

Validation Task	Validation Metric	Accuracy or Value	P/F (Tolerance)	Comparison Source	Previous Value	% Difference
UNIT TESTS:						
find	Function Return Value		Pass	Exact Analytic Result	Pass	
findLinear	Function Return Value		Pass	Exact Analytic Result	Pass	
findLinearWrap	Function Return Value		Pass	Exact Analytic Result	Pass	
normalize	Function Return Value		Pass	Exact Analytic Result	Pass	
interpolate	Function Return Value		Pass	Exact Analytic Result	Pass	
interpolateLinear	Function Return Value		Pass	Exact Analytic Result	Pass	
interpolateBilinear	Function Return Value		Pass	Exact Analytic Result	Pass	
interpolateBilinearFloatWrap	Function Return Value		Pass	Exact Analytic Result	Pass	
reflect	Function Return Value		Pass	Exact Analytic Result	Pass	
refract	Function Return Value		Pass	Exact Analytic Result	Pass	
propagate	Function Return Value		Pass	Exact Analytic Result	Pass	
PhasimParser_test1	Function Return Value		Pass	Exact Analytic Result	Pass	
UNIT TEST SUMMARY: 12 Pass and 0 Fail				REGRESSION CHECK: 12 Same and 0 Different		
INTEGRATION TESTS:						
1A Diffraction Approximation	Integrated PSF Comparison	1.48 (X^2/dof)	Pass (< 2.00)	FFT Calculation	1.13 (X^2/dof)	31.22%
	FWHM error	0.008 arcsec	Pass (< 0.01)	FFT Calculation	0.006 arcsec	21.17%
	Sqrt(elfp)*FWHM error	0.001 arcsec	Pass (< 0.00)	FFT Calculation	0.001 arcsec	93.65%
	Centroid error	0.008 arcsec	Pass (< 0.02)	FFT Calculation	0.009 arcsec	-12.38%
	Instantaneous Monochr PSF Comparison	2.21 (X^2/dof)	Pass (< 3.00)	FFT Calculation	2.00 (X^2/dof)	10.24%
	FWHM error	0.001 arcsec	Pass (< 0.01)	FFT Calculation	0.020 arcsec	-96.43%
	Sqrt(elfp)*FWHM error	0.000 arcsec	Pass (< 0.00)	FFT Calculation	0.002 arcsec	-93.33%
	Centroid error	0.019 arcsec	Pass (< 0.02)	FFT Calculation	0.016 arcsec	19.19%
	Instantaneous Full SED PSF Comparison	1.94 (X^2/dof)	Pass (< 3.00)	FFT Calculation	1.72 (X^2/dof)	13.26%
	FWHM error	0.001 arcsec	Pass (< 0.01)	FFT Calculation	0.010 arcsec	-88.79%
	Sqrt(elfp)*FWHM error	0.000 arcsec	Pass (< 0.00)	FFT Calculation	0.001 arcsec	-88.31%
	Centroid error	0.020 arcsec	Fail (< 0.02)	FFT Calculation	0.017 arcsec	17.43%
	1B Screen Convergence	PSF FWHM Error	0.00 arcsec	Pass (< 0.01)	Double pixel size screens	0.00 arcsec
PSF Centroid Error		0.00 arcsec	Pass (< 0.01)	Double pixel size screens	0.00 arcsec	121.74%
PSF Sqrt(Elfp)*FWHM Error		0.00 arcsec	Pass (< 0.01)	Double pixel size screens	0.00 arcsec	234.48%
1C Grids of Stars	Aim X=1 PSF size	0.89 arcsec	Fail (0.80 +/- 0.05)	Input value	0.82 arcsec	-15.20%
	Average Ellipticity	0.01	Pass (< 0.05)	Subaru (some opt included)	0.02	-17.30%
	Sidev Ellipticity	0.02	Pass (< 0.03)	Subaru (some opt included)	0.01	88.52%
	Ellipticity Decorelation Length	0.10 degrees	Pass (> 0.03)	Estimate (should be ndegree)	1.70 degrees	-94.12%
	Avg Diff Astrometry, 3 arcmin	4.05 milliforcsec	Pass (< 10.00)	Monet worst case estimate for 15s	4.24 milliforcsec	-4.51%
	Sidev Diff Astrometry, 3 arcmin	3.25 milliforcsec	Pass (< 6.00)	Monet a of a Estimate	3.34 milliforcsec	-2.71%
	Aim X=2 PSF size	0.86 arcsec	Fail (0.80 +/- 0.05)	Input value	0.78 arcsec	10.11%
	Average Ellipticity	0.03	Pass (< 0.05)	Subaru (some opt included)	0.02	80.85%
	Sidev Ellipticity	0.05	Fail (< 0.03)	Subaru (some opt included)	0.01	534.91%
	Ellipticity Decorelation Length	0.10 degrees	Pass (> 0.03)	Estimate (should be ndegree)	1.60 degrees	-93.75%
	Avg Diff Astrometry, 3 arcmin	4.25 milliforcsec	Pass (< 10.00)	Monet worst case estimate for 15s	4.70 milliforcsec	-9.56%
	Sidev Diff Astrometry, 3 arcmin	3.40 milliforcsec	Pass (< 6.00)	Monet a of a Estimate	3.52 milliforcsec	-3.38%
	Aim=Opt PSF size	0.99 arcsec	Fail (0.89 +/- 0.05)	Input value+LSST Design	0.94 arcsec	5.67%
	Average Ellipticity	0.01	Pass (< 0.10)	LSST Design	0.05	-77.34%
	Sidev Ellipticity	0.01	Pass (< 0.10)	LSST Design	0.03	-72.45%
Ellipticity Decorelation Length	0.10 degrees	Pass (> 0.03)	Estimate (should be ndegree)	3.60 degrees	-97.22%	
Avg Diff Astrometry, 3 arcmin	4.86 milliforcsec	Pass (< 10.00)	Monet worst case estimate for 15s	4.67 milliforcsec	3.99%	
Sidev Diff Astrometry, 3 arcmin	3.89 milliforcsec	Pass (< 6.00)	Monet a of a Estimate	3.62 milliforcsec	7.48%	