3.0m.

EUT.

Im-4m.

Tune-Table.

1.5m.

AMP.

Receiver.

PC-System.

In 3 m Anechoic Chamber, test setup diagram for frequency above 1 GHz:

Note: For harmonic emissions test an appropriate high pass filter was inserted in the input port of AMP.

13.2. Limit

(1) FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.1772&4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.2072&4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

LOP-FTR016 1.0 36 / 62

²Above 38.6

(2) FCC 15.209 Limit.

Frequency	Distance	Field Strengths Limit			
MHz	Meters	μV/m	dB(μV)/m		
0.009 ~ 0.490	300	2400/F(kHz)	67.6-20log(F)		
0.490 ~ 1.705	30	24000/F(kHz)	87.6-20log(F)		
1.705 ~ 30.0	30	30	29.54		
30 ~ 88	3	100	40.0		
88 ~ 216	3	150	43.5		
216~960	3	200	46.0		
960~1000	3	500	54.0		
Above 1000	3	74.0 dB(μV)/r 54.0 dB(μV)/m			

Note: (1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.

About Restricted bands of operation please refer to FCC § 15.205(a),

LOP-FTR016 1.0 37 / 62

13.3. Test Procedure

Below 30 MHz:

The setting of the spectrum Analyzer

RBW	300 Hz (From 9 kHz to 0.15 MHz)/ 10 kHz (From 0.15 MHz to 30 MHz)
VBW	1 kHz (From 9 kHz to 0.15 MHz)/ 30 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto
Trace	Max hold

- 1. The testing follows the guidelines in ANSI C63.10-2013
- 2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
 - 3. The EUT was placed on a turntable with 80 cm meter above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of 1 meter height antenna tower.
- 5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
- 6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
- 7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore, sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

LOP-FTR016 1.0 38 / 62

Below 1 GHz and above 30 MHz:

The setting of the spectrum Analyzer

DDW	400 kl I-
RBW	100 kHz
VBW	300 kHz
Sweep	Auto
Sweep	Auto
Trace	Max hold

- 1. The testing follows the guidelines in ANSI C63.10-2013.
- 2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
 - 3. The EUT was placed on a turntable with 80 cm above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

LOP-FTR016 1.0 39 / 62

Above 1 GHz:

RBW	1 MHz
1//B///	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

- 1. The testing follows the guidelines in ANSI C63.10-2013.
- 2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
 - 3. The EUT was placed on a turntable with 1.5m above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
- 6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for AVG measurements. For the Duty Cycle please refer to clause 8.1.ON TIME AND DUTY CYCLE.
- 7. Restriction band: Investigated frequency range from 2310 MHz to 2410 MHz and 2470MHz to 2500 MHz.

All restriction band should comply with 15.209, other emission should be at least 20 dB below the fundamental.

- Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.
 - Note 2: The EUT does not support simultaneous transmission.
- Note 3: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

LOP-FTR016 1.0 40 / 62

13.4. Results

Pass. (See below detailed test result)

All the emissions except fundamental emission from 9 kHz to 25 GHz were comply with 15.209 limits.

Note1: According exploratory test, the emission levels are 20 dB below the limit detected from 9 kHz to 30 MHz, so the final test was performed with frequency range from 30 MHz to 26 GHz and recorded in below.

Note2: For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in GFSK, Tx 2480MHz mode.

Note3: For emissions above 1 GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

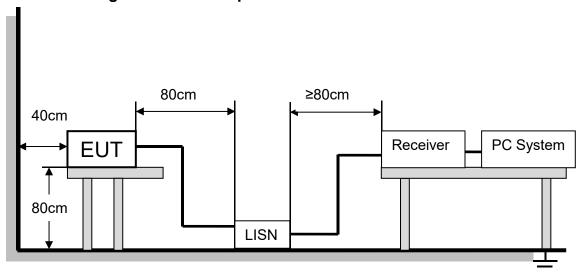
13.5. Original test data

Below 1 GHz and above 30 MHz test data Refer to appendix A Above 1 GHz test data Refer to appendix B

LOP-FTR016 1.0 41 / 62

14. AC Power Line Conducted Emissions

14.1. Block diagram of test setup



The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through an Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

14.2. Limits

Please refer to CFR 47 FCC § 15.207 (a).

