



5224 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at $z > 10$

Cycle: 3, Proposal Category: GO

INVESTIGATORS

| <i>Name</i> | <i>Institution</i> |
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JWST Proposal 5224 (Created: Tuesday, February 11, 2025, 11:01:15AM Eastern Standard Time) - Overview

| <i>Name</i> | <i>Institution</i> |
|----------------------------------------------|------------------------------------------------|
| Prof. John Chisholm (CoI) | University of Texas at Austin |
| Prof. Ivo Labbe (CoI) | Swinburne University of Technology |
| Prof. Arjen van der Wel (CoI) (ESA Member) | Universiteit Gent |
| Dr. John R. Weaver (CoI) | University of Massachusetts - Amherst |
| Dr. Katherine E. Whitaker (CoI) | University of Massachusetts - Amherst |
| Mr. Daniel K. Magee (CoI) | University of California - Santa Cruz |
| Dr. Benjamin D. Johnson (CoI) | Harvard University |
| Dr. Sownak Bose (CoI) | Harvard University |
| Prof. Sirio Belli (CoI) (ESA Member) | University of Bologna |
| Alba Covelo-Paz (CoI) (ESA Member) | University of Geneva, Department of Astronomy |
| Prof. Pieter van Dokkum (CoI) | Yale University |
| Dr. Gabriel Brammer (CoI) (ESA Member) | University of Copenhagen, Niels Bohr Institute |
| Dr. Yoshinobu Fudamoto (CoI) | Chiba University |
| Dr. Hakim Atek (CoI) (ESA Member) | CNRS, Institut d'Astrophysique de Paris |
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| Dr. Romain Alexis Meyer (CoI) (ESA Member) | University of Geneva, Department of Astronomy |
| Emma Giovinazzo (CoI) (ESA Member) | University of Geneva, Department of Astronomy |

OBSERVATIONS

| <i>Folder</i> | <i>Observation</i> | <i>Label</i> | <i>Observing Template</i> | <i>Science Target</i> |
|---------------|--------------------|----------------|----------------------------------|--------------------------------|
| NIRSpec | | | | |
| | 1 | mom0_prism | NIRSpec MultiObject Spectroscopy | (6) grizli_v7.2.4_gaia_mom_pt0 |
| | 2 | mom1_prism | NIRSpec MultiObject Spectroscopy | (7) grizli_v7.2.4_gaia_mom_pt1 |
| | 3 | mom-cosmos-pt0 | NIRSpec MultiObject Spectroscopy | (13) cosmos_im7.4_aw1.0_v1_pt0 |
| | 4 | mom-cosmos-pt1 | NIRSpec MultiObject Spectroscopy | (14) cosmos_im7.4_aw1.0_v1_pt1 |
| | 5 | mom-cosmos-pt2 | NIRSpec MultiObject Spectroscopy | (15) cosmos_im7.4_aw1.0_v1_pt2 |

ABSTRACT

The first year of JWST has finally pushed our observational frontier beyond $z \sim 11$, into the last unknown epoch of our cosmic timeline. Dozens of galaxy candidates have been reported at record-breaking redshifts, and some even spectroscopically confirmed. While this is exactly what JWST was built for, the large number of luminous $M_{\text{uv}} < -20$ candidates barely a few hundred Myrs after the Big Bang continues to be one of the biggest

surprises from early JWST data. These galaxies have excited the community -- *if* they are at $z > 10$, they imply new ingredients are required in our galaxy formation models, and perhaps even cosmology. Despite the intense interest and large numbers of candidates, spectroscopic follow-up and confirmation is severely lagging behind. Only a handful of sources at $M_{UV} < -20$ have so far been confirmed at $z \sim 10$.

Here we propose the first systematic spectroscopic survey of luminous $z \sim 10$ galaxies that will definitively settle the number density and nature of this population. We will target a carefully selected sample of 15 sources that are found to have a $\sim 10\times$ higher number density than theoretical models predicted. Our observations will test whether these sources genuinely are at $z \sim 10$ or if they are new classes of interlopers that may be corrupting JWST's searches. At the same time, these spectra will provide detailed insights into the physics of luminous $z \sim 10$ galaxies through continuum slopes and rest-frame UV emission lines, which can constrain the presence of Pop-III stars, AGN, or globular cluster formation in action. These observations have immediate implications for the success of JWST to securely expand our horizon to cosmic dawn.

OBSERVING DESCRIPTION

The primary goal of this program is to obtain 4.4hr deep NIRSpec/PRISM observations of luminous $z > 10$ candidates to confirm or refute their high-redshift nature through continuum breaks. Additionally, we will measure emission lines for several $z \sim 5-9.5$ galaxies selected from NIRCам imaging. No pre-imaging is required, as these sources all have been identified in the NIRCам images of key legacy fields, which were aligned to Gaia DR3.

NIRSpec exposures:

The observing strategy for the MSA consists of 3 nods in 3 slitlet slits, which we repeat 3 times. We are taking a series of 12 groups of integrations and 2 integrations per exposure with the NRSIRS2 readout mode, resulting in a total science time of 16019s, or 4.4hrs per mask. This same strategy will be repeated for each of our five masks -- three in the PRIMER/UDS field and two in the PRIMER/COSMOS field. Our tests show that we can target up to ~ 50 other galaxies in the epoch of reionization in addition to possibly 100 more lower redshift fillers in the field. The MSA mask design will be finalized once the VPA3 angle of JWST is assigned. We have no particular constraints and can safely avoid the micro meteorites.

