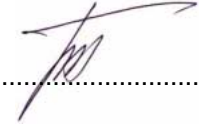
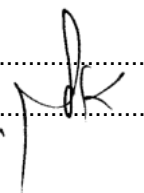


**TEST REPORT****EN 60529****Degrees of protection provided by enclosure (IP Code)**

Report Reference No.....: 8512309078	
Compiled by (+ signature): MICHAEL TERMAN	
Approved by (+ signature): ELI VAKNIN	
Date of issue.....: 30/05/2005	
Contents: 12 pages	
Testing laboratory.....: The Standards Institution of Israel	
Address.....: 42 Chaim Levanon St., Tel Aviv 69977, Israel	
Testing location.....: As above	
Client	
Name: Motorola Communications Israel Ltd.	
Address.....: 3 Kremenetski St., Tel Aviv 67899, Israel	
Test specification	
Standard: EN 60529: 1991 + A1: 2000 (compliance with IP65 only)	
Test procedure: N.A.	
Procedure deviation.....: N.A.	
Non-standard test method: N.A.	
Test item	
Description.....: Piccolo RTU	
Trademark: Motorola	
Model and/or type reference.....: F2611A, F2611A with option V228, FLN2169A	
Manufacturer.....: Motorola Communications Israel Ltd.	

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General remarks:

Only the following tests in accordance with IP65 were performed on the product on May 24-25, 2005:

- ◆ Degrees of protection against access to hazardous parts and against foreign solid objects indicated by the first characteristic numeral (clause 5);
- ◆ Degrees of protection against ingress of water indicated by the second characteristic numeral (clause 6)

Conclusion:

Two samples of the Piccolo RTU (Models F2611A and F2611A with option V228) were tested and considered in compliance with the requirements of EN 60529 standard for IP65:

1. the products complied with the requirements for IP6X (protection against access to hazardous parts and against solid foreign objects indicated by the first characteristic numeral);
2. the products complied with the requirements for IPX5 (protection against ingress of water indicated by the second characteristic numeral).

Model FLN2169A is mechanically identical to Model F2611A (same enclosure), therefore, tests performed on Model F2611A were considered representative of Model FLN2169A.

Test results are detailed on pages 3 and 4 of this report.

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IP6X Test Results

1. Protection of persons - Protection against access to hazardous parts (access with a wire).

First characteristic numeral	Degree of protection		For test conditions, see
	Brief description	Definition	
6	Protected against access to hazardous parts with a wire	The access probe of 1,0 mm dia. shall not penetrate.	12.2

TABLE 1			Verdict	Pass
Equipment under Test	Duration	Instrument	Penetration of probe	
Piccolo RTU Samples 1 and 2	--	--	--	
There is no access to hazardous mechanical or hazardous live parts.				

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2. Protection of equipment - Protection against solid foreign objects (dust-protected).

First characteristic numeral	Degree of protection		For test conditions, see
	Brief description	Definition	
6	Dust-tight (Category 1 enclosure)	No ingress of dust	13.4 13.6

	TABLE 2			Verdict: Pass
Equipment under Test	Duration	Instrument	Penetration of dust is observable	

Piccolo RTU Sample 1	8 hours	Dust chamber	No
Observation: No dust was observed on the internal parts of the unit.			

Piccolo RTU Sample 2	8 hours	Dust chamber	No
Observation: No dust was observed on the internal parts of the unit.			

Test instrument: SII # 1067

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IPX5 Test Results

Second characteristic numeral	Degree of protection		For test conditions, see
	Brief description	Definition	
5	Protected against water jets	Water projected in jets against the enclosure from any direction shall have no harmful effects	14.2.5

TABLE: IPX5 Test			Verdict:	Pass
Equipment under Test	Duration	Instrument	Penetration of water is observable	

Piccolo RTU Sample 1	3 min.	Test nozzle of Fig. 6 with pressure gauge (internal diameter of the nozzle: 6.3 mm; delivery rate: 12,5 l/min. +/- 5%; distance from nozzle to enclosure: 3 m)	No
<u>Observation:</u> No water penetrated inside the unit.			

Piccolo RTU Sample 2	3 min.	Test nozzle of Fig. 6 with pressure gauge (internal diameter of the nozzle: 6.3 mm; delivery rate: 12,5 l/min. +/- 5%; distance from nozzle to enclosure: 3 m)	No
<u>Observation:</u> No water penetrated inside the unit.			

Test instrument: SII # 561212, 4141

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Test instrument

SII Ref. No.	Instrument Type	Manufacturer	Model	Expire Calibration Date	SII Location
1067	Dust chamber	PTL	P1414	06.05	Electr. Lab
561212	Pressure gauge	--	--	02.06	Electr. Lab
4141	Scales	Mettler	PM30000-K	06/05	Calibration Lab

Note: Adjustment of test nozzle and pressure gauge was performed before test according to sub-clause 14.2.5 of EN 60529 standard for delivery rate of 12,5 l/min. +/- 5%.

