



7. On Time, Duty Cycle and Measurement methods

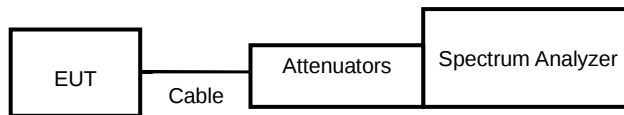
7.1. Test Limit

None; for reporting purposes only.

7.2. Test Procedure

KDB 789033 Zero-Span Spectrum Analyzer Method.

7.3. Test Setup Layout





7.4. Test Result and Data

For 24070407-TRFCC04

SISO

Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
802.11a,6M	2.10	2.11	99.22%

MIMO

Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
802.11ax HE20	5.36	5.38	99.67%
802.11ax HE40	4.82	4.84	99.64%
802.11ax HE80	2.56	2.57	99.40%
802.11ax HE160	2.21	2.23	99.31%

Verify Data

SISO

Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
802.11a,6M	1.70	2.01	84.90%

MIMO

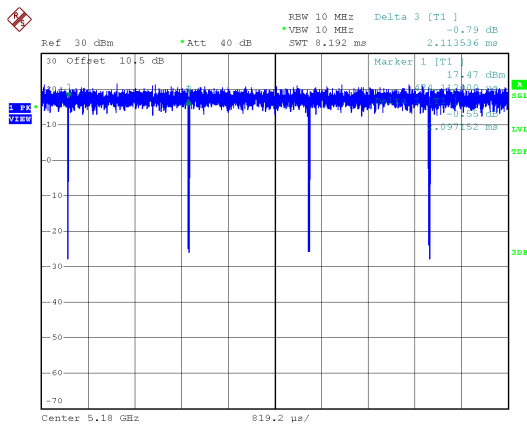
Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
802.11ax HE20	5.35	6.03	88.70%
802.11ax HE40	4.82	5.16	93.41%
802.11ax HE80	2.56	2.72	93.98%
802.11ax HE160	2.16	2.25	95.94%

7.5. Measurement Methods

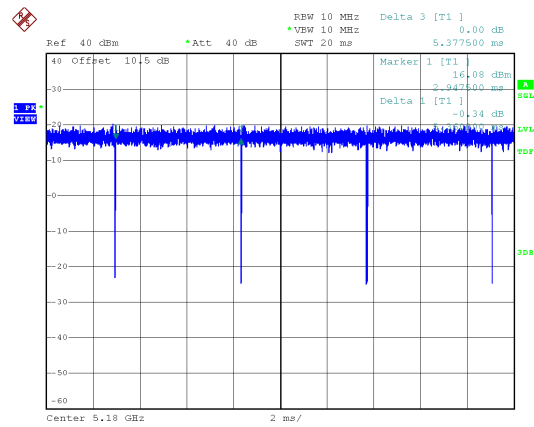
26 dB and 6dB Emission BW	KDB 789033 D02 v02r01, Section C
99% Occupied BW	KDB 789033 D02 v02r01, Section D
Conducted Output Power	KDB 789033 D02 v02r01, Section E.2.d and E.3.b (Method PM-G)
Power Spectral Density	KDB 789033 D02 v02r01, Section F
Unwanted emissions in restricted bands	KDB 789033 D02 v02r01, Sections G and H
Unwanted emissions in non-restricted bands	KDB 789033 D02 v02r01, Sections G and H



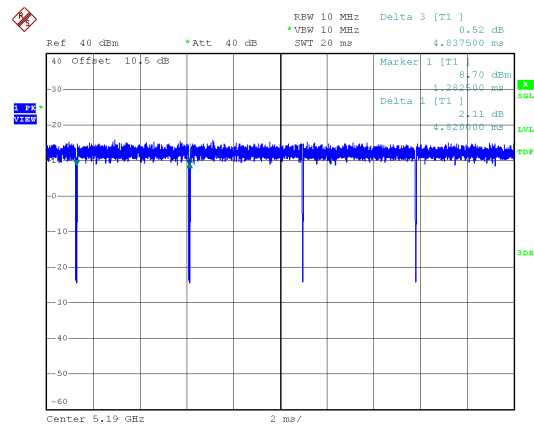
For 24070407-TRFCC04
SISO
Modulation Type: 802.11a



