



FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	39.73	V	74	-34.27	Peak	1.75	335	
2708.91	29.76	V	54	-24.24	Avg	1.75	335	
3611.88	45.48	V	74	-28.52	Peak	1.25	320	
3611.88	37.56	V	54	-16.44	Avg	1.25	320	
4514.86	45.76	V	74	-28.24	Peak	1.5	190	
4514.86	37	V	54	-17	Avg	1.5	190	
5417.83	48.49	V	74	-25.51	Peak	1.75	340	
5417.83	37.14	V	54	-16.86	Avg	1.75	340	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

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Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.42	V	74	-33.58	Peak	1	210	
2708.91	30.18	V	54	-23.82	Avg	1	210	
3611.88	46.61	V	74	-27.39	Peak	1	185	
3611.88	39.91	V	54	-14.09	Avg	1	185	
4514.86	46.19	V	74	-27.81	Peak	2	200	
4514.86	38.33	V	54	-15.67	Avg	2	200	
5417.83	50.45	V	74	-23.55	Peak	1.25	185	
5417.83	38.09	V	54	-15.91	Avg	1.25	185	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

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Date: 02/10/2015
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Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.91	V	74	-33.09	Peak	1.25	90	
2708.91	30.5	V	54	-23.5	Avg	1.25	90	
3611.88	44.72	V	74	-29.28	Peak	1.1	80	
3611.88	35.73	V	54	-18.27	Avg	1.1	80	
4514.86	45.85	V	74	-28.15	Peak	1	45	
4514.86	37.38	V	54	-16.62	Avg	1	45	
5417.83	48.59	V	74	-25.41	Peak	1	160	
5417.83	36.91	V	54	-17.09	Avg	1	160	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

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Date: 02/10/2015

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Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	39.33	H	74	-34.67	Peak	1	290	
2708.91	27.79	H	54	-26.21	Avg	1	290	
3611.88	45.63	H	74	-28.37	Peak	1	270	
3611.88	38.48	H	54	-15.52	Avg	1	270	
4514.86	45.59	H	74	-28.41	Peak	1.25	300	
4514.86	37.21	H	54	-16.79	Avg	1.25	300	
5417.83	50.25	H	74	-23.75	Peak	1	210	
5417.83	40.81	H	54	-13.19	Avg	1	210	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

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Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.43	H	74	-33.57	Peak	1	185	
2708.91	29.24	H	54	-24.76	Avg	1	185	
3611.88	44.14	H	74	-29.86	Peak	1	90	
3611.88	34.5	H	54	-19.5	Avg	1	90	
4514.86	44.27	H	74	-29.73	Peak	1	175	
4514.86	32.86	H	54	-21.14	Avg	1	175	
5417.83	47.47	H	74	-26.53	Peak	1.25	45	
5417.83	35.57	H	54	-18.43	Avg	1.25	45	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

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Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.86	H	74	-33.14	Peak	1	150	
2708.91	29.14	H	54	-24.86	Avg	1	150	
3611.88	46.14	H	74	-27.86	Peak	1.65	270	
3611.88	38.75	H	54	-15.25	Avg	1.65	270	
4514.86	45.89	H	74	-28.11	Peak	1	180	
4514.86	36.99	H	54	-17.01	Avg	1	180	
5417.83	49.08	H	74	-24.92	Peak	1.25	180	
5417.83	38.98	H	54	-15.02	Avg	1.25	180	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

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 Hummingbird MCA Module
 Model: HUM-900-PRO-UFL
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**Middle Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	40.31	V	74	-33.69	Peak	1.1	280	
2745	28.79	V	54	-25.21	Avg	1.1	280	
3660	44.56	V	74	-29.44	Peak	1	325	
3660	35.2	V	54	-18.8	Avg	1	325	
4575	46.01	V	74	-27.99	Peak	1	0	
4575	36.77	V	54	-17.23	Avg	1	0	
5490	45.38	V	74	-28.62	Peak	2	45	
5490	34.05	V	54	-19.95	Avg	2	45	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

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Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	41.43	V	74	-32.57	Peak	1	200	
2745	30.87	V	54	-23.13	Avg	1	200	
3660	45.25	V	74	-28.75	Peak	1	350	
3660	38.72	V	54	-15.28	Avg	1	350	
4575	48.56	V	74	-25.44	Peak	1	190	
4575	41.33	V	54	-12.67	Avg	1	190	
5490	47.77	V	74	-26.23	Peak	2.25	345	
5490	34.36	V	54	-19.64	Avg	2.25	345	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

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Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	39.96	V	74	-34.04	Peak	1	110	
2745	28.11	V	54	-25.89	Avg	1	110	
3660	44	V	74	-30	Peak	1	80	
3660	34.97	V	54	-19.03	Avg	1	80	
4575	45.59	V	74	-28.41	Peak	1	160	
4575	36.28	V	54	-17.72	Avg	1	160	
5490	47.38	V	74	-26.62	Peak	1	150	
5490	35.15	V	54	-18.85	Avg	1	150	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
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Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	39.84	H	74	-34.16	Peak	1	235	
2745	28.56	H	54	-25.44	Avg	1	235	
3660	45.48	H	74	-28.52	Peak	1	270	
3660	38.96	H	54	-15.04	Avg	1	270	
4575	47.4	H	74	-26.6	Peak	1	210	
4575	40.19	H	54	-13.81	Avg	1	210	
5490	49.83	H	74	-24.17	Peak	1.1	170	
5490	40.14	H	54	-13.86	Avg	1.1	170	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
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Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	40.38	H	74	-33.62	Peak	1	250	
2745	29.79	H	54	-24.21	Avg	1	250	
3660	43.38	H	74	-30.62	Peak	1.5	345	
3660	34.01	H	54	-19.99	Avg	1.5	345	
4575	44.1	H	74	-29.9	Peak	1.1	45	
4575	32.48	H	54	-21.52	Avg	1.1	45	
5490	47.12	H	74	-26.88	Peak	1	30	
5490	34.64	H	54	-19.36	Avg	1	30	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

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Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	40.62	H	74	-33.38	Peak	1	170	
2745	29.18	H	54	-24.82	Avg	1	170	
3660	45.02	H	74	-28.98	Peak	1	180	
3660	38.91	H	54	-15.09	Avg	1	180	
4575	45.51	H	74	-28.49	Peak	1.1	45	
4575	36.67	H	54	-17.33	Avg	1.1	45	
5490	49.34	H	74	-24.66	Peak	1	235	
5490	39.4	H	54	-14.6	Avg	1	235	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

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Lab: B

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High Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	39.65	V	74	-34.35	Peak	1	135	
2778.83	26.92	V	54	-27.08	Avg	1	135	
3705.1	42.72	V	74	-31.28	Peak	1	290	
3705.1	31.92	V	54	-22.08	Avg	1	290	
4631.4	45.87	V	74	-28.13	Peak	1	210	
4631.4	37.03	V	54	-16.97	Avg	1	210	
5557.66	47.23	V	74	-26.77	Peak	1.15	345	
5557.66	34.09	V	54	-19.91	Avg	1.15	345	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

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**High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	40.34	V	74	-33.66	Peak	1.25	195	
2778.83	29.57	V	54	-24.43	Avg	1.25	195	
3705.1	45.52	V	74	-28.48	Peak	1	190	
3705.1	36.13	V	54	-17.87	Avg	1	190	
4631.4	47.33	V	74	-26.67	Peak	1	200	
4631.4	40.16	V	54	-13.84	Avg	1	200	
5557.66	47.87	V	74	-26.13	Peak	1	345	
5557.66	36.46	V	54	-17.54	Avg	1	345	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

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**High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	39.04	V	74	-34.96	Peak	1	85	
2778.83	26.85	V	54	-27.15	Avg	1	85	
3705.1	43.68	V	74	-30.32	Peak	1	175	
3705.1	35.61	V	54	-18.39	Avg	1	175	
4631.4	45.08	V	74	-28.92	Peak	1	45	
4631.4	35.97	V	54	-18.03	Avg	1	45	
5557.66	47.77	V	74	-26.23	Peak	1	100	
5557.66	34.76	V	54	-19.24	Avg	1	100	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

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**High Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	38.76	H	74	-35.24	Peak	1	345	
2778.83	26.25	H	54	-27.75	Avg	1	345	
3705.1	46.12	H	74	-27.88	Peak	1	250	
3705.1	39.69	H	54	-14.31	Avg	1	250	
4631.4	48.64	H	74	-25.36	Peak	1	220	
4631.4	41.59	H	54	-12.41	Avg	1	220	
5557.66	50.51	H	74	-23.49	Peak	1.1	180	
5557.66	41.28	H	54	-12.72	Avg	1.1	180	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

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**High Channel
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Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	39.96	H	74	-34.04	Peak	1	260	
2778.83	28.84	H	54	-25.16	Avg	1	260	
3705.1	42.11	H	74	-31.89	Peak	1	195	
3705.1	29.44	H	54	-24.56	Avg	1	195	
4631.4	44.94	H	74	-29.06	Peak	1.1	235	
4631.4	34.95	H	54	-19.05	Avg	1.1	235	
5557.66	48.04	H	74	-25.96	Peak	1.15	265	
5557.66	32.64	H	54	-21.36	Avg	1.15	265	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

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**High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	39.88	H	74	-34.12	Peak	1.25	170	
2778.83	28.37	H	54	-25.63	Avg	1.25	170	
3705.1	45.66	H	74	-28.34	Peak	1	175	
3705.1	37.78	H	54	-16.22	Avg	1	175	
4631.4	45.73	H	74	-28.27	Peak	1.5	250	
4631.4	36.81	H	54	-17.19	Avg	1.5	250	
5557.66	49.67	H	74	-24.33	Peak	1	180	
5557.66	37.52	H	54	-16.48	Avg	1	180	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

FCC 15.247 and FCC Class B

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Configuration: Protocol B
ANT-916-CW-HW Antenna

