

BASE ANT (Internal)

SPECIFICATION

承認書

APPLICATION FOR APPROVAL

客戶(CUSTOMER) 神腦國際企業股份有限公司

客戶機種(CS P/N) EP-236(7102001440000)

品名(PART NAME) 2.4GHz ANTENNA

開發單號(DEVE NO.) B-054(母機)

機種(AUDEN NO.) CR-6001BO-000 (PANTONE-532U)

日期(DATE) AUG 05, 2002

客戶承認印(CUSTOMER APPROVED)

Auden Techno Corp.			
RF ENGINEER CHECKED	MECHANICAL ENGINEER CHECKED	R&D MANAGER CHECKED	PRODUCT MANAGER CHECKED
楊玗 0807 0048	吳冬 0807 1330	徐耀 0807 1402	陳一 0807 1630

auden

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1.ELECTRICAL SPECIFICATIONS

1-1 FREQUENCY BAND

<i>Freq. Band</i>	<i>FREQUENCY</i>
2.4GHz	2.4~2.5GHz

1-2 IMPEDANCE

Nominal Impedance : 50 ohms

1-3 V.S.W.R

1-3-1 FREE SPACE
ENGINEERING

<i>Freq. Band</i>	<i>FREQUENCY</i>
	<i>2.4~2.5 (GHz)</i>
2.4GHz	$\leq 2\text{dB}$

※ Measuring a 50Ω test jig is connected to a network analyzer to measure the V.S.W.R..

※※ All test value is done in customer approval fixture.

1-4 GAIN

Typical value:(Average Gain)

<i>Freq. Band</i>	<i>FREQUENCY</i>
	<i>2.4~2.5GHz</i>
2.4GHz	$\geq 0\text{dBi}$

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2. MECHANICAL SPECIFICATIONS

2-1 MECHANICAL CONFIGURATION

The appearance of the antenna is in according to drawing *FIG. 2-1*(Page 8)

2-2 MECHANICAL TEST

Please Fix the top of the antenna and apply 3kg pulling force at the cable for 5 sec.

The cable is no loosening with antenna cap.

3.PACKING DESCRIPTION

Antenna to be packed in a number 5 polybag and one pcs per bag.

4.APPENDIX

Regarding the specifications of the cable please see the attached.

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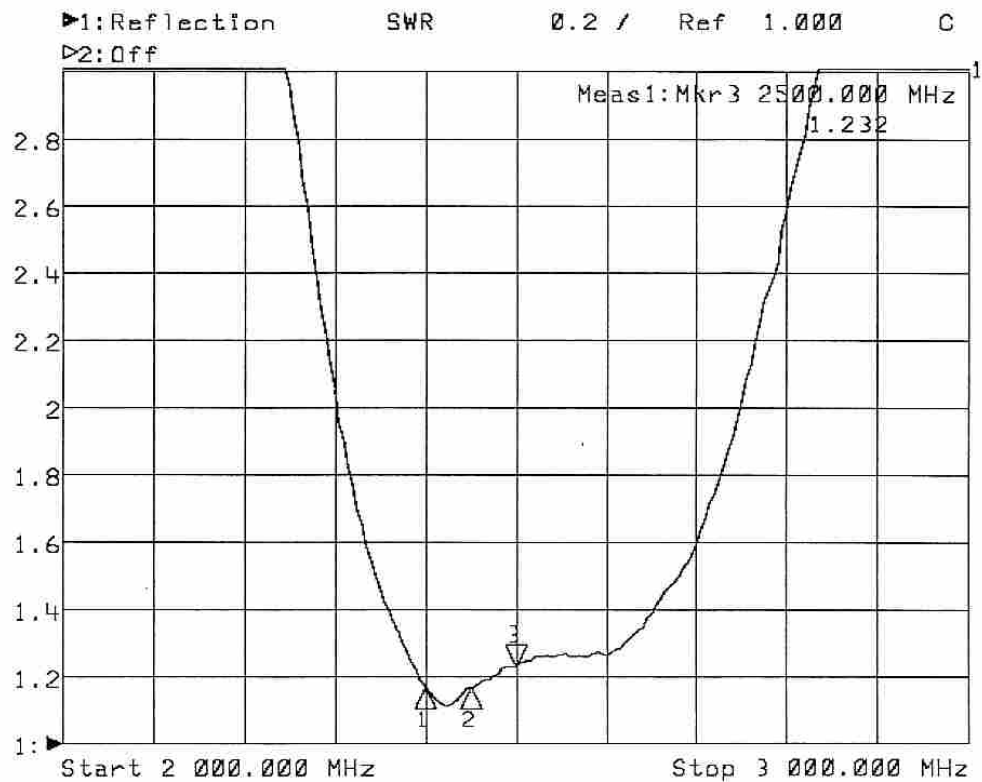
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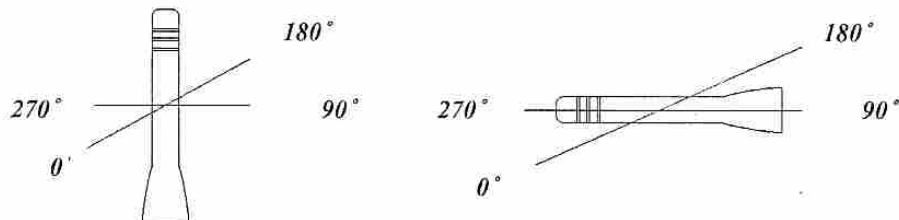
Auden P/N: CR-6001BO-000 (PANTONE 532U)



