

ANSI/ISEA 107-2004 Retroreflective Material Testing Report, Level 2

Material Description:	Test Lab(s):
Lot #:	Address:
Manufacturer:	Contact Person:
Color:	Date Tested:

PHOTOMETRIC PERFORMANCE REQUIREMENTS					
Take measurements at $\epsilon_1 = 0^\circ$ and $\epsilon_2 = 90^\circ$. Record maximum value on left side of test result column and the other value on right side of test result column.					
ANSI/ISEA 107 Requirement Section 8.1, Table 5			Test Result cd/(lx·m ²)	Pass/ Fail	
Observation Angle	Entrance Angle	Minimum cd/(lx·m ²)			
12' (0.2°)	5°	330 / 248			
	20°	290 / 218			
	30°	180 / 135			
	40°	65 / 47			
20' (0.33°)	5°	250 / 188			
	20°	200 / 150			
	30°	170 / 128			
	40°	60 / 45			
1.0°	5°	25 / 18.8			
	20°	15 / 11.3			
	30°	12 / 9			
	40°	10 / 7.5			
1.5°	5°	10 / 7.5			
	20°	7 / 5.25			
	30°	5 / 3.75			
	40°	4 / 3			

PHYSICAL PERFORMANCE REQUIREMENTS				
Test	Section	ANSI/ISEA 107 Requirement	Test Result	Pass/ Fail
Retroreflection, after abrasion	8.2 , 9.4.1	$R_A (0.2^\circ/5^\circ) > 100 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_1 $R_A (0.2^\circ/5^\circ) > 75 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_2	ϵ_1 : ϵ_2 :	
Retroreflection, after flexing	8.2, 9.4.2	$R_A (0.2^\circ/5^\circ) > 100 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_1 $R_A (0.2^\circ/5^\circ) > 75 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_2	ϵ_1 : ϵ_2 :	
Retroreflection, after folding at cold Temperatures	8.2, 9.4.3	$R_A (0.2^\circ/5^\circ) > 100 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_1 $R_A (0.2^\circ/5^\circ) > 75 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_2	ϵ_1 : ϵ_2 :	
Retroreflection, after exposure to temperature variation	8.2, 9.4.4	$R_A (0.2^\circ/5^\circ) > 100 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_1 $R_A (0.2^\circ/5^\circ) > 75 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_2	ϵ_1 : ϵ_2 :	
Retroreflection, after washing (when applicable)	8.2, 9.4.5, 9.4.6	$R_A (0.2^\circ/5^\circ) > 100 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_1 $R_A (0.2^\circ/5^\circ) > 75 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_2	ϵ_1 : ϵ_2 :	
Retroreflection, after dry cleaning (when applicable)	8.2, 9.4.5, 9.4.7	$R_A (0.2^\circ/5^\circ) > 100 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_1 $R_A (0.2^\circ/5^\circ) > 75 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_2	ϵ_1 : ϵ_2 :	
Retroreflection in rainfall	8.2 , 9.4.8	$R_A (0.2^\circ/5^\circ) > 100 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_1 $R_A (0.2^\circ/5^\circ) > 75 \text{ cd}/(\text{lx}\cdot\text{m}^2)$ at ϵ_2	ϵ_1 : ϵ_2 :	