Frequency (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

14.3. Test procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

LOP-FTR016 1.0 42 / 62

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

14.4. Test result

Pass. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.

Note2: Pre-test AC conducted emission at both voltage AC 120V/60Hz and AC 240V/50Hz, recorded worse case.

14.5. Original test data

AC Power Line Conducted Emission Test Data Refer to appendix C

LOP-FTR016 1.0 43 / 62

15. Antenna Requirements

15.1. Limits

Please refer to FCC § 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC § 15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

15.2. Result

The antenna used for this product is FPC antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 2.04 dBi

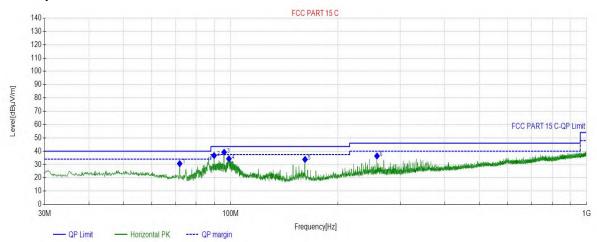
LOP-FTR016 1.0 44 / 62

APPENDIX A – Radiated Emission Below 1GHz Test Data Test Report

Project Information						
EUT:	360° All-in-one Conference Camera	Environment:	23℃ 56%			
Model:	MD20A	SN:				
Mode:	1M_2480	Voltage:	DC12V 3A			
Customer:		Engineer:	Roger			
Remark:						

Start of Test: 2023-08-25 10:40:31

Test Graph



Final	Final Data List								
NO.	Freq. (MHz)	Factor (dB)	QP Value (dBµV/m)	QP Limit (dBµV/m)	QP Margin (dB)	Height (cm)	Angle (°)	Polarity	
1	71.9082	17.78	30.68	40.00	9.32	100	324	Horizonta	
2	89.8550	18.37	36.75	43.50	6.75	100	355	Horizonta	
3	95.8696	19.80	39.20	43.50	4.30	100	305	Horizonta	
4	98.8769	20.51	34.31	43.50	9.19	100	170	Horizonta	
5	161.836	17.75	33.82	43.50	9.68	100	219	Horizonta	
6	257.778	21.59	36.41	46.00	9.59	100	246	Horizonta	

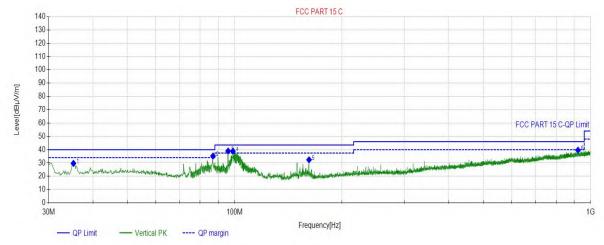
LOP-FTR016 1.0 45 / 62

Test Report

Project Information							
EUT:	360° All-in-one Conference Camera	Environment:	23℃ 56%				
Model:	MD20A	SN:					
Mode:	1M_2480	Voltage:	DC12V 3A				
Customer:		Engineer:	Roger				
Remark:							

Start of Test: 2023-08-25 10:41:15

Test Graph



Final	Final Data List								
NO.	Freq. (MHz)	Factor (dB)	QP Value (dBµV/m)	QP Limit (dBµV/m)	QP Margin (dB)	Height (cm)	Angle (°)	Polarity	
1	35.2385	20.08	29.71	40.00	10.29	100	283	Vertical	
2	86.9447	17.59	35.29	40.00	4.71	100	153	Vertical	
3	95.8696	19.80	39.00	43.50	4.50	100	43	Vertical	
4	98.8769	20.51	38.96	43.50	4.54	100	147	Vertical	
5	161.836	17.75	32.43	43.50	11.07	100	273	Vertical	
6	922.101	34.68	39.65	46.00	6.35	100	138	Vertical	