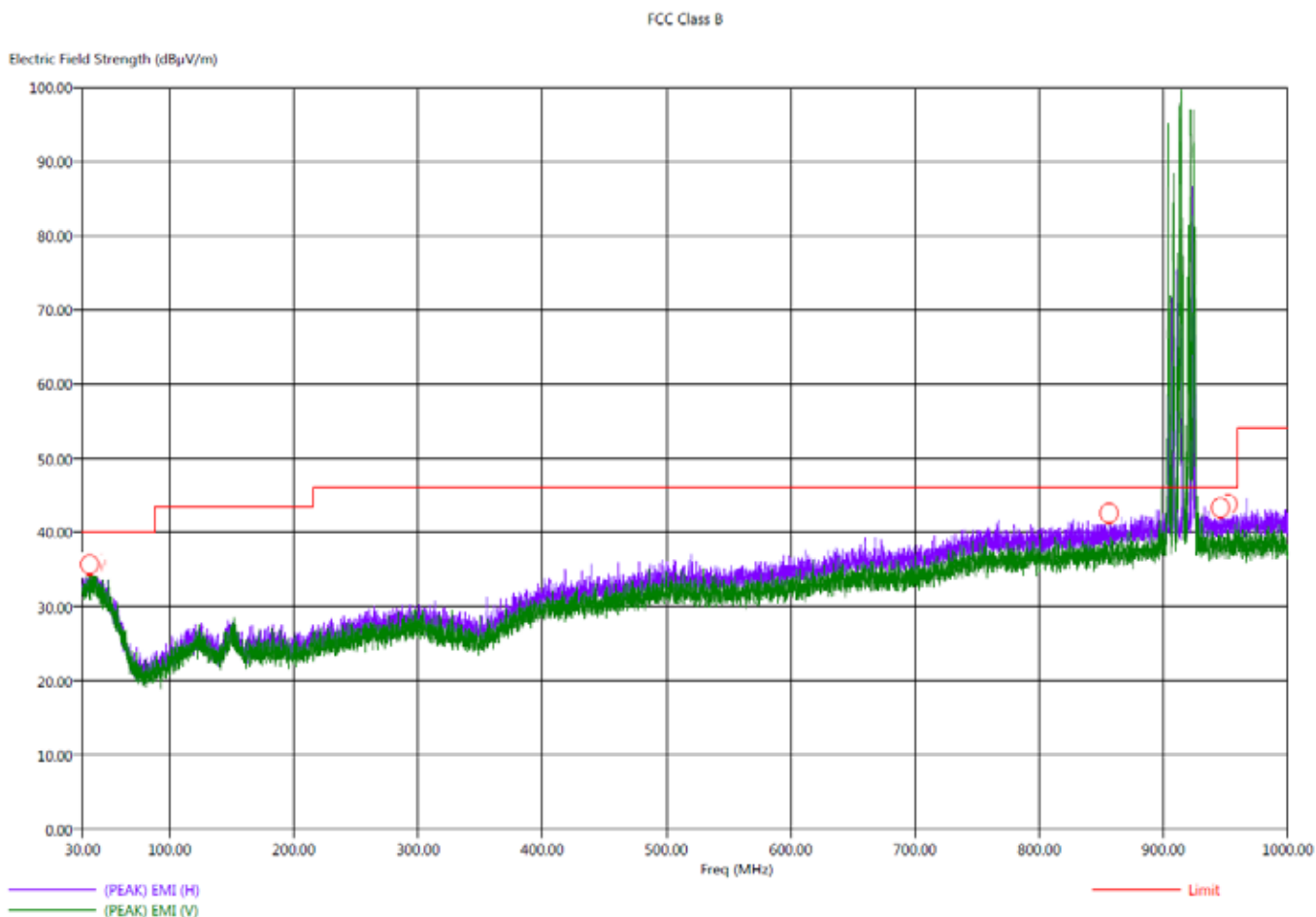
Dates: 02/05/2015 and 02/10/2015
Labs: B and D
Tested By: Kenneth Lee

Non Harmonic Emissions from the Tx and Digital Portion - 10 kHz to 30 MHz
Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 9.3 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found for the
								Digital Portion
								from 10 kHz to 30 MHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 10 kHz to 30 MHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis
								No Emissions Found for the
								Digital Portion
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis

Title: Pre-Scan - FCC Class B
File: Agilent - Radiated Pre-Scan 30-1000Mhz - FCC Class B_Module_1_Protocol_B_ANT-916-CW-HW_Y-Axis_02-06-2015.set
Operator: Kenneth Lee
EUT Type: Hummingbird MCA
EUT Condition: Continuously Transmitting - Frequency Hopping - Protocol B - Module 1 - Y-Axis - Worst Case
Comments: Customer: Linx Technologies
M/N: HUM-900-PRO-UTL
Note: Antenna - ANT-916-CW-HW

2/6/2015 11:43:34 AM
Sequence: Preliminary Scan



Title: Radiated Final - 30-1000 MHz - FCC Class B
File: Agilent - Radiated Final Scan 30-1000Mhz - FCC Class B_Module 1_Protocol B_ANT-916-CW-HW_Y-Axis_02-06-2015.set
Operator: Kenneth Lee
EUT Type: Hummingbird MCA
EUT Condition: Continuously Transmitting - Frequency Hopping - Protocol B - Module 1 - Y-Axis - Worst Case
Comments: Customer: Unix Technologies
M/N: HUM-900-PRO.UFL
Note: Antenna - ANT-916-CW-HW

2/6/2015 11:54:09 AM
Sequence: Final Measurements

Final Scan - FCC Class B

Freq (MHz)	Pol	(PEAK) EMI (dB μ V/m)	(QP) EMI (dB μ V/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dB μ V/m)	Transducer (dB)	Cable (dB)	Twr Ht (cm)	Ttbt Aql (dec)
35.80	V	36.18	31.44	-3.82	-8.56	40.00	23.82	0.40	400.14	263.00
38.00	H	36.06	31.65	-3.94	-8.35	40.00	24.01	0.42	400.32	158.50
40.60	H	35.94	31.81	-4.06	-8.19	40.00	24.14	0.43	111.43	156.00
856.30	H	42.23	37.84	-3.77	-8.16	46.00	26.48	2.54	223.79	142.75
945.90	H	43.51	39.50	-2.49	-6.50	46.00	27.65	2.70	223.67	66.25
952.10	H	43.80	39.56	-2.20	-6.44	46.00	27.69	2.72	255.91	279.75



FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	43.31	V	74	-30.69	Peak	1	45	
2708.25	28.85	V	54	-25.15	Avg	1	45	
3611	37.75	V	74	-36.25	Peak	1	120	
3611	26.48	V	54	-27.52	Avg	1	120	
4513.75	45.06	V	74	-28.94	Peak	1	0	
4513.75	30.69	V	54	-23.31	Avg	1	0	
5416.5	47.34	V	74	-26.66	Peak	1.75	180	
5416.5	33.23	V	54	-20.77	Avg	1.75	180	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	40.04	V	74	-33.96	Peak	1.1	165	
2708.25	26.74	V	54	-27.26	Avg	1.1	165	
3611	45.05	V	74	-28.95	Peak	1	180	
3611	30.28	V	54	-23.72	Avg	1	180	
4513.75	44.96	V	74	-29.04	Peak	1	180	
4513.75	30.44	V	54	-23.56	Avg	1	180	
5416.5	47.19	V	74	-26.81	Peak	1.25	135	
5416.5	32.47	V	54	-21.53	Avg	1.25	135	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	40.86	V	74	-33.14	Peak	1	45	
2708.25	26.67	V	54	-27.33	Avg	1	45	
3611	43.66	V	74	-30.34	Peak	1	210	
3611	29.5	V	54	-24.5	Avg	1	210	
4513.75	43.6	V	74	-30.4	Peak	1	220	
4513.75	29.72	V	54	-24.28	Avg	1	220	
5416.5	45.98	V	74	-28.02	Peak	1.1	135	
5416.5	32.73	V	54	-21.27	Avg	1.1	135	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015
Lab: B
Tested By: Kenneth Lee

**Low Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	39.87	H	74	-34.13	Peak	1.15	335	
2708.25	25.98	H	54	-28.02	Avg	1.15	335	
3611	44.91	H	74	-29.09	Peak	1	170	
3611	30.69	H	54	-23.31	Avg	1	170	
4513.75	44.52	H	74	-29.48	Peak	1.35	190	
4513.75	29.74	H	54	-24.26	Avg	1.35	190	
5416.5	46.02	H	74	-27.98	Peak	1	200	
5416.5	33.42	H	54	-20.58	Avg	1	200	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	40.09	H	74	-33.91	Peak	1	235	
2708.25	26.88	H	54	-27.12	Avg	1	235	
3611	44.88	H	74	-29.12	Peak	1.15	175	
3611	30.47	H	54	-23.53	Avg	1.15	175	
4513.75	47.08	H	74	-26.92	Peak	1	10	
4513.75	32.46	H	54	-21.54	Avg	1	10	
5416.5	45.73	H	74	-28.27	Peak	1	180	
5416.5	32.33	H	54	-21.67	Avg	1	180	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	40.17	H	74	-33.83	Peak	1	120	
2708.25	26.51	H	54	-27.49	Avg	1	120	
3611	44.9	H	74	-29.1	Peak	1	180	
3611	30.36	H	54	-23.64	Avg	1	180	
4513.75	46.32	H	74	-27.68	Peak	1	170	
4513.75	31.17	H	54	-22.83	Avg	1	170	
5416.5	47.9	H	74	-26.1	Peak	1.25	175	
5416.5	33.27	H	54	-20.73	Avg	1.25	175	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
 Hummingbird MCA Module
 Model: HUM-900-RC-UFL
 Configuration: Protocol C
 ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	39.87	V	74	-34.13	Peak	1	180	
2726.25	25.13	V	54	-28.87	Avg	1	180	
3635	42.67	V	74	-31.33	Peak	1	230	
3635	28.77	V	54	-25.23	Avg	1	230	
4543.75	42.98	V	74	-31.02	Peak	1	160	
4543.75	29.02	V	54	-24.98	Avg	1	160	
5452.49	45.05	V	74	-28.95	Peak	1	170	
5452.49	32.12	V	54	-21.88	Avg	1	170	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
 Hummingbird MCA Module
 Model: HUM-900-RC-UFL
 Configuration: Protocol C
 ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	40.28	V	74	-33.72	Peak	1.25	195	
2726.25	26.54	V	54	-27.46	Avg	1.25	195	
3635	45.08	V	74	-28.92	Peak	1.1	110	
3635	31.01	V	54	-22.99	Avg	1.1	110	
4543.75	44.27	V	74	-29.73	Peak	1	135	
4543.75	28.86	V	54	-25.14	Avg	1	135	
5452.49	46.57	V	74	-27.43	Peak	1.25	210	
5452.49	31.46	V	54	-22.54	Avg	1.25	210	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	38.86	V	74	-35.14	Peak	1.1	45	
2726.25	25.44	V	54	-28.56	Avg	1.1	45	
3635	46.35	V	74	-27.65	Peak	1.1	135	
3635	28.79	V	54	-25.21	Avg	1.1	135	
4543.75	44.67	V	74	-29.33	Peak	1	120	
4543.75	29.45	V	54	-24.55	Avg	1	120	
5452.49	45.89	V	74	-28.11	Peak	1	90	
5452.49	33.45	V	54	-20.55	Avg	1	90	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	37.87	H	74	-36.13	Peak	1.1	180	
2726.25	26.15	H	54	-27.85	Avg	1.1	180	
3635	46.94	H	74	-27.06	Peak	1	165	
3635	31.55	H	54	-22.45	Avg	1	165	
4543.75	46.11	H	74	-27.89	Peak	1	235	
4543.75	30.87	H	54	-23.13	Avg	1	235	
5452.49	46.34	H	74	-27.66	Peak	1.25	320	
5452.49	32.99	H	54	-21.01	Avg	1.25	320	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	39.58	H	74	-34.42	Peak	1	110	
2726.25	24.24	H	54	-29.76	Avg	1	110	
3635	42.79	H	74	-31.21	Peak	1.25	180	
3635	28.67	H	54	-25.33	Avg	1.25	180	
4543.75	42.87	H	74	-31.13	Peak	1	135	
4543.75	29.37	H	54	-24.63	Avg	1	135	
5452.49	45.18	H	74	-28.82	Peak	1	260	
5452.49	32.49	H	54	-21.51	Avg	1	260	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	39.86	H	74	-34.14	Peak	1	190	
2726.25	25.79	H	54	-28.21	Avg	1	190	
3635	44.12	H	74	-29.88	Peak	1.1	165	
3635	29.87	H	54	-24.13	Avg	1.1	165	
4543.75	44.66	H	74	-29.34	Peak	1.1	230	
4543.75	30.4	H	54	-23.6	Avg	1.1	230	
5452.49	45.64	H	74	-28.36	Peak	1	180	
5452.49	32.98	H	54	-21.02	Avg	1	180	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
 Hummingbird MCA Module
 Model: HUM-900-RC-UFL
 Configuration: Protocol C
 ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

High Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	38.39	V	74	-35.61	Peak	1.1	275	
2744.24	26.45	V	54	-27.55	Avg	1.1	275	
3658.99	43.88	V	74	-30.12	Peak	2.5	195	
3658.99	29.95	V	54	-24.05	Avg	2.5	195	
4573.74	44.79	V	74	-29.21	Peak	1	75	
4573.74	30.43	V	54	-23.57	Avg	1	75	
5488.48	46.84	V	74	-27.16	Peak	2.75	45	
5488.48	33.06	V	54	-20.94	Avg	2.75	45	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247

Linx Technologies
 Hummingbird MCA Module
 Model: HUM-900-RC-UFL
 Configuration: Protocol C
 ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

High Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	38.29	V	74	-35.71	Peak	1.35	190	
2744.24	26.11	V	54	-27.89	Avg	1.35	190	
3658.99	44.16	V	74	-29.84	Peak	1.5	345	
3658.99	29.52	V	54	-24.48	Avg	1.5	345	
4573.74	45.7	V	74	-28.3	Peak	1	210	
4573.74	31.28	V	54	-22.72	Avg	1	210	
5488.48	47.37	V	74	-26.63	Peak	1	0	
5488.48	33.03	V	54	-20.97	Avg	1	0	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247

Linx Technologies
 Hummingbird MCA Module
 Model: HUM-900-RC-UFL
 Configuration: Protocol C
 ANT-916-CW-HW Antenna

Date: 02/10/2015

Lab: B

Tested By: Kenneth Lee

High Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	41.23	V	74	-32.77	Peak	1	90	
2744.24	26.49	V	54	-27.51	Avg	1	90	
3658.99	43.21	V	74	-30.79	Peak	1.75	135	
3658.99	28.48	V	54	-25.52	Avg	1.75	135	
4573.74	43.85	V	74	-30.15	Peak	1.5	260	
4573.74	29.15	V	54	-24.85	Avg	1.5	260	
5488.48	47.28	V	74	-26.72	Peak	1	160	
5488.48	33.81	V	54	-20.19	Avg	1	160	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	39.36	H	74	-34.64	Peak	1.5	250	
2744.24	26.22	H	54	-27.78	Avg	1.5	250	
3658.99	44.57	H	74	-29.43	Peak	1	160	
3658.99	30.03	H	54	-23.97	Avg	1	160	
4573.74	43.26	H	74	-30.74	Peak	1	45	
4573.74	29.42	H	54	-24.58	Avg	1	45	
5488.48	47.82	H	74	-26.18	Peak	1	180	
5488.48	32.92	H	54	-21.08	Avg	1	180	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	39.33	H	74	-34.67	Peak	1.25	185	
2744.24	25.95	H	54	-28.05	Avg	1.25	185	
3658.99	42.01	H	74	-31.99	Peak	2.75	235	
3658.99	28.16	H	54	-25.84	Avg	2.75	235	
4573.74	43.78	H	74	-30.22	Peak	1	35	
4573.74	29.86	H	54	-24.14	Avg	1	35	
5488.48	45.98	H	74	-28.02	Peak	1	95	
5488.48	32.82	H	54	-21.18	Avg	1	95	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Date: 02/10/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	41.07	H	74	-32.93	Peak	1.35	170	
2744.24	26.33	H	54	-27.67	Avg	1.35	170	
3658.99	44.21	H	74	-29.79	Peak	1	165	
3658.99	30.04	H	54	-23.96	Avg	1	165	
4573.74	44.98	H	74	-29.02	Peak	1	250	
4573.74	30.6	H	54	-23.4	Avg	1	250	
5488.48	47.98	H	74	-26.02	Peak	1	180	
5488.48	33.65	H	54	-20.35	Avg	1	180	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247 and FCC Class B

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-CW-HW Antenna

Dates: 02/05/2015 and 02/10/2015

Labs: B and D

Tested By: Kenneth Lee

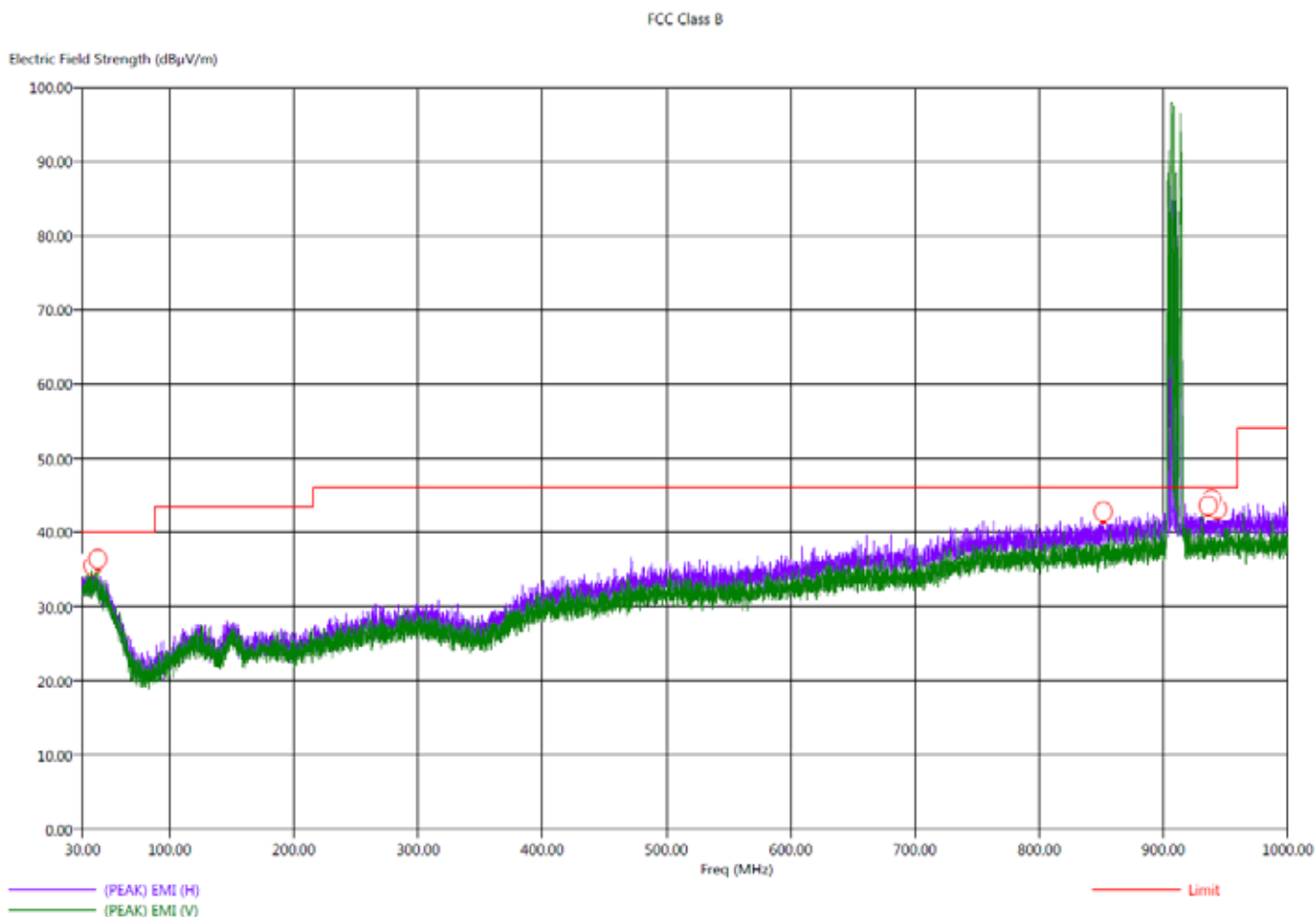
Non Harmonic Emissions from the Tx and Digital Portion - 10 kHz to 30 MHz

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 9.3 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found for the
								Digital Portion
								from 10 kHz to 30 MHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 10 kHz to 30 MHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis
								No Emissions Found for the
								Digital Portion
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis

Title: Pre-Scan - FCC Class B
File: Agilent - Radiated Pre-Scan 30-1000Mhz - FCC Class B_Module_1_Protocol_C_ANT-916-CW-HW_Z-Axis_02-06-2015.set
Operator: Kenneth Lee
EUT Type: Hummingbird MCA
EUT Condition: Continuously Transmitting - Frequency Hopping - Protocol C - Module 1 - Z-Axis - Worst Case
Comments: Customer: Linx Technologies
M/N: HUM-900-RC-UFL
Note: Antenna - ANT-916-CW-HW

2/6/2015 3:16:14 PM
Sequence: Preliminary Scan

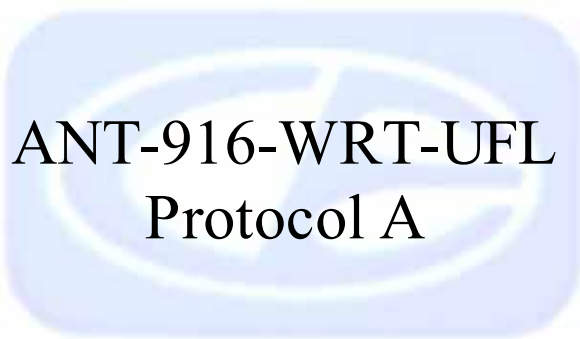


Title: Radiated Final - 30-1000 MHz - FCC Class B
File: Agilent - Radiated Final Scan 30-1000Mhz - FCC Class B_Module_1_Protocol_C_ANT-916-CW-HW_Z-Axis_02-06-2015.set
Operator: Kenneth Lee
EUT Type: Hummingbird MCA
EUT Condition: Continuously Transmitting - Frequency Hopping - Protocol C - Module 1 - Z-Axis - Worst Case
Comments: Customer: Linx Technologies
M/N: HUM-900-RC-UFL
Note: Antenna - ANT-916-CW-HW