1: Mkr (MHz)	2: Mkr (MHz)	dB
1: 2400.0000	1.172	
2: 2450.0000	1.169	
3> 2500.0000	1.232	

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Model No: 防火材質	File:2.4GHz 天線_B054_20020617
Deve No: B054(母機)	Note:
Sample No: Sample-2	
Test Condition: Free space	
	Matching: N/A
Confirmation: 李 宇 珊	Engineer: 楊 玫 姿



Frequency (MHz)	H - Plane		E - Plane
	MAX (dBi)	AVR (dBi)	MAX (dBi)
2400	1.45	-0.77	1.60
2450	1.65	-0.68	2.02
2500	1.55	-0.47	1.94

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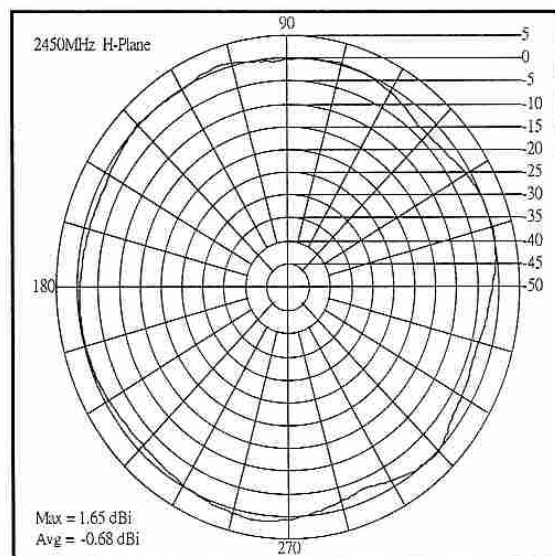
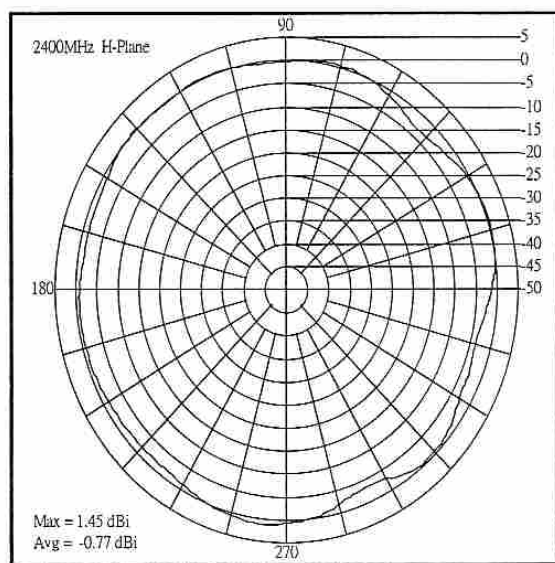
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Subject: **Qualification Test Specification for 2.4GHz Antenna** Deve No.: B-054(母機)