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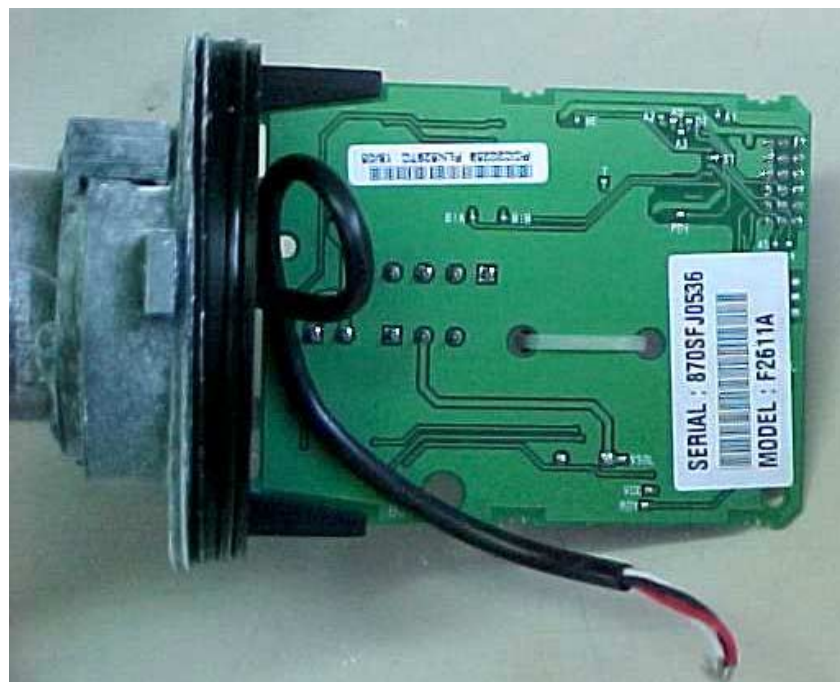
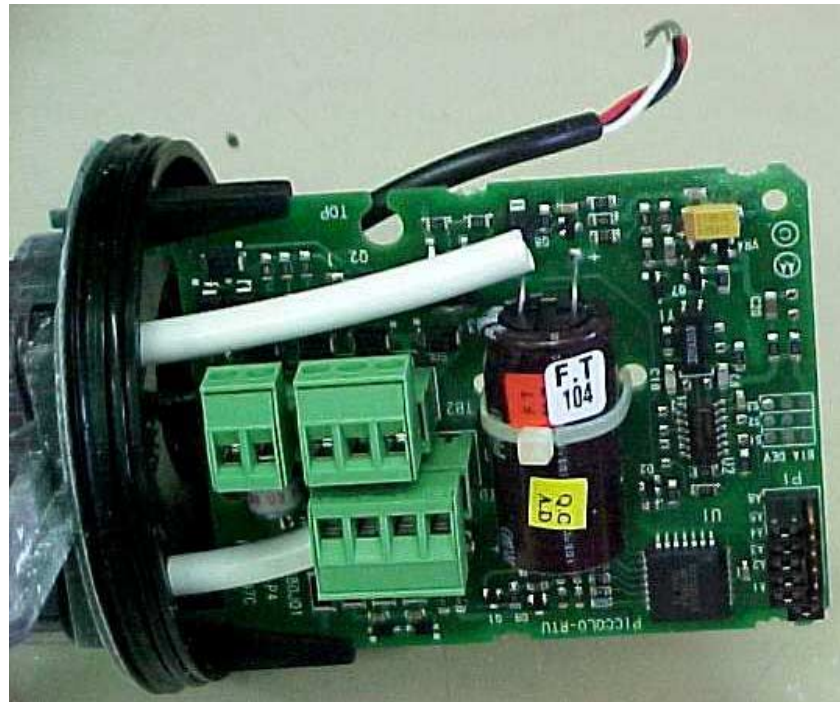
Photographs

Fig. 1
Dust test set-up
(subject unit in the dust chamber with a pipe for connection to vacuum pump)



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Fig. 2
Internal view of Sample 1 after dust test
(no traces of dust observed)



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Fig. 3
Internal view of Sample 2 after dust test
(no traces of dust observed)



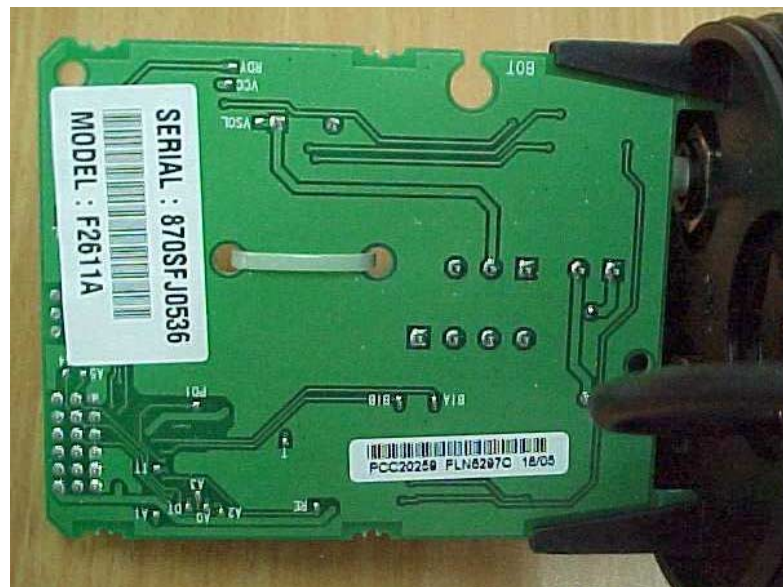
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Fig. 4
Water test set-up



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Fig. 5
Internal view of Sample 1 after water test
(no traces of water observed)



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Fig. 6
Internal view of Sample 2 after water test
(no traces of water observed)