Proposal 5224 - Targets - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at $z > 10$

| # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous |
|-------------------------------------------|----------------------------|------------------------------------------------------------------------------------|--------------------------|---------------|
| (6) | grizli_v7.2.4_gaia_mom_pt0 | RA: 02 17 32.6801 (34.3861671d) Dec: -05 08 5.20 (-5.13478d) Equinox: J2000 | | |
| <i>Comments:</i> <i>Description=[]</i> | | | | |
| (7) | grizli_v7.2.4_gaia_mom_pt1 | RA: 02 17 10.2581 (34.2927421d) Dec: -05 10 25.65 (-5.17379d) Equinox: J2000 | | |
| <i>Comments:</i> <i>Description=[]</i> | | | | |
| (13) | cosmos_im7.4_aw1.0_v1_pt0 | RA: 10 00 28.5791 (150.1190796d) Dec: +02 23 1.63 (2.38379d) Equinox: J2000 | | |
| <i>Comments:</i> <i>Description=[]</i> | | | | |
| (14) | cosmos_im7.4_aw1.0_v1_pt1 | RA: 10 00 27.5996 (150.1149983d) Dec: +02 13 2.42 (2.21734d) Equinox: J2000 | | |
| <i>Comments:</i> <i>Description=[]</i> | | | | |
| (15) | cosmos_im7.4_aw1.0_v1_pt2 | RA: 10 00 24.8739 (150.1036412d) Dec: +02 17 26.81 (2.29078d) Equinox: J2000 | | |
| <i>Comments:</i> <i>Description=[]</i> | | | | |

Fixed Targets

Proposal 5224 - Observation 1 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at z>10

Tue Feb 11 16:01:15 GMT 2025

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|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------|------------------------------------------------|---------------------------------|-----------------------------|-----------------------------------|----------------------------------|----------------------------|-------------------------|
| Observation | Proposal 5224, Observation 1: mom0_prism Diagnostic Status: Warning Observing Template: NIRSspec MultiObject Spectroscopy | | | | | | | | | | |
| | (mom0_prism (Obs 1)) Warning (Form): Config c1 (#1) has 2 primary slits affected by failed closed shutters. (mom0_prism (Obs 1)) Warning (Form): Config c1 (#2) has 2 primary slits affected by failed closed shutters. (mom0_prism (Obs 1)) Warning (Form): Config c1 (#3) has 2 primary slits affected by failed closed shutters. (Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. | | | | | | | | | | |
| Fixed Targets | # | Name | Target Coordinates | | | Targ. Coord. Corrections | | | Miscellaneous | | |
| | (6) | grizli_v7.2.4_gaia_mom_pt0 | RA: 02 17 32.6801 (34.3861671d) Dec: -05 08 5.20 (-5.13478d) Equinox: J2000 | | | | | | | | |
| <i>Comments:</i> | | | | | | | | | | | |
| <i>Description=[]</i> | | | | | | | | | | | |
| Acquisition | # | Reference Star Bin | Target | Filter | MSA Configuration | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | Filter: CLEAR; Readout: NRSRAPIDD2; 8 sources in 4 quads; [Optimal TA Accuracy] | SAME | CLEAR | Auto Acq MSA Config | NRSRAPIDD2 | 3 | 1 | 4 | 343.577 | |
| Template | TA Method | HFF Readout Mode | Obtain Confirmation Images | Science Aperture | Primary Candidate List | Filler Candidate List | Spectral Overlap Map | Spectral Overlap Threshold | | | |
| | MSATA | false | After Target ACQ and New MSA Config | MSA Center | grizli_v7.2.4_gaia_mom_ pt0 (24561 sources) | | jwst-nirspec-prism | 1.5 | | | |
| Reference Stars | Visit | ID | RA | Dec | Magnitude | Visit | ID | RA | Dec | Magnitude | |
| | 1 | 128996 | 34.386323 | -5.164536 | 24.81675338745117 2 | 1 | 139729 | 34.360394 | -5.149887 | 24.85195922851562 5 | |
| | 1 | 129406 | 34.372404 | -5.164134 | 23.48472976684570 3 | 1 | 152773 | 34.385462 | -5.131558 | 24.39777374267578 | |
| | 1 | 135544 | 34.381811 | -5.155597 | 24.84140014648437 5 | 1 | 161738 | 34.355381 | -5.119064 | 23.27161598205566 4 | |
| | 1 | 136046 | 34.355111 | -5.154925 | 24.49715995788574 2 | 1 | 164003 | 34.386975 | -5.115783 | 23.94788932800293 | |
| Confirmation | # | Confirmation Type | | Conf. Readout Pattern | Conf. Groups/Int | Conf. Integrations/Exp | | Conf. Total Integrations | Conf. Total Exposure Time | | |
| | 1 | c1 | | NRSIRS2RAPID | 5 | 1 | | 1 | 87.533 | | |