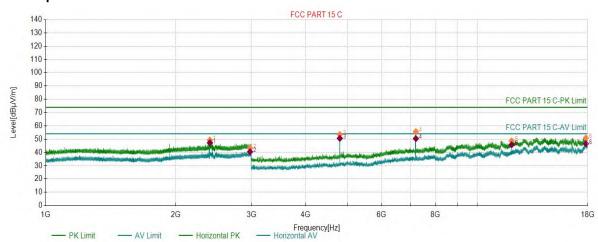
LOP-FTR016 1.0 46 / 62

APPENDIX B – Radiated Emission Above 1GHz Test Data Test Report

Project Information						
EUT:	360° All-in-one Conference Camera					
Model:	MD20A Environment:					
Mode:	BLE_1M_2402	Voltage:	DC12V 3A			
Customer:	Engineer: Roger					
Remark:	Power Set : 2.6					

Start of Test: 2023-08-01 20:02:06

Test Graph



PK Fir	PK Final Data List							
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	2401.9701	7.43	49.32	74.00	24.68	150	2	Horizontal
2	2975.3988	9.12	43.29	74.00	30.71	150	236	Horizontal
3	4803.0902	-9.95	53.48	74.00	20.52	150	133	Horizontal
4	7206.2103	-2.58	55.66	74.00	18.34	150	326	Horizontal
5	12010.9505	5.49	48.71	74.00	25.29	150	269	Horizontal
6	17844.7422	14.86	50.81	74.00	23.19	150	65	Horizontal

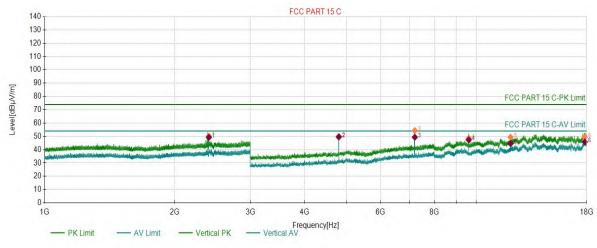
AV Fi	AV Final Data List									
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity		
1	2401.9701	7.43	47.22	54.00	6.78	150	2	Horizontal		
2	2975.3988	9.12	40.49	54.00	13.51	150	236	Horizontal		
3	4803.0902	-9.95	50.59	54.00	3.41	150	133	Horizontal		
4	7206.2103	-2.58	50.40	54.00	3.60	150	326	Horizontal		
5	12010.9505	5.49	45.76	54.00	8.24	150	269	Horizontal		
6	17844.7422	14.86	46.49	54.00	7.51	150	65	Horizontal		

LOP-FTR016 1.0 47 / 62

	Project Information								
EUT:	360° All-in-or	360° All-in-one Conference Camera							
Model:	MD20A Environment:								
Mode:	BLE_1M_2402	Voltage:	DC12V 3A						
Customer:		Engineer:	Roger						
Remark:	Power Set : 2.6								

Start of Test: 2023-08-01 20:03:36

Test Graph



PK Fir	nal Data List							
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	2401.9701	7.13	50.15	74.00	23.85	150	250	Vertical
2	4803.8402	-10.14	49.96	74.00	24.04	150	246	Vertical
3	7204.7102	-2.61	54.31	74.00	19.69	150	41	Vertical
4	9607.0804	3.30	48.63	74.00	25.37	150	41	Vertical
5	12008.7004	5.67	49.40	74.00	24.60	150	41	Vertical
6	17835.7418	14.65	49.51	74.00	24.49	150	301	Vertical

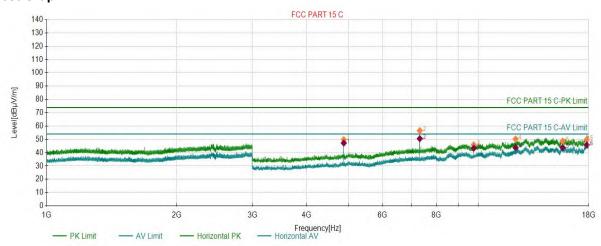
AV Fi	AV Final Data List									
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity		
1	2401.9701	7.13	49.26	54.00	4.74	150	250	Vertical		
2	4803.8402	-10.14	49.57	54.00	4.43	150	246	Vertical		
3	7204.7102	-2.61	49.39	54.00	4.61	150	41	Vertical		
4	9607.0804	3.30	47.41	54.00	6.59	150	41	Vertical		
5	12008.7004	5.67	44.59	54.00	9.41	150	41	Vertical		
6	17835.7418	14.65	45.83	54.00	8.17	150	301	Vertical		

