FCC Certification Report for the **LA24001AZL** WLAN PC Card Class II Permissive Change

EXHIBIT 4

RF EXPOSURE INFO

RF Exposure Antenna Summary

Network Systems Organization

FCC ID: **H9PLA24001AZL** WLAN PC Card, 1 Mbps, CR-1, Lo Power

Output Power: 100 mW Class II Permissive Change

Source Based

Mobile DC Factor: 0.600

Portable DC Factor: 0.320

Body Worn Antennas

Ant No	Model	Symbol P/N	Type	Gain (dBi)	Cabel Loss (dB)	Pout (dBm)	EIRP (mW)	TR Status	Device Type	Tx Limited
01.	Oniel BFA	50-21900-023	Slot	0.0	0.39	19.61	29.3	Requested	Body Worn	

Antenna Gain listed without cable

TR Status refers to weither the antena was tested. If not refer to the directed antenna test data

Duty Cycle Factors are applied to MPE and EIRP

Tx Limited configurations are for low power versions of the radio. See the specific antenna exhibit for detail

Antenna List by FCC ID

Network Systems Organization

FCC ID: **H9PLA24001AZL** WLAN PC Card, 1 Mbps, CR-1, Lo Power

Output Power: 100 mW

Grant Date	Ant #:	Model	Symbol P/N	Mfg	Mfg P/N
9/20/96					
	01	Plane	50-21900-008	Tecom	505042C(48IN)
	02	Rubber Duck	50-21900-007	Cushcraft	RBN2400SXR
	03	End Cap, 6 Pin	50-21900-009	Tecom	505068E
	04	Pipe Bomb 11"x4'	50-11901-048P	Cushcraft	S2403BHPS48RBN
	04.1	Pipe Bomb 11"x15'	50-11901-180P	Cushcraft	S2403BHPS180RB
Applied For					
	1	Oniel BFA	50-21900-023	Tecom	703620

Oneil BFA / Oneil MMCX Antenna

The **Oneil** antenna is 0 dBi omni-directional in azimuth plane. It is available with eirher a MuRatta BFA or MMCX connector. It is mounted as an internal antenna on the O'Neil MicroFlash series of portable belt worn printers. In its use it would be within 5 cm of a users body. It is used in portable devices.

Location	Body worn
Pattern	Omni
Type	Slot
Max Gain	0 dBi
Physical	See attached dwg
Cable	MXYH75 or RG-178
Symbol P/N	50-21900-023 50-21900-031
EIRP	See Summary Tbl

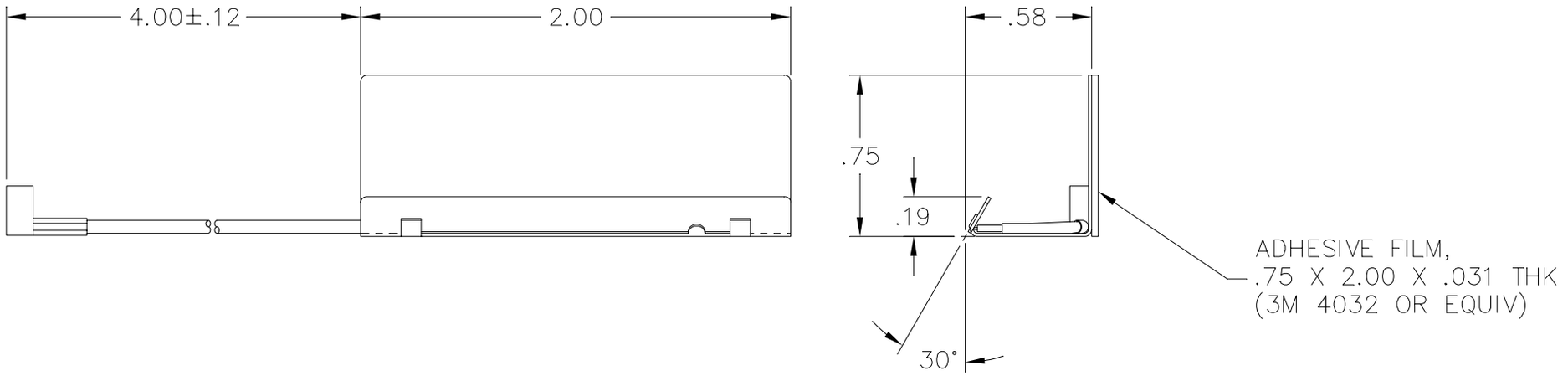
Note: This antenna is only to be used with a transmitter that produces an EIRP of less than 200 mW. For an EIRP of more than 200 mW a SAR test must be performed.