Proposal 5224 - Observation 1 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at $z > 10$

| | # | Exposure Specification | MSA Configuration | Nod Pattern | Pointing | Aperture PA | Dispersion Offset (Shutters) | Cross-Dispersion Offset (Shutters) | Total Dithers | Total Integrations | Total Exposure Time |
|-----------------------------|------------------------------------------------------------------------------------|------------------------|-------------------|-------------------|-------------------------------------------------------------------|-----------------------|------------------------------|------------------------------------|---------------|--------------------|---------------------|
| Spectral Elements | 1 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 34.370755041666 67 Degrees - 5.1364969444444 455 Degrees | 201.11236875432 73 | | | 3 | 6 | 5339.534 |
| | 2 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 34.370755041666 67 Degrees - 5.1364969444444 455 Degrees | 201.11236875432 73 | | | 3 | 6 | 5339.534 |
| | 3 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 34.370755041666 67 Degrees - 5.1364969444444 455 Degrees | 201.11236875432 73 | | | 3 | 6 | 5339.534 |
| Special Requirements | MSA Scheduled Aperture PA 201.1110 to 201.1110 Degrees (V3 62.536438 to 62.536438) | | | | | | | | | | |

Proposal 5224 - Observation 2 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at z>10

Tue Feb 11 16:01:15 GMT 2025

| | | | | | | | | | | | |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------|--------------------------------------------|---------------------------------|----------------------------------|-----------------------------------|---------------------------|----------------------------|-------------------------|
| Observation | Proposal 5224, Observation 2: mom1_prism Diagnostic Status: Warning Observing Template: NIRSpec MultiObject Spectroscopy | | | | | | | | | | |
| | (mom1_prism (Obs 2)) Warning (Form): Config c1 (#1) has 1 primary slits affected by failed closed shutters. (mom1_prism (Obs 2)) Warning (Form): Config c1 (#1) has 14 primary slit traces affected by failed open shutters. (mom1_prism (Obs 2)) Warning (Form): Config c1 (#2) has 1 primary slits affected by failed closed shutters. (mom1_prism (Obs 2)) Warning (Form): Config c1 (#2) has 14 primary slit traces affected by failed open shutters. (mom1_prism (Obs 2)) Warning (Form): Config c1 (#3) has 1 primary slits affected by failed closed shutters. (mom1_prism (Obs 2)) Warning (Form): Config c1 (#3) has 14 primary slit traces affected by failed open shutters. (Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. (Visit 2:1) Warning (Form): The recommended value is 8 Reference Stars for this template. | | | | | | | | | | |
| Diagnosics | | | | | | | | | | | |
| | | | | | | | | | | | |
| Fixed Targets | # | Name | Target Coordinates | | | Targ. Coord. Corrections | | | Miscellaneous | | |
| | (7) | grizli_v7.2.4_gaia_mom_pt1 | RA: 02 17 10.2581 (34.2927421d) Dec: -05 10 25.65 (-5.17379d) Equinox: J2000 | | | | | | | | |
| <i>Comments: Description=[]</i> | | | | | | | | | | | |
| Acquisition | # | Reference Star Bin | Target | Filter | MSA Configuration | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | Filter: CLEAR; Readout: NRSRAPIDD6; 7 sources in 4 quads; [Optimal TA Accuracy] | SAME | CLEAR | Auto Acq MSA Config | NRSRAPIDD6 | 3 | 1 | 4 | 687.153 | |
| Template | TA Method | HFF Readout Mode | Obtain Confirmation Images | Science Aperture | Primary Candidate List | Filler Candidate List | Spectral Overlap Map | Spectral Overlap Threshold | | | |
| | MSATA | false | After Target ACQ and New MSA Config | MSA Center | grizli_v7.2.4_gaia_mom_pt1 (27792 sources) | | rwst-nirspec-prism | 1.5 | | | |
| Reference Stars | Visit | ID | RA | Dec | Magnitude | Visit | ID | RA | Dec | Magnitude | |
| | 1 | 123912 | 34.272844 | -5.171765 | 23.90073204040527 | 1 | 155401 | 34.250170 | -5.127945 | 25.298065185546875 | |
| | 1 | 128591 | 34.244326 | -5.165259 | 24.67622947692871 | 1 | 157427 | 34.242449 | -5.125153 | 25.676095962524414 | |
| | 1 | 131145 | 34.276032 | -5.161572 | 25.53158760070800 | 1 | 158399 | 34.253664 | -5.123803 | 25.086812973022468 | |
| | 1 | 145767 | 34.284655 | -5.141577 | 24.2198429107666 | | | | | | |
| Confirmation | # | Confirmation Type | Conf. Readout Pattern | Conf. Groups/Int | Conf. Integrations/Exp | Conf. Total Integrations | Conf. Total Exposure Time | | | | |
| | 1 | c1 | NRSIRS2RAPID | 5 | 1 | 1 | 87.533 | | | | |

