

# REFLECTAmark® U 450 White Reflective V-344 90 PFW

## Reflectivity Data

(with comparison to REFLECTAmark® EG 400 White Reflective)

Retroreflection			
Minimum Coefficient of Retroreflective Values (RA) (cd/lx/m2)			
Observation Angle	Entrance Angle	Retroreflection	
		REFLECTAmark® U 450 White	REFLECTAmark® EG 400 White
0.2°	+ 5°	81.5	113.5
	+15°	74.2	100.5
	+20°	68.3	89.2
	+30°	53.0	57.1
	+40°	36.5	25.5
	+50°	22.2	8.7
	+60°	10.9	2.2
	+70°	3.9	0.5
0.33°	+80°	0.5	0.2
	+ 5°	69.8	90.7
	+15°	63.9	82.7
	+20°	59.1	73.9
	+30°	46.6	48.2
	+40°	32.6	23.9
	+50°	20.3	8.4
	+60°	10.3	2.2
0.5°	+70°	3.8	0.5
	+80°	0.5	0.1
	+ 5°	51.5	58.0
	+15°	47.5	55.8
	+20°	44.5	52.1
	+30°	36.2	38.1
	+40°	26.1	20.4
	+50°	16.5	7.7
+60°	9.3	2.1	
+70°	3.6	0.5	
+80°	0.5	0.2	

# REFLECTAmark® U 450 White Reflective

Retroreflection			
Minimum Coefficient of Retroreflective Values (RA) (cd/lx/m2)			
Observation Angle	Entrance Angle	Retroreflection	
		REFLECTAmark® U 450 White	REFLECTAmark® EG 400 White
1.0°	+ 5°	14.1	21.5
	+15°	13.9	20.9
	+20°	13.6	20.6
	+30°	12.2	18.2
	+40°	9.9	12.2
	+50°	7.5	5.7
	+60°	5.2	1.8
	+70°	2.7	0.5
	+80°	0.5	0.1
1.5°	+ 5°	9.4	15.3
	+15°	9.0	14.5
	+20°	8.7	14.1
	+30°	7.8	12.9
	+40°	6.2	9.4
	+50°	4.3	4.7
	+60°	2.7	1.6
	+70°	1.7	0.4
	+80°	0.4	0.1
2.0°	+ 5°	5.7	10.4
	+15°	5.4	9.7
	+20°	5.2	9.4
	+30°	5.0	8.7
	+40°	4.5	6.9
	+50°	3.5	3.7
	+60°	2.1	1.5
	+70°	1.1	0.4
	+80°	0.3	0.1

## Units of Retroreflectivity Measurement - RA

Performance values for retroreflective sheeting are an expression of the ability of that material to retroreflect light at a particular set of observation and entrance angles. The number given tells how much light is retroreflected at that set of angles for a given unit of light falling on a given area of the material. Technically, it is termed the "Coefficient of Retroreflection," designated by the symbol RA, a/k/a retroreflectivity.

"RA" essentially expresses the relationship:

$$\frac{\text{Light OUT (Retro)}}{\text{Light IN}} = \text{RA}$$

The technical meaning of the factors comprising retroreflectivity are candela per incident lux per square meter, often abbreviated to "cd/lx/m<sup>2</sup>." The important concept to understand, however, is that the RA is a ratio. It does not tell how bright the sheeting will be on a given object. Rather, it is simply its ability to return light to the source at that particular set of observation and entrance angles.

### Product Performance and Suitability

All of the descriptive information, the typical performance data, and recommendations for the use of FLEXcon products shall be used only as a guide and do not reflect the specification or specification range for any particular property of the product. Furnishing such information is merely an attempt to assist you after you have indicated your contemplated use and shall in no event constitute a warranty of any kind by FLEXcon. All purchasers of FLEXcon products shall be responsible for independently determining the suitability of the material for the purpose for which it is purchased. No distributor, salesman, or representative of FLEXcon is authorized to give any warranty, guaranty, or make any representation in addition or contrary to the above.

