

Microwave Path Data Sheet

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COMSEARCH19700 Janelia Farm Boulevard, Ashburn, VA, 20147
(858)232-4372 www.comsearch.com

PCN Date: 06/02/2011

Prev Job Num: 110324COMSSL01

Job Number: 110602COMSSL08

RCN Number: 11060216

Administrative Information

CA0035 RIVER CA
City/County Riverbank/Stanislaus
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign WQMA320
Licensee Code OPNRAN
Licensee Name Open Range Communications
Radio Service / Station Class MG -- Microwave Industrial/Business Pool

CA0524 CA

Modesto/Stanislaus
Engineering Proposal / PRIMARY OPERATION

OPNRAN
Open Range Communications
FXO -- Fixed

Site Information

Latitude (NAD 83)	37 ° 43' 51.1" N	37 ° 40' 49.5" N
Longitude (NAD 83)	120 ° 56' 6.0" W	120 ° 55' 29.3" W
Ground Elevation (m/ft-AMSL)	43.30 / 142.1	34.40 / 112.9
Antenna Structure Registration #	1233589	1060758
Path Azimuth (°)	170.875	350.881
Path Length (km / miles)	5.671 / 3.524	

Transmit Antenna

87204A
Manufacturer ANDREW CORPORATION
Model VHLP2-18B
Gain(dBi) / Beamwidth(°) / Tilt(°) 38.9 / 2.10 / 0.40
Centerline (m / ft - AGL) 27.43 / 90.0

87204A

ANDREW CORPORATION
VHLP2-18B
38.9 / 2.10 / -0.44
77.72 / 255.0

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

TEMN90
Manufacturer Aviat Networks, Inc.
Model EH18-70DS1-32QAM-30
Model Description ECLIPSE ODU 300 HP
Emission Designator / Modulation 30M0D7W 32 QAM
Loading 1 CH DIG 117800.000
Stability (%) 0.001
Nominal Coordinated Maximum
Power (dBm) 17.0
Received Level (dBm) -40.2
EIRP (dBm) 54.9
Fixed Loss: Tx / Common (dB) 0.0 / 1.0
Free Space Loss (dB) 133.0

TEMN90

Aviat Networks, Inc.
EH18-70DS1-32QAM-30
ECLIPSE ODU 300 HP
30M0D7W 32 QAM
1 CH DIG 117800.000
0.001
Nominal Coordinated Maximum
17.0
-40.2
54.9
0.0 / 1.0

Transmit Frequencies (MHz) 19525.0000V(8)

17965.0000V(8)

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PCN Date: 06/02/2011
Job Number 110602COMSSL08

Prev Job Num: 110324COMSSL01
RCN Number: 11060216

Administrative Information

CA0095 CA
City/County /Stanislaus
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign WQMA313
Licensee Code OPNRAN
Licensee Name Open Range Communications
Radio Service / Station Class MG -- Microwave Industrial/Business Pool

CA0522 CA

/Stanislaus
Engineering Proposal / PRIMARY OPERATION

OPNRAN
Open Range Communications
FXO -- Fixed

Site Information

Latitude (NAD 83)	37 °28' 8.4" N	37 °24' 55.8" N
Longitude (NAD 83)	121 °7' 19.2" W	121 °9' 25.2" W
Ground Elevation (m/ft-AMSL)	29.10 / 95.5	125.80 / 412.7
Antenna Structure Registration #		
Path Azimuth (°)	207.558	27.537
Path Length (km / miles)	6.697 / 4.161	

Transmit Antenna

87204A
Manufacturer ANDREW CORPORATION
Model VHLP2-18B
Gain(dBi) / Beamwidth(°) / Tilt(°) 38.9 / 2.10 / 0.87
Centerline (m / ft – AGL) 30.48 / 100.0

87204A

ANDREW CORPORATION
VHLP2-18B
38.9 / 2.10 / -0.92
38.10 / 125.0

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

TEMZ02
Manufacturer Aviat Networks, Inc.
Model EH18-100DS1-32QAM-40
Model Description ECLIPSE ODU 300 HP
Emission Designator / Modulation 40M0D7W 32 QAM
Loading 1 CH DIG 168100.000
Stability (%) 0.001
Nominal Coordinated Maximum
Power (dBm) 17.0
Received Level (dBm) -41.6
EIRP (dBm) 54.9
Fixed Loss: Tx / Common (dB) 0.0 / 1.0
Free Space Loss (dB) 134.4

TEMZ02

Aviat Networks, Inc.
EH18-100DS1-32QAM-40
ECLIPSE ODU 300 HP
40M0D7W 32 QAM
1 CH DIG 168100.000
0.001
Nominal Coordinated Maximum
17.0
-41.6
54.9
0.0 / 1.0

Transmit Frequencies (MHz) 19360.0000V(3)

17800.0000V(3)