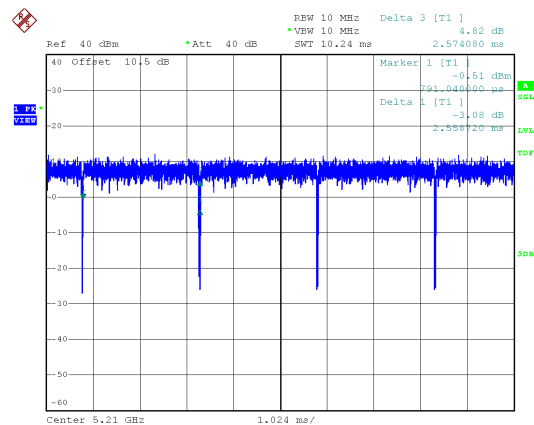
MIMO
Modulation Type: 802.11ax20



Modulation Type: 802.11ax40



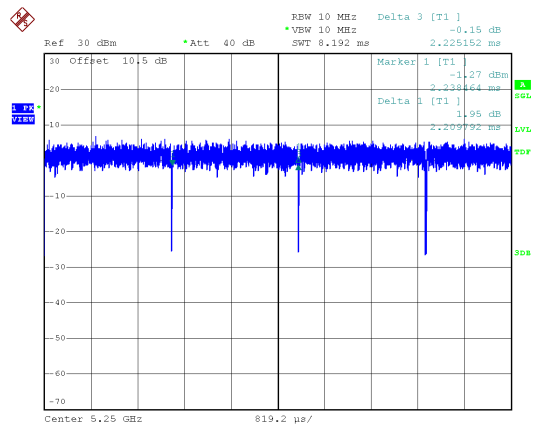
Modulation Type: 802.11ax80





MIMO

Modulation Type: 802.11ax160

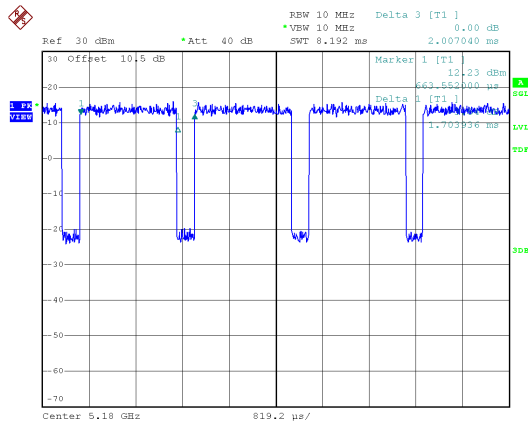




Verify Data

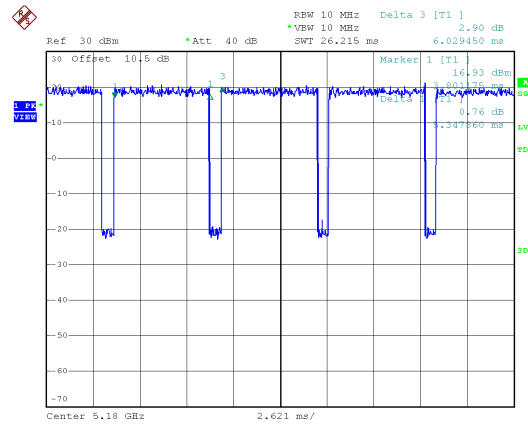
SISO

Modulation Type: 802.11a

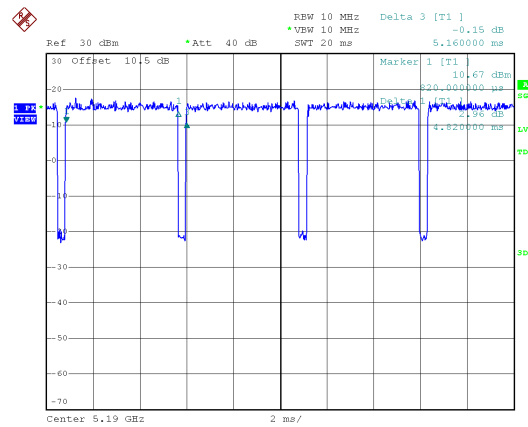


MIMO

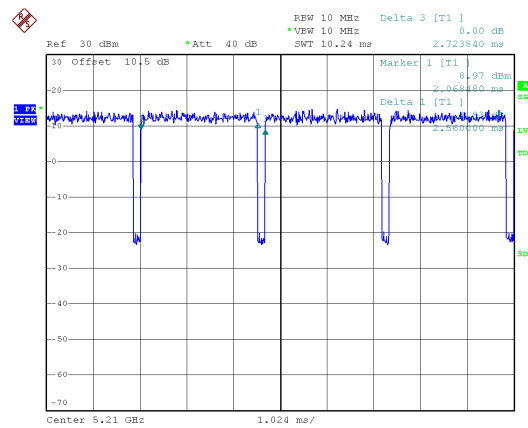
Modulation Type: 802.11ax20



Modulation Type: 802.11ax40



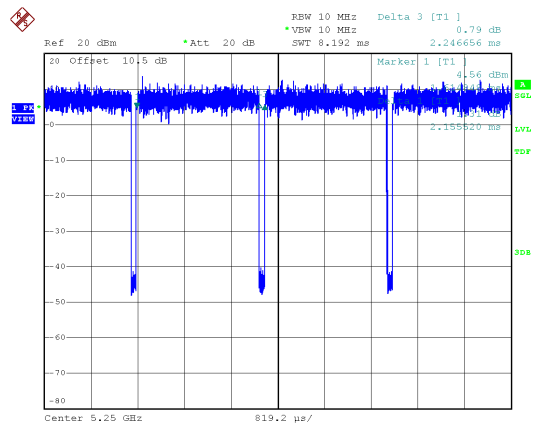
Modulation Type: 802.11ax80





MIMO

Modulation Type: 802.11ax160





8. Average Power

8.1. Test Limit

Output Power:

Frequency Band		Limit
☒	5.15~5.25GHz	
	Operating Mode	
☐	Outdoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30degrees as measured from the horizon must not exceed 125 mW (21 dBm).
☐	Indoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
☐	Fixed point-to-point access points	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.
☒	client devices	The maximum conducted output power over the frequency band of operation shall not exceed 250 mW (24dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.