2/6/2015 3:26:49 PM
Sequence: Final Measurements

Final Scan - FCC Class B

Freq (MHz)	Pol	(PEAK) EMI (dB μ V/m)	(QP) EMI (dB μ V/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dB μ V/m)	Transducer (dB)	Cable (dB)	Twr Ht (cm)	Ttbt Aql (dec)
38.40	H	36.16	31.75	-3.84	-8.25	40.00	24.06	0.42	208.02	360.25
42.20	V	35.32	31.30	-4.68	-8.70	40.00	23.53	0.45	255.97	106.25
851.50	H	41.83	37.80	-4.17	-8.20	46.00	26.41	2.52	368.50	285.75
936.10	H	43.71	39.42	-2.29	-6.58	46.00	27.51	2.69	352.20	132.75
938.90	H	43.13	39.49	-2.87	-6.51	46.00	27.56	2.70	191.97	213.75
943.50	H	43.48	39.60	-2.52	-6.40	46.00	27.62	2.70	223.55	245.00



ANT-916-WRT-UFL Protocol A

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	39.66	V	74	-34.34	Peak	1	180	
2708.91	27.89	V	54	-26.11	Avg	1	180	
3611.88	44.36	V	74	-29.64	Peak	1	210	
3611.88	37.49	V	54	-16.51	Avg	1	210	
4514.86	45.28	V	74	-28.72	Peak	1.25	160	
4514.86	38.12	V	54	-15.88	Avg	1.25	160	
5417.83	50.13	V	74	-23.87	Peak	1	180	
5417.83	40.05	V	54	-13.95	Avg	1	180	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
7223.77								
8126.74								No Emissions Detected
8126.74								
9029.71								No Emissions Detected
9029.71								

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.07	V	74	-33.93	Peak	1	320	
2708.91	29.67	V	54	-24.33	Avg	1	320	
3611.88	44.58	V	74	-29.42	Peak	1	210	
3611.88	37.95	V	54	-16.05	Avg	1	210	
4514.86	44.26	V	74	-29.74	Peak	1.1	145	
4514.86	39.69	V	54	-14.31	Avg	1.1	145	
5417.83	50.44	V	74	-23.56	Peak	1	160	
5417.83	39.48	V	54	-14.52	Avg	1	160	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	39.68	V	74	-34.32	Peak	1	45	
2708.91	29.73	V	54	-24.27	Avg	1	45	
3611.88	45.07	V	74	-28.93	Peak	1.25	60	
3611.88	37.37	V	54	-16.63	Avg	1.25	60	
4514.86	46.2	V	74	-27.8	Peak	1	120	
4514.86	39.88	V	54	-14.12	Avg	1	120	
5417.83	49.31	V	74	-24.69	Peak	1	195	
5417.83	38.27	V	54	-15.73	Avg	1	195	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	39.26	H	74	-34.74	Peak	1.1	235	
2708.91	27.91	H	54	-26.09	Avg	1.1	235	
3611.88	46.35	H	74	-27.65	Peak	1.5	195	
3611.88	40.4	H	54	-13.6	Avg	1.5	195	
4514.86	45.3	H	74	-28.7	Peak	1	230	
4514.86	34.68	H	54	-19.32	Avg	1	230	
5417.83	50.5	H	74	-23.5	Peak	1.25	180	
5417.83	42.15	H	54	-11.85	Avg	1.25	180	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.12	H	74	-33.88	Peak	1	210	
2708.91	31.59	H	54	-22.41	Avg	1	210	
3611.88	45.03	H	74	-28.97	Peak	1.25	90	
3611.88	36.81	H	54	-17.19	Avg	1.25	90	
4514.86	45.65	H	74	-28.35	Peak	1.5	60	
4514.86	38.66	H	54	-15.34	Avg	1.5	60	
5417.83	48.79	H	74	-25.21	Peak	1.75	15	
5417.83	36.27	H	54	-17.73	Avg	1.75	15	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	38.79	H	74	-35.21	Peak	1	240	
2708.91	28.28	H	54	-25.72	Avg	1	240	
3611.88	46.35	H	74	-27.65	Peak	1	180	
3611.88	40.4	H	54	-13.6	Avg	1	180	
4514.86	46.38	H	74	-27.62	Peak	1	45	
4514.86	39.44	H	54	-14.56	Avg	1	45	
5417.83	50.09	H	74	-23.91	Peak	1.25	160	
5417.83	41.27	H	54	-12.73	Avg	1.25	160	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	39.3	V	74	-34.7	Peak	1.75	180	
2745	28.46	V	54	-25.54	Avg	1.75	180	
3660	45.86	V	74	-28.14	Peak	1	210	
3660	40.23	V	54	-13.77	Avg	1	210	
4575	45.78	V	74	-28.22	Peak	1	160	
4575	39.1	V	54	-14.9	Avg	1	160	
5490	50.46	V	74	-23.54	Peak	1.1	15	
5490	36.51	V	54	-17.49	Avg	1.1	15	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	40.56	V	74	-33.44	Peak	1.1	200	
2745	32.13	V	54	-21.87	Avg	1.1	200	
3660	45.26	V	74	-28.74	Peak	1.25	165	
3660	38.43	V	54	-15.57	Avg	1.25	165	
4575	49.24	V	74	-24.76	Peak	1	190	
4575	41.57	V	54	-12.43	Avg	1	190	
5490	49.49	V	74	-24.51	Peak	1.25	230	
5490	38.52	V	54	-15.48	Avg	1.25	230	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	41.16	V	74	-32.84	Peak	1	60	
2745	29.63	V	54	-24.37	Avg	1	60	
3660	44.87	V	74	-29.13	Peak	1	90	
3660	36.95	V	54	-17.05	Avg	1	90	
4575	45.97	V	74	-28.03	Peak	1.25	120	
4575	36.88	V	54	-17.12	Avg	1.25	120	
5490	48.76	V	74	-25.24	Peak	1	210	
5490	34.61	V	54	-19.39	Avg	1	210	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	39.82	H	74	-34.18	Peak	1	45	
2745	27.56	H	54	-26.44	Avg	1	45	
3660	45.69	H	74	-28.31	Peak	1.5	230	
3660	38.79	H	54	-15.21	Avg	1.5	230	
4575	45.27	H	74	-28.73	Peak	1.1	180	
4575	38.12	H	54	-15.88	Avg	1.1	180	
5490	50.28	H	74	-23.72	Peak	1	160	
5490	43.38	H	54	-10.62	Avg	1	160	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	38.71	H	74	-35.29	Peak	1	210	
2745	27.39	H	54	-26.61	Avg	1	210	
3660	44.93	H	74	-29.07	Peak	1.1	135	
3660	34.57	H	54	-19.43	Avg	1.1	135	
4575	46.13	H	74	-27.87	Peak	1.25	120	
4575	38.27	H	54	-15.73	Avg	1.25	120	
5490	48.39	H	74	-25.61	Peak	1	45	
5490	35.81	H	54	-18.19	Avg	1	45	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	41.2	H	74	-32.8	Peak	1.15	235	
2745	30.77	H	54	-23.23	Avg	1.15	235	
3660	46.29	H	74	-27.71	Peak	1.75	180	
3660	40.48	H	54	-13.52	Avg	1.75	180	
4575	47.38	H	74	-26.62	Peak	1	135	
4575	39.45	H	54	-14.55	Avg	1	135	
5490	51.34	H	74	-22.66	Peak	1.5	210	
5490	42.45	H	54	-11.55	Avg	1.5	210	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

High Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1853.3								N/A - Not in Restricted Band and done via Conducted
2779.9	39.86	V	74	-34.14	Peak	1	120	
2779.9	27.19	V	54	-26.81	Avg	1	120	
3706.6	41.33	V	74	-32.67	Peak	1.5	180	
3706.6	32.48	V	54	-21.52	Avg	1.5	180	
4633.25	47.84	V	74	-26.16	Peak	1	135	
4633.25	40.07	V	54	-13.93	Avg	1	135	
5559.9	50.34	V	74	-23.66	Peak	1.1	230	
5559.9	38.27	V	54	-15.73	Avg	1.1	230	
6486.55								N/A - Not in Restricted Band and done via Conducted
7413.2								No Emissions Detected
8339.85								No Emissions Detected
9266.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1853.3								N/A - Not in Restricted Band and done via Conducted
2779.9	39.53	V	74	-34.47	Peak	1.1	165	
2779.9	27.98	V	54	-26.02	Avg	1.1	165	
3706.6	45.62	V	74	-28.38	Peak	1.5	90	
3706.6	35.88	V	54	-18.12	Avg	1.5	90	
4633.25	47.48	V	74	-26.52	Peak	2	15	
4633.25	38.48	V	54	-15.52	Avg	2	15	
5559.9	48.86	V	74	-25.14	Peak	1.75	135	
5559.9	38.22	V	54	-15.78	Avg	1.75	135	
6486.55								N/A - Not in Restricted Band and done via Conducted
7413.2								No Emissions Detected
8339.85								No Emissions Detected
9266.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1853.3								N/A - Not in Restricted Band and done via Conducted
2779.9	41.13	V	74	-32.87	Peak	2.25	160	
2779.9	29.84	V	54	-24.16	Avg	2.25	160	
3706.6	45.16	V	74	-28.84	Peak	1.75	230	
3706.6	36.37	V	54	-17.63	Avg	1.75	230	
4633.25	46.39	V	74	-27.61	Peak	1	180	
4633.25	35.88	V	54	-18.12	Avg	1	180	
5559.9	50.4	V	74	-23.6	Peak	1	165	
5559.9	38.56	V	54	-15.44	Avg	1	165	
6486.55								N/A - Not in Restricted Band and done via Conducted
7413.2								No Emissions Detected
8339.85								No Emissions Detected
9266.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1853.3								N/A - Not in Restricted Band and done via Conducted
2779.9	42.54	H	74	-31.46	Peak	1.75	260	
2779.9	30.71	H	54	-23.29	Avg	1.75	260	
3706.6	43.15	H	74	-30.85	Peak	1	235	
3706.6	37.16	H	54	-16.84	Avg	1	235	
4633.25	48.43	H	74	-25.57	Peak	1	350	
4633.25	43.44	H	54	-10.56	Avg	1	350	
5559.9	50.29	H	74	-23.71	Peak	1	175	
5559.9	42.92	H	54	-11.08	Avg	1	175	
6486.55								N/A - Not in Restricted Band and done via Conducted
7413.2								No Emissions Detected
8339.85								No Emissions Detected
9266.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1853.3								N/A - Not in Restricted Band and done via Conducted
2779.9	40.07	H	74	-33.93	Peak	1.1	30	
2779.9	29.24	H	54	-24.76	Avg	1.1	30	
3706.6	44.06	H	74	-29.94	Peak	2.1	45	
3706.6	36.65	H	54	-17.35	Avg	2.1	45	
4633.25	46.11	H	74	-27.89	Peak	1	235	
4633.25	39.91	H	54	-14.09	Avg	1	235	
5559.9	49.72	H	74	-24.28	Peak	1.25	15	
5559.9	40.91	H	54	-13.09	Avg	1.25	15	
6486.55								N/A - Not in Restricted Band and done via Conducted
7413.2								No Emissions Detected
8339.85								No Emissions Detected
9266.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1853.3								N/A - Not in Restricted Band and done via Conducted
2779.9	39.74	H	74	-34.26	Peak	1	345	
2779.9	26.67	H	54	-27.33	Avg	1	345	
3706.6	44.64	H	74	-29.36	Peak	1	235	
3706.6	36.49	H	54	-17.51	Avg	1	235	
4633.25	48.1	H	74	-25.9	Peak	1	170	
4633.25	42.4	H	54	-11.6	Avg	1	170	
5559.9	51.03	H	74	-22.97	Peak	1.15	220	
5559.9	43.89	H	54	-10.11	Avg	1.15	220	
6486.55								N/A - Not in Restricted Band and done via Conducted
7413.2								No Emissions Detected
8339.85								No Emissions Detected
9266.5								No Emissions Detected

