

 MOTOROLA	 <p>Certificate Number: 1449-01</p>
---	--

FCC ID: AZ489FT5832
DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 3 of 3

GEMS EME Test Laboratory 8000 West Sunrise Blvd Fort Lauderdale, FL. 33322	Date of Report: March 15, 2005 Report Revision: Rev. A Report ID: FCC rpt_i275_Rev A_050315 SR1995
---	--

<p>Responsible Engineer: Kim Uong (EME lead Eng.) Date/s Tested: 3/02/05-3/4/05 Manufacturer/Location: Motorola - Plantation Sector/Group/Div.: iDEN Subscriber Date submitted for test: 2/07/05 DUT Description: Dual Mode iDEN (1:6, 2:6, 81:120, 1:12 TDMA; 64QAM, 16 QAM & QPSK Modulation; 0.6W Pulse Avg. MOTOtalk (114:120 8FSK; 0.85 W nominal) 114:120</p> <p>Test TX mode(s): 114:120 Max. Power output: 0.891W Nominal Power: 0.85W Tx Frequency Bands: 902-928MHz Signaling type: iDEN; MOTOtalk – (FHSS 8FSK) Model(s) Tested: H79XAN6RR4AN Model(s) Certified: H79XAN6RR4AN Serial Number(s): 364YFABY2J Classification: General Population/Uncontrolled Rule Part(s): 15</p> <p>Approved Accessories: Antenna(s): 8585424E01 (806-941MHz retractable Top helical ½ wave antenna -0.8dBd @ 915MHz) Battery(ies): SNN5705C (8-mm 950mAh); SNN5705B (Hi performance 750mAh Li Ion) Body worn accessory(ies): NNTN5821A (Holster) Audio accessory(ies): NSN6066A (Light duty RSM), NNTN5004A (PTT headset over ear), NNTN5005A (PTT headset over head), SYN8390B (Privacy earpiece), SYN8146C (Lightweight headset w/ boom mic), NTN8496A (Lightweight headset w/ mic), NNTN4033A (Privacy Earpiece/mic w/ PTT), NNTN5006A (Silver Earbud), SYN7875C (Hearing Aide Neckloop), NTN8513B (Lightweight headband), NNTN5330A (Ear bud accessory), NNTN4620A (Silver ear bud), NNTN5211A (Falcon Surveillance kit), NNTN5751A (Stereo phone audio mix headset PTT)</p> <p style="text-align: center;">Max. Calc. 1-g/10-g Avg. SAR: 1.08/0.79 mW/g (Body) Max. Calc. 1-g/10-g Avg. SAR: 0.83/0.59 mW/g (Face)</p>	
---	--

Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 2.0 of this report. This report shall not be reproduced without written approval from an officially designated representative of the Motorola EME Laboratory.

This reporting format is consistent with the test report guidelines of the TIA TSB-150 December 2004
 The results and statements contained in this report pertain only to the device(s) evaluated.

<p><u>Signature on file</u> Ken Enger GEMS EME Lab Senior Resource Manager, Laboratory Director,</p> <p style="text-align: center;"><u>3/15/05</u> Approval Date:</p>	<p>Certification Date: <u>3/15/05</u> Certification No.: <u>L1050337</u></p>
--	---

Appendix E
DUT Scans (Shortened scans & Highest SAR configurations)

Shortened Scan Results

Motorola GEMS EME Laboratory

FCC ID: AZ489FT5832; Test Date: 3/4/05

Run #: 050304-11	Test operator: E. Church
Model #: H79XAN6RR4AN	SN: 364YFABY2J
TX Freq: 902.525 MHz	Start power: 0.850 W
Tissue Temp: 21.0 (C)	

Antenna:	IN
Battery:	SNN5705C
Carry acc.:	NNTN5821A
Audio/Data acc.:	SYN8146C

Comments: Short Scan at the body w/ body worn accessory against phantom
Shortened scan reflect highest S.A.R. producing configuration; Run time 14 minutes.

