

REPORT

FROM TESTING

№ 1 21 0167 AT / 04.10.2018

1. Reflective Pavement Marker – Road stud RST SY1 — one way, yellow color, for application with bolt screw – type B
Producer: MUVHAR INDUSTREY LTD

2. Test requested by:

Muvhar Industrey LTD, 18, Dereh Hagana Tel-Aviv Israel, zip code 67752, application № 2-0741/20.12.2017

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: 08.02.2018

5. Quantity of test samples: 33 numbers

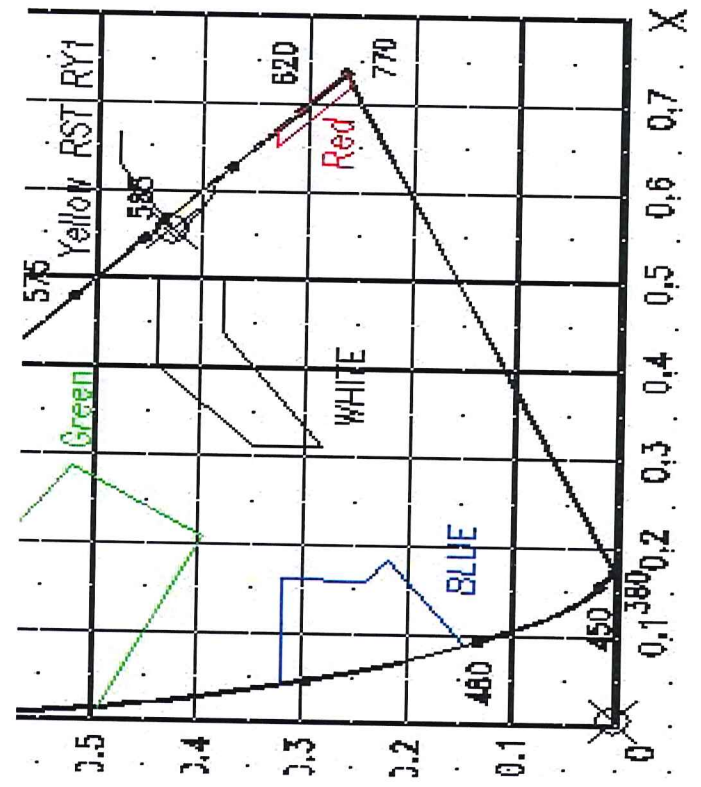
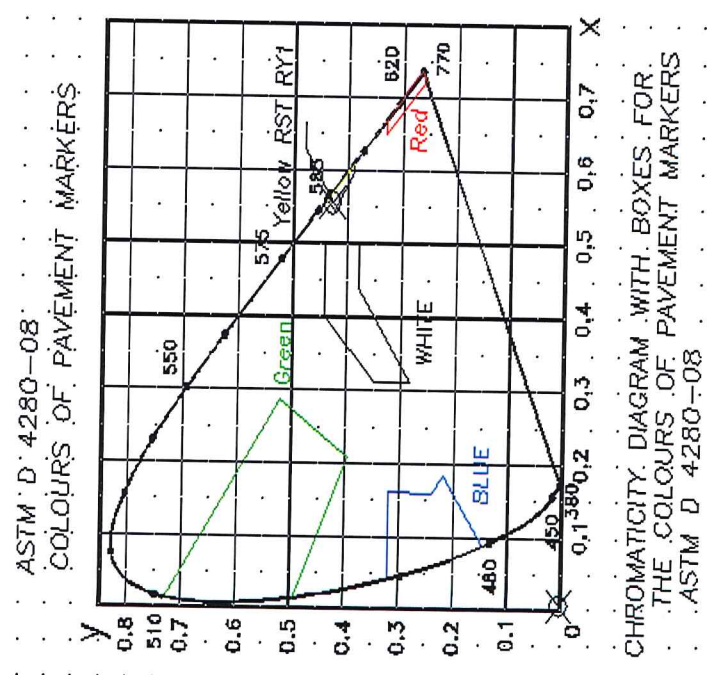
6. Date of test: 19.02.2018 ÷ 19.03.2018, 04.10.2018

Laboratory manager:
(eng. H. Angelova)



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 sours A - the angle $\beta_2 = 0^\circ$	[mcd/lx]	ASTM D 4280-08 clause 9.1	0145-0/ 1÷10	171 mcd /lx ± 3 mcd /lx	In accordance with the standard	no
1.2	Coefficient of Luminous Intensity R_1 – light sours A - the angle $\beta_2 = +20^\circ$	[mcd/lx]			70 mcd /lx ± 3 mcd /lx		
1.3	Coefficient of Luminous Intensity R_1 – light sours A - the angle $\beta_2 = -20^\circ$	[mcd/lx]			71 mcd /lx ± 3 mcd /lx		
1.4	Coordinates of color x, y	-	x = 0.5566 \pm 0.0009 y = 0.4292 \pm 0.0026				

