



The option class listed below will begin trading on the MIAX Emerald Exchange at the start of trading on **Friday, April 12, 2019**. All option classes on MIAX Emerald have an allocation style of Pro-Rata and billing style of Maker-Taker.

Security Symbol	Security Name	Option Class	Penny Pilot	Exchange for Opening	Closing Time	PLMM	Cloud
TW	Tradeweb Markets Inc.	TW	No	NASDAQ	4:00	Susquehanna Securities	8

Please contact MIAX Options Listings with any questions.

Listings@MIAXOptions.com

(609) 897-7308