Representative “normal” scan run time was 23 minutes

“Shortened” scan max calculated S.A.R. using S.A.R. drift: 1-g Avg. = 1.08mW/g; 10-g Avg. = 0.79mW/g

“Normal” scan max calculated S.A.R. using S.A.R. drift: 1-g Avg. = 1.03mW/g; 10-g Avg. = 0.75mW/g
(see part 1 of 2 section 9.0 run # EC-Ab-050304-10)

Probe: ET3DV6 - SN1393, Calibrated: 4/28/2004, ConvF(6.35, 6.35, 6.35)

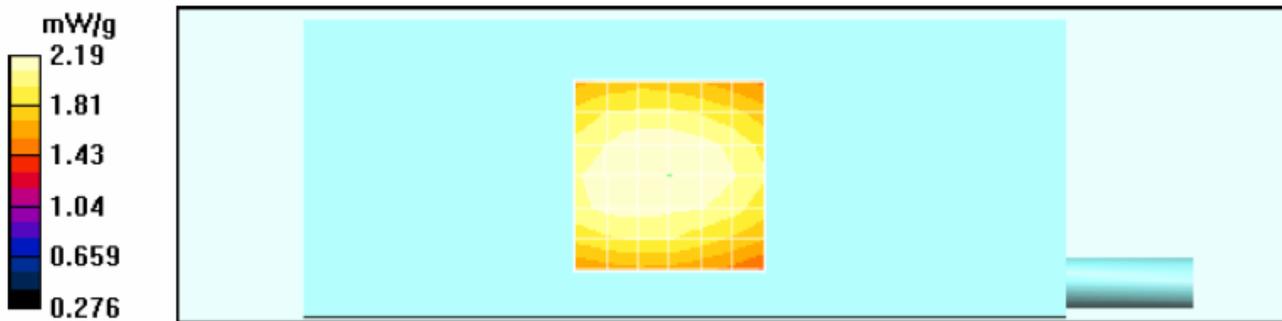
Duty Cycle: 1:1.05, Medium: 915 MHz FCC Body, Medium parameters used: $\sigma = 1.05$; mho/m, $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$

Electronics: DAE3 Sn374, Calibrated: 3/23/2004

Body - Ant In/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46 V/m; Power Drift = 0.2 dB; Peak SAR (extrapolated) = 2.57 W/kg

SAR(1 g) = 2.07 mW/g; SAR(10 g) = 1.51 mW/g



Motorola GEMS EME Laboratory

FCC ID: AZ489FT5832; Test Date: 3/4/05

Run #: 050304-20 Test operator: E. Church
Model #: H79XAN6RR4AN SN: 364YFAB2J
TX Freq: 902.525 MHz Start power: 0.854 W
Tissue Temp: 20.7 (C)

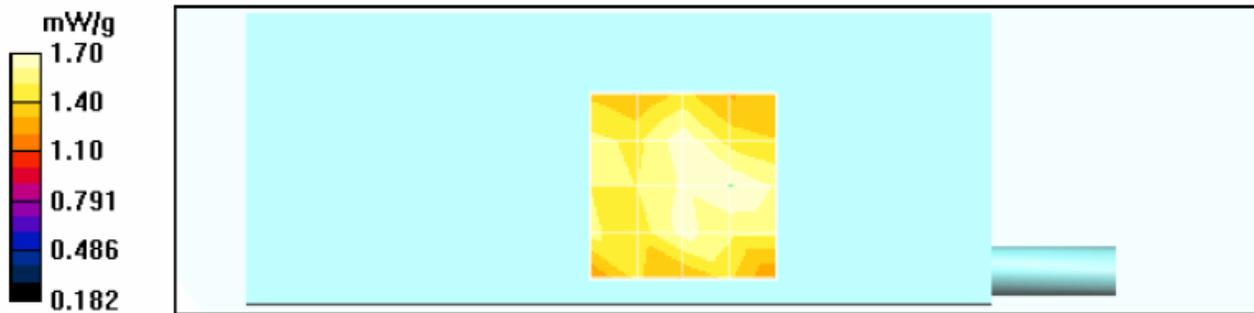
Antenna: IN
Battery: SNN5705B
Carry acc.: None
Audio/Data acc.: None