LOP-FTR016 1.0 48 / 62

	Project Information								
EUT:	360° All-in-or	360° All-in-one Conference Camera							
Model:	MD20A Environment:								
Mode:	BLE_1M_2440	Voltage:	DC12V 3A						
Customer:		Engineer:	Roger						
Remark:	Power Set: 1.3								

Start of Test: 2023-08-01 20:22:27

Test Graph



PK Fi	PK Final Data List									
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity		
1	4879.5940	-9.50	49.85	74.00	24.15	150	258	Horizontal		
2	7319.4660	-1.94	56.62	74.00	17.38	150	258	Horizontal		
3	9760.8380	3.22	45.95	74.00	28.05	150	56	Horizontal		
4	12200.7100	6.28	50.33	74.00	23.67	150	258	Horizontal		
5	15680.8840	10.78	48.71	74.00	25.29	150	24	Horizontal		
6	17837.9919	14.83	49.80	74.00	24.20	150	35	Horizontal		

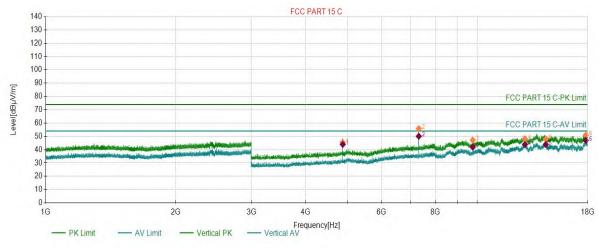
AV Fi	AV Final Data List									
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity		
1	4879.5940	-9.50	47.25	54.00	6.75	150	258	Horizontal		
2	7319.4660	-1.94	50.57	54.00	3.43	150	258	Horizontal		
3	9760.8380	3.22	43.39	54.00	10.61	150	56	Horizontal		
4	12200.7100	6.28	43.75	54.00	10.25	150	258	Horizontal		
5	15680.8840	10.78	43.88	54.00	10.12	150	24	Horizontal		
6	17837.9919	14.83	45.85	54.00	8.15	150	35	Horizontal		

LOP-FTR016 1.0 49 / 62

	Project Information								
EUT:	360° All-in-or	360° All-in-one Conference Camera							
Model:	MD20A Environment:								
Mode:	BLE_1M_2440	Voltage:	DC12V 3A						
Customer:		Engineer:	Roger						
Remark:	Power Set: 1.3								

Start of Test: 2023-08-01 20:23:57

Test Graph



PK Fir	nal Data List							
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	4879.5940	-9.54	45.48	74.00	28.52	150	34	Vertical
2	7320.2160	-1.91	55.83	74.00	18.17	150	260	Vertical
3	9760.0880	3.37	47.20	74.00	26.80	150	124	Vertical
4	12892.9947	9.26	47.99	74.00	26.01	150	192	Vertical
5	14406.5703	11.60	48.08	74.00	25.92	150	192	Vertical
6	17831.2416	14.63	50.92	74.00	23.08	150	294	Vertical

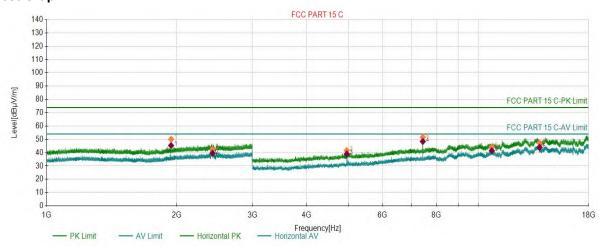
AV Fi	nal Data List							
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	4879.5940	-9.54	43.99	54.00	10.01	150	34	Vertical
2	7320.2160	-1.91	50.09	54.00	3.91	150	260	Vertical
3	9760.0880	3.37	41.98	54.00	12.02	150	124	Vertical
4	12892.9947	9.26	43.86	54.00	10.14	150	192	Vertical
5	14406.5703	11.60	43.91	54.00	10.09	150	192	Vertical
6	17831.2416	14.63	46.97	54.00	7.03	150	294	Vertical

LOP-FTR016 1.0 50 / 62

	Project Information								
EUT:	360° All-in-or	360° All-in-one Conference Camera							
Model:	MD20A Environment:								
Mode:	BLE_1M_2480	Voltage:	DC12V 3A						
Customer:		Engineer:	Roger						
Remark:	Power Set : -4.2								

