STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@po.state.ct.us
www.ct.gov/csc

April 20, 2005

Kenneth C. Baldwin
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-137-137-050401** -Cellco Partnership d/b/a Verizon Wireless notice of intent to modify existing telecommunications facilities located at 173 South Broad Street, Stonington; and 40 Taugwank Spur, Stonington, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on April 19, 2005, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated April 1, 2005, including the placement of all necessary equipment and shelters within the tower compounds. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to existing facility sites that would not increase tower heights, extend the boundaries of the tower sites, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundaries to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities have also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on these towers.

This decision is under the exclusive jurisdiction of the Council. Any additional change to these facilities will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Pamela B. Katz, P.E.
Chairman

PBK/laf

c: The Honorable William S. Brown, Acting First Selectman, Town of Stonington
Jason Vincent, Town Planner, Town of Stonington
Jonathan Roush, Site Marketing Manager, Northeast, SBA Network Services, Inc.
Melanie Girton, Property Management Dept., Spectrasite Communications
Christopher B. Fisher, Esq., Cuddy & Feder LLP
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
Stephen J. Humes, Esq., McCarter & English LLP

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www.ct.gov/csc

April 5, 2005

The Honorable William S. Brown
Acting First Selectman
Town of Stonington
152 Elm Street
Stonington, CT 06378

RE: **EM-VER-137-137-050401** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify existing telecommunications facilities located at 173 South Broad Street, Stonington; and 40 Taugwank Spur, Stonington, Connecticut.

Dear Mr. Brown:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for April 19, 2005 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the council by April 18, 2005.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/cm

Enclosure: Notice of Intent

c: Jason Vincent, Town Planner, Town of Stonington

ROBINSON & COLE LLP

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

EM-VER-137-137-050401

April 1, 2005

Via Hand Delivery

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Antenna Swap**
173 South Broad Street, Stonington, CT
40 Taugwank Spur, Stonington, CT

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility at each of the sites referenced above. As described below, Cellco now intends to modify each facility.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Stonington First Selectman, William S. Brown.

South Broad Street Facility, Stonington, CT

Cellco's existing South Broad Street facility consists of twelve (12) cellular antennas on a tower owned by the SBA Communications. Cellco now intends to modify its facility by removing six (6) cellular antennas and replacing them with six (6) PCS antennas at the same level on the tower. Attached behind Tab 1 are specifications for the existing cellular antennas and the proposed PCS antennas for the facility and a new general power density table.

Taugwank Spur Facility, Stonington, CT

Cellco's existing Taugwank Spur facility consists of nine (9) cellular antennas on a tower owned by SpectraSite. Cellco now intends to modify its facility by

removing five (5) cellular antennas and replacing them with two (2) new cellular antennas and three (3) PCS antennas at the same level on the tower. Four (4) of the existing cellular antennas will remain. Attached behind Tab 2 are specifications for the existing cellular antennas, the new cellular antennas and the new PCS antennas along with a new general power density table.

The planned modifications to each of these facilities fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in any increase in the overall height of the existing structure. Cellco's replacement antennas will be mounted at the same level on the tower.

2. The proposed modifications will not affect ground-mounted equipment and will not require the extension of the site boundaries.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more.

4. The proposed modifications will not result in radio frequency (RF) power density levels at the facility that exceed the Federal Communications Commission (FCC) adopted safety standard.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facilities constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

Enclosures
cc: William S. Brown, Town of Stonington First Selectman
Sandy M. Carter

DECIBEL PRODUCTS
An Allen Telecom Company

844H90EXYBAM

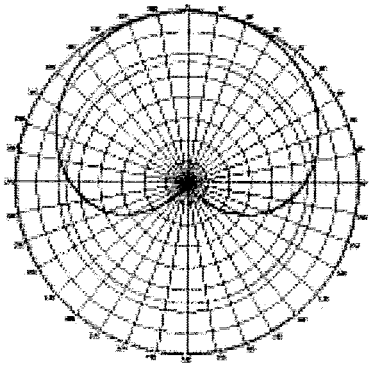
12 dBd
Log Periodic Antenna

824-896 MHz

dB Director®

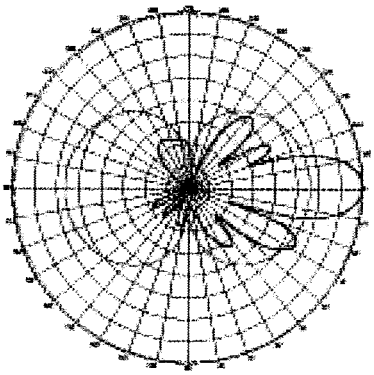
90°

- **Superior Azimuth pattern roll off, reducing sector to sector interference, improving call capacity.**
- **Extremely rugged, reliable design yet lightweight with low wind load.**