**Comments: Short Scan at the face w/ DUT front separated 2.5cm from the phantom
Shortened scan reflect highest S.A.R. producing configuration; Run time 7 minutes.
Representative "normal" scan run time was 23 minutes**

**"Shortened" scan max calculated S.A.R. using S.A.R. drift: 1-g Avg. = 0.83mW/g; 10-g Avg. = 0.59mW/g
"Normal" scan max calculated S.A.R. using S.A.R. drift: 1-g Avg. = 0.76mW/g; 10-g Avg. = 0.54mW/g
(see part 1 of 2 section 9.0 run # EC-Face-050304-19)**

Probe: ET3DV6 - SN1393, Calibrated: 4/28/2004, ConvF(6.73, 6.73, 6.73)
Duty Cycle: 1:1.05, Medium: 915 IEEE Head, Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$
Electronics: DAE3 Sn374, Calibrated: 3/23/2004

**Face/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 41.2 V/m; Power Drift = -0.1 dB; Peak SAR (extrapolated) = 2.17 W/kg
SAR(1 g) = 1.56 mW/g; SAR(10 g) = 1.1 mW/g**



Highest SAR Configurations Results

Motorola GEMS EME Laboratory

FCC ID: AZ489FT5832; Test Date: 3/04/05

Run #: 050304-10 Test operator: E. Church

Tissue Temp: 21.0 (C)

Model #: H79XAN6RR4AN SN: 364YFABY2J

TX Freq: 902.525 MHz Start power: 0.864 W

Antenna: IN

Battery: SNN5705C

Carry acc.: NNTN5821A

Audio/Data acc.: SYN8146C

Probe: ET3DV6 - SN1393, Calibrated: 4/28/2004, ConvF(6.35, 6.35, 6.35)

Duty Cycle: 1:1.05, Medium: 915 MHz FCC Body, Medium parameters used: $\sigma = 1.05$; mho/m, $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$

Electronics: DAE3 Sn374, Calibrated: 3/23/2004

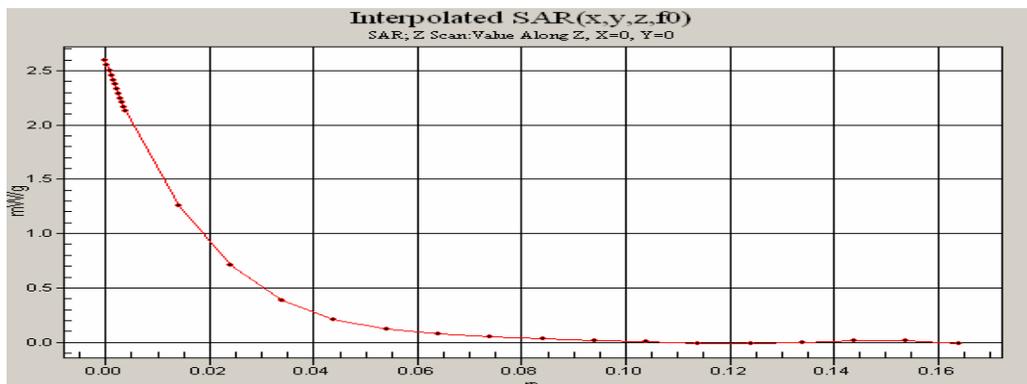
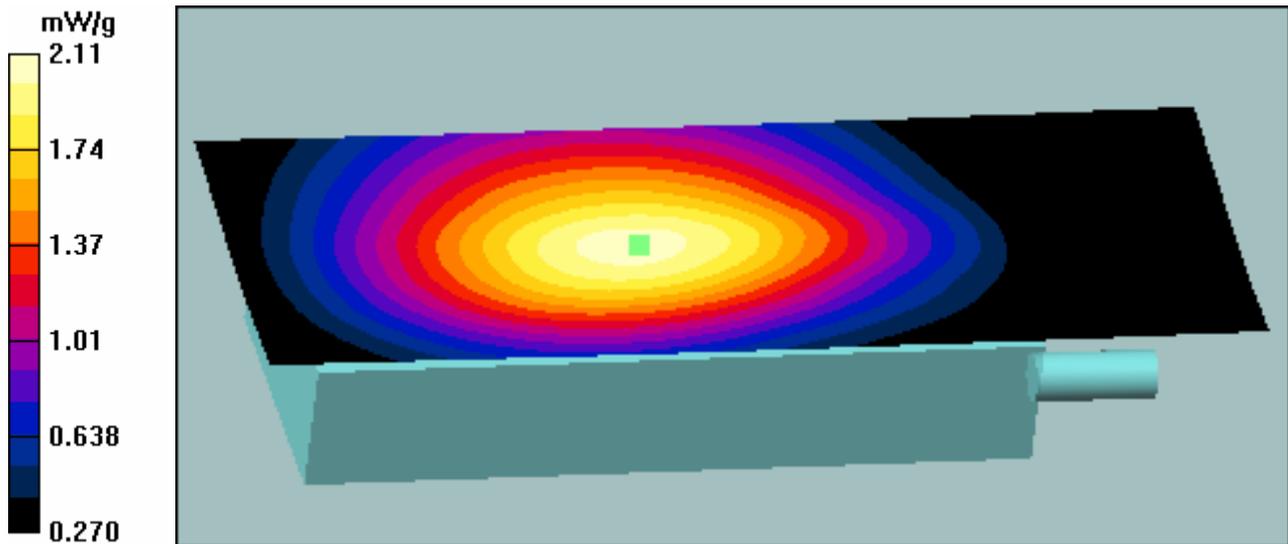
Body - Ant In/Area Scan (41x111x1): Measurement grid: dx=15mm, dy=15mm