Proposal 5224 - Observation 2 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at $z > 10$

| Spectral Elements | # | Exposure Specification | MSA Configuration | Nod Pattern | Pointing | Aperture PA | Dispersion Offset (Shutters) | Cross-Dispersion Offset (Shutters) | Total Dithers | Total Integrations | Total Exposure Time |
|----------------------|------------------------------------------------------------------------------------|------------------------|-------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|------------------------|------------------------------|------------------------------------|---------------|--------------------|---------------------|
| | 1 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 34.261457916666 664 Degrees - 5.1420186111110 98 Degrees | 201.06222886527 505 | | | 3 | 6 | 5339.534 |
| 2 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 34.261457916666 664 Degrees - 5.1420186111110 98 Degrees | 201.06222886527 505 | | | 3 | 6 | 5339.534 | |
| 3 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 34.261457916666 664 Degrees - 5.1420186111110 98 Degrees | 201.06222886527 505 | | | 3 | 6 | 5339.534 | |
| Special Requirements | MSA Scheduled Aperture PA 201.0595 to 201.0595 Degrees (V3 62.484894 to 62.484894) | | | | | | | | | | |

Proposal 5224 - Observation 3 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at z>10

Tue Feb 11 16:01:15 GMT 2025

| Observation | Proposal 5224, Observation 3: mom-cosmos-pt0 Diagnostic Status: Warning Observing Template: NIRSpec MultiObject Spectroscopy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|------------------------------------------|------------------------|--------------------------|---------------------------|----------------------------|--------------------|---------------------|------------------|-----------|--------------------|----------------------------|--------------------------|------------------------|--------------------------|---------------------------|-----------------------------------------------------------------------------------|--------------------|---------------------|-------------------------------------|------------|-----------------------------------------------------------------------------------------|----------|--------------------|---------------------|------------|------------|----------|-------------------|---------|--------|------------|----------|-------------------|---|--------|------------|----------|-------------------|---|--------|------------|----------|-------------------|---|--------|------------|----------|-------------------|---|--------|------------|----------|-------------------|---|--------|------------|----------|-------------------|
| | (mom-cosmos-pt0 (Obs 3)) Warning (Form): Config c1 (#1) has 16 primary slit traces affected by failed open shutters. (mom-cosmos-pt0 (Obs 3)) Warning (Form): Config c1 (#2) has 16 primary slit traces affected by failed open shutters. (mom-cosmos-pt0 (Obs 3)) Warning (Form): Config c1 (#3) has 16 primary slit traces affected by failed open shutters. (Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Targets | <table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(13)</td> <td>cosmos_im7.4_aw1.0_v1_pt0</td> <td>RA: 10 00 28.5791 (150.1190796d) Dec: +02 23 1.63 (2.38379d) Equinox: J2000</td> <td></td> <td></td> </tr> </tbody> </table> Comments: Description=[] | | | | | | | | | | | # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | (13) | cosmos_im7.4_aw1.0_v1_pt0 | RA: 10 00 28.5791 (150.1190796d) Dec: +02 23 1.63 (2.38379d) Equinox: J2000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (13) | cosmos_im7.4_aw1.0_v1_pt0 | RA: 10 00 28.5791 (150.1190796d) Dec: +02 23 1.63 (2.38379d) Equinox: J2000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acquisition | <table border="1"> <thead> <tr> <th>#</th> <th>Reference Star Bin</th> <th>Target</th> <th>Filter</th> <th>MSA Configuration</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Filter: CLEAR; Readout: NRSRAPIDD6; 8 sources in 4 quads; [Optimal TA Accuracy]</td> <td>SAME</td> <td>CLEAR</td> <td>Auto Acq MSA Config</td> <td>NRSRAPIDD6</td> <td>3</td> <td>1</td> <td>4</td> <td>687.153</td> <td></td> </tr> </tbody> </table> | | | | | | | | | | | # | Reference Star Bin | Target | Filter | MSA Configuration | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | 1 | Filter: CLEAR; Readout: NRSRAPIDD6; 8 sources in 4 quads; [Optimal TA Accuracy] | SAME | CLEAR | Auto Acq MSA Config | NRSRAPIDD6 | 3 | 1 | 4 | 687.153 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | # | Reference Star Bin | Target | Filter | MSA Configuration | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Filter: CLEAR; Readout: NRSRAPIDD6; 8 sources in 4 quads; [Optimal TA Accuracy] | SAME | CLEAR | Auto Acq MSA Config | NRSRAPIDD6 | 3 | 1 | 4 | 687.153 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Template | <table border="1"> <thead> <tr> <th>TA Method</th> <th>HFF Readout Mode</th> <th>Obtain Confirmation Images</th> <th>Science Aperture</th> <th>Primary Candidate List</th> <th>Filler Candidate List</th> <th>Spectral Overlap Map</th> <th>Spectral Overlap Threshold</th> </tr> </thead> <tbody> <tr> <td>MSATA</td> <td>false</td> <td>After Target ACQ and New MSA Config</td> <td>MSA Center</td> <td>cosmos_im7.4_aw1.0_v1_pt0 (3355 sources)</td> <td></td> <td>jwst-nirspec-prism</td> <td>1.5</td> </tr> </tbody> </table> | | | | | | | | | | | TA Method | HFF Readout Mode | Obtain Confirmation Images | Science Aperture | Primary Candidate List | Filler Candidate List | Spectral Overlap Map | Spectral Overlap Threshold | MSATA | false | After Target ACQ and New MSA Config | MSA Center | cosmos_im7.4_aw1.0_v1_pt0 (3355 sources) | | jwst-nirspec-prism | 1.