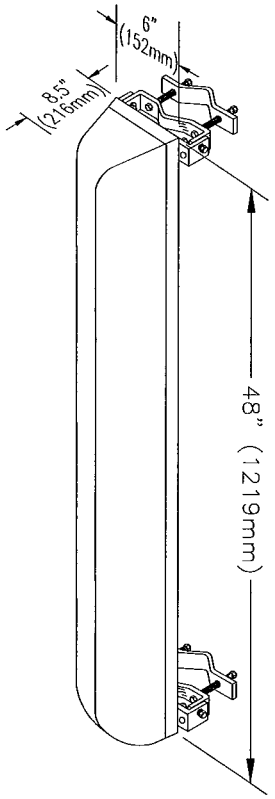


Azimuth (Horizontal)

Elevation (Vertical)



Scale: 10° radials, 5 dB per division



Electrical

Frequency:	824-896 MHz
Polarization:	Vertical
Gain:	12 dBd (14.1 dBi)
Azimuth BW:	90°
Elevation BW:	15.5°
USLS:	> 18 dB
Front-to-Back Ratio:	40 dB
VSWR:	1.22:1
PIM:	-150 dBc (2 tone, 20 watt)
Impedance:	50 Ohms
Max. Input Power:	500 Watts
Lightning Protection:	All metal parts are grounded

Mechanical

Weight:	10 lbs (4.5 kg)
Dimensions:	48" x 6" x 8.5" (1219 x 152 x 216 mm)
Max. Wind Area:	2.8 ft² (0.26 m²)
Max. Wind Load:	80 lbf (356N) 35.9 kp (at 100 mph)
Max. Wind Speed:	125 mph (201 km/h)
Radiators:	Brass
Reflector:	Pass. Aluminum
Radome:	ABS, UV Resistant
Mounting Hardware:	Galvanized Steel
Connector:	7/16 DIN (Back)
Color:	Gray

Mounting Options

Standard:	DB380 pipe mount kit included.
Downtilt:	DB5083 downtilt brackets, optional.

8635 Stemmons Freeway • Dallas, Texas U.S.A. 75247-3701
Dallas/Ft.Worth Area Tel: 214.631.0310 • Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342 • Fax: 1.800.229.4706
www.decibelproducts.com
dbtech@decibelproducts.com

099089-052 05/02-B

ISO9001 Compliant

DECIBEL
Base Station Antennas

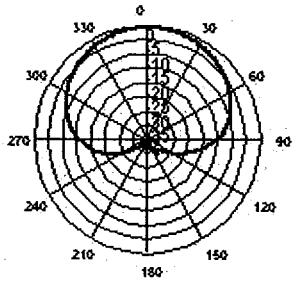
948F85T2E-M

16.1 dBi, Directed Dipole Antenna
1850-1990 MHz

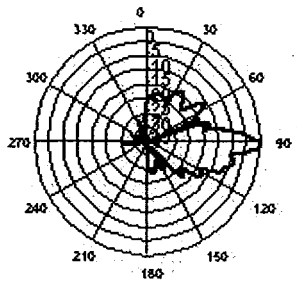
1850-1990 MHz
MaxFill™
dB Director®

85°

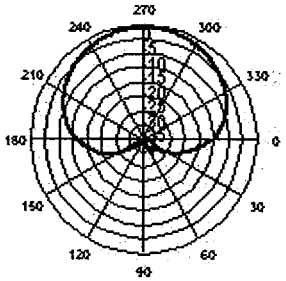
- Exceptional azimuth roll-off reducing soft hand-offs and improving capacity
- Excellent upper side lobe suppression
- Deep null filling below the horizon assures improved signal intensity
- Low profile appearance and low wind loading profile for easier zoning approvals



Azimuth 1850 MHz (Tilt=2)



Vertical 1850 MHz (Tilt=2)



Horizontal 1850 MHz (Tilt=2)

ELECTRICAL	
Frequency (MHz):	1850-1990
Polarization:	Vertical
Gain (dBd/dBi):	14/16.1
Azimuth BW:	85°
Elevation BW:	8°
Beam Tilt:	2°
USLS* (dB):	>18
Null Fill* (dB):	15
Front-to-Back Ratio* (dB):	40
VSWR:	<1.33:1
IM Suppression - Two 20 Watt Carriers:	-150 dBc
Impedance:	50 Ohms
Max Input Power:	250 Watts
Lightning Protection:	DC Ground
Opt Electrical Tilt:	0°,4°,6°