Body - Ant In/Z Scan (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Body - Ant In/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 37.7 V/m; Power Drift = 0.2 dB; Peak SAR (extrapolated) = 2.46 W/kg

SAR(1 g) = 1.99 mW/g; SAR(10 g) = 1.45 mW/g



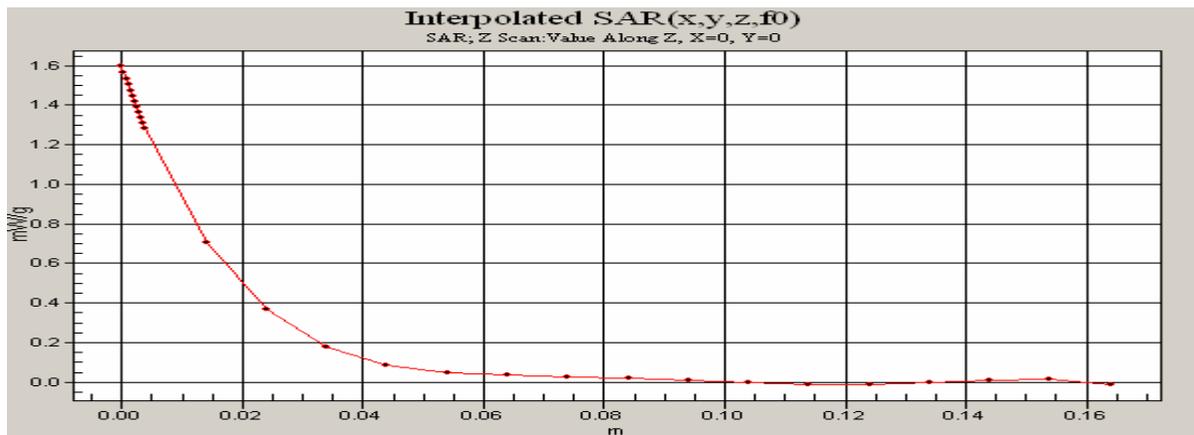
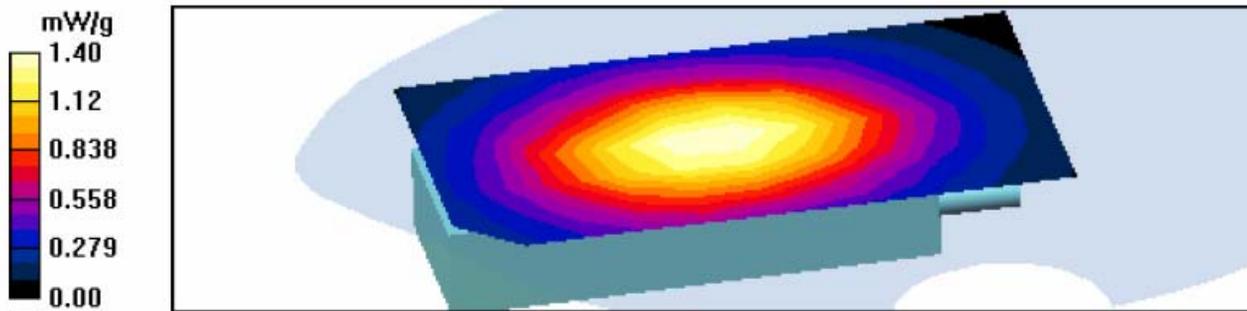
Motorola GEMS EME Laboratory