Start of Test: 2023-08-02 09:20:23

Test Graph



PK Fir	nal Data List							
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1942.6471	4.46	50.15	74.00	23.85	150	244	Horizontal
2	2423.1712	7.51	42.66	74.00	31.34	150	267	Horizontal
3	4959.0980	-8.98	41.67	74.00	32.33	150	150	Horizontal
4	7438.7219	-1.89	51.69	74.00	22.31	150	267	Horizontal
5	10747.1374	4.86	44.12	74.00	29.88	150	357	Horizontal
6	13862.0431	10.24	47.36	74.00	26.64	150	336	Horizontal

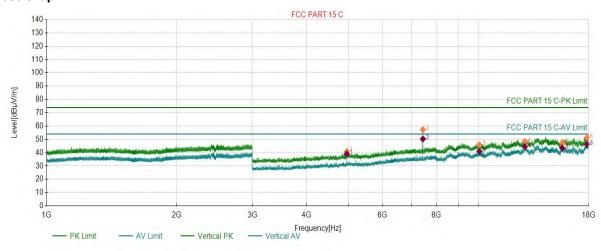
AV Fi	nal Data List							
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1942.6471	4.46	45.38	54.00	8.62	150	244	Horizontal
2	2423.1712	7.51	39.57	54.00	14.43	150	267	Horizontal
3	4959.0980	-8.98	39.05	54.00	14.95	150	150	Horizontal
4	7438.7219	-1.89	48.44	54.00	5.56	150	267	Horizontal
5	10747.1374	4.86	41.48	54.00	12.52	150	357	Horizontal
6	13862.0431	10.24	43.99	54.00	10.01	150	336	Horizontal

LOP-FTR016 1.0 51 / 62

	Project Information									
EUT:	360° All-in-or	360° All-in-one Conference Camera								
Model:	MD20A Environment:									
Mode:	BLE_1M_2480	Voltage:	DC12V 3A							
Customer:		Engineer:	Roger							
Remark:	Pow	ver Set : -4.2								

Start of Test: 2023-08-02 09:26:26

Test Graph



PK Fir	PK Final Data List											
NO.	Freq. (MHz)	Factor (dB)	PK Value (dBµV/m)	PK Limit (dBµV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity				
1	4959.0980	-8.86	40.85	74.00	33.15	150	288	Vertical				
2	7440.2220	-1.80	57.27	74.00	16.73	150	246	Vertical				
3	10058.6029	4.41	45.89	74.00	28.11	150	341	Vertical				
4	12814.9908	9.19	48.32	74.00	25.68	150	183	Vertical				
5	15643.3822	11.11	47.39	74.00	26.61	150	195	Vertical				
6	17843.9922	14.69	51.29	74.00	22.71	150	195	Vertical				

AV Fi	nal Data List							
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	4959.0980	-8.86	38.98	54.00	15.02	150	288	Vertical
2	7440.2220	-1.80	50.30	54.00	3.70	150	246	Vertical
3	10058.6029	4.41	41.04	54.00	12.96	150	341	Vertical
4	12814.9908	9.19	44.59	54.00	9.41	150	183	Vertical
5	15643.3822	11.11	43.55	54.00	10.45	150	195	Vertical
6	17843.9922	14.69	46.26	54.00	7.74	150	195	Vertical

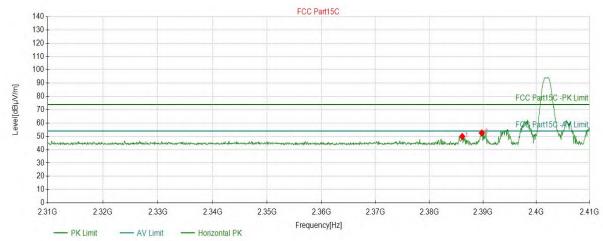
LOP-FTR016 1.0 52 / 62

Test Report

	Project Information									
EUT:	360° All-in-or	360° All-in-one Conference Camera								
Model:	MD20A Environment:									
Mode:	BLE_1M_2402	Voltage:	DC12V 3A							
Customer:		Engineer:	Roger							
Remark:	Pov	Power Set : 3.5								

Start of Test: 2023-08-01 19:54:31

Test Graph



Suspe	Suspected Data List											
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detec tor	Polarity			
1	2386.1381	49.91	5.95	74.00	24.09	150	332	PK	Horizont			
2	2389.7899	52.60	5.95	74.00	21.40	150	324	PK	Horizont			

