=4			120 Secs (120 Secs) [==>]	[1]
	6		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1589 A	FP-POS=1			120 Secs (120 Secs) [==>]	[1]
	7		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1589 A	FP-POS=2			120 Secs (120 Secs) [==>]	[1]
	8		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1589 A	FP-POS=3			120 Secs (120 Secs) [==>]	[1]
	9		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1589 A	FP-POS=4			120 Secs (120 Secs) [==>]	[1]
	10		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1600 A	FP-POS=1			120 Secs (120 Secs) [==>]	[1]
	11		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1600 A	FP-POS=2			120 Secs (120 Secs) [==>]	[1]
	12		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1600 A	FP-POS=3			120 Secs (120 Secs) [==>]	[1]
	13		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1600 A	FP-POS=4			120 Secs (120 Secs) [==>]	[1]
	14		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1611 A	FP-POS=1			120 Secs (120 Secs) [==>]	[2]
	15		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1611 A	FP-POS=2			120 Secs (120 Secs) [==>]	[2]
	16		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1611 A	FP-POS=3			120 Secs (120 Secs) [==>]	[2]
	17		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1611 A	FP-POS=4			120 Secs (120 Secs) [==>]	[2]
	18		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1623 A	FP-POS=1			120 Secs (120 Secs) [==>]	[2]
	19		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1623 A	FP-POS=2			120 Secs (120 Secs) [==>]	[2]
	20		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1623 A	FP-POS=3			120 Secs (120 Secs) [==>]	[2]
21		WAVE	COS/FUV, TIME-TAG, WCA	G160M 1623 A	FP-POS=4			120 Secs (120 Secs) [==>]	[2]	





Proposal 14856 - Visit 03 - COS/FUV Wavecal lamp template reference files at LP3

Wed Nov 09 17:33:03 GMT 2016

Diagnosics	(Visit 03) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS (Visit 03) Warning (Orbit Planner): LAMP EXPOSURE EXCEEDS 300 SECONDS (Visit 03) Warning (Orbit Planner): MAXIMUM DURATION EXCEEDED FOR INTERNAL OR EARTH CALIB SU									
	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	WAVE		COS/FUV, TIME-TAG, WCA	G140L 1280 A	FLASH=S0120D030 ; FP-POS=3			1800 Secs (1800 Secs) [==>]	[1]
	2	WAVE		COS/FUV, TIME-TAG, WCA	G140L 1280 A	FP-POS=1			120 Secs (120 Secs) [==>]	[1]
	3	WAVE		COS/FUV, TIME-TAG, WCA	G140L 1280 A	FP-POS=2			120 Secs (120 Secs) [==>]	[1]
	4	WAVE		COS/FUV, TIME-TAG, WCA	G140L 1280 A	FP-POS=3			120 Secs (120 Secs) [==>]	[1]
	5	WAVE		COS/FUV, TIME-TAG, WCA	G140L 1280 A	FP-POS=4			120 Secs (120 Secs) [==>]	[1]
	6	WAVE		COS/FUV, TIME-TAG, WCA	G140L 1105 A	FP-POS=1			120 Secs (120 Secs) [==>]	[1]
	7	WAVE		COS/FUV, TIME-TAG, WCA	G140L 1105 A	FP-POS=2			120 Secs (120 Secs) [==>]	[1]
	8	WAVE		COS/FUV, TIME-TAG, WCA	G140L 1105 A	FP-POS=3			120 Secs (120 Secs) [==>]	[1]
	9	WAVE		COS/FUV, TIME-TAG, WCA	G140L 1105 A	FP-POS=4			120 Secs (120 Secs) [==>]	[1]

