

Microwave Path Data Sheet

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COMSEARCH19700 Janelia Farm Boulevard, Ashburn, VA, 20147
(703)726-5824 www.comsearch.com

PCN Date: 05/10/2011

Job Number: 100511COMSFB08

Administrative Information		WEST TRACY CA	ALTAMONT PS CA
City/County		/Alameda	/Alameda
Status / License Basis		Engineering Proposal / PRIMARY OPERATION	Engineering Proposal / PRIMARY OPERATION
Call Sign		WPQP800	WLV548
Licensee Code		5165A1	5165A1
Licensee Name		New Cingular Wireless PCS LLC – N C	New Cingular Wireless PCS LLC – N C
Radio Service / Station Class		CF -- Point-to-Point Microwave, Common Carrier	FXO -- Fixed
Site Information			
Latitude (NAD 83)		37 ° 44' 31.1" N	37 ° 42' 46.4" N
Longitude (NAD 83)		121 ° 34' 53.9" W	121 ° 39' 43.3" W
Ground Elevation (m/ft-AMSL)		129.84 / 426.0	451.10 / 1480.0
Antenna Structure Registration #			
Path Azimuth (°)		245.536	65.486
Path Length (km / miles)		7.787 / 4.839	
Transmit Antenna			
Manufacturer		77043A	77043A
Model		ANDREW CORPORATION	ANDREW CORPORATION
Gain(dBi) / Beamwidth(°) / Tilt(°)		VHLP4-11B	VHLP4-11B
Centerline (m / ft – AGL)		40.4 / 1.50 / 2.52	40.4 / 1.50 / -2.57
		3.05 / 10.0	27.43 / 90.0
Receive Antenna		Same As Transmit	
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft – AGL)			
Diversity Receive Antenna			
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft – AGL)			
Radio Information			
Manufacturer		TEMU27	TEMU27
Model		Alcatel-Lucent USA, Inc.	Alcatel-Lucent USA, Inc.
Model Description		95MPR11-H128F30-160	95MPR11-H128F30-160
Emission Designator / Modulation		9500 MPR Indoor Fixed Modulation	9500 MPR Indoor Fixed Modulation
Loading		30M0D7W 128 QAM	30M0D7W 128 QAM
Stability (%)		1 CH DIG 160170.000	1 CH DIG 160170.000
		0.001	0.001
		Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)		27.0	27.0
Received Level (dBm)		-31.4	-31.4
EIRP (dBm)		64.7	62.2
Fixed Loss: Tx / Common (dB)		0.0 / 2.7	0.0 / 5.2
Free Space Loss (dB)			131.3
Transmit Frequencies (MHz)		11035.0000V(9)	11525.0000V(9)

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Administrative Information		S ALTAMOUNT CA	WEST TRACY CA
City/County		/Alameda	/Alameda
Status / License Basis		Engineering Proposal / PRIMARY OPERATION	Engineering Proposal / PRIMARY OPERATION
Call Sign		WPQP801	WPQP800
Licensee Code		5165A1	5165A1
Licensee Name		New Cingular Wireless PCS LLC – N C	New Cingular Wireless PCS LLC – N C
Radio Service / Station Class		CF -- Point-to-Point Microwave, Common Carrier	FXO -- Fixed
Site Information			
Latitude (NAD 83)		37 ° 43' 45.0" N	37 ° 44' 31.1" N
Longitude (NAD 83)		121 ° 37' 33.6" W	121 ° 34' 53.9" W
Ground Elevation (m/ft-AMSL)		260.30 / 854.0	129.84 / 426.0
Antenna Structure Registration #			
Path Azimuth (°)		70.011	250.038
Path Length (km / miles)		4.161 / 2.585	
Transmit Antenna			
Manufacturer		84900G	84900G
Model		GABRIEL ELECTRONICS	GABRIEL ELECTRONICS
Gain(dBi) / Beamwidth(°) / Tilt(°)		HE2-180C	HE2-180C
Centerline (m / ft – AGL)		38.9 / 1.90 / -1.77	38.9 / 1.90 / 1.74
		3.05 / 10.0	6.10 / 20.0
Receive Antenna		Same As Transmit	
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft – AGL)			
Diversity Receive Antenna			
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft – AGL)			
Radio Information			
Manufacturer		TEMT63	TEMT63
Model		Alcatel-Lucent USA, Inc.	Alcatel-Lucent USA, Inc.
Model Description		95MPR18-O32F30-114	95MPR18-O32F30-114
Emission Designator / Modulation		9500 MPR Outdoor Fixed Modulation HP	9500 MPR Outdoor Fixed Modulation HP
Loading		30M0D7W 32 QAM	30M0D7W 32 QAM
Stability (%)		1 CH DIG 114000.000	1 CH DIG 114000.000
		0.001	0.001
		Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)		17.0	17.0
Received Level (dBm)		-41.5	-41.5
EIRP (dBm)		53.2	52.6
Fixed Loss: Tx / Common (dB)		0.0 / 2.7	0.0 / 3.3
Free Space Loss (dB)			130.3
Transmit Frequencies (MHz)		19585.0000H(10)	18025.0000H(10)