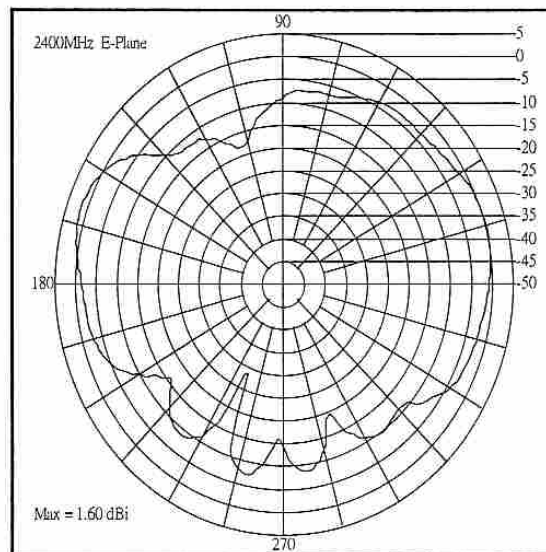
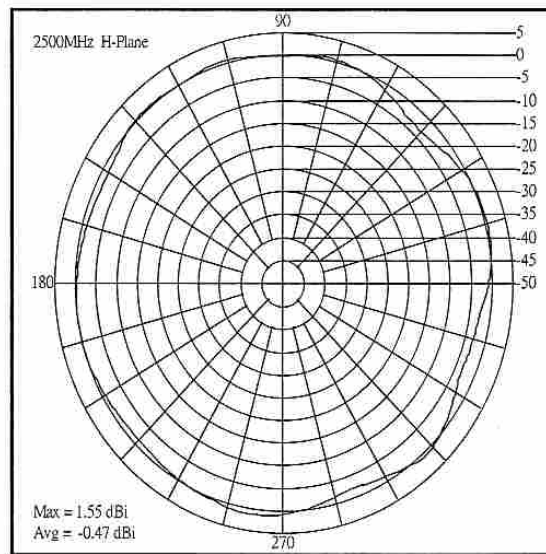
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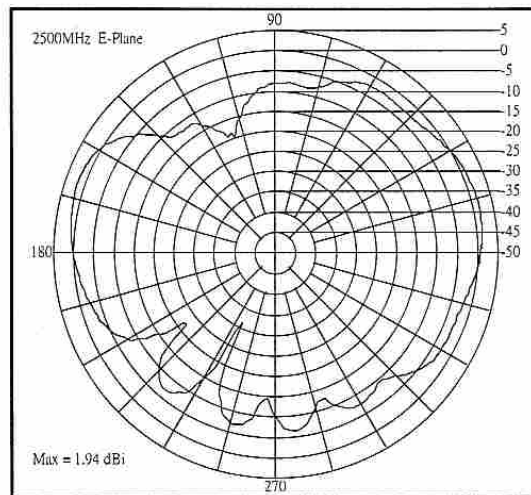