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TA Method | HFF Readout Mode | Obtain Confirmation Images | Science Aperture | Primary Candidate List | Filler Candidate List | Spectral Overlap Map | Spectral Overlap Threshold | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MSATA | false | After Target ACQ and New MSA Config | MSA Center | cosmos_im7.4_aw1.0_v1_pt0 (3355 sources) | | jwst-nirspec-prism | 1.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reference Stars | <table border="1"> <thead> <tr> <th>Visit</th> <th>ID</th> <th>RA</th> <th>Dec</th> <th>Magnitude</th> <th>Visit</th> <th>ID</th> <th>RA</th> <th>Dec</th> <th>Magnitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>222441</td> <td>150.088965</td> <td>2.173834</td> <td>25.12854385375976</td> <td>1</td> <td>237935</td> <td>150.077294</td> <td>2.208759</td> <td>24.32811355590820</td> </tr> <tr> <td>1</td> <td>225213</td> <td>150.106957</td> <td>2.182129</td> <td>24.90487480163574</td> <td>1</td> <td>241068</td> <td>150.104713</td> <td>2.215718</td> <td>23.39531707763672</td> </tr> <tr> <td>1</td> <td>231309</td> <td>150.112781</td> <td>2.196469</td> <td>23.31158447265625</td> <td>1</td> <td>242200</td> <td>150.104294</td> <td>2.219400</td> <td>25.20265007019043</td> </tr> <tr> <td>1</td> <td>235173</td> <td>150.071421</td> <td>2.203732</td> <td>23.71626853942871</td> <td>1</td> <td>245160</td> <td>150.099959</td> <td>2.228809</td> <td>25.30940437316894</td> </tr> </tbody> </table> | | | | | | | | | | | Visit | ID | RA | Dec | Magnitude | Visit | ID | RA | Dec | Magnitude | 1 | 222441 | 150.088965 | 2.173834 | 25.12854385375976 | 1 | 237935 | 150.077294 | 2.208759 | 24.32811355590820 | 1 | 225213 | 150.106957 | 2.182129 | 24.90487480163574 | 1 | 241068 | 150.104713 | 2.215718 | 23.39531707763672 | 1 | 231309 | 150.112781 | 2.196469 | 23.31158447265625 | 1 | 242200 | 150.104294 | 2.219400 | 25.20265007019043 | 1 | 235173 | 150.071421 | 2.203732 | 23.71626853942871 | 1 | 245160 | 150.099959 | 2.228809 | 25.30940437316894 |
| | Visit | ID | RA | Dec | Magnitude | Visit | ID | RA | Dec | Magnitude | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 222441 | 150.088965 | 2.173834 | 25.12854385375976 | 1 | 237935 | 150.077294 | 2.208759 | 24.32811355590820 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 225213 | 150.106957 | 2.182129 | 24.90487480163574 | 1 | 241068 | 150.104713 | 2.215718 | 23.39531707763672 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 231309 | 150.112781 | 2.196469 | 23.31158447265625 | 1 | 242200 | 150.104294 | 2.219400 | 25.20265007019043 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 235173 | 150.071421 | 2.203732 | 23.71626853942871 | 1 | 245160 | 150.099959 | 2.228809 | 25.30940437316894 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Confirmation | <table border="1"> <thead> <tr> <th>#</th> <th>Confirmation Type</th> <th>Conf. Readout Pattern</th> <th>Conf. Groups/Int</th> <th>Conf. Integrations/Exp</th> <th>Conf. Total Integrations</th> <th>Conf. Total Exposure Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>c1</td> <td>NRSIRS2RAPID</td> <td>5</td> <td>1</td> <td>1</td> <td>87.533</td> </tr> </tbody> </table> | | | | | | | | | | | # | Confirmation Type | Conf. Readout Pattern | Conf. Groups/Int | Conf. Integrations/Exp | Conf. Total Integrations | Conf. Total Exposure Time | 1 | c1 | NRSIRS2RAPID | 5 | 1 | 1 | 87.533 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | # | Confirmation Type | Conf. Readout Pattern | Conf. Groups/Int | Conf. Integrations/Exp | Conf. Total Integrations | Conf. Total Exposure Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | c1 | NRSIRS2RAPID | 5 | 1 | 1 | 87.533 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Proposal 5224 - Observation 3 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at $z > 10$

| Spectral Elements | # | Exposure Specification | MSA Configuration | Nod Pattern | Pointing | Aperture PA | Dispersion Offset (Shutters) | Cross-Dispersion Offset (Shutters) | Total Dithers | Total Integrations | Total Exposure Time |
|----------------------|------------------------------------------------------------------------------------|------------------------|-------------------|----------------------------------------------------------------|----------------------------------------------------------------|-----------------------|------------------------------|------------------------------------|---------------|--------------------|---------------------|
| | 1 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 150.08843841666 666 Degrees 2.200335277777 78 Degrees | 246.69580132309 65 | | | 3 | 6 | 5339.534 |
| 2 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 150.08843841666 666 Degrees 2.200335277777 78 Degrees | 246.69580132309 65 | | | 3 | 6 | 5339.534 | |
| 3 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 150.08843841666 666 Degrees 2.200335277777 78 Degrees | 246.69580132309 65 | | | 3 | 6 | 5339.534 | |
| Special Requirements | MSA Scheduled Aperture PA 246.6966 to 246.6966 Degrees (V3 108.12202 to 108.12202) | | | | | | | | | | |