FCC 15.247 and FCC Class B

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol A
ANT-916-WRT-UFL

Dates: 02/06/2015 and 02/11/2015

Labs: B and D

Tested By: Kenneth Lee

Non Harmonic Emissions from the Tx and Digital Portion - 10 kHz to 30 MHz

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 9.3 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found for the
								Digital Portion
								from 10 kHz to 30 MHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 10 kHz to 30 MHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis
								No Emissions Found for the
								Digital Portion
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis

Title: Pre-Scan - FCC Class B

File: Agilent - Radiated Pre-Scan 30-1000Mhz - FCC Class B_Module_1_Protocol_A_ANT-916-WRT-UFL_Z-Axis_02-06-2015.set

Operator: Kenneth Lee

EUT Type: Hummingbird MCA

EUT Condition: Continuously Transmitting - Frequency Hopping - Protocol A - Module 1 - Z-Axis - Worst Case

Comments: Customer: Linx Technologies

M/N: HUM-900-PRO-UFL

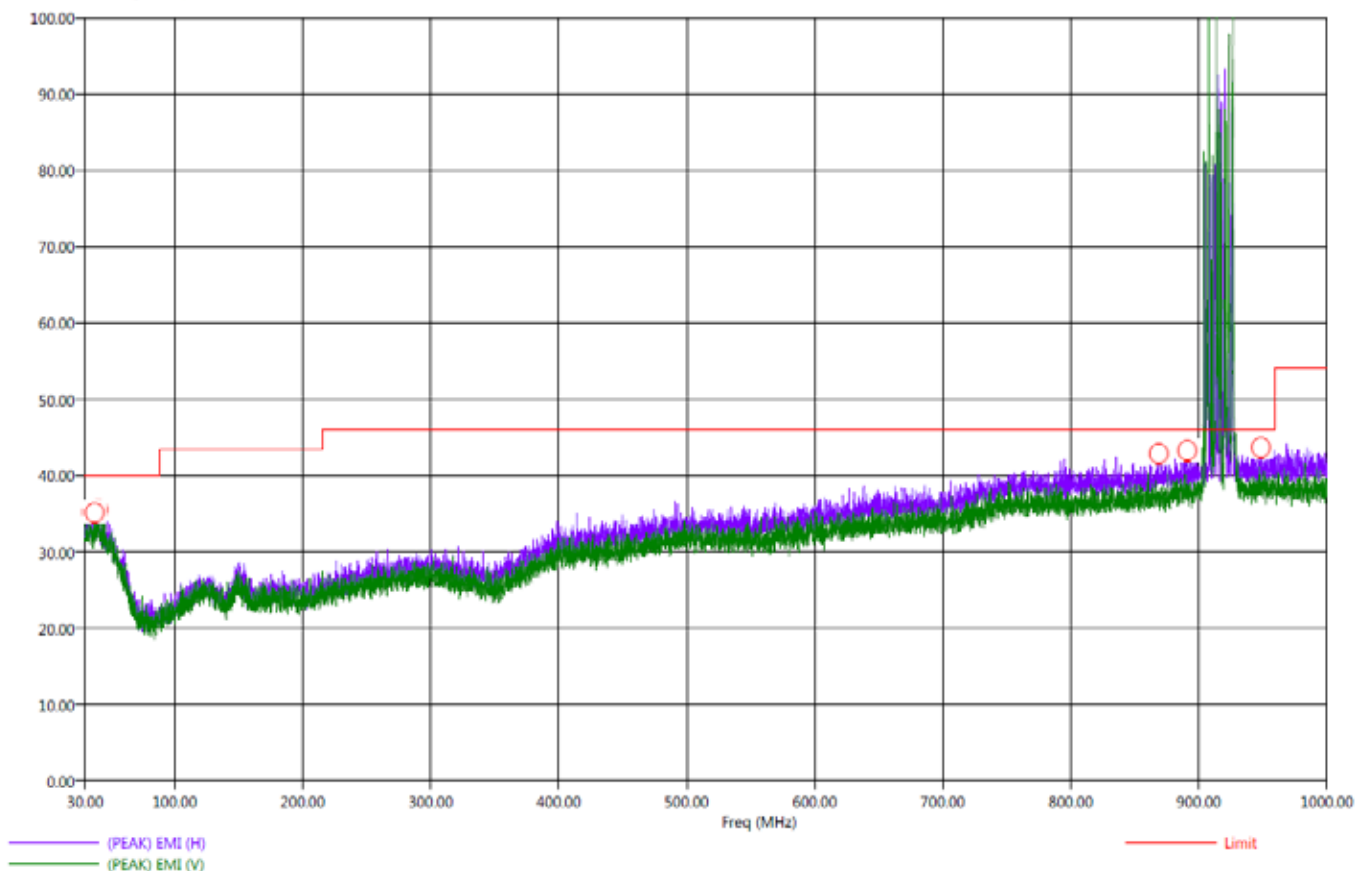
Note: Antenna - ANT-916-WRT-UFL

2/6/2015 9:54:02 AM

Sequence: Preliminary Scan

FCC Class B

Electric Field Strength (dBuV/m)



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Title: Radiated Final - 30-1000 MHz - FCC Class B
File: Agilent - Radiated Final Scan 30-1000MHz - FCC Class B_Module 1_Protocol A_ANT-916-WRT-UFL_Z-Axis_02-06-2015.set
Operator: Kenneth Lee
EUT Type: Hummingbird MCA
EUT Condition: Continuously Transmitting - Frequency Hopping - Protocol A - Module 1 - Z-Axis - Worst Case
Comments: Customer: Linx Technologies
M/N: HUM-900-PRO-UFL
Note: Antenna - ANT-916-WRT-UFL

2/6/2015 10:06:23 AM
Sequence: Final Measurements

Final Scan - FCC Class B

Freq (MHz)	Pol	(PEAK) EMI (dBuV/m)	(QP) EMI (dBuV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBuV/m)	Transducer (dB)	Cable (dB)	Twr Ht (cm)	Ttbl Aql (deg)
35.20	H	36.15	31.37	-3.85	-8.63	40.00	23.77	0.40	127.07	109.00
37.60	V	36.03	31.60	-3.97	-8.40	40.00	23.99	0.41	384.26	29.00
40.40	H	36.17	31.59	-3.83	-8.41	40.00	24.01	0.43	239.85	121.75
868.80	H	42.37	38.04	-3.63	-7.96	46.00	26.64	2.57	287.67	244.00
891.00	H	43.71	38.69	-2.29	-7.31	46.00	26.89	2.62	288.20	153.75
948.60	H	44.47	39.46	-1.53	-6.54	46.00	27.69	2.71	207.61	292.00



FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.07	V	74	-33.93	Peak	1	45	
2708.91	29.38	V	54	-24.62	Avg	1	45	
3611.88	43.61	V	74	-30.39	Peak	1	235	
3611.88	32.47	V	54	-21.53	Avg	1	235	
4514.86	45.21	V	74	-28.79	Peak	1.65	190	
4514.86	35.64	V	54	-18.36	Avg	1.65	190	
5417.83	49.28	V	74	-24.72	Peak	1.75	180	
5417.83	39.07	V	54	-14.93	Avg	1.75	180	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
7223.77								
8126.74								No Emissions Detected
8126.74								
9029.71								No Emissions Detected
9029.71								