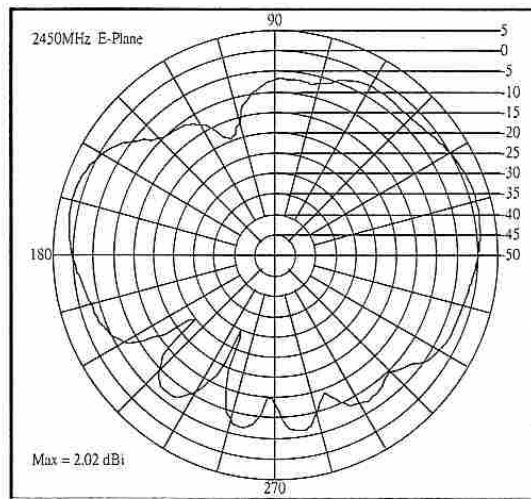
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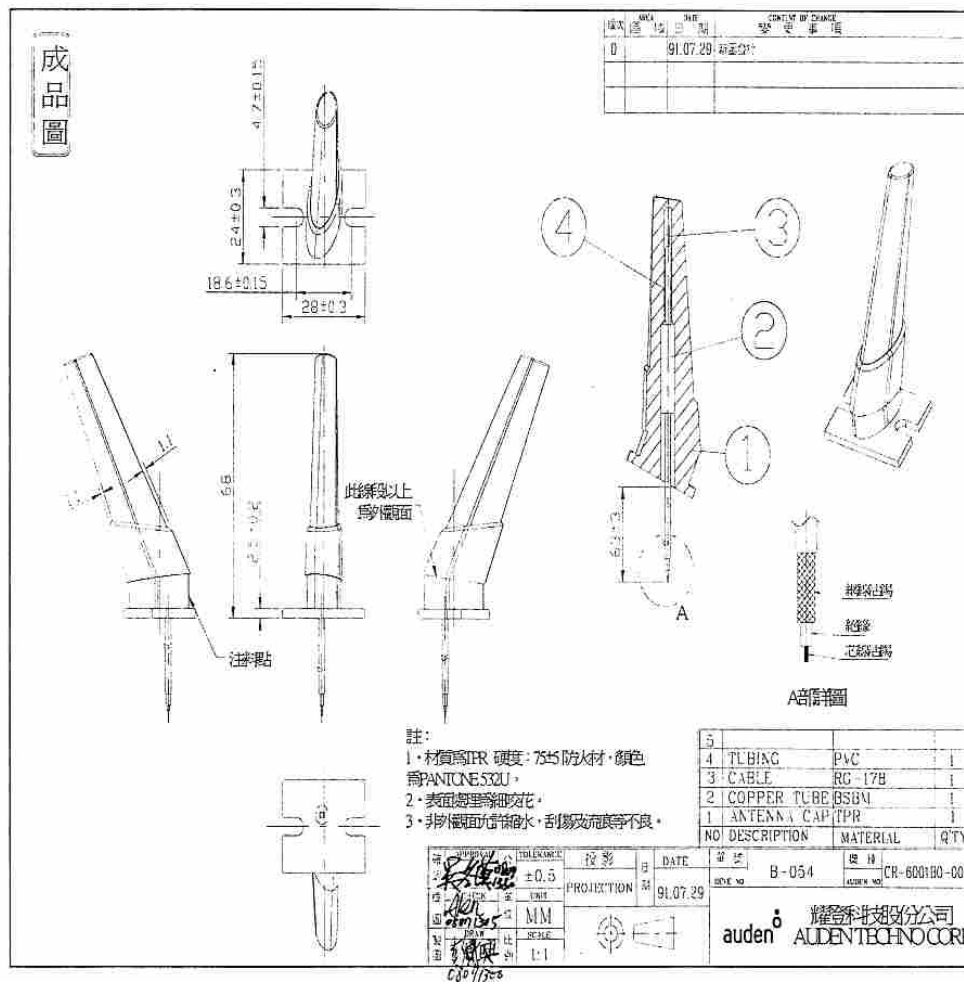
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FIG. 2-1