Proposal 5224 - Observation 4 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at z>10

Tue Feb 11 16:01:15 GMT 2025

| | | | | | | | | | | | |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------|----------------------------------------------|---------------------------------|-----------------------------|-----------------------------------|----------------------------------|----------------------------|-------------------------|
| Observation | Proposal 5224, Observation 4: mom-cosmos-pt1 Diagnostic Status: Warning Observing Template: NIRSspec MultiObject Spectroscopy | | | | | | | | | | |
| | (mom-cosmos-pt1 (Obs 4)) Warning (Form): Config c1 (#1) has 17 primary slit traces affected by failed open shutters. (mom-cosmos-pt1 (Obs 4)) Warning (Form): Config c1 (#2) has 17 primary slit traces affected by failed open shutters. (mom-cosmos-pt1 (Obs 4)) Warning (Form): Config c1 (#3) has 17 primary slit traces affected by failed open shutters. (Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. | | | | | | | | | | |
| Fixed Targets | # | Name | Target Coordinates | | | Targ. Coord. Corrections | | | Miscellaneous | | |
| | (14) | cosmos_im7.4_aw1.0_v1_pt1 | RA: 10 00 27.5996 (150.1149983d) Dec: +02 13 2.42 (2.21734d) Equinox: J2000 | | | | | | | | |
| <i>Comments: Description=[]</i> | | | | | | | | | | | |
| Acquisition | # | Reference Star Bin | Target | Filter | MSA Configuration | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID |
| | 1 | Filter: CLEAR; Readout: NRSRAPIDD6; 8 sources in 2 quads; [Optimal TA Accuracy] | SAME | CLEAR | Auto Acq MSA Config | NRSRAPIDD6 | 3 | 1 | 4 | 687.153 | |
| Template | TA Method | HFF Readout Mode | Obtain Confirmation Images | Science Aperture | Primary Candidate List | Filler Candidate List | Spectral Overlap Map | Spectral Overlap Threshold | | | |
| | MSATA | false | After Target ACQ and New MSA Config | MSA Center | cosmos_im7.4_aw1.0_v1 _pt1 (3886 sources) | | jwst-nirspec-prism | 1.5 | | | |
| Reference Stars | Visit | ID | RA | Dec | Magnitude | Visit | ID | RA | Dec | Magnitude | |
| | 1 | 295299 | 150.068309 | 2.300955 | 24.35926055908203 | 1 | 346998 | 150.085874 | 2.325852 | 24.92395401000976 6 | |
| | 1 | 302936 | 150.076981 | 2.312474 | 25.37992668151855 | 1 | 349023 | 150.092914 | 2.319292 | 25.44512748718261 7 | |
| | 1 | 304449 | 150.107663 | 2.315999 | 24.72998237609863 | 1 | 349376 | 150.104669 | 2.318063 | 23.45639801025390 6 | |
| | 1 | 345244 | 150.102269 | 2.322235 | 25.34691619873047 | 1 | 349509 | 150.098939 | 2.319452 | 24.06367683410644 5 | |
| Confirmation | # | Confirmation Type | | Conf. Readout Pattern | Conf. Groups/Int | Conf. Integrations/Exp | | Conf. Total Integrations | Conf. Total Exposure Time | | |
| | 1 | c1 | | NRSIRS2RAPID | 5 | 1 | | 1 | 87.533 | | |

Proposal 5224 - Observation 4 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at $z > 10$

| Spectral Elements | # | Exposure Specification | MSA Configuration | Nod Pattern | Pointing | Aperture PA | Dispersion Offset (Shutters) | Cross-Dispersion Offset (Shutters) | Total Dithers | Total Integrations | Total Exposure Time |
|----------------------|--------------------------------------------------------------------------------------|------------------------|-------------------|------------------------------------------------------------------|------------------------------------------------------------------|-----------------------|------------------------------|------------------------------------|---------------|--------------------|---------------------|
| | 1 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 150.09097058333 333 Degrees 2.3006380555555 555 Degrees | 246.51163407694 37 | | | 3 | 6 | 5339.534 |
| 2 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 150.09097058333 333 Degrees 2.3006380555555 555 Degrees | 246.51163407694 37 | | | 3 | 6 | 5339.534 | |
| 3 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 150.09097058333 333 Degrees 2.3006380555555 555 Degrees | 246.51163407694 37 | | | 3 | 6 | 5339.534 | |
| Special Requirements | MSA Scheduled Aperture PA 246.5127 to 246.5127 Degrees (V3 107.938156 to 107.938156) | | | | | | | | | | |

Proposal 5224 - Observation 5 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at z>10