FCC ID: AZ489FT5832; Test Date: 3/04/05

Run #: 050304-19 Test operator: E. Church
 Model #: H79XAN6RR4AN SN: 364YFAB2J
 TX Freq: 902.525 MHz Start power: 0.856 W
 Tissue Temp: 20.8 (C)

Antenna: IN
 Battery: SNN5705B
 Carry acc.: None
 Audio/Data acc.: None
 Probe: ET3DV6 - SN1393, Calibrated: 4/28/2004, ConvF(6.73, 6.73, 6.73)
 Duty Cycle: 1:1.05, Medium: 915 IEEE Head, Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$
 Electronics: DAE3 Sn374, Calibrated: 3/23/2004

Face/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Face/Z Scan (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Face/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 39.9 V/m; Power Drift = -0.8 dB; Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.871 mW/g



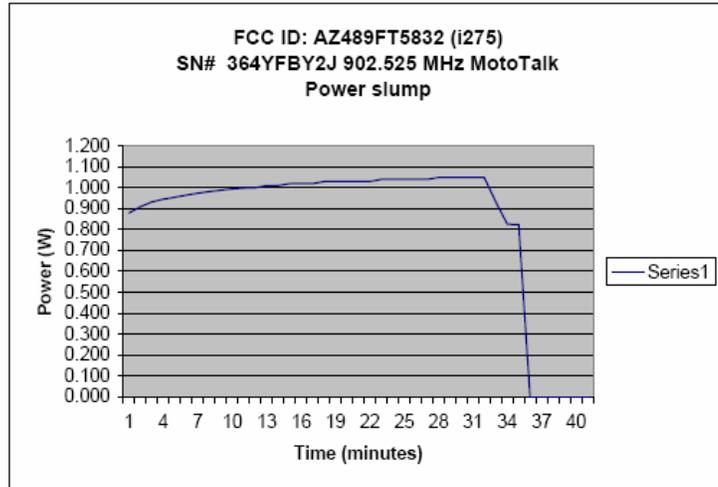
APPENDIX F
DUT Supplementary Data (Power slump)

Worst case tested battery SNN5705C

Start Date and Time: 3/5/2005 12:00:00 PM
 Stop Date and Time: 3/5/2005 12:40:00 PM