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Attached

Harbour Industries MIL-C-17 Coaxial Cables

Physical Characteristics									
M17 Number	Center Conductor	PTFE Dielectric Diameter	Shield	Jacket	Overall Diameter	Minimum Recommended Bend Radius	Operating Temp. (°C)	Weight (lbs./MFT)	Comments
M17/60-RG142	.037" SCCS	.116"	SPC(2)	FEP	.195"	1.0"	-55 +200	43.0	
M17/93-RG178	.0120"(7/004")SCCS	.033"	SPC	FEP	.071"	0.4"	-55 +200	6.3	
M17/93-00001	.0120"(7/004")SCCS	.033"	SPC	PFA	.071"	0.4"	-55 +200	6.3	M17/93-RG178 w/extended temp. range
M17/94-RG179	.0120"(7/004")SCCS	.063"	SPC	FEP	.100"	0.4"	-55 +200	10.8	
M17/95-RG180	.0120"(7/004")SCCS	.102"	SPC	FEP	.141"	0.7"	-55 +200	19.8	
M17/110-RG302	.0253" SCCS	.146"	SPC	FEP	.202"	1.0"	-55 +200	40.0	
M17/111-RG303	.037" SCCS	.116"	SPC	FEP	.170"	0.8"	-55 +200	31.0	
M17/112-RG304	.059" SCCS	.185"	SPC(2)	FEP	.280"	1.4"	-55 +200	94.0	
M17/113-RG316	.0201"(7/0067")SCCS	.060"	SPC	FEP	.098"	0.5"	-55 +200	12.2	
M17/127-RG393	.094"(7/0312")SC	.285"	SPC(2)	FEP	.390"	2.0"	-55 +200	165.0	
M17/128-RG400	.0384"(19/008")SC	.116"	SPC(2)	FEP	.195"	1.0"	-55 +200	50.0	
M17/131-RG403	.0120"(7/004")SCCS	.033"	SPC(2)	FEP(2)	.116"	0.6"	-55 +200	15.0	Triaxial M17/93-RG178 Double shielded
M17/152-00001	.0201"(7/0067")SCCS	.060"	SPC(2)	FEP	.114"	0.6"	-55 +200	18.5	M17/113-RG316 Unswpt. M17/60-RG142 Unswpt. M17/93-RG178 Unswpt. M17/111-RG303 Unswpt. M17/113-RG316 Unswpt. M17/127-RG393 Unswpt. M17/128-RG400 Controlled impedance twinax
M17/152-00002	.0235"(19/005")SPA(2)	.042"	SPA	PFA	.129"	0.6"	-55 +200	18.0	
PTFE Tape Wrap Jacketed RG Cables									
RG 187 A/U	.0120"(7/004")SCCS	.063"	SPC	PTFE	.100"	0.5"	-55 +250	10.0	Flexible, 250° C. rated
RG 188 A/U	.0201"(7/0067")SCCS	.060"	SPC	PTFE	.100"	0.5"	-55 +250	11.0	Flexible, 250° C. rated
RG 195 A/U	.0120"(7/004")SCCS	.102"	SPC	PTFE	.141"	0.7"	-55 +250	18.0	Flexible, 250° C. rated
RG 196 A/U	.0120"(7/004")SCCS	.034"	SPC	PTFE	.080"	0.4"	-55 +250	6.0	Flexible, 250° C. rated
Electrical Characteristics									
M17 Number	Impedance (ohms)	Capacitance (pF/ft)	Max. Operating Voltage (RMS)	100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz
M17/60-RG142	50 ± 2	29.4	1900	5.5	11.7	19.0	35.0	48.0	12.4
M17/93-RG178	50 ± 2	29.4	1000	16.0	33.0	52.0	94.0	-	3.0
M17/93-00001	50 ± 2	29.4	1000	16.0	33.0	52.0	94.0	-	3.0
M17/94-RG179	50 ± 3	19.4	1200	-	21.0	-	-	-	-
M17/95-RG180	95 ± 5	16.4	1500	-	17.0	-	-	-	-
M17/110-RG302	50 ± 3	19.4	2300	-	6.0	-	26.0	-	-
M17/111-RG303	50 ± 2	29.4	1900	3.9	8.0	15.0	28.0	-	-
M17/112-RG304	50 ± 2	29.4	3000	2.7	5.4	11.1	22.0	30.0	8.0
M17/113-RG316	50 ± 2	29.4	1200	11.0	21.0	38.0	58.0	-	3.0
M17/127-RG393	50 ± 2	29.4	2500	2.4	5.0	8.8	16.0	24.6	37.0
M17/128-RG400	50 ± 2	29.4	1900	4.5	10.5	17.0	38.0	50.0	78.0
M17/131-RG403	50 ± 2	29.4	1000	-	37.0	-	-	-	10.0
M17/152-00001	50 ± 2	29.4	1200	11.5	24.0	40.0	75.0	110.0	170.0
M17/152-00002	50 ± 2	29.4	1900	-	9.5	-	-	-	-
M17/169-00001	50 ± 2	29.4	1000	-	29.0	-	-	-	-
M17/170-00001	50 ± 2	29.4	1900	-	8.6	-	-	-	-
M17/172-00001	50 ± 2	29.4	1200	-	21.0	-	-	-	-
M17/174-00001	50 ± 2	29.4	2500	-	5.0	-	-	-	-
M17/175-00001	50 ± 2	29.4	1900	-	10.5	-	-	-	-
M17/176-00002	77 ± 7	19.0	1000	-	-	-	-	-	-
PTFE Tape Wrap Jacketed RG Cables									
RG 187 A/U	75 ± 3	19.4	1200	-	21.0	-	-	-	3
RG 188 A/U	50 ± 2	29.4	1200	11.0	21.0	38.0	58.0	-	3
RG 195 A/U	95 ± 5	15.4	1500	-	17.0	-	-	-	3
RG 196 A/U	50 ± 2	29.4	1000	-	29.0	-	-	-	-