Frequency Band		Limit
☒	5.25-5.35 GHz	The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
☒	5.470-5.725 GHz	
☒	5.725~5.85 GHz	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power.

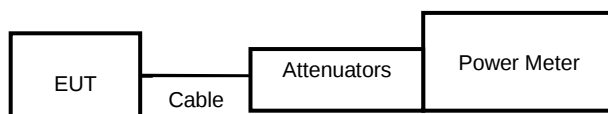
8.2. Test Procedure

According to the methods defined in ANSI C63.10-2013 Section 12.3

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

8.3. Test Setup Layout





8.4. Test Result and Data

For 24070407-TRFCC04

ESY22I1E

SISO ANT A

Modulation Type	Data Rate	Conducted Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A			
11a	6 Mbps	17.5	36	5180	15.62	15.62	36.475	24.00
11a	6 Mbps	17.5	40	5200	15.76	15.76	37.670	24.00
11a	6 Mbps	21	48	5240	18.23	18.23	66.527	24.00
11a	6 Mbps	17.5	52	5260	15.35	15.35	34.277	23.90
11a	6 Mbps	17.5	60	5300	14.62	14.62	28.973	23.84
11a	6 Mbps	18	64	5320	14.85	14.85	30.549	23.92
11a	6 Mbps	17	100	5500	15.39	15.39	34.594	23.90
11a	6 Mbps	19	120	5600	16.03	16.03	40.087	23.92
11a	6 Mbps	16	140	5700	11.71	11.71	14.825	23.90
11a	6 Mbps	19.5	149	5745	14.01	14.01	25.177	30.00
11a	6 Mbps	21	157	5785	15.63	15.63	36.559	30.00
11a	6 Mbps	19.5	165	5825	13.38	13.38	21.777	30.00

