

Microwave Path Data Sheet

Page 1 of 1

COMSEARCH

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PCN Date: 02/11/2011

Prev Job Num: 100916COMSSL07

Job Number: 110211COMSSL02

RCN Number: 11021132

Administrative Information

CA-SFO0380A CA
City/County Redwood City/San Mateo
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign WQMA226
Licensee Code CLESP3
Licensee Name Clearwire Spectrum Holdings III, LL
Radio Service / Station Class MG -- Microwave Industrial/Business Pool

CA-SFO0394A CA

City/County Redwood City/San Mateo
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign WQLY843
Licensee Code CLESP3
Licensee Name Clearwire Spectrum Holdings III, LL
Radio Service / Station Class FXO -- Fixed

Site Information

Latitude (NAD 83)	37 °31' 24.1" N	37 °28' 46.6" N
Longitude (NAD 83)	122 °15' 41.3" W	122 °15' 18.0" W
Ground Elevation (m/ft-AMSL)	2.40 / 7.9	34.40 / 112.9
Antenna Structure Registration #		
Path Azimuth (°)	173.276	353.280
Path Length (km / miles)	4.889 / 3.038	

Transmit Antenna

Manufacturer	RH6969	RB2160
Model	RADIO WAVES, INC	RADIO WAVES, INC
Gain(dBi) / Beamwidth(°) / Tilt(°)	HP3-18	HP4-18
Centerline (m / ft - AGL)	42.0 / 1.30 / 0.33	44.5 / 1.00 / -0.37
	28.04 / 92.0	25.91 / 85.0

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	<u>TENE28</u>			<u>TENE28</u>		
Model	DRAGONWAVE INC			DRAGONWAVE INC		
Model Description	<u>18QA50HFC322V03</u>			<u>18QA50HFC322V03</u>		
Emission Designator / Modulation	<u>HORIZON QUANTUM - ADJ CHANNEL</u>			<u>HORIZON QUANTUM - ADJ CHANNEL</u>		
Loading	<u>45M8D7W</u>	<u>256 QAM</u>		<u>45M8D7W</u>	<u>256 QAM</u>	
Stability (%)	1 CH	DIG	322000.000	1 CH	DIG	322000.000
	0.001			0.001		
	Nominal	Coordinated	Maximum	Nominal	Coordinated	Maximum
Power (dBm)		<u>15.5</u>			<u>15.5</u>	
Received Level (dBm)		<u>-31.3</u>			<u>-31.3</u>	
EIRP (dBm)		<u>56.7</u>			<u>59.2</u>	
Fixed Loss: Tx / Common (dB)	0.0 / 0.8			0.0 / 0.8		
Free Space Loss (dB)	131.7					

Transmit Frequencies (MHz)	17815.0000H(2)	17915.0000H(4)	19375.0000H(2)	19475.0000H(4)
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