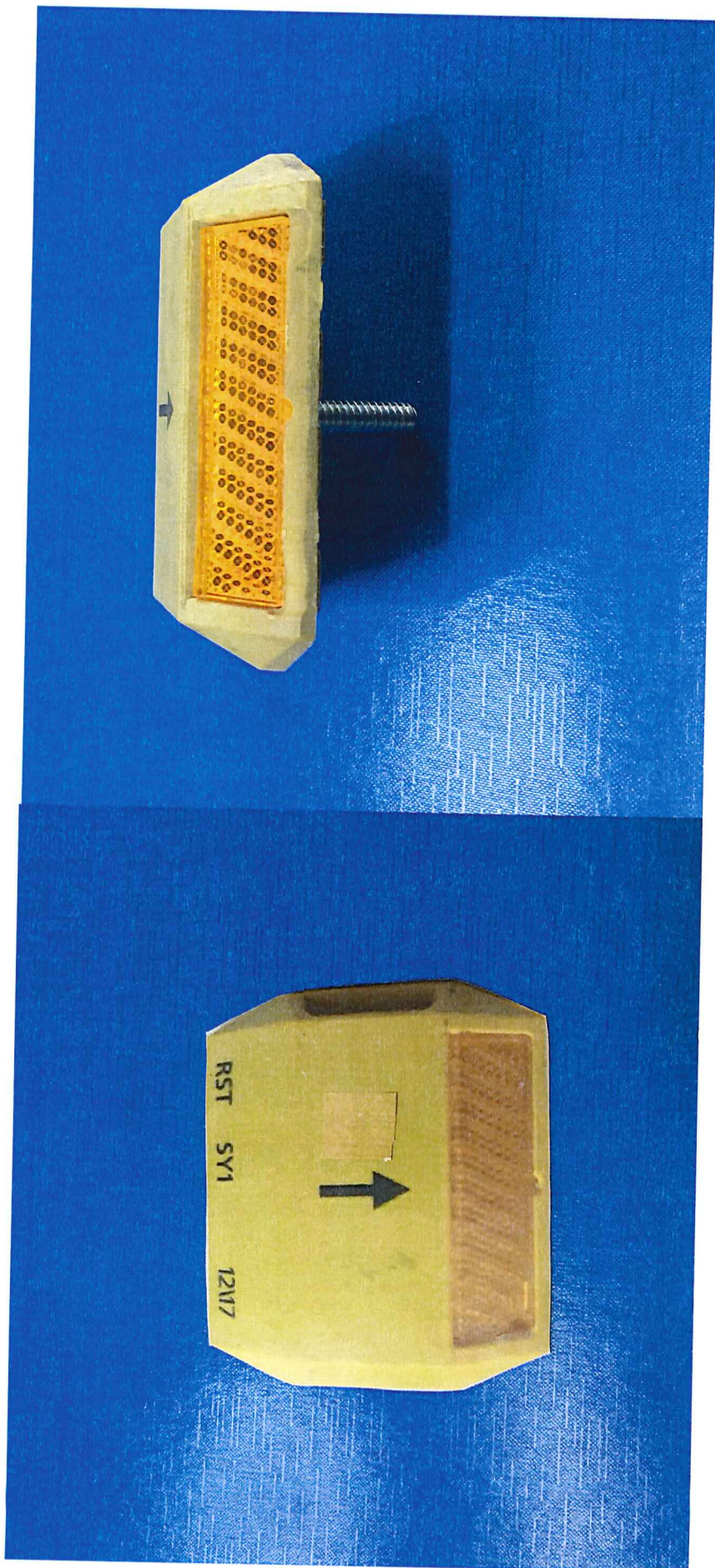


№	Name of testing / characteristic	Unit of measure	Standardized methods	Diary sample №	Test results										Test conditions	Test method deviation
1	2	3	4	5	6										7	8
2.	Longitudinal Flexural Strength test was performed assuming that the markers are placed in the roadway direction	N	ASTM D 4280-08 clause 9.2.1	0145-0	1	2	3	average			8790	10137	In accordance with the standard	no		
					10960	10660	2	3	average							
3.	Compressive Strength	N	ASTM D 4280-08 clause 9.2.2	0145-0	1	2	3	average			51200	55767	In accordance with the standard	no		
4.	Resistance to Lens Cracking															
4.1	Lens Impact Strength	have cracks / no cracks	ASTM D 4280-08 clause 9.4	0145-0	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
					1	2	3	4	5	6	7	8	9	10		
5.	Dimensions															
5.1	Height				1	2	3	4	5	6	7	8	9	10	In accordance with the standard	
					20	20	20	21	20	21	20	20	20	20		
5.2	Length				1	2	3	4	5	6	7	8	9	10	In accordance with the standard	
					114	114	114	115	114	115	115	113	114	114		
5.3	Width				1	2	3	4	5	6	7	8	9	10	In accordance with the standard	
					84	84	84	83	84	84	85	84	85	84		
5.4	A length of screw				1	2	3	4	5	6	7	8	9	10	In accordance with the standard	
					32	33	32	34	33	33	34	33	32	32		



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)

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(eng. H. Angelova)

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Laboratory manager.....