SISO ANT B

Modulation Type	Data Rate	Conducted Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT B			
11a	6 Mbps	17.5	36	5180	15.81	15.81	38.107	24.00
11a	6 Mbps	17.5	40	5200	15.76	15.76	37.670	24.00
11a	6 Mbps	21	48	5240	18.05	18.05	63.826	24.00
11a	6 Mbps	17.5	52	5260	14.51	14.51	28.249	23.90
11a	6 Mbps	17.5	60	5300	14.26	14.26	26.669	23.84
11a	6 Mbps	18	64	5320	14.55	14.55	28.510	23.92
11a	6 Mbps	17	100	5500	12.94	12.94	19.679	23.90
11a	6 Mbps	19	120	5600	16.58	16.58	45.499	23.92
11a	6 Mbps	16	140	5700	14.03	14.03	25.293	23.90
11a	6 Mbps	19.5	149	5745	16.63	16.63	46.026	30.00
11a	6 Mbps	21	157	5785	17.23	17.23	52.845	30.00
11a	6 Mbps	19.5	165	5825	15.42	15.42	34.834	30.00

ESY22I1E
MIMO

Modulation Type	Data Rate	Conducted Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11ax HE20	NSS1-MCS0	16	36	5180	14.15	14.08	17.13	51.587	24.00
11ax HE20	NSS1-MCS0	17	40	5200	15.08	15.01	18.06	63.906	24.00
11ax HE20	NSS1-MCS0	17.5	48	5240	14.89	15.14	18.03	63.491	24.00
11ax HE40	NSS1-MCS0	14.5	38	5190	12.47	12.10	15.30	33.878	24.00
11ax HE40	NSS1-MCS0	17	46	5230	14.52	14.18	17.36	54.496	24.00
11ax HE80	NSS1-MCS0	13.5	42	5210	10.69	10.38	13.55	22.636	24.00
11ax HE20	NSS1-MCS0	19	52	5260	16.63	15.95	19.31	85.381	24.00
11ax HE20	NSS1-MCS0	17	60	5300	14.09	13.60	16.86	48.554	24.00
11ax HE20	NSS1-MCS0	15	64	5320	11.81	11.25	14.55	28.506	24.00
11ax HE40	NSS1-MCS0	18	54	5270	14.53	14.26	17.41	55.048	24.00
11ax HE40	NSS1-MCS0	15	62	5310	11.18	10.89	14.05	25.396	24.00
11ax HE80	NSS1-MCS0	14.5	58	5290	10.68	10.52	13.61	22.967	24.00
11ax HE20	NSS1-MCS0	15	100	5500	13.05	11.15	15.21	33.215	24.00
11ax HE20	NSS1-MCS0	17.5	120	5600	14.77	13.89	17.36	54.482	24.00
11ax HE20	NSS1-MCS0	14	140	5700	9.51	11.95	13.91	24.601	24.00
11ax HE40	NSS1-MCS0	14	102	5510	11.62	9.27	13.61	22.974	24.00
11ax HE40	NSS1-MCS0	18	118	5590	14.93	14.58	17.77	59.825	24.00
11ax HE40	NSS1-MCS0	15.5	134	5670	11.29	13.08	15.29	33.782	24.00
11ax HE80	NSS1-MCS0	13	106	5530	9.89	8.23	12.15	16.403	24.00
11ax HE80	NSS1-MCS0	16.5	122	5610	13.02	12.93	15.99	39.678	24.00
11ax HE160	NSS1-MCS0	11.5	114	5570	8.72	7.55	11.18	13.136	24.00
11ax HE20	NSS1-MCS0	17	149	5745	11.38	14.42	16.17	41.410	30.00
11ax HE20	NSS1-MCS0	17	157	5785	10.88	13.56	15.43	34.945	30.00
11ax HE20	NSS1-MCS0	16.5	165	5825	10.23	12.19	14.33	27.102	30.00
11ax HE40	NSS1-MCS0	16.5	151	5755	10.54	13.31	15.15	32.753	30.00
11ax HE40	NSS1-MCS0	17.5	159	5795	11.22	13.82	15.72	37.342	30.00
11ax HE80	NSS1-MCS0	15.5	155	5775	8.89	11.74	13.56	22.673	30.00

ESY22I1E
MIMO

FCC Maximum Conducted Output Power (Within 5150-5250MHz band) RF Output Power(dBm)											
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A	ANT B					
50	11	11ax HE160	NSS1-MCS0	5250	3.75	3.38	6.58	0.00	4.549	6.58	24.00

FCC Maximum Conducted Output Power (Extends across 5250MHz band) RF Output Power(dBm)											
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A	ANT B					
50	11	11ax HE160	NSS1-MCS0	5250	3.05	2.93	6.00	0.00	3.982	6.00	24.00

Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	Avg Power Output (dBm)		Total Power
					ANT A	ANT B	(dBm)
Meter power (for full power)							
50	11	11ax HE160	NSS1-MCS0	5250	8.26	8.22	11.25

Note: Power Meter Average power is for reference only.