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.65	V	74	-33.35	Peak	1	190	
2708.91	30.41	V	54	-23.59	Avg	1	190	
3611.88	46.06	V	74	-27.94	Peak	1.1	345	
3611.88	39.02	V	54	-14.98	Avg	1.1	345	
4514.86	46.21	V	74	-27.79	Peak	1	180	
4514.86	38.36	V	54	-15.64	Avg	1	180	
5417.83	49.05	V	74	-24.95	Peak	1.75	180	
5417.83	37.95	V	54	-16.05	Avg	1.75	180	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.72	V	74	-33.28	Peak	2	270	
2708.91	29.04	V	54	-24.96	Avg	2	270	
3611.88	45.09	V	74	-28.91	Peak	1	45	
3611.88	36.25	V	54	-17.75	Avg	1	45	
4514.86	45.41	V	74	-28.59	Peak	1	45	
4514.86	36.32	V	54	-17.68	Avg	1	45	
5417.83	48.39	V	74	-25.61	Peak	1.75	160	
5417.83	35.9	V	54	-18.1	Avg	1.75	160	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.06	H	74	-33.94	Peak	1.5	260	
2708.91	27.88	H	54	-26.12	Avg	1.5	260	
3611.88	45.98	H	74	-28.02	Peak	1	180	
3611.88	39.12	H	54	-14.88	Avg	1	180	
4514.86	45.87	H	74	-28.13	Peak	1.1	345	
4514.86	36.97	H	54	-17.03	Avg	1.1	345	
5417.83	49.86	H	74	-24.14	Peak	1.1	350	
5417.83	39.39	H	54	-14.61	Avg	1.1	350	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.12	H	74	-33.88	Peak	1	180	
2708.91	28.87	H	54	-25.13	Avg	1	180	
3611.88	45.07	H	74	-28.93	Peak	1.75	45	
3611.88	35.46	H	54	-18.54	Avg	1.75	45	
4514.86	44.78	H	74	-29.22	Peak	1.25	230	
4514.86	32.68	H	54	-21.32	Avg	1.25	230	
5417.83	48.55	H	74	-25.45	Peak	1	150	
5417.83	36.27	H	54	-17.73	Avg	1	150	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.94								N/A - Not in Restricted Band and done via Conducted
2708.91	40.33	H	74	-33.67	Peak	2.1	190	
2708.91	27.29	H	54	-26.71	Avg	2.1	190	
3611.88	44.66	H	74	-29.34	Peak	1.5	260	
3611.88	35.69	H	54	-18.31	Avg	1.5	260	
4514.86	45.38	H	74	-28.62	Peak	1.75	170	
4514.86	35.88	H	54	-18.12	Avg	1.75	170	
5417.83	49.73	H	74	-24.27	Peak	1.25	185	
5417.83	40.39	H	54	-13.61	Avg	1.25	185	
6320.8								N/A - Not in Restricted Band and done via Conducted
7223.77								No Emissions Detected
8126.74								No Emissions Detected
9029.71								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	41.16	V	74	-32.84	Peak	1.75	230	
2745	29.24	V	54	-24.76	Avg	1.75	230	
3660	45.37	V	74	-28.63	Peak	2.25	195	
3660	35.87	V	54	-18.13	Avg	2.25	195	
4575	45.79	V	74	-28.21	Peak	1	160	
4575	36.58	V	54	-17.42	Avg	1	160	
5490	45.63	V	74	-28.37	Peak	1	135	
5490	34.79	V	54	-19.21	Avg	1	135	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	41.18	V	74	-32.82	Peak	1.75	135	
2745	29.92	V	54	-24.08	Avg	1.75	135	
3660	46.37	V	74	-27.63	Peak	1.75	230	
3660	39.53	V	54	-14.47	Avg	1.75	230	
4575	48.4	V	74	-25.6	Peak	1.5	335	
4575	40.35	V	54	-13.65	Avg	1.5	335	
5490	49.73	V	74	-24.27	Peak	1	45	
5490	40.22	V	54	-13.78	Avg	1	45	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	39.76	V	74	-34.24	Peak	1.5	180	
2745	28.03	V	54	-25.97	Avg	1.5	180	
3660	45.31	V	74	-28.69	Peak	1	135	
3660	36.11	V	54	-17.89	Avg	1	135	
4575	46.38	V	74	-27.62	Peak	1.35	90	
4575	36.82	V	54	-17.18	Avg	1.35	90	
5490	50.31	V	74	-23.69	Peak	1.1	15	
5490	40.98	V	54	-13.02	Avg	1.1	15	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	40.35	H	74	-33.65	Peak	1	90	
2745	28.77	H	54	-25.23	Avg	1	90	
3660	46.21	H	74	-27.79	Peak	1	15	
3660	39.43	H	54	-14.57	Avg	1	15	
4575	46.64	H	74	-27.36	Peak	1	175	
4575	38.79	H	54	-15.21	Avg	1	175	
5490	50.26	H	74	-23.74	Peak	1.75	350	
5490	41.91	H	54	-12.09	Avg	1.75	350	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	39.84	H	74	-34.16	Peak	1	190	
2745	28.57	H	54	-25.43	Avg	1	190	
3660	44.12	H	74	-29.88	Peak	2.25	235	
3660	34.68	H	54	-19.32	Avg	2.25	235	
4575	45.32	H	74	-28.68	Peak	1.75	150	
4575	31.98	H	54	-22.02	Avg	1.75	150	
5490	48.6	H	74	-25.4	Peak	1	180	
5490	36.59	H	54	-17.41	Avg	1	180	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830								N/A - Not in Restricted Band and done via Conducted
2745	41.31	H	74	-32.69	Peak	2	170	
2745	31.05	H	54	-22.95	Avg	2	170	
3660	46.35	H	74	-27.65	Peak	1	190	
3660	39.44	H	54	-14.56	Avg	1	190	
4575	46.68	H	74	-27.32	Peak	1.5	320	
4575	37.49	H	54	-16.51	Avg	1.5	320	
5490	50.46	H	74	-23.54	Peak	1.1	210	
5490	40.88	H	54	-13.12	Avg	1.1	210	
6405								N/A - Not in Restricted Band and done via Conducted
7320								No Emissions Detected
8235								No Emissions Detected
9150								No Emissions Detected

FCC 15.247

Linx Technologies
 Hummingbird MCA Module
 Model: HUM-900-PRO-UFL
 Configuration: Protocol B
 ANT-916-WRT-UFL Antenna

Date: 02/11/2015
 Lab: B
 Tested By: Kenneth Lee

**High Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	39.87	V	74	-34.13	Peak	1	335	
2778.83	27.49	V	54	-26.51	Avg	1	335	
3705.1	44.29	V	74	-29.71	Peak	2	350	
3705.1	34.22	V	54	-19.78	Avg	2	350	
4631.4	47.51	V	74	-26.49	Peak	1	235	
4631.4	38.8	V	54	-15.2	Avg	1	235	
5557.66	49.33	V	74	-24.67	Peak	1	160	
5557.66	38.19	V	54	-15.81	Avg	1	160	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

FCC 15.247

Linx Technologies
 Hummingbird MCA Module
 Model: HUM-900-PRO-UFL
 Configuration: Protocol B
 ANT-916-WRT-UFL Antenna

Date: 02/11/2015
 Lab: B
 Tested By: Kenneth Lee

**High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	39.32	V	74	-34.68	Peak	1.75	335	
2778.83	29.12	V	54	-24.88	Avg	1.75	335	
3705.1	46.16	V	74	-27.84	Peak	1	345	
3705.1	37.87	V	54	-16.13	Avg	1	345	
4631.4	49.12	V	74	-24.88	Peak	1	190	
4631.4	42.94	V	54	-11.06	Avg	1	190	
5557.66	49.14	V	74	-24.86	Peak	1	0	
5557.66	37.69	V	54	-16.31	Avg	1	0	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

FCC 15.247

Linx Technologies
 Hummingbird MCA Module
 Model: HUM-900-PRO-UFL
 Configuration: Protocol B
 ANT-916-WRT-UFL Antenna

Date: 02/11/2015
 Lab: B
 Tested By: Kenneth Lee

**High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	40.41	V	74	-33.59	Peak	2.75	90	
2778.83	29.1	V	54	-24.9	Avg	2.75	90	
3705.1	44.59	V	74	-29.41	Peak	1	135	
3705.1	36.05	V	54	-17.95	Avg	1	135	
4631.4	46.19	V	74	-27.81	Peak	1	45	
4631.4	37.95	V	54	-16.05	Avg	1	45	
5557.66	49.64	V	74	-24.36	Peak	1	165	
5557.66	37.92	V	54	-16.08	Avg	1	165	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	39.64	H	74	-34.36	Peak	1	210	
2778.83	26.86	H	54	-27.14	Avg	1	210	
3705.1	46.78	H	74	-27.22	Peak	1	170	
3705.1	39.96	H	54	-14.04	Avg	1	170	
4631.4	49.37	H	74	-24.63	Peak	1	335	
4631.4	43.57	H	54	-10.43	Avg	1	335	
5557.66	50.89	H	74	-23.11	Peak	1	195	
5557.66	41.86	H	54	-12.14	Avg	1	195	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	40.09	H	74	-33.91	Peak	1	200	
2778.83	28.35	H	54	-25.65	Avg	1	200	
3705.1	45.11	H	74	-28.89	Peak	1	15	
3705.1	36.31	H	54	-17.69	Avg	1	15	
4631.4	46.25	H	74	-27.75	Peak	1	30	
4631.4	36.02	H	54	-17.98	Avg	1	30	
5557.66	49.52	H	74	-24.48	Peak	1	10	
5557.66	38.99	H	54	-15.01	Avg	1	10	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1852.55								N/A - Not in Restricted Band and done via Conducted
2778.83	39.28	H	74	-34.72	Peak	1.1	180	
2778.83	26.63	H	54	-27.37	Avg	1.1	180	
3705.1	45.57	H	74	-28.43	Peak	1	135	
3705.1	38.47	H	54	-15.53	Avg	1	135	
4631.4	47.72	H	74	-26.28	Peak	1	170	
4631.4	39.75	H	54	-14.25	Avg	1	170	
5557.66	49.64	H	74	-24.36	Peak	1	270	
5557.66	38.44	H	54	-15.56	Avg	1	270	
6483.9								N/A - Not in Restricted Band and done via Conducted
6483.9								
7410.2								No Emissions Detected
7410.2								
8336.5								No Emissions Detected
8336.5								
9262.8								No Emissions Detected
9262.8								

FCC 15.247 and FCC Class B

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-PRO-UFL
Configuration: Protocol B
ANT-916-WRT-UFL Antenna

Dates: 02/05/2015 and 02/11/2015

Labs: B and D

Tested By: Kenneth Lee

Non Harmonic Emissions from the Tx and Digital Portion - 10 kHz to 30 MHz

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 9.3 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found for the
								Digital Portion
								from 10 kHz to 30 MHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 10 kHz to 30 MHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis
								No Emissions Found for the
								Digital Portion
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis

Title: Pre-Scan - FCC Class B

File: Agilent - Radiated Pre-Scan 30-1000MHz - FCC Class B_Module_1_Protocol_B_ANT-916-WRT-UFL_X-Axis_02-06-2015.set

Operator: Kenneth Lee

EUT Type: Hummingbird MCA

EUT Condition: Continuously Transmitting - Frequency Hopping - Protocol B - Module 1 - X-Axis - Worst Case