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Administrative Information		SAN MATEO 2 CA	SAN MATEO 3 CA
City/County		/	/
Status / License Basis		Engineering Proposal / PRIMARY OPERATION	Engineering Proposal / PRIMARY OPERATION
Call Sign		WPNG848	WPNG849
Licensee Code		5165A1	5165A1
Licensee Name		New Cingular Wireless PCS LLC – N C	New Cingular Wireless PCS LLC – N C
Radio Service / Station Class		CF -- Point-to-Point Microwave, Common Carrier	FXO -- Fixed
Site Information			
Latitude (NAD 83)		37 °35' 50.6" N	37 °36' 10.0" N
Longitude (NAD 83)		122 °13' 13.2" W	122 °12' 7.6" W
Ground Elevation (m/ft-AMSL)		4.27 / 14.0	4.27 / 14.0
Antenna Structure Registration #			
Path Azimuth (°)		69.605	249.616
Path Length (km / miles)		1.717 / 1.067	
Transmit Antenna			
Manufacturer		MD1250	MD1250
Model		MARK ANTENNA	MARK ANTENNA
Gain(dBi) / Beamwidth(°) / Tilt(°)		HP-230A18 RF	HP-230A18 RF
Centerline (m / ft – AGL)		38.4 / 2.00 / –0.01	38.4 / 2.00 / –0.01
		6.40 / 21.0	6.40 / 21.0
Receive Antenna		Same As Transmit	
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft – AGL)			
Diversity Receive Antenna			
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft – AGL)			
Radio Information			
Manufacturer		TENA76	TENA76
Model		Alcatel-Lucent USA, Inc.	Alcatel-Lucent USA, Inc.
Model Description		95MPR23-O128F30-160	95MPR23-O128F30-160
Emission Designator / Modulation		9500 MPR Outdoor Fixed Modulation	9500 MPR Outdoor Fixed Modulation
Loading		30M0D7W 128 QAM	30M0D7W 128 QAM
Stability (%)		1 CH DIG 160000.000	1 CH DIG 160000.000
		0.001	0.001
		Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)		15.5	15.5
Received Level (dBm)		–43.3	–43.3
EIRP (dBm)		48.1	48.1
Fixed Loss: Tx / Common (dB)		0.0 / 5.8	0.0 / 5.8
Free Space Loss (dB)			124.0
Transmit Frequencies (MHz)		23285.0000V(6)	22085.0000V(6)

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Job Number 100511COMSFB08

Administrative Information		SAN MATEO 3 CA	SAN MATEO 4 CA
City/County		/	/
Status / License Basis		Engineering Proposal / PRIMARY OPERATION	Engineering Proposal / PRIMARY OPERATION
Call Sign		WPNG849	WPNG850
Licensee Code		5165A1	5165A1
Licensee Name		New Cingular Wireless PCS LLC - N C	New Cingular Wireless PCS LLC - N C
Radio Service / Station Class		CF -- Point-to-Point Microwave, Common Carrier	FXO -- Fixed
Site Information			
Latitude (NAD 83)		37 °36' 10.0" N	37 °36' 29.7" N
Longitude (NAD 83)		122 °12' 7.6" W	122 °11' 2.0" W
Ground Elevation (m/ft-AMSL)		4.27 / 14.0	4.27 / 14.0
Antenna Structure Registration #			
Path Azimuth (°)		69.315	249.326
Path Length (km / miles)		1.720 / 1.069	
Transmit Antenna			
Manufacturer		MD1250	MD1250
Model		MARK ANTENNA	MARK ANTENNA
Gain(dBi) / Beamwidth(°) / Tilt(°)		HP-230A18 RF	HP-230A18 RF
Centerline (m / ft - AGL)		38.4 / 2.00 / -0.01	38.4 / 2.00 / -0.01
		6.40 / 21.0	6.40 / 21.0
Receive Antenna		Same As Transmit	
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft - AGL)			
Diversity Receive Antenna			
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft - AGL)			
Radio Information			
Manufacturer		TENA76	TENA76
Model		Alcatel-Lucent USA, Inc.	Alcatel-Lucent USA, Inc.
Model Description		95MPR23-O128F30-160	95MPR23-O128F30-160
Emission Designator / Modulation		9500 MPR Outdoor Fixed Modulation	9500 MPR Outdoor Fixed Modulation
Loading		30M0D7W 128 QAM	30M0D7W 128 QAM
Stability (%)		1 CH DIG 160000.000	1 CH DIG 160000.000
		0.001	0.001
		Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)		15.5	15.5
Received Level (dBm)		-43.4	-43.4
EIRP (dBm)		48.1	48.1
Fixed Loss: Tx / Common (dB)		0.0 / 5.8	0.0 / 5.8
Free Space Loss (dB)			124.1
Transmit Frequencies (MHz)		21985.0000V(4)	23185.0000V(4)