ESY2211E

SISO ANT A

FCC Maximum Conducted Output Power (Within 5470-5725MHz band) RF Output Power(dBm)										
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A					
144	16.5	11a	6M	5720	10.02	10.02	0.00	10.046	10.02	22.62

FCC Maximum Conducted Output Power (Extends across 5725MHz band) RF Output Power(dBm)										
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A					
144	16.5	11a	6M	5720	2.25	2.25	0.00	1.679	2.25	30.00

Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	Avg Power Output (dBm)	Total Power
					ANT A	(dBm)
Meter power (for full power)						
Ch144	16.5	11a	6 Mbps	5720MHz	11.62	11.62

Note: Power Meter Average power is for reference only.



ESY2211E

SISO ANT B

FCC Maximum Conducted Output Power (Within 5470-5725MHz band) RF Output Power(dBm)										
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT B					
144	16.5	11a	6M	5720	9.55	9.55	0.00	9.016	9.55	22.62

FCC Maximum Conducted Output Power (Extends across 5725MHz band) RF Output Power(dBm)										
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT B					
144	16.5	11a	6M	5720	1.74	1.74	0.00	1.493	1.74	30.00

Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	Avg Power Output (dBm)	Total Power
					ANT B	(dBm)
Meter power (for full power)						
Ch144	16.5	11a	6 Mbps	5720MHz	14.2	14.20

Note: Power Meter Average power is for reference only.



ESY2211E

MIMO

FCC Maximum Conducted Output Power (Within 5470-5725MHz band) RF Output Power(dBm)											
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A	ANT B					
144	16	11ax HE20	NSS1-MCS0	5720	8.93	11.66	13.52	0.00	22.472	13.52	22.85
142	16	11ax HE40	NSS1-MCS0	5710	9.82	12.05	14.09	0.00	25.626	14.09	24.00
138	16.5	11ax HE80	NSS1-MCS0	5690	10.45	12.44	14.57	0.00	28.631	14.57	24.00

FCC Maximum Conducted Output Power (Extends across 5725MHz band) RF Output Power(dBm)											
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A	ANT B					
144	16	11ax HE20	NSS1-MCS0	5720	2.03	4.92	6.72	0.00	4.700	6.72	30.00
142	16	11ax HE40	NSS1-MCS0	5710	-1.60	0.83	2.79	0.00	1.902	2.79	30.00
138	16.5	11ax HE80	NSS1-MCS0	5690	-5.28	-3.12	-1.06	0.00	0.784	-1.06	30.00

Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	Avg Power Output (dBm)		Total Power
					ANT A	ANT B	(dBm)
Meter power (for full power)							
Ch144	16	11ax HE20	NSS1-MCS0	5720MHz	10.67	13.64	15.41
Ch142	16	11ax HE40	NSS1-MCS0	5710MHz	11.03	13.45	15.42
Ch138	16.5	11ax HE80	NSS1-MCS0	5690MHz	11.38	13.62	15.65

Note: Power Meter Average power is for reference only.



Verify Data

(ESY22I1E) SISO ANT A

Modulation Type	Data Rate	Conducted Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A			
11a	6 Mbps	15	36	5180	15.57	15.57	36.058	24.00
11a	6 Mbps	15	40	5200	15.39	15.39	34.594	24.00
11a	6 Mbps	18.5	48	5240	18.11	18.11	64.714	24.00
11a	6 Mbps	15	52	5260	14.93	14.93	31.117	24.00
11a	6 Mbps	15	60	5300	14.54	14.54	28.445	24.00
11a	6 Mbps	15	64	5320	14.63	14.63	29.040	24.00
11a	6 Mbps	14.5	100	5500	14.83	14.83	30.409	24.00
11a	6 Mbps	17.5	120	5600	15.78	15.78	37.844	24.00
11a	6 Mbps	13.5	140	5700	11.29	11.29	13.459	24.00
11a	6 Mbps	17	149	5745	13.86	13.86	24.322	30.00
11a	6 Mbps	19	157	5785	15.47	15.47	35.237	30.00
11a	6 Mbps	16	165	5825	13.13	13.13	20.559	30.00

