

## Evaluation Table

<b>PEP ID:</b>	XXXXX
<b>Manufacturer:</b>	<b>Name of Manufacturer</b>
<b>Product Name:</b>	<b>Name of Product</b>

706 Raised Pavement Markers

706 Retroreflective Raised Pavement Markers (RRPM) - Permanent (Abrasion Resistant)

ADOT Standard Specification: 706

ADOT Stored Specification: 706REFPMR

ADOT Drawing: M-19 series

Responsible Section: Traffic Group

Material Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
Reflector Pavement Markers, Type	706-2.02 superceded by M-19 (1 of 9) as per 706REFPMR	Type C: Clear or White, Red		
		Type D : Yellow, Two-Way		
		Type E: Yellow, Red		
		Type G: White, One Way		
		Type H: Yellow, One-Way		
		Type BB: Blue, Two Way		
Composition, Reflector Surface, Abrasion Resistant Surface *	706-2.02 M-19 (1 of 9) *	Permanent reflective pavement markers shall have thin untempered glass or other abrasion resistant material bonded to the prismatic reflector face to provide an extremely hard and durable, abrasive resistant reflector surface. *		
Dimensions, Raised Pavement Markers, max	ASTM D4280	Height 0.8 inches Width 5.1 inches		
Angle between the face and the base, max	ASTM D4280	45°		
Compressive Strength, min	ASTM D4280	6,000 lb without breakage or significant deformation (0.13 in)		
Flexural Strength, min	ASTM D4280	2,000 lbf (8,914 N)		

Last Modified 05/09/2023

Material Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
Specific Intensity, mcd/lx, cd/fc 0° incidence	706-2.02 ASTM D4280 ASTM E809	White: 279, 3.0		
		Yellow: 167, 1.8		
		Red: 70, 0.75		
		Green: 93, 1.0		
		Blue: 26, 0.28		
Specific Intensity, mcd/lx, cd/fc 20° incidence	706-2.02 ASTM D4280 ASTM E809	White: 112, 1.2		
		Yellow: 67, 0.72		
		Red: 28, 0.30		
		Green: 37, 0.4		
		Blue: 10, 0.11		
Abrasion Resistance mcd/lx, cd/fc 0° incidence	ASTM D4280	White: 137, 1.5		
		Yellow: 83.5, 0.9		
		Red: 35, 0.375		
		Green: 46.5, 0.5		
		Blue: 13, 0.14		
Abrasion Resistance mcd/lx, cd/fc 20° incidence	ASTM D4280	White: 56, 0.6		
		Yellow: 33.5, 0.36		
		Red: 14, 0.15		
		Green: 18.5, 0.2		
		Blue: 5, 0.055		
Color - the color of the retroreflected light shall fall within the color gamuts.	ASTM D4280	White pass		
		Yellow pass		
		Red pass		
		Blue pass		
		Green pass		
Lens Impact Strength	ASTM D4280	No more than two radial cracks longer than 0.25 in (6.4mm). No radial cracks extending to the edge of the abrasion resistant area. No delamination		
Temperature Cycling	ASTM D4280	No cracking or delamination		

\*Abrasion resistant coating on red retroreflective side is optional: M-19 (1 of 9)

## ASTM D4280 Color Gamuts

### 6.2.4.1 *White:*

Point No.	<i>x</i>	<i>y</i>
1	0.310	0.348
2	0.453	0.440
3	0.500	0.440
4	0.500	0.380
5	0.440	0.380
6	0.310	0.283

### 6.2.4.2 *Yellow:*

Point No.	<i>x</i>	<i>y</i>
1	0.545	0.424
2	0.559	0.439
3	0.609	0.390
4	0.597	0.390

### 6.2.4.3 *Red:*

Point No.	<i>x</i>	<i>y</i>
1	0.650	0.330
2	0.668	0.330
3	0.734	0.265
4	0.721	0.259

### 6.2.4.4 *Blue:*

Point No.	<i>x</i>	<i>y</i>
1	0.039	0.320
2	0.160	0.320
3	0.160	0.240
4	0.183	0.218
5	0.088	0.142

### 6.2.4.5 *Green:*

Point No.	<i>x</i>	<i>y</i>
1	0.009	0.733
2	0.288	0.520
3	0.209	0.395
4	0.012	0.494