

Microwave Path Data Sheet

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COMSEARCH

19700 Janelia Farm Boulevard, Ashburn, VA, 20147
(858)232-4372 www.comsearch.com

PCN Date: 04/29/2011

Job Number: 110429COMSSL01

New Path

RCN Number: 11042900

Administrative Information

CA-SFO0585A CA
City/County Castro Valley/Alameda
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign WQLY407
Licensee Code CLESP3
Licensee Name Clearwire Spectrum Holdings III, LL
Radio Service / Station Class MG -- Microwave Industrial/Business Pool

CA-SFO0286A CA

Hayward/Alameda
Engineering Proposal / PRIMARY OPERATION
WQLY217
CLESP3
Clearwire Spectrum Holdings III, LL
FXO -- Fixed

Site Information

Latitude (NAD 83)	37 ° 41' 34.8" N	37 ° 39' 25.7" N
Longitude (NAD 83)	122 ° 5' 38.4" W	122 ° 5' 40.4" W
Ground Elevation (m/ft-AMSL)	87.10 / 285.8	22.20 / 72.8
Antenna Structure Registration #		
Path Azimuth (°)	180.706	0.705
Path Length (km / miles)	3.981 / 2.473	

Transmit Antenna

87204A	87204A
ANDREW CORPORATION	ANDREW CORPORATION
VHLP2-18B	VHLP2-18B
Gain(dBi) / Beamwidth(°) / Tilt(°) 38.9 / 2.10 / -0.94	38.9 / 2.10 / 0.91
Centerline (m / ft - AGL) 22.25 / 73.0	22.86 / 75.0

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

TEMR29	TEMR29
DRAGONWAVE INC	DRAGONWAVE INC
18HD50HFC364V02	18HD50HFC364V02
HORIZON DUO	HORIZON DUO
Emission Designator / Modulation 47M1D7W 256 QAM	47M1D7W 256 QAM
Loading 1 CH DIG 364000.000	1 CH DIG 364000.000
Stability (%) 0.001	0.001
Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm) 14.5	14.5
Received Level (dBm) -37.6	-37.6
EIRP (dBm) 53.4	53.4
Fixed Loss: Tx / Common (dB) 0.0 / 0.0	0.0 / 0.0
Free Space Loss (dB) 129.9	

Transmit Frequencies (MHz)	18015.0000V(6)	18115.0000V(8)	19575.0000V(6)	19675.0000V(8)
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Administrative Information

CA-SFO0286A CA
City/County Hayward/Alameda
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign WQLY217
Licensee Code CLESP3
Licensee Name Clearwire Spectrum Holdings III, LL
Radio Service / Station Class MG -- Microwave Industrial/Business Pool

CA-SFO0314A CA

City/County Union City/Alameda
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign WQLY322
Licensee Code CLESP3
Licensee Name Clearwire Spectrum Holdings III, LL
Radio Service / Station Class FXO -- Fixed

Site Information

Latitude (NAD 83)	37 °39' 25.7" N	37 °36' 28.6" N
Longitude (NAD 83)	122 °5' 40.4" W	122 °2' 24.2" W
Ground Elevation (m/ft-AMSL)	22.20 / 72.8	15.30 / 50.2
Antenna Structure Registration #		
Path Azimuth (°)	138.601	318.635
Path Length (km / miles)		7.277 / 4.522

Transmit Antenna

Manufacturer	87204A	87204A
Model	ANDREW CORPORATION	ANDREW CORPORATION
Gain(dBi) / Beamwidth(°) / Tilt(°)	VHLP2-18B	VHLP2-18B
Centerline (m / ft - AGL)	38.9 / 2.10 / -0.00	38.9 / 2.10 / -0.05
	22.86 / 75.0	32.61 / 107.0

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	TENA18	TENA18
Model	DRAGONWAVE INC	DRAGONWAVE INC
Model Description	18QD50HFC215V03	18QD50HFC215V03
Emission Designator / Modulation	HORIZON QUANTUM	HORIZON QUANTUM
Loading	45M8D7W 64 QAM	45M8D7W 64 QAM
Stability (%)	1 CH DIG 215000.000	1 CH DIG 215000.000
	0.001	0.001
	Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)	18.5	18.5
Received Level (dBm)	-38.8	-38.8
EIRP (dBm)	57.4	57.4
Fixed Loss: Tx / Common (dB)	0.0 / 0.0	0.0 / 0.0
Free Space Loss (dB)		135.1

Transmit Frequencies (MHz)	19325.0000H(1)	19425.0000H(3)	17765.0000H(1)	17865.0000H(3)
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