(ESY22I1E) SISO ANT B

Modulation Type	Data Rate	Conducted Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT B			
11a	6 Mbps	17.5	36	5180	14.63	14.63	29.040	24.00
11a	6 Mbps	17.5	40	5200	15.31	15.31	33.963	24.00
11a	6 Mbps	20	48	5240	17.91	17.91	61.802	24.00
11a	6 Mbps	16	52	5260	14.89	14.89	30.832	24.00
11a	6 Mbps	17	60	5300	14.02	14.02	25.235	24.00
11a	6 Mbps	15	64	5320	14.16	14.16	26.062	24.00
11a	6 Mbps	15	100	5500	12.75	12.75	18.836	24.00
11a	6 Mbps	19.5	120	5600	16.23	16.23	41.976	24.00
11a	6 Mbps	16	140	5700	13.85	13.85	24.266	24.00
11a	6 Mbps	18.5	149	5745	16.36	16.36	43.251	30.00
11a	6 Mbps	18.5	157	5785	17.16	17.16	52.000	30.00
11a	6 Mbps	16	165	5825	15.23	15.23	33.343	30.00



(ESY22I1E) MIMO

Modulation Type	Data Rate	Conducted Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11ax HE20	NSS1-MCS0	15	36	5180	15.04	12.71	17.04	50.579	24.00
11ax HE20	NSS1-MCS0	16	40	5200	15.91	13.75	17.97	62.708	24.00
11ax HE20	NSS1-MCS0	16	48	5240	15.54	14.25	17.95	62.417	24.00
11ax HE40	NSS1-MCS0	13	38	5190	13.16	10.81	15.15	32.752	24.00
11ax HE40	NSS1-MCS0	15	46	5230	15.06	13.15	17.22	52.716	24.00
11ax HE80	NSS1-MCS0	12.5	42	5210	11.31	8.92	13.29	21.319	24.00
11ax HE20	NSS1-MCS0	17	52	5260	16.38	15.49	18.97	78.851	24.00
11ax HE20	NSS1-MCS0	15	60	5300	13.95	13.48	16.73	47.116	24.00
11ax HE20	NSS1-MCS0	15	64	5320	11.63	11.15	14.41	27.586	24.00
11ax HE40	NSS1-MCS0	15	54	5270	14.41	14.08	17.26	53.192	24.00
11ax HE40	NSS1-MCS0	11.5	62	5310	11.15	10.37	13.79	23.921	24.00
11ax HE80	NSS1-MCS0	12.5	58	5290	10.53	10.39	13.47	22.238	24.00
11ax HE20	NSS1-MCS0	13	100	5500	12.30	11.83	15.08	32.223	24.00
11ax HE20	NSS1-MCS0	16.5	120	5600	14.81	13.63	17.27	53.337	24.00
11ax HE20	NSS1-MCS0	13	140	5700	10.71	10.97	13.85	24.279	24.00
11ax HE40	NSS1-MCS0	12	102	5510	10.96	10.19	13.60	22.921	24.00
11ax HE40	NSS1-MCS0	17	118	5590	15.12	14.11	17.65	58.272	24.00
11ax HE40	NSS1-MCS0	13.5	134	5670	12.10	11.57	14.85	30.573	24.00
11ax HE80	NSS1-MCS0	9.5	106	5530	9.38	7.91	11.72	14.850	24.00
11ax HE80	NSS1-MCS0	14.5	122	5610	13.48	11.97	15.80	38.024	24.00
11ax HE160	NSS1-MCS0	8.5	114	5570	8.61	7.48	11.09	12.859	24.00
11ax HE20	NSS1-MCS0	15.5	149	5745	12.48	13.66	16.12	40.928	30.00
11ax HE20	NSS1-MCS0	15	157	5785	11.21	13.32	15.40	34.691	30.00
11ax HE20	NSS1-MCS0	12.5	165	5825	10.07	12.17	14.26	26.644	30.00
11ax HE40	NSS1-MCS0	14.5	151	5755	11.38	12.74	15.12	32.534	30.00
11ax HE40	NSS1-MCS0	14	159	5795	11.