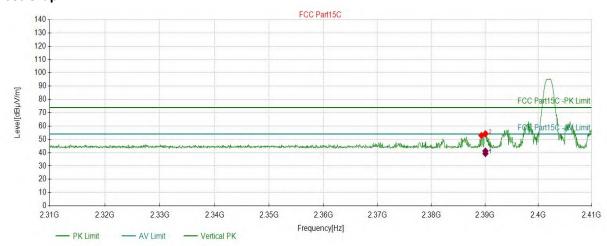
LOP-FTR016 1.0 53 / 62

Test Report

	Project Information									
EUT:	360° All-in-or	360° All-in-one Conference Camera								
Model:	MD20A Environment:									
Mode:	BLE_1M_2402	Voltage:	DC12V 3A							
Customer:	Engineer: Roger									
Remark:	Pov	ver Set : 3.5								

Start of Test: 2023-08-01 19:55:17

Test Graph



Suspe	Suspected Data List											
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detec tor	Polarity			
1	2389.3397	52.91	5.66	74.00	21.09	150	248	PK	Vertical			
2	2390.0900	54.27	5.65	74.00	19.73	150	245	PK	Vertical			

AV Fir	AV Final Data List											
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity				
1	2390.0899	5.65	39.31	54.00	14.69	245.6	95.8	Vertical				
2	2390.0900	5.65	41.27	54.00	12.73	150	245	Vertical				

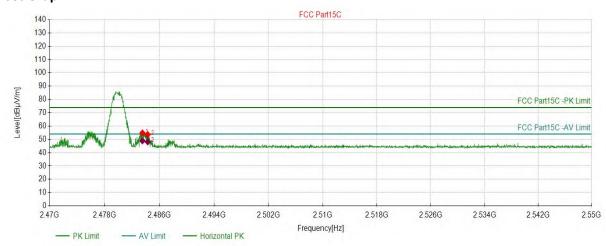
LOP-FTR016 1.0 54 / 62

Test Report

	Project Information									
EUT:	360° All-in-or	360° All-in-one Conference Camera								
Model:	MD20A Environment:									
Mode:	BLE_1M_2480	Voltage:	DC12V 3A							
Customer:		Engineer:	Roger							
Remark:	Pow	ver Set : -4.2								

Start of Test: 2023-08-02 09:30:37

Test Graph



Suspe	Suspected Data List											
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detec tor	Polarity			
1	2483.5245	54.82	6.37	74.00	19.18	155	176	PK	Horizont			
2	2484.2981	53.71	6.38	74.00	20.29	155	159	PK	Horizont			

AV Fi	AV Final Data List											
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity				
1	2483.5245	6.37	48.93	54.00	5.07	155	176	Horizontal				
2	2484.2981	6.38	48.17	54.00	5.83	155	159	Horizontal				

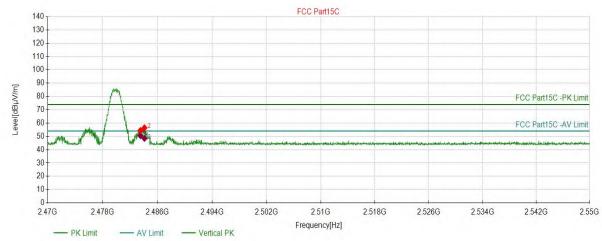
LOP-FTR016 1.0 55 / 62

Test Report

	Project Inform	nation					
EUT:	360° All-in-or	ne Conference C	Camera				
Model:	MD20A	Environment:					
Mode:	BLE_1M_2480	Voltage:	DC12V 3A				
Customer:		Engineer:	Roger				
Remark:	Power Set : 2.6						

Start of Test: 2023-08-02 09:31:22

Test Graph



Suspe	ected Data Lis	t							
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detec tor	Polarity
1	2483.5245	54.37	6.28	74.00	19.63	155	261	PK	Vertical
2	2484.1114	56.42	6.29	74.00	17.58	155	270	PK	Vertical

AV Fir	nal Data List							
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBμV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	2483.5245	6.29	50.60	54.00	3.40	234.4	99.5	Vertical
2	2484.1113	6.29	48.51	54.00	5.49	185.8	90.1	Vertical

