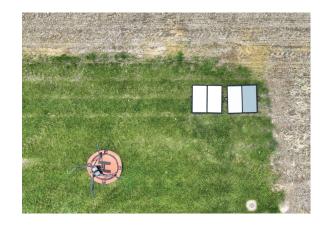


## GRYFN AIRBORNE REFLECTANCE PANELS

GRYFN offers a custom spectral reflectance panel deployment kit for easy in-field deployment of spectral reflectance panels. Reflectance panels are utilized in Hyperspectral data collection as a calibration method for converting radiance data captured by a hyperspectral sensor to analysis-ready reflectance data.

GRYFN's standard Spectral Reflectance Panel Kit comes as a set of two convenient carrying cases of 1.2m x 0.6m x 0.035m dimensions. These cases also make the target panels easy to transport and setup in the field, with no stakes\_\_\_ or extra weights required. Inside each case, weighing in just under 7kg, are two, side-by-side, 1.10m x 0.54m, rigid di-bond panels coated with an actinically stable and waterproof fluoropolymer paint. Each panel is painted with a different reflectance percentage paint, of 11%, 30%, 56%, and 82% reflectance, respectively.





\$5675 plus S&H

Easy to carry, deploy, and move
No need to stake or secure to ground
1.1m x .54m size suitable for drone flights
Calibration tables from 300-5000nm

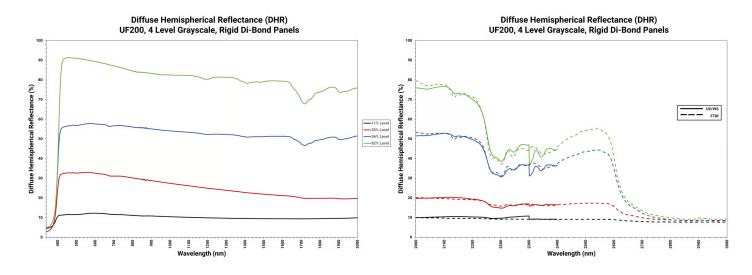


## TECHNICAL NOTES

Rigid Aluminum Di-Bond airborne sensor reference panels were painted using a custom formulated coating pigmented to achieve diffuse hemispherical reflectivity (DHR) levels of 11%, 30%, 56% and 82% (maximum white). The reflective coating applied by Group 8 Technology, Inc. (G8T) consisted of a pigmented Type UF200 fluorourethane polymer that tolerates environmental exposure for an extended period of time without significant changes in spectral reflectivity. The pre-cut Aluminum Di-Bond rigid panels were furnished by GRYFN and were originally white coated (primed) by the manufacturer.

The formulated UF200 coating, applied to the reflecting surface of these panels, was pigmented to present a matte reflecting surface with a band average DHR across the visible, Near-IR and SW IR domains (420nm to 2500nm).

Spectral diffuse hemispherical reflectivity (DHR) data were acquired from each of the painted Aluminum Di-Bond panels. These reflectance data were collected using a Perkin-Elmer Lambda 1050 Spectrophotometer with a 150mm diameter integrating sphere covering the spectral domain of 350nm to 2400nm relative to a Spectralon (trademark of Labsphere, Inc.). Extended spectral reflectivity data were gathered from 2000nm to 3000nm using a Nicolet iS50 FTIR spectrophotometer with a Pike integrating sphere. These extended wavelength FTIR data were acquired relative to a gold coated reflectance standard.



## WASHING

It is recommended that the painted surface of the UF200 calibration panel be washed when the reflecting surface appears dirty and it is likely that the reflectivity has changed because of surface contamination. Washing of the UF200 painted Di-Bond panels may be accomplished by rinsing the painted surface with clean tap water or deionized water and applying a mild detergent. The panel surface may then be sprayed with a diluted detergent or soap solution (liquid detergent) and the surface cleaned with a soft cloth or a sponge. Do not scrub or abrade the painted surface as the reflective coating may be damaged. The panel should then be rinsed with deionized or distilled water to prevent spotting due to calcium deposits that would occur if a hard water final rinse was used.