W

12:00:00 PM	0.880
12:01:00 PM	0.910
12:02:00 PM	0.933
12:03:00 PM	0.946
12:04:00 PM	0.955
12:05:00 PM	0.965
12:06:00 PM	0.974
12:07:00 PM	0.982
12:08:00 PM	0.989
12:09:00 PM	0.995
12:10:00 PM	0.999
12:11:00 PM	1.00
12:12:00 PM	1.01
12:13:00 PM	1.01
12:14:00 PM	1.02
12:15:00 PM	1.02
12:16:00 PM	1.02
12:17:00 PM	1.03
12:18:00 PM	1.03
12:19:00 PM	1.03
12:20:00 PM	1.03
12:21:00 PM	1.03
12:22:00 PM	1.04
12:23:00 PM	1.04
12:24:00 PM	1.04
12:25:00 PM	1.04
12:26:00 PM	1.04
12:27:00 PM	1.05
12:28:00 PM	1.05
12:29:00 PM	1.05
12:30:00 PM	1.05
12:31:00 PM	1.05
12:32:00 PM	0.932
12:33:00 PM	0.827
12:34:00 PM	0.824
12:35:00 PM	0.000
12:36:00 PM	0.000
12:37:00 PM	0.000
12:38:00 PM	0.000
12:39:00 PM	0.000
12:40:00 PM	0.000



Appendix G DUT Test Position Photos

Figure 1: Highest S.A.R. Test Position (Body)
DUT w/ holster against the phantom; worst case audio accessory attached, and antenna retracted
(same position used for all other audio accessories and for ant extended)

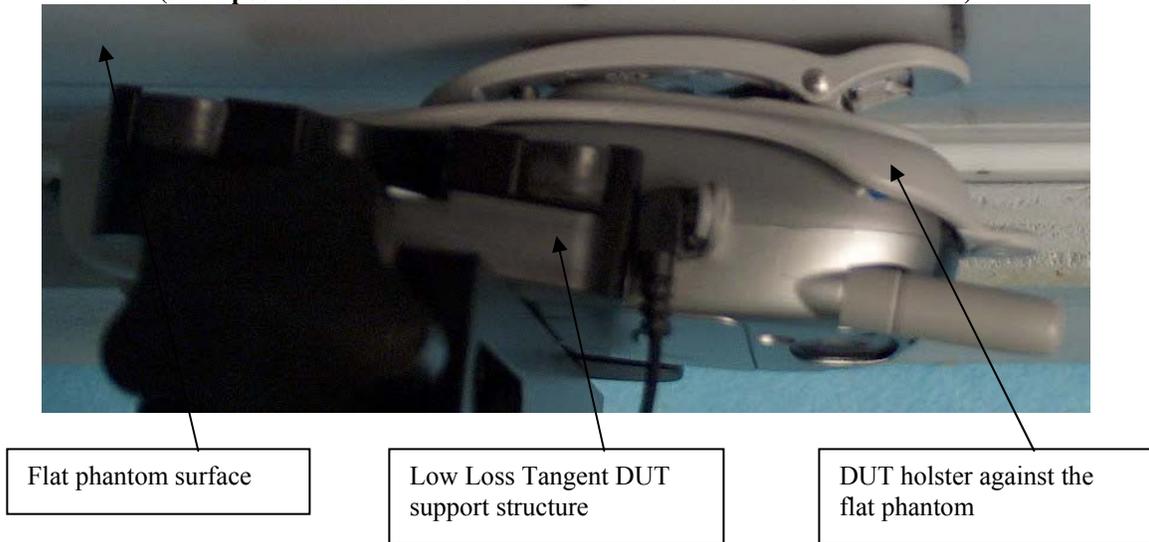


Figure 2: Highest S.A.R. Test Position (face)
DUT w/ front side separated 2.5cm from the phantom



Figure 3: Body Assessment
DUT w/ back side separated 2.5cm from the phantom.



Appendix H DUT and Accessory Photos

The purpose of this appendix is to illustrate the body-worn carry accessory(ies) for FCC ID: AZ489FT5832. The sample that was used in the following photos represents the product used to obtain the results presented herein and was used in this section to demonstrate the offered body-worn accessory(ies).



Photo 1.
Model NNTN5821A
Front View



Photo 2.
Model NNTN5821A
Back View



Photo 3.
Model NNTN5821A
Side View

Appendix I DUT Body-worn Separation Distances

The following table summarizes the test status and separation distance provided by each of the applicable body-worn accessory(ies):

Carry Case Models	Tested ?	Min. Separation distances between DUT antenna and phantom surface. (mm)	Comments
NNTN5821A	Yes	36-53	NA