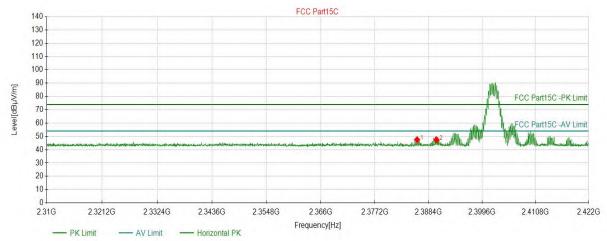
LOP-FTR016 1.0 56 / 62

Test Report

	Project Inform	nation						
EUT:	360° All-in-one Co	nference Camer	a23℃ 56%					
Model:	MD20A	Environment:						
Mode:	BLE_2M_2402	Voltage:	DC12V 3A					
Customer:		Engineer:	Roger					
Remark:	Pov	Power Set : 2.6						

Start of Test: 2023-08-24 10:55:36

Test Graph



Suspe	Suspected Data List										
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detec tor	Polarity		
1	2385.9987	47.54	5.60	74.00	26.46	150	126	PK	Horizont		
2	2390.0320	47.42	5.61	74.00	26.58	150	126	PK	Horizont		

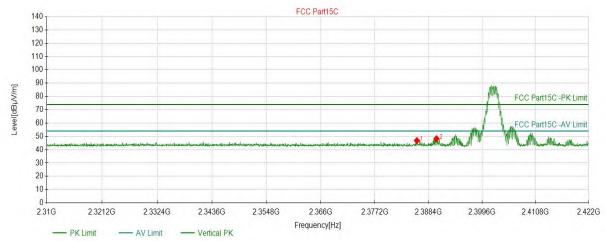
LOP-FTR016 1.0 57 / 62

Test Report

	Project Inform	nation					
EUT:	360° All-in-one Co	nference Camer	a23℃ 56%				
Model:	MD20A	Environment:					
Mode:	BLE_2M_2402	Voltage:	DC12V 3A				
Customer:		Engineer:	Roger				
Remark:	Pov	Power Set : 2.6					

Start of Test: 2023-08-24 11:02:48

Test Graph



Suspe	Suspected Data List										
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detec tor	Polarity		
1	2385.9613	46.89	5.60	74.00	27.11	150	334	PK	Vertical		
2	2390.0320	48.24	5.61	74.00	25.76	150	334	PK	Vertical		

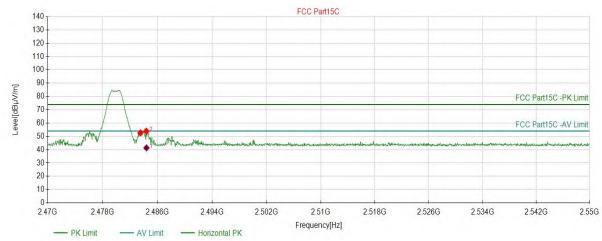
LOP-FTR016 1.0 58 / 62

Test Report

	Project Inform	nation				
EUT:	360° All-in-one Co	nference Camer	a23℃ 56%			
Model:	MD20A	Environment:				
Mode:	BLE_2M_2480	Voltage:	DC12V 3A			
Customer:		Engineer:	Roger			
Remark:	Power Set : -4.2					

Start of Test: 2023-08-24 11:13:11

Test Graph



Suspe	ected Data Lis	t							
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detec tor	Polarity
1	2483.5268	52.65	6.07	74.00	21.35	150	189	PK	Horizont
2	2484.4072	53.88	6.08	74.00	20.12	150	186	PK	Horizont

AV Fi	AV Final Data List										
NO.	Freq. (MHz)	Factor (dB)	AV Value (dBµV/m)	AV Limit (dBµV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity			
1	2484.4072	6.08	41.38	54.00	12.62	150	186	Horizontal			