MECHANICAL	
Weight:	8.5 lbs (3.9 kg)
Dimensions (LxWxD):	48 X 3.5 X 7 in (1219 X 89 X 178 mm)
Max. Wind Area:	1.18 ft² (0.11 m²)
Max. Wind Load (@ 100mph):	65 lbf (289 N)
Max. Wind Speed:	125 mph (201 km/h)
Radiator Material:	Low Loss Circuit Board
Reflector Material:	Aluminum
Radome Material:	ABS, UV Resistant
Mounting Hardware Material:	Galvanized Steel
Connector Type:	7-16 DIN - Female (Bottom)
Color:	Light Gray
Standard Mounting Hardware:	DB390 Pipe Mount Kit, included
Downtilt Mounting Hardware:	DB5098, optional
Opt. Mounting Hardware:	DB5094-AZ Azimuth Wall Mount

Andrew Corporation
8635 Stemmons Freeway
Dallas, Texas U.S.A 75247-3701
Tel: 214.631.0310

Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342
Fax: 1.800.229.4706
www.andrew.com

dbtech@andrew.com

Date: 4/29/2004
* - Indicates Typical Values

General Power Density

Site Name: Pawcatuck
Tower Height: 150 Ft. rad center

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissable Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
Verizon	880	9	200	1800	150	0.0288	0.56733	5.07%
Verizon	1900	3	255	765	150	0.0122	1	1.22%
Total Percentage of Maximum Permissible Exposure								6.29%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.

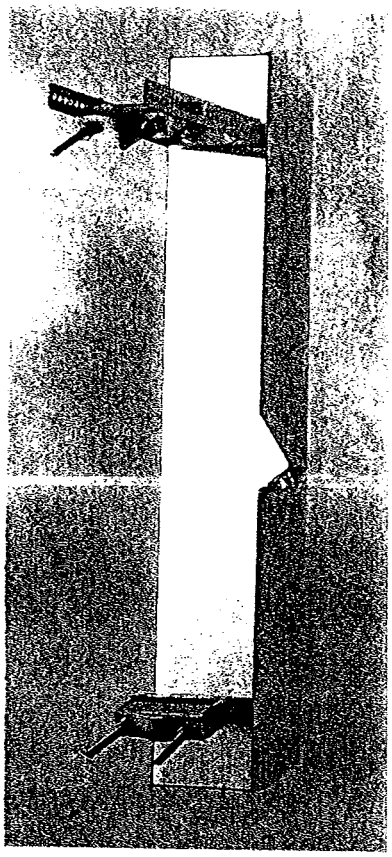
EXISTING

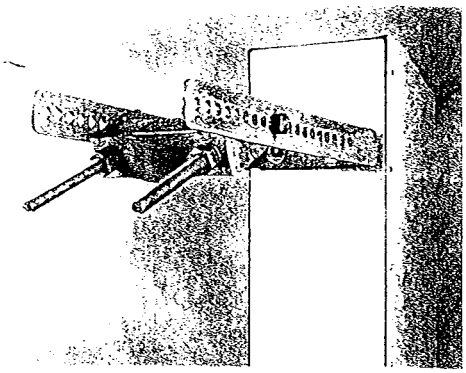
ALP-E 9011-Din

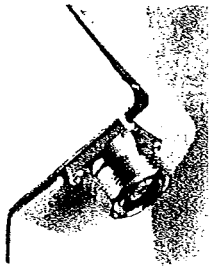
Enhanced Log Periodic Antenna

Features:

- ❑ Small Size
- ❑ Aesthetically Pleasing
- ❑ Suitable For TDMA/CDMA
- ❑ High Return Loss
- ❑ Low Intermodulation
- ❑ High FTB
- ❑ Broadbanded
- ❑ Side-lobe Suppression
- ❑ Sturdy Design
- ❑ Down-Tilt Brackets Incl.







The distance between the center of the bolts (on the back of the antenna) are shown in the drawing above.

Bolt diameter is: 3/8-16 [comes with lock nut].