Tue Feb 11 16:01:15 GMT 2025

| Observation | Proposal 5224, Observation 5: mom-cosmos-pt2 Diagnostic Status: Warning Observing Template: NIRSspec MultiObject Spectroscopy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------|------------------------------------------|------------------------|--------------------------|---------------------------|----------------------------|------------------------|------------------------|------------------|-----------|--------------------|----------------------------|--------------------------|------------------------|--------------------------|---------------------------|------------------------------------------------------------------------------------|--------------------|---------------------|-------------------------------------|------------|--------------------------------------------------------------------------------------|----------|------------------------|---------------------|------------|------------|----------|------------------------|---------|-------|------------|----------|-------------------|---|--------|------------|----------|------------------------|---|-------|------------|----------|-------------------|---|--------|------------|----------|------------------------|---|-------|------------|----------|------------------------|---|--------|------------|----------|------------------------|
| | (mom-cosmos-pt2 (Obs 5)) Warning (Form): Config c1 (#1) has 17 primary slit traces affected by failed open shutters. (mom-cosmos-pt2 (Obs 5)) Warning (Form): Config c1 (#2) has 17 primary slit traces affected by failed open shutters. (mom-cosmos-pt2 (Obs 5)) Warning (Form): Config c1 (#3) has 17 primary slit traces affected by failed open shutters. (Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Targets | <table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(15)</td> <td>cosmos_im7.4_aw1.0_v1_pt2</td> <td>RA: 10 00 24.8739 (150.1036412d) Dec: +02 17 26.81 (2.29078d) Equinox: J2000</td> <td></td> <td></td> </tr> </tbody> </table> Comments: Description=[] | | | | | | | | | | | # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | (15) | cosmos_im7.4_aw1.0_v1_pt2 | RA: 10 00 24.8739 (150.1036412d) Dec: +02 17 26.81 (2.29078d) Equinox: J2000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | # | Name | Target Coordinates | Targ. Coord. Corrections | Miscellaneous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (15) | cosmos_im7.4_aw1.0_v1_pt2 | RA: 10 00 24.8739 (150.1036412d) Dec: +02 17 26.81 (2.29078d) Equinox: J2000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acquisition | <table border="1"> <thead> <tr> <th>#</th> <th>Reference Star Bin</th> <th>Target</th> <th>Filter</th> <th>MSA Configuration</th> <th>Readout Pattern</th> <th>Groups/Int</th> <th>Integrations/Exp</th> <th>Total Integrations</th> <th>Total Exposure Time</th> <th>ETC Wkbk.Calc ID</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Filter: F140X; Readout: NRSRAPIDD6; 8 sources in 4 quads; [Optimal TA Accuracy]</td> <td>SAME</td> <td>F140X</td> <td>Auto Acq MSA Config</td> <td>NRSRAPIDD6</td> <td>3</td> <td>1</td> <td>4</td> <td>687.153</td> <td></td> </tr> </tbody> </table> | | | | | | | | | | | # | Reference Star Bin | Target | Filter | MSA Configuration | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | 1 | Filter: F140X; Readout: NRSRAPIDD6; 8 sources in 4 quads; [Optimal TA Accuracy] | SAME | F140X | Auto Acq MSA Config | NRSRAPIDD6 | 3 | 1 | 4 | 687.153 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | # | Reference Star Bin | Target | Filter | MSA Configuration | Readout Pattern | Groups/Int | Integrations/Exp | Total Integrations | Total Exposure Time | ETC Wkbk.Calc ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Filter: F140X; Readout: NRSRAPIDD6; 8 sources in 4 quads; [Optimal TA Accuracy] | SAME | F140X | Auto Acq MSA Config | NRSRAPIDD6 | 3 | 1 | 4 | 687.153 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Template | <table border="1"> <thead> <tr> <th>TA Method</th> <th>HFF Readout Mode</th> <th>Obtain Confirmation Images</th> <th>Science Aperture</th> <th>Primary Candidate List</th> <th>Filler Candidate List</th> <th>Spectral Overlap Map</th> <th>Spectral Overlap Threshold</th> </tr> </thead> <tbody> <tr> <td>MSATA</td> <td>false</td> <td>After Target ACQ and New MSA Config</td> <td>MSA Center</td> <td>cosmos_im7.4_aw1.0_v1_pt2 (2975 sources)</td> <td></td> <td>jwst-nirspec-prism</td> <td>1.5</td> </tr> </tbody> </table> | | | | | | | | | | | TA Method | HFF Readout Mode | Obtain Confirmation Images | Science Aperture | Primary Candidate List | Filler Candidate List | Spectral Overlap Map | Spectral Overlap Threshold | MSATA | false | After Target ACQ and New MSA Config | MSA Center | cosmos_im7.4_aw1.0_v1_pt2 (2975 sources) | | jwst-nirspec-prism | 1.