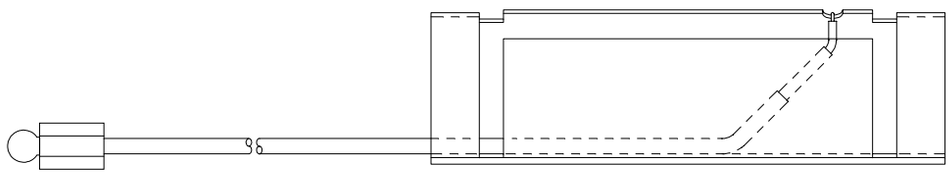
Antenna Installation Photo

Device use Photograph.

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
C2	A	.58 WAS .42 ADHESIVE CALLOUT WAS: ... X .025 THK (3M 4930 OR EQUIV) WO 2675 REDRAWN	1-4-00 JL	





4. SHARP CORNERS & EDGES .005 MAX.

3. FINISH SHALL BE UNIFORM AND EXHIBIT NO EVIDENCE OF CORROSION OR OXIDATION WHEN VIEWED WITH THE UNAIDED EYE. EDGE PLATING ON CUT OR SHEARED SURFACES IS NOT REQUIRED.

2. ALTERNATE:
MATERIAL: CRS 1008, .015 THK.
FINISH: BRIGHT TIN PLATE PER MIL-T-10727A, TYPE 1, ELECTRO DEPOSITED .00010-.00025 IN.

1. MATERIAL: ELECTROLYTIC TIN PLATED STEEL SHEET, .015 THK.

SPECIFICATIONS

FREQUENCY:	2.4-2.485 GHZ
VSWR	2.0:1 MAX
GAIN	0dBi NOMINAL
POLARIZATION	LINEAR
CABLE:	MURATA MXYH75
CONNECTOR:	TYPE BFA

NOTES : UNLESS OTHERWISE SPECIFIED

.500
SCALE

PMIC	
823362	C090-874
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES.
TOLERANCES: .XX ± .03
.XXX ± .010 ANGLES ± 0°30'
MACHINED SURFACE ROUGHNESS 125✓
REMOVE BURRS, SHARP EDGES R.005–.015
MACHINED FILLETS R.005–.015
DIMENSIONS ARE AFTER PLATING.
MACHINED DIA'S ON COMMON CENTERLINE CONCENTRIC WITHIN .005 TIR.
INTERPRET PER ANSI Y14.5M–1982.

HOLE TOLERANCES:

.040 – .128	+.003 –.001	.515 – .750	+.008 –.001
.136 – .228	+.004 –.001	.765 – 1.000	+.010 –.002
.234 – .500	+.006 –.001	1.031 UP	+.015 –.002

MATL ENGR | APPROVAL

CONTRACT NUMBER

CONTRACTOR

DRAWN BY	DATE
J. LOWE	11-8-99
CHECKER	MFG ENGR
QA	ENGR BI
PRGM MGR	ENGR

TECOM INDUSTRIES INC.
9324 TOPANGA CYN BLVD CHATSWORTH, CA. 91311
TECHNICAL EXCELLENCE COMMITTED TO QUALITY

TITLE
ANTENNA, 2.4 GHZ

SIZE	CAGE CODE	DWG NO
C	52791	703620

SCALE 2/1 | UNIT WT . | SHEET 1 OF 1