Frequency Range:	800-900 MHz
Impedance:	50 ohm
Connector Type:	7/16 Din
Return Loss:	20 dB
Polarization:	Vertical
Gain:	> 11 dBd
Front To Back Ratio:	> 30 dB
Side-Lobe Suppression:	18 dB
Intermodulation (2x25W):	IM3 > 146 dB IM5 > 153 dB IM7/9 > 163 dB
Power Rating:	500 W
H-Plane (-3 dB point):	85 - 92°
V-Plane (-3 dB point):	16 - 18°
Lightning Protection:	DC Grounded

Overall Height:	43 in	[1092 mm]
Width:	6.5 in	[165 mm]
Depth:	8 in	[203 mm]
Weight Including Tilt-Brackets:	20 lbs	[9.1 Kg]
Rated Wind Velocity:	113 mph	[180 Km/h]
Wind Area (CxA/Side):	2.3 sq. ft.	[0.22 sq.m]
Lateral Thrust At Rated Wind Worst Case:	112 lbs	[500 N]

Radiating Elements:	Aluminum
Extrusion:	Aluminum
Radome:	Grey PVC
Tilt-Bracket:	Hot Dip Galvanized Steel
Antenna Bolts:	Stainless Steel

The ALP-E 9011-Din is made in U.S.A.

Proposed Cellular

DECIBEL PRODUCTS
An Allen Telecom Company

DB844H80E-XY

12.7 dBd
Directional Log Periodic Antenna

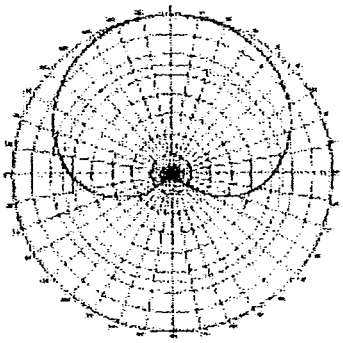
806-960 MHz

dB Director®

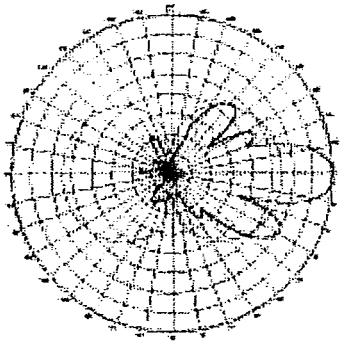
- 806-960 MHz
- 12.7 dBd (14.8 dBi) Gain
- Vertical Polarization
- 80° Azimuth BW
- 15° Elevation BW
- 7/16 DIN
- Cellular and ESMR

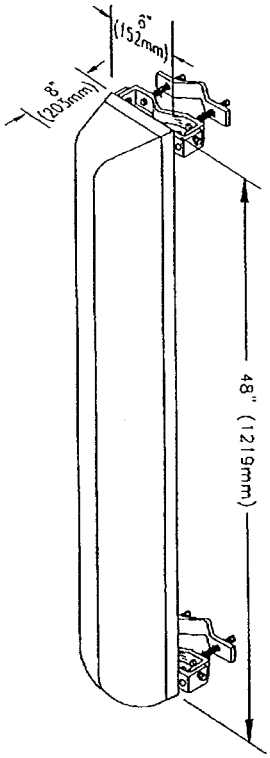
80°

Azimuth (Horizontal)



Elevation (Vertical)





Electrical

VSWR:	< 1.5:1
Front-to-Back Ratio:	> 40 dB, typical
Max. Input Power:	500 Watts
Impedance:	50 Ohms
Lightning Protection:	All metal parts are grounded.

Mechanical

Weight:	10 lbs (4.5 kg)
Wind Area:	2 ft² (0.19 m²)
Wind Load:	80 lbf (356N) 35.9 kp (at 100 mph)
Max. Wind Speed:	125 mph (200 km/h)
Radiators:	Brass
Back Panel:	Pass. Aluminum
Radome:	ABS
Mounting Hardware:	Galvanized Steel
Color:	Normal Gray

~22 w/ mount brackets

Mounting Options

Standard:	DB380 pipe mount kit (max. 3.5" OD), included.
Downtilt:	DB5083 downtilt brackets, optional.

Dimensions 48 x 6 x 8.5

8635 Stemmons Freeway • Dallas, Texas U.S.A. 75247-3701
Dallas/Ft.Worth Area Tel: 214.631.0310 • Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342 • Fax: 1.800.229.4706
www.decibelproducts.com
dbtech@decibelproducts.com

ISO9001 Compliant

099089-000 07/01-N

Proposed PCS

Slant +/- 45° Dual Polarized, Panel 90° / 16.5 dBi

BXA-185090/8CF ___

When ordering, replace "___" with connector type.