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TA Method | HFF Readout Mode | Obtain Confirmation Images | Science Aperture | Primary Candidate List | Filler Candidate List | Spectral Overlap Map | Spectral Overlap Threshold | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MSATA | false | After Target ACQ and New MSA Config | MSA Center | cosmos_im7.4_aw1.0_v1_pt2 (2975 sources) | | jwst-nirspec-prism | 1.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reference Stars | <table border="1"> <thead> <tr> <th>Visit</th> <th>ID</th> <th>RA</th> <th>Dec</th> <th>Magnitude</th> <th>Visit</th> <th>ID</th> <th>RA</th> <th>Dec</th> <th>Magnitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>51130</td> <td>150.132980</td> <td>2.413950</td> <td>24.38119697570800 8</td> <td>1</td> <td>312998</td> <td>150.108974</td> <td>2.444826</td> <td>24.17355918884277 3</td> </tr> <tr> <td>1</td> <td>65738</td> <td>150.115575</td> <td>2.440299</td> <td>23.81329345703125</td> <td>1</td> <td>317521</td> <td>150.095918</td> <td>2.426659</td> <td>24.93755149841308 6</td> </tr> <tr> <td>1</td> <td>66621</td> <td>150.114254</td> <td>2.436171</td> <td>22.81581687927246</td> <td>1</td> <td>321753</td> <td>150.089787</td> <td>2.407410</td> <td>24.84230041503906 2</td> </tr> <tr> <td>1</td> <td>72070</td> <td>150.134003</td> <td>2.416091</td> <td>23.84226989746093 8</td> <td>1</td> <td>325865</td> <td>150.112072</td> <td>2.397469</td> <td>23.68383598327636 7</td> </tr> </tbody> </table> | | | | | | | | | | | Visit | ID | RA | Dec | Magnitude | Visit | ID | RA | Dec | Magnitude | 1 | 51130 | 150.132980 | 2.413950 | 24.38119697570800 8 | 1 | 312998 | 150.108974 | 2.444826 | 24.17355918884277 3 | 1 | 65738 | 150.115575 | 2.440299 | 23.81329345703125 | 1 | 317521 | 150.095918 | 2.426659 | 24.93755149841308 6 | 1 | 66621 | 150.114254 | 2.436171 | 22.81581687927246 | 1 | 321753 | 150.089787 | 2.407410 | 24.84230041503906 2 | 1 | 72070 | 150.134003 | 2.416091 | 23.84226989746093 8 | 1 | 325865 | 150.112072 | 2.397469 | 23.68383598327636 7 |
| | Visit | ID | RA | Dec | Magnitude | Visit | ID | RA | Dec | Magnitude | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 51130 | 150.132980 | 2.413950 | 24.38119697570800 8 | 1 | 312998 | 150.108974 | 2.444826 | 24.17355918884277 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 65738 | 150.115575 | 2.440299 | 23.81329345703125 | 1 | 317521 | 150.095918 | 2.426659 | 24.93755149841308 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 66621 | 150.114254 | 2.436171 | 22.81581687927246 | 1 | 321753 | 150.089787 | 2.407410 | 24.84230041503906 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 72070 | 150.134003 | 2.416091 | 23.84226989746093 8 | 1 | 325865 | 150.112072 | 2.397469 | 23.68383598327636 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Confirmation | <table border="1"> <thead> <tr> <th>#</th> <th>Confirmation Type</th> <th>Conf. Readout Pattern</th> <th>Conf. Groups/Int</th> <th>Conf. Integrations/Exp</th> <th>Conf. Total Integrations</th> <th>Conf. Total Exposure Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>c1</td> <td>NRSIRS2RAPID</td> <td>5</td> <td>1</td> <td>1</td> <td>87.533</td> </tr> </tbody> </table> | | | | | | | | | | | # | Confirmation Type | Conf. Readout Pattern | Conf. Groups/Int | Conf. Integrations/Exp | Conf. Total Integrations | Conf. Total Exposure Time | 1 | c1 | NRSIRS2RAPID | 5 | 1 | 1 | 87.533 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | # | Confirmation Type | Conf. Readout Pattern | Conf. Groups/Int | Conf. Integrations/Exp | Conf. Total Integrations | Conf. Total Exposure Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | c1 | NRSIRS2RAPID | 5 | 1 | 1 | 87.533 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Proposal 5224 - Observation 5 - Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at $z > 10$

| | # | Exposure Specification | MSA Configuration | Nod Pattern | Pointing | Aperture PA | Dispersion Offset (Shutters) | Cross-Dispersion Offset (Shutters) | Total Dithers | Total Integrations | Total Exposure Time |
|-----------------------------|----------------------------------------------------------------------------------|------------------------|-------------------|-------------------|---------------------------------------------------------------|-----------------------|------------------------------|------------------------------------|---------------|--------------------|---------------------|
| Spectral Elements | 1 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 150.10887045833 33 Degrees 2.422105277777 78 Degrees | 246.56949154420 78 | | | 3 | 6 | 5339.534 |
| | 2 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 150.10887045833 33 Degrees 2.422105277777 78 Degrees | 246.56949154420 78 | | | 3 | 6 | 5339.534 |
| | 3 | 1 (PRISM/CLEAR) | c1 | 3 Shutter Slitlet | 150.10887045833 33 Degrees 2.422105277777 78 Degrees | 246.56949154420 78 | | | 3 | 6 | 5339.534 |
| Special Requirements | MSA Scheduled Aperture PA 246.5695 to 246.5695 Degrees (V3 107.9949 to 107.9949) | | | | | | | | | | |