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Administrative Information		SAN MATEO 4 CA	SAN MATEO 5 CA
City/County		/	/
Status / License Basis		Engineering Proposal / PRIMARY OPERATION	Engineering Proposal / PRIMARY OPERATION
Call Sign		WPNG850	WPNG851
Licensee Code		5165A1	5165A1
Licensee Name		New Cingular Wireless PCS LLC – N C	New Cingular Wireless PCS LLC – N C
Radio Service / Station Class		CF -- Point-to-Point Microwave, Common Carrier	FXO -- Fixed
Site Information			
Latitude (NAD 83)		37 °36' 29.7" N	37 °36' 49.1" N
Longitude (NAD 83)		122 °11' 2.0" W	122 °9' 56.2" W
Ground Elevation (m/ft-AMSL)		4.27 / 14.0	4.27 / 14.0
Antenna Structure Registration #			
Path Azimuth (°)		69.659	249.670
Path Length (km / miles)		1.721 / 1.069	
Transmit Antenna			
Manufacturer		MD1250	MD1250
Model		MARK ANTENNA	MARK ANTENNA
Gain(dBi) / Beamwidth(°) / Tilt(°)		HP-230A18 RF	HP-230A18 RF
Centerline (m / ft – AGL)		38.4 / 2.00 / –0.01	38.4 / 2.00 / –0.01
		6.40 / 21.0	6.40 / 21.0
Receive Antenna		Same As Transmit	
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft – AGL)			
Diversity Receive Antenna			
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft – AGL)			
Radio Information			
Manufacturer		TENA72	TENA72
Model		Alcatel-Lucent USA, Inc.	Alcatel-Lucent USA, Inc.
Model Description		95MPR23-O128F50-268	95MPR23-O128F50-268
Emission Designator / Modulation		9500 MPR Outdoor Fixed Modulation	9500 MPR Outdoor Fixed Modulation
Loading		50M0D7W 128 QAM	50M0D7W 128 QAM
Stability (%)		1 CH DIG 267700.000	1 CH DIG 267700.000
		0.001	0.001
		Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)		15.5	15.5
Received Level (dBm)		–43.4	–43.4
EIRP (dBm)		48.1	48.1
Fixed Loss: Tx / Common (dB)		0.0 / 5.8	0.0 / 5.8
Free Space Loss (dB)			124.1
Transmit Frequencies (MHz)		23375.0000V(8)	22175.0000V(8)

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Administrative Information		SAN MATEO 5 CA	SAN MATEO 6 CA
City/County		/	/
Status / License Basis		Engineering Proposal / PRIMARY OPERATION	Engineering Proposal / PRIMARY OPERATION
Call Sign		WPNG851	WPNG852
Licensee Code		5165A1	5165A1
Licensee Name		New Cingular Wireless PCS LLC – N C	New Cingular Wireless PCS LLC – N C
Radio Service / Station Class		CF -- Point-to-Point Microwave, Common Carrier	FXO -- Fixed
Site Information			
Latitude (NAD 83)		37 °36' 49.1" N	37 °37' 3.4" N
Longitude (NAD 83)		122 °9' 56.2" W	122 °9' 11.3" W
Ground Elevation (m/ft-AMSL)		4.27 / 14.0	4.57 / 15.0
Antenna Structure Registration #			
Path Azimuth (°)		68.176	248.184
Path Length (km / miles)		1.186 / 0.737	
Transmit Antenna			
Manufacturer		97217A	97217A
Model		ANDREW CORPORATION	ANDREW CORPORATION
Gain(dBi) / Beamwidth(°) / Tilt(°)		VHLPX2-23B	VHLPX2-23B
Centerline (m / ft – AGL)		40.5 / 1.70 / 0.04	40.5 / 1.70 / -0.05
		6.40 / 21.0	7.01 / 23.0
Receive Antenna		Same As Transmit	
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft – AGL)			
Diversity Receive Antenna			
Manufacturer			
Model			
Gain (dBi) / Beamwidth (°)			
Centerline (m / ft – AGL)			
Radio Information			
Manufacturer		TENA72	TENA72
Model		Alcatel-Lucent USA, Inc.	Alcatel-Lucent USA, Inc.
Model Description		95MPR23-O128F50-268	95MPR23-O128F50-268
Emission Designator / Modulation		9500 MPR Outdoor Fixed Modulation	9500 MPR Outdoor Fixed Modulation
Loading		50M0D7W 128 QAM	50M0D7W 128 QAM
Stability (%)		1 CH DIG 267700.000	1 CH DIG 267700.000
		0.001	0.001
		Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)		15.5	15.5
Received Level (dBm)		-35.9	-35.9
EIRP (dBm)		50.2	50.2
Fixed Loss: Tx / Common (dB)		0.0 / 5.8	0.0 / 5.8
Free Space Loss (dB)			120.8
Transmit Frequencies (MHz)		21825.0000H(1)	23025.0000H(1)