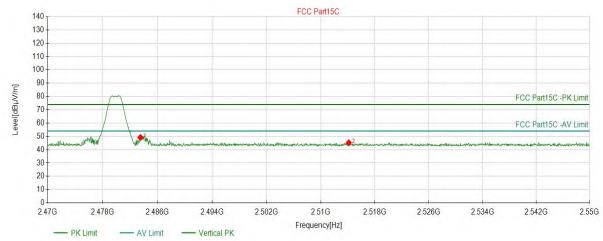
LOP-FTR016 1.0 59 / 62

Test Report

	Project Inform	nation				
EUT:	360° All-in-one Co	nference Camer	a23℃ 56%			
Model:	MD20A	Environment:				
Mode:	BLE_2M_2480	Voltage:	DC12V 3A			
Customer:		Engineer:	Roger			
Remark:	Power Set : -4.2					

Start of Test: 2023-08-24 11:13:56

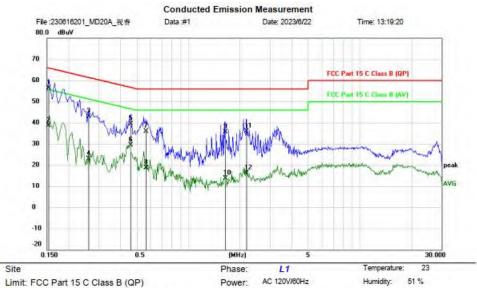
Test Graph



Suspe	Suspected Data List										
NO.	Freq. (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Angle (°)	Detec tor	Polarity		
1	2483.5268	49.18	6.07	74.00	24.82	150	329	PK	Vertical		
2	2514.1421	45.17	6.17	74.00	28.83	150	228	PK	Vertical		

LOP-FTR016 1.0 60 / 62

APPENDIX C – AC Power Line Conducted Emission Test Data

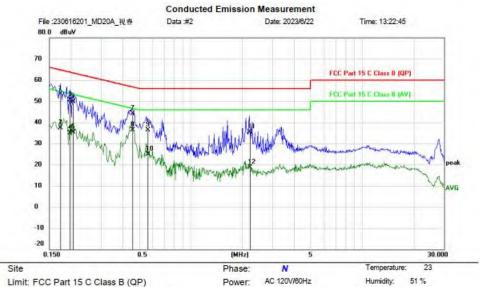


EUT: 360° All-in-one Conference Camera

M/N: MD20A Mode: BLE Mode

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dЫ	Detector	Comment
1	*	0.1539	46.67	9.64	56.31	65.79	-9.48	QP	
2		0.1539	29.00	9.64	38.64	55.79	-17.15	AVG	
3		0.2620	33.10	9.66	42.76	61.37	-18.61	QP	
4		0.2620	13.31	9.66	22.97	51.37	-28.40	AVG	
5		0.4620	29.52	9.74	39.26	56.66	-17.40	QP	
6		0.4620	19.56	9.74	29.30	46.66	-17.36	AVG	
7		0.5660	26.09	9.77	35.86	56.00	-20.14	QP	
8		0.5660	8.78	9.77	18.55	46.00	-27.45	AVG	
9		1.6420	25.84	9.76	35.60	56.00	-20.40	QP	
10		1.6420	3.94	9.76	13.70	46.00	-32.30	AVG	
11		2.1820	26.14	9.75	35.89	56.00	-20.11	QP	
12		2,1820	6.29	9.75	16.04	46.00	-29.96	AVG	

61 / 62 LOP-FTR016 1.0



EUT: 360° All-in-one Conference Camera

M/N: MD20A Mode: BLE Mode

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1740	43.65	9.66	53.31	64.77	-11.46	QP	
2		0.1740	27.69	9.66	37.35	54.77	-17.42	AVG	
3		0.1980	40.90	9.66	50.56	63.69	-13.13	QP	
4		0.1980	25.17	9.66	34.83	53.69	-18.86	AVG	
5		0.2060	40.20	9.66	49.86	63.37	-13.51	QP	
6		0.2060	25.81	9.66	35.47	53.37	-17.90	AVG	
7		0.4580	34.39	9.72	44.11	56.73	-12.62	QP	
8	*	0.4580	26.55	9.72	36.27	46.73	-10.46	AVG	
9		0.5620	26.57	9.76	36.33	56.00	-19.67	QP	
10		0.5620	15.16	9.76	24.92	46.00	-21.08	AVG	
11		2.2020	25.56	9.74	35.30	56.00	-20.70	QP	
12		2.2020	8.83	9.74	18.57	46.00	-27.43	AVG	
_									

END OF REPORT

62 / 62 LOP-FTR016 1.0