CORNER CUBE RETROREFLECTOR

Corner Cube Retro-Reflectors operates on the principle of total internal reflection (TIR). A beam entering the effective aperture is reflected by the three roof surfaces and emerges from the entrance / exit surface parallel to itself. This property is independent of orientation of the retro-reflector, within acceptance angle limitations.

For applications in which either the acceptance angle for TIR is exceeded, or the reflecting surfaces cannot be kept sufficiently clean for TIR, a metal or dielectric coating can be applied to the reflecting surfaces.

Antireflection coated entrance and exit faces are also available.

Standard Specifications:

Optical Material: BK7 or Fused Silica

Dimension Tolerance: \pm 0.2mm Clear Aperture: >80% Deviation: 180°

Flatness: lambda/4 at 632.8nm on big surface

lambda/4 at 632.8nm on other surface

Surface Quality: 60-40 scratch and dig Bevel: 0.2-0.5mm X 45°

Coating: Uncoated or silver with inconel and black

overpaint.

Standard Corner Cube Retroreflectors

D(mm)	H(mm)	Angle Tolerance	Material	Product Number
7.16	6.10	10 arcsec	BK7	UQT-CCRB0101
7.16	6.10	1 arc min.	Fused Silica	UQT-CCRF0102
12.70	10.16	3 arcsec	BK7	UQT-CCRB0103
12.70	10.16	1 arc min.	Fused Silica	UQT-CCRF0104
25.40	19.05	3 arcsec	BK7	UQT-CCRB0105
25.40	19.05	30 arcsec	Fused Silica	UQT-CCRF0106
38.10	29.21	3 arcsec	BK7	UQT-CCRB0107
38.10	29.21	30 arcsec	Fused Silica	UQT-CCRF0108
50.80	38.10	3 arcsec	BK7	UQT-CCRB0109
50.80	38.10	1 arc min.	Fused Silica	UQT-CCRF0110
63.50	48.26	3 arcsec	BK7	UQT-CCRB0111
63.50	48.26	1 arc min.	Fused Silica	UQT-CCRF0112
76.20	57.15	3 arcsec	BK7	UQT-CCRB0113
76.20	57.15	1 arc min.	Fused Silica	UQT-CCRF0114

Please Contact ultiQuest for other dimensions in prototype and production quantities.

NOTES!

Every edge of these prisms is chamfered (beveled) for chipping prevention. The dimensions of these prisms are values

not including chamfer.

Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.