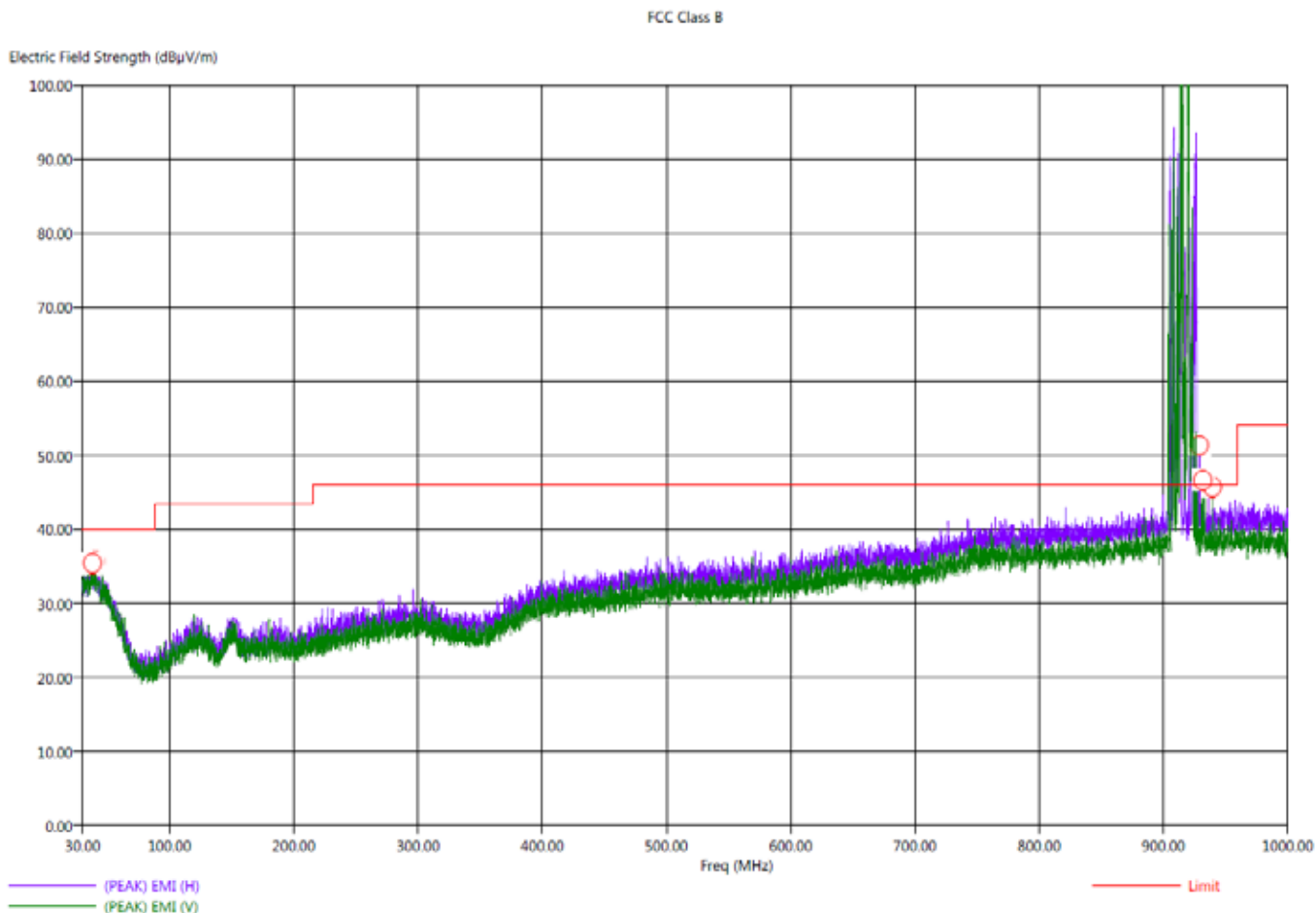
Comments: Customer: Linx Technologies

M/N: HUM-900-PRO-UFL

Note: Antenna - ANT-916-WRT-UFL

2/6/2015 10:43:06 AM

Sequence: Preliminary Scan

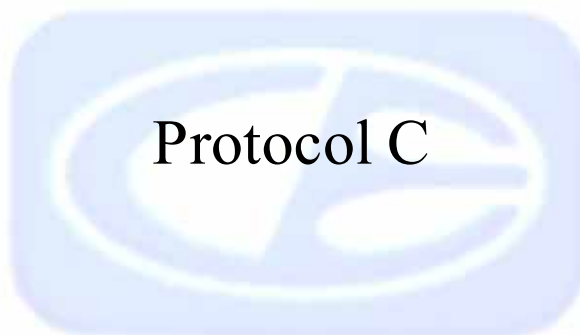


Title: Radiated Final - 30-1000 MHz - FCC Class B
File: Agilent - Radiated Final Scan 30-1000MHz - FCC Class B_Module 1_Protocol B_ANT-916-WRT-UFL_X-Axis_02-06-2015.set
Operator: Kenneth Lee
EUT Type: Hummingbird MCA
EUT Condition: Continuously Transmitting - Frequency Hopping - Protocol B - Module 1 - X-Axis - Worst Case
Comments: Customer: Linx Technologies
M/N: HUM-900-PRO-UFL
Note: Antenna - ANT-916-WRT-UFL

2/6/2015 11:06:12 AM
Sequence: Final Measurements

Final Scan - FCC Class B

Freq (MHz)	Pol	(PEAK) EMI (dBuV/m)	(QP) EMI (dBuV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBuV/m)	Transducer (dB)	Cable (dB)	Twr Ht (cm)	Ttbl Aql (deg)
38.10	V	36.05	31.70	-3.95	-8.30	40.00	24.01	0.42	400.02	295.25
38.50	H	36.07	31.75	-3.93	-8.25	40.00	24.03	0.42	399.79	43.00
40.30	H	36.93	31.85	-3.07	-8.15	40.00	24.19	0.43	256.02	158.25
931.70	V	43.80	39.41	-2.20	-6.59	46.00	27.44	2.68	158.59	252.75
936.00	H	48.22	40.33	2.22	-5.67	46.00	27.50	2.69	223.85	124.75
939.50	V	52.32	41.55	6.32	-4.45	46.00	27.55	2.70	111.37	227.25



FCC 15.247

Linx Technologies
 Hummingbird MCA Module
 Model: HUM-900-RC-UFL
 Configuration: Protocol C
 ANT-916-WRT-UFL Antenna

Date: 02/11/2015
 Lab: B
 Tested By: Kenneth Lee

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	40.38	V	74	-33.62	Peak	1	45	
2708.25	26.14	V	54	-27.86	Avg	1	45	
3611	43.11	V	74	-30.89	Peak	2	180	
3611	29.29	V	54	-24.71	Avg	2	180	
4513.75	42.99	V	74	-31.01	Peak	1	235	
4513.75	29.17	V	54	-24.83	Avg	1	235	
5416.5	46.49	V	74	-27.51	Peak	1	235	
5416.5	32.83	V	54	-21.17	Avg	1	235	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	40.35	V	74	-33.65	Peak	1	200	
2708.25	26.28	V	54	-27.72	Avg	1	200	
3611	44.12	V	74	-29.88	Peak	1	185	
3611	30.44	V	54	-23.56	Avg	1	185	
4513.75	43.04	V	74	-30.96	Peak	1	190	
4513.75	29.09	V	54	-24.91	Avg	1	190	
5416.5	46.18	V	74	-27.82	Peak	1	350	
5416.5	32.54	V	54	-21.46	Avg	1	350	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	39.94	V	74	-34.06	Peak	1	45	
2708.25	26.32	V	54	-27.68	Avg	1	45	
3611	42.22	V	74	-31.78	Peak	1	135	
3611	28.6	V	54	-25.4	Avg	1	135	
4513.75	43.46	V	74	-30.54	Peak	1.1	45	
4513.75	29.29	V	54	-24.71	Avg	1.1	45	
5416.5	47.28	V	74	-26.72	Peak	1.25	145	
5416.5	32.64	V	54	-21.36	Avg	1.25	145	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	41.27	H	74	-32.73	Peak	1.75	260	
2708.25	27.09	H	54	-26.91	Avg	1.75	260	
3611	46.03	H	74	-27.97	Peak	1	160	
3611	30.68	H	54	-23.32	Avg	1	160	
4513.75	45.22	H	74	-28.78	Peak	1.25	210	
4513.75	30.23	H	54	-23.77	Avg	1.25	210	
5416.5	46.44	H	74	-27.56	Peak	2.25	175	
5416.5	32.92	H	54	-21.08	Avg	2.25	175	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	40.85	H	74	-33.15	Peak	1	45	
2708.25	26.66	H	54	-27.34	Avg	1	45	
3611	43.74	H	74	-30.26	Peak	1.5	30	
3611	29.02	H	54	-24.98	Avg	1.5	30	
4513.75	42.86	H	74	-31.14	Peak	1.5	30	
4513.75	29.07	H	54	-24.93	Avg	1.5	30	
5416.5	46.84	H	74	-27.16	Peak	1	335	
5416.5	32.98	H	54	-21.02	Avg	1	335	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1805.5								N/A - Not in Restricted Band and done via Conducted
2708.25	39.32	H	74	-34.68	Peak	1.25	180	
2708.25	25.78	H	54	-28.22	Avg	1.25	180	
3611	43.59	H	74	-30.41	Peak	2	270	
3611	29.59	H	54	-24.41	Avg	2	270	
4513.75	44.42	H	74	-29.58	Peak	1.1	185	
4513.75	29.6	H	54	-24.4	Avg	1.1	185	
5416.5	44.24	H	74	-29.76	Peak	1.1	175	
5416.5	29.26	H	54	-24.74	Avg	1.1	175	
6319.25								N/A - Not in Restricted Band and done via Conducted
7222								No Emissions Detected
8124.75								No Emissions Detected
9027.5								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**Middle Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	39.62	V	74	-34.38	Peak	1.35	90	
2726.25	25.88	V	54	-28.12	Avg	1.35	90	
3635	43.9	V	74	-30.1	Peak	1.5	235	
3635	28.99	V	54	-25.01	Avg	1.5	235	
4543.75	43.54	V	74	-30.46	Peak	1	220	
4543.75	29.37	V	54	-24.63	Avg	1	220	
5452.49	46.14	V	74	-27.86	Peak	1.1	150	
5452.49	32.1	V	54	-21.9	Avg	1.1	150	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	39.75	V	74	-34.25	Peak	1.1	190	
2726.25	25.59	V	54	-28.41	Avg	1.1	190	
3635	43.09	V	74	-30.91	Peak	1.25	25	
3635	28.91	V	54	-25.09	Avg	1.25	25	
4543.75	44.39	V	74	-29.61	Peak	1	180	
4543.75	29.36	V	54	-24.64	Avg	1	180	
5452.49	46.17	V	74	-27.83	Peak	1	185	
5452.49	32.56	V	54	-21.44	Avg	1	185	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	39.99	V	74	-34.01	Peak	1	90	
2726.25	26.3	V	54	-27.7	Avg	1	90	
3635	41.37	V	74	-32.63	Peak	1	135	
3635	28.5	V	54	-25.5	Avg	1	135	
4543.75	43.36	V	74	-30.64	Peak	1	175	
4543.75	29.22	V	54	-24.78	Avg	1	175	
5452.49	47.05	V	74	-26.95	Peak	1.35	75	
5452.49	32.13	V	54	-21.87	Avg	1.35	75	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	39.68	H	74	-34.32	Peak	1	235	
2726.25	26.34	H	54	-27.66	Avg	1	235	
3635	44.68	H	74	-29.32	Peak	1	135	
3635	29.98	H	54	-24.02	Avg	1	135	
4543.75	45.5	H	74	-28.5	Peak	1	190	
4543.75	30.96	H	54	-23.04	Avg	1	190	
5452.49	47.46	H	74	-26.54	Peak	1.15	170	
5452.49	33.39	H	54	-20.61	Avg	1.15	170	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	40.12	H	74	-33.88	Peak	1	45	
2726.25	26.18	H	54	-27.82	Avg	1	45	
3635	42.9	H	74	-31.1	Peak	1	30	
3635	29.1	H	54	-24.9	Avg	1	30	
4543.75	44.54	H	74	-29.46	Peak	1.15	235	
4543.75	29.52	H	54	-24.48	Avg	1.15	235	
5452.49	45.9	H	74	-28.1	Peak	1	150	
5452.49	31.94	H	54	-22.06	Avg	1	150	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015