*Maximum frequencies are those as referenced on individual slant sheets of the MIL-C-17 specification. No values are given for unswept constructions as the specification recommends these cables should not be used above 400 MHz. (All figures referenced above are nominal unless otherwise specified.)

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PRODUCT DATA SHEET

Santoprene®

THERMOPLASTIC RUBBER

251-80

Storable thermoplastic flame retardant elastomer with good fluid resistance, formulated to replace thermoset Elastomers like EPDM, polychloroprene, chlorosulfonated polyethylene. It can be processed using injection molding, extrusion, blow molding or other melt processing techniques. Supplied as free-flowing pellets in 25 kilogram moisture barrier bags.

Property	Test Method	Test Units	Typical Value
Hardness, 5 sec.	TPE-0069 (ASTM D 2240)	Shore A	80
Specific Gravity	TPE-0005 (ASTM D 297)		1.24
Tensile Strength, Ultimate	TPE-0053 (ASTM D 412)	MPa (psi)	7.2 (1050)
Elongation, Ultimate	TPE-0053 (ASTM D 412)	percent	410
Tens Modulus	TPE-0053 (ASTM D 412)	MPa (psi)	3.2 (460)
Compression set, 168 hrs.	TPE-0095 (ASTM D375, Method B)	percent @ 77°F(25°C) percent @ 212°F(100°C)	27.1 45.3
Tension set	TPE-0053 (ASTM D 412)	percent	10
Tear Strength	TPE-0056 (ASTM D624)	(kN/m @ 25°C) pli @ 77°F (kN/m @ 100°C) pli @ 212°F	23.6 135 9.3 55
Brittle Point	TPE-0089 (ASTM D 746)	°C (°F)	<-56(<-69)

For order assistance, call 1-800-ELASTOMer (1-800-352-7855).

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QMF28 March 27, 1998
Component - Plastics Certified For Canada

ADVANCED ELASTOMER SYSTEMS, L.P.

✓ ES00017 (M)
(A008 - cont. from A card)

251-96 W232	HC, WT	1.5	V-0	50	50	50	—	—	—	—
		1.0	V-0	50	50	50	—	—	—	—
	BK	3.0	V-1	50	50	50	—	—	—	—
251-86 W232	HC, WT	1.5	V-0	50	50	50	—	—	—	—
		3.0	V-0	50	50	50	—	—	—	—
	BK	1.0	V-1	50	50	50	—	—	—	—
251-92 W232	HC, WT	1.3	V-0	50	50	50	—	—	—	—
		3.0	V-0	50	50	50	—	—	—	—
	BK	1.0	V-1	50	50	50	—	—	—	—
251-85 W232	AL	0.75	V-2	50	50	50	—	—	—	—
2501-90	AL	1.1	HB	100	90	90	—	—	—	—
		3.0	HB	100	95	95	—	—	—	—

* All colors except black.

Reports: September 20, 1994; September 10, 1996; September 20, 1996; September 30, 1996; April 1, 1998.

59155000

RC993

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(Cont. on A010 card)

01U/0306449
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