Mechanical specifications

	Length	1225 mm	48.2	in
	Width	154 mm	6.1	in
	Depth	105 mm	4.1	in
4)	Weight	4.99 kg	11	lbs
	Wind Area			
	Front	0.189 m^2	2.03	ft^2
	Side	0.129 m^2	1.39	ft^2
	Rated Wind Velocity (Safety factor 2.0)			
		>321.9 km/hr	>200	mph
	Wind load @ 100 mph (161 km/hr)			
	Front	283 N	64	lbs
	Side	211 N	47.5	lbs

Antenna consisting of aluminum alloy with brass feed-lines covered by a UV safe fiberglass radome.

Mounting & Downtilting:

Wall mounted or pole tower mount with mounting brackets.

Mounting bracket kit #26799997

Downtilt bracket kit #26799999
The downtilt bracket kit includes the mounting bracket kit.

Electrical specifications

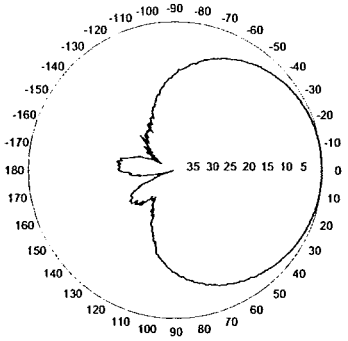
	Frequency Range	1850-1990 MHz
	Impedance	50Ω
3)	Connector	NE, E-DIN
1)	VSWR	≤1.4:1
	Polarization	Slant ± 45°
1)	Isolation Between Ports	< -30 dB
1)	Gain	16.5 dBi
2)	Power Rating	250 W
1)	Half Power Angle	
	H-Plane	90°
	E-Plane	7°
1)	Lobe Tilt	0°
1)	Null Fill	5%
	Lightning Protection	Direct Ground

Patented Dipole Design: U.S. Patent No. 6,597,324 B2

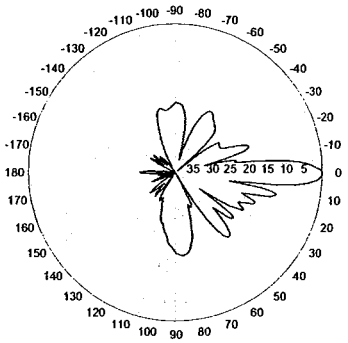
1) Typical Values
2) Power Rating limited by connector only.
3) NE indicates an elongated N Connector.
E-DIN indicates an elongated DIN Connector.
4) The antenna weight listed above does not include the bracket weight.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

Radiation-pattern[1)]



Horizontal



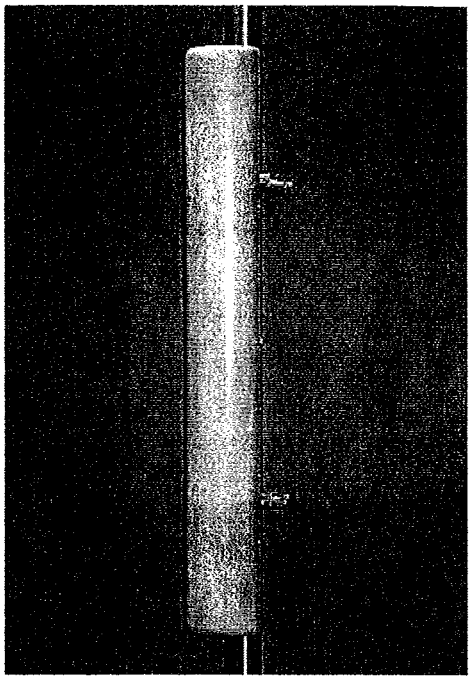
Vertical

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back Ratio.

CF Denotes a Center-Fed Connector.

1850-1990 MHz



Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- Watercut brass feedline assembly for consistent performance.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad band-width and superior performance.
- Air as insulation for virtually no internal signal loss.

Every Amphenol Antel antenna is under a five-year limited warranty for repair or re-placement.

Antenna available with center-fed connector only.

Amphenol Antel, Inc.
The Antenna Technology Company

1300 Capital Drive Rockford, IL 61109 Toll-Free (888) 417-9562 Tel. (815) 399-0001
Fax. (815) 399-0156 Email: antel@antelinc.com www.antelinc.com

Revision Date: 11/23/04

General Power Density

Site Name: Stonington
Tower Height: 110 Ft. rad center

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissable Exposure*	Fraction of MPE	
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)	
Verizon	880	9	200	1800	110	0.0535	0.56733	9.43%	
Verizon	1900	3	255	765	110	0.0227	1	2.27%	
Total Percentage of Maximum Permissible Exposure								11.70%	

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.

verizonwireless