Lab: B

Tested By: Kenneth Lee

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1817.5								N/A - Not in Restricted Band and done via Conducted
2726.25	38.57	H	74	-35.43	Peak	1	190	
2726.25	25.61	H	54	-28.39	Avg	1	190	
3635	42.83	H	74	-31.17	Peak	1.75	135	
3635	29.51	H	54	-24.49	Avg	1.75	135	
4543.75	45.19	H	74	-28.81	Peak	1	175	
4543.75	30.32	H	54	-23.68	Avg	1	175	
5452.49	47.53	H	74	-26.47	Peak	1.1	180	
5452.49	33.57	H	54	-20.43	Avg	1.1	180	
6361.24								N/A - Not in Restricted Band and done via Conducted
7269.99								No Emissions Detected
8178.74								No Emissions Detected
9087.49								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	39.98	V	74	-34.02	Peak	1	45	
2744.24	25.83	V	54	-28.17	Avg	1	45	
3658.99	42.41	V	74	-31.59	Peak	1.25	235	
3658.99	28.66	V	54	-25.34	Avg	1.25	235	
4573.74	45.37	V	74	-28.63	Peak	1	345	
4573.74	30.6	V	54	-23.4	Avg	1	345	
5488.48	44.87	V	74	-29.13	Peak	1.25	45	
5488.48	32.36	V	54	-21.64	Avg	1.25	45	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	40.36	V	74	-33.64	Peak	1.5	235	
2744.24	26.3	V	54	-27.7	Avg	1.5	235	
3658.99	42.94	V	74	-31.06	Peak	1.1	355	
3658.99	28.95	V	54	-25.05	Avg	1.1	355	
4573.74	43.98	V	74	-30.02	Peak	1	175	
4573.74	29.68	V	54	-24.32	Avg	1	175	
5488.48	45.85	V	74	-28.15	Peak	1	10	
5488.48	32.54	V	54	-21.46	Avg	1	10	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	40.22	V	74	-33.78	Peak	1.75	135	
2744.24	25.69	V	54	-28.31	Avg	1.75	135	
3658.99	40.26	V	74	-33.74	Peak	1	235	
3658.99	27.9	V	54	-26.1	Avg	1	235	
4573.74	45.49	V	74	-28.51	Peak	1.35	135	
4573.74	30.4	V	54	-23.6	Avg	1.35	135	
5488.48	45.32	V	74	-28.68	Peak	1	120	
5488.48	33.11	V	54	-20.89	Avg	1	120	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	40.17	H	74	-33.83	Peak	1.75	170	
2744.24	25.99	H	54	-28.01	Avg	1.75	170	
3658.99	43.6	H	74	-30.4	Peak	1	45	
3658.99	29.46	H	54	-24.54	Avg	1	45	
4573.74	45.64	H	74	-28.36	Peak	1	190	
4573.74	31.02	H	54	-22.98	Avg	1	190	
5488.48	48.16	H	74	-25.84	Peak	1	170	
5488.48	33.62	H	54	-20.38	Avg	1	170	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	39.03	H	74	-34.97	Peak	1	235	
2744.24	35.73	H	54	-18.27	Avg	1	235	
3658.99	43.18	H	74	-30.82	Peak	1	290	
3658.99	28.68	H	54	-25.32	Avg	1	290	
4573.74	43.2	H	74	-30.8	Peak	1	15	
4573.74	28.9	H	54	-25.1	Avg	1	15	
5488.48	46.04	H	74	-27.96	Peak	1	300	
5488.48	32.57	H	54	-21.43	Avg	1	300	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Date: 02/11/2015
Lab: B
Tested By: Kenneth Lee

**High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1829.49								N/A - Not in Restricted Band and done via Conducted
2744.24	38.48	H	74	-35.52	Peak	1.25	135	
2744.24	25.37	H	54	-28.63	Avg	1.25	135	
3658.99	44.25	H	74	-29.75	Peak	1.25	270	
3658.99	29.34	H	54	-24.66	Avg	1.25	270	
4573.74	45.37	H	74	-28.63	Peak	1	170	
4573.74	32.47	H	54	-21.53	Avg	1	170	
5488.48	51.1	H	74	-22.9	Peak	1.35	185	
5488.48	36.91	H	54	-17.09	Avg	1.35	185	
6403.23								N/A - Not in Restricted Band and done via Conducted
7317.98								No Emissions Detected
8232.72								No Emissions Detected
9147.47								No Emissions Detected

FCC 15.247 and FCC Class B

Linx Technologies
Hummingbird MCA Module
Model: HUM-900-RC-UFL
Configuration: Protocol C
ANT-916-WRT-UFL Antenna

Dates: 02/05/2015 and 02/11/2015

Labs: B and D

Tested By: Kenneth Lee

Non Harmonic Emissions from the Tx and Digital Portion - 10 kHz to 30 MHz

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 9.3 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found for the
								Digital Portion
								from 10 kHz to 30 MHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 10 kHz to 30 MHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis
								No Emissions Found for the
								Digital Portion
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis

Title: Pre-Scan - FCC Class B

File: Agilent - Radiated Pre-Scan 30-1000MHz - FCC Class B_Module_1_Protocol_C_ANT-916-WRT-UFL_X-Axis_02-06-2015.set

Operator: Kenneth Lee

EUT Type: Hummingbird MCA

EUT Condition: Continuously Transmitting - Frequency Hopping - Protocol C - Module 1 - X-Axis - Worst Case

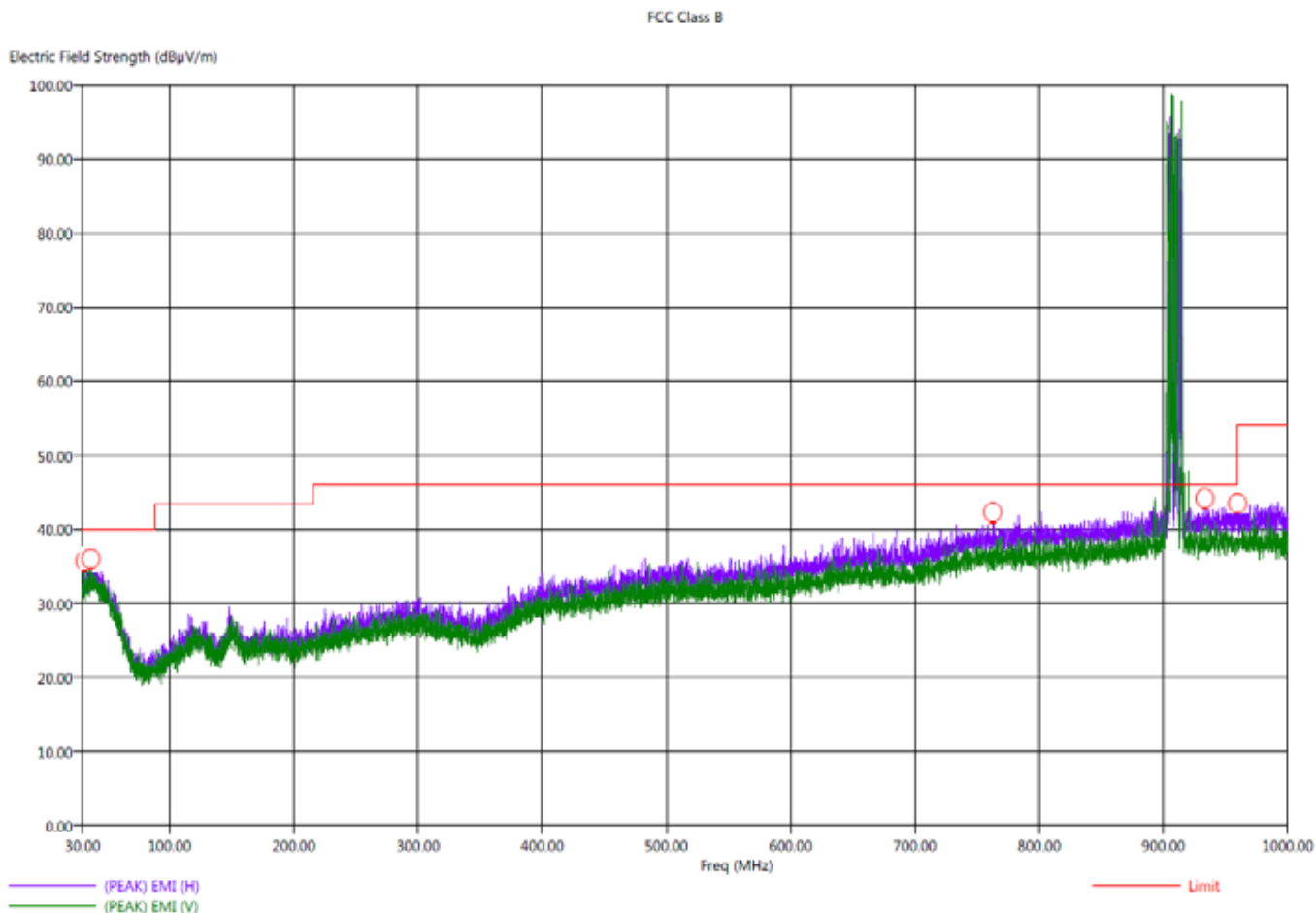
Comments: Customer: Linx Technologies

M/N: HUM-900-RC-UFL

Note: Antenna - ANT-916-WRT-UFL

2/6/2015 2:16:45 PM

Sequence: Preliminary Scan



Title: Radiated Final - 30-1000 MHz - FCC Class B
File: Agilent - Radiated Final Scan 30-1000Mhz - FCC Class B_Module 1_Protocol C_ANT-916-WRT-UFL_X-Axis_02-06-2015.set
Operator: Kenneth Lee
EUT Type: Hummingbird MCA
EUT Condition: Continuously Transmitting - Frequency Hopping - Protocol C - Module 1 - X-Axis - Worst Case
Comments: Customer: Linx Technologies
M/N: HUM-900-RC-UFL
Note: Antenna - ANT-916-WRT-UFL

2/6/2015 2:27:00 PM
Sequence: Final Measurements

Final Scan - FCC Class B

Freq (MHz)	Pol	(PEAK) EMI (dBuV/m)	(QP) EMI (dBuV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBuV/m)	Transducer (dB)	Cable (dB)	Twr Ht (cm)	Ttbi Aql (deg)
32.00	H	35.36	31.22	-4.64	-8.78	40.00	23.53	0.37	223.55	207.75
35.40	H	35.65	31.35	-4.35	-8.65	40.00	23.70	0.39	127.43	123.50
36.60	V	36.49	31.56	-3.51	-8.44	40.00	23.84	0.40	191.85	0.00
762.70	H	41.60	37.05	-4.40	-8.95	46.00	25.90	2.36	288.20	325.50
933.30	H	43.75	39.43	-2.25	-6.57	46.00	27.48	2.69	368.50	255.50
959.70	H	44.74	39.67	-9.26	-14.33	54.00	27.66	2.75	336.14	250.25