

REPORT

FROM TESTING

№ 1 21 0817 AT/ 28.09.2018

1. Reflective Pavement Marker – Road stud RST SW2, two way, white color, for application with bolt screw – type A

Producer: MUVHAR INDUSTRIAL LTD

2. Test requested by:

Muvhar Industrey LTD and Hadesk company, 18, Dereh Hagana, Tel-Aviv, Israel, zip code 67752, application № 2-0258/06.06.2018

3. Test method:

ASTM D 4280 – 08 Standard Specifications for Extended Life Type, Nonplowable, Raised Retroreflective Pavement Markers

EN 1463-1:2009 Road marking materials - Retroreflecting road studs - Part 1: Initial performance requirements

4. Date of delivery of samples to the laboratory: 28.06.2018

5. Quantity of test samples: 33 numbers

6. Date of test: 03.07.2018 ÷ 28.09.2018

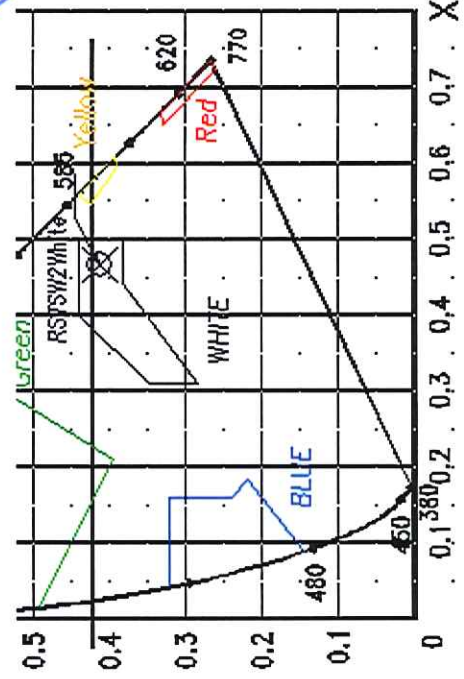
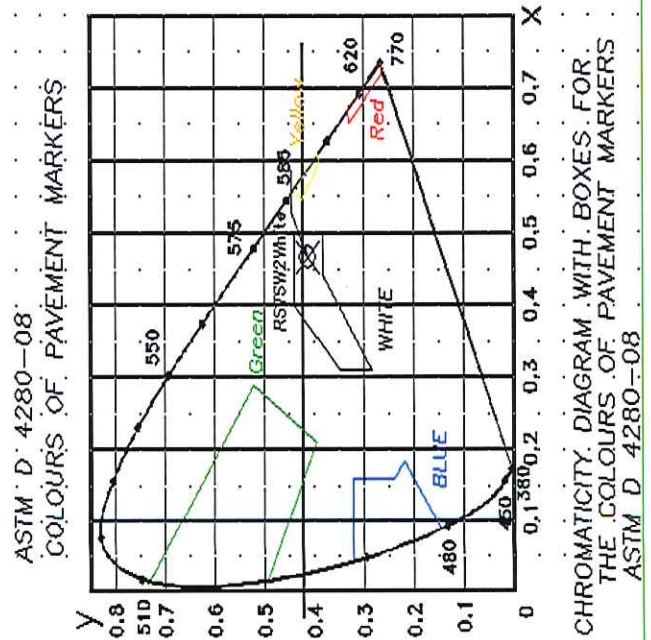
For Laboratory manager:

(eng. K. Boycheva)



7. Test results:

№	Name of testing / characteristic	Unit of measure	Standardized methods	Diary sample №	Test results	Test conditions	Test method deviation
1	2	3	4	5	6	7	8
1. Color Retro reflectivity – ASTM D 4280-08							
1.1	Coefficient of Luminous Intensity R_1 – light sourс A - the angle $\beta_2 = 0^\circ$	[mcd/lx]	ASTM D 4280-08 clause 9.1	0704-0/ 1=10	291 mcd /lx \pm 3 mcd /lx	In accordance with the standard	no
1.2	Coefficient of Luminous Intensity R_1 – light sourс A - the angle $\beta_2 = +20^\circ$	[mcd/lx]			204 mcd /lx \pm 4 mcd /lx		
1.3	Coefficient of Luminous Intensity R_1 – light sourс A - the angle $\beta_2 = -20^\circ$	[mcd/lx]			215 mcd /lx \pm 4 mcd /lx		
1.4	Coordinates of color x, y	-	ASTM D 4280-08 clause 9.3		x = 0.4706 \pm 0.0009 y = 0.4118 \pm 0.0014		

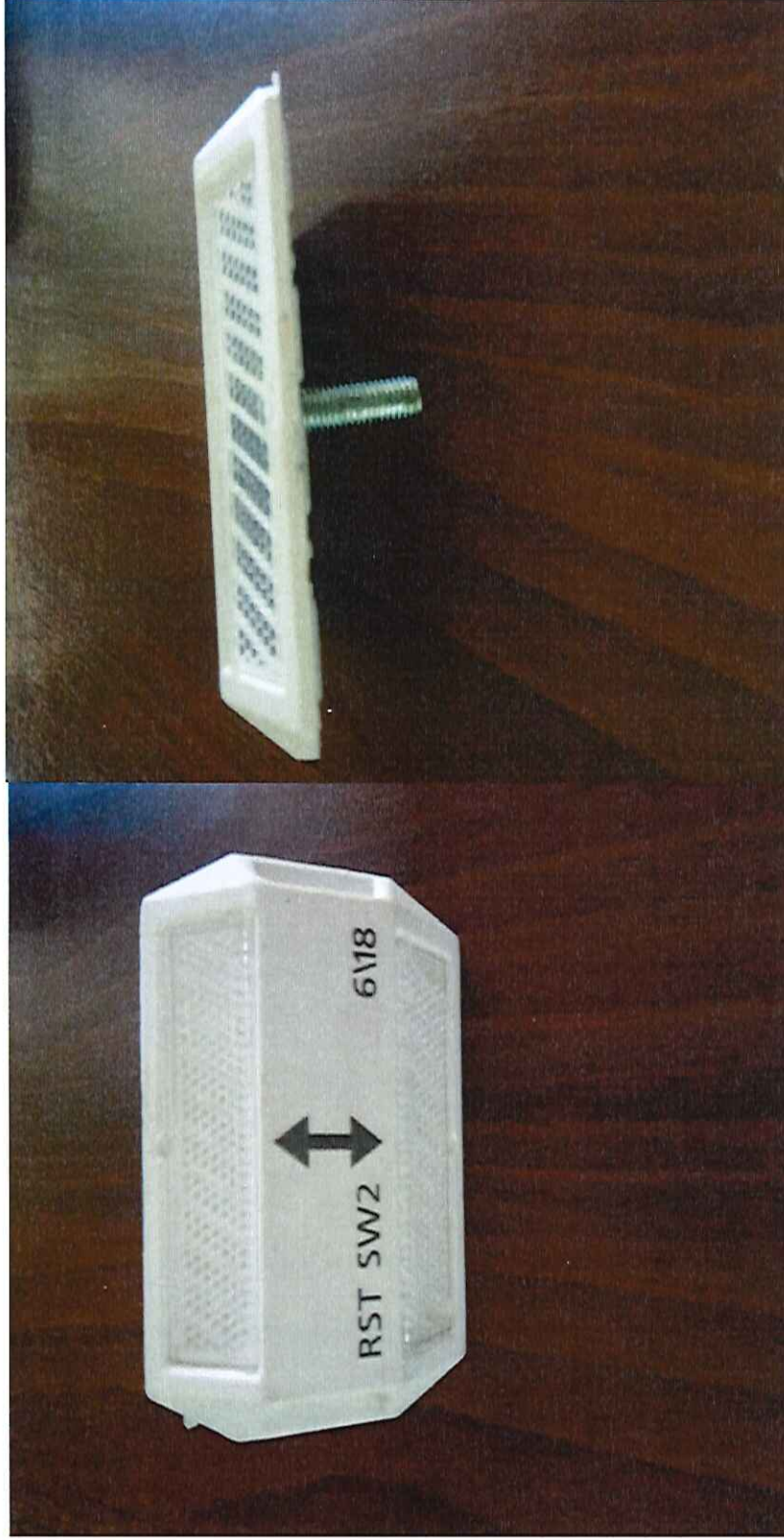




№	Name of testing / characteristic	Unit of measure	Standardized methods	Diary sample №	Test results										Test conditions	Test method deviation
1	2	3	4	5	6										7	8
2.	Longitudinal Flexural Strength test was performed assuming that the markers are placed in the roadway direction	N	ASTM D 4280-08 clause 9.2.1	0704-0	1	2	3	average			8190	In accordance with the standard	no			
					10340	8880	9137									
3.	Compressive Strength	N	ASTM D 4280-08 clause 9.2.2	0704-0	1	2	3	average			109900	In accordance with the standard	no			
					138100	132000	126667									
4.	Resistance to Lens Cracking															
4.1	Lens Impact Strength	have cracks / no cracks	ASTM D 4280-08 clause 9.4	0704-0	1	2	3	4	5	6	7	8	9	10	In accordance with the standard	no
					no	no	no	no	no	no	no	no	no	no		
4.2	Resistance to Temperature Cycling				1	2	3	4	5	6	7	8	9	10	In accordance with the standard	no
					no	no	no	no	no	no	no	no	no	no		
5.	Dimensions															
5.1	Height				1	2	3	4	5	6	7	8	9	10	In accordance with the standard	no
					20	20	20	21	20	20	20	21	20	20		
5.2	Length	mm	EN 1463-1	0704-0	1	2	3	4	5	6	7	8	9	10	In accordance with the standard	no
					114	114	114	114	115	114	114	113	114	114		
5.3	Width				1	2	3	4	5	6	7	8	9	10	In accordance with the standard	no
					84	84	84	83	84	84	84	84	84	85		
5.4	A length of screw				1	2	3	4	5	6	7	8	9	10	In accordance with the standard	no
					32	33	32	34	33	33	34	33	33	34		

Note I: The test results apply to the samples only.

Note II: The test certificate shut be entirely copied only and with agreement by the test laboratory



Tested by:.....
(A. Laskov)

For Laboratory manager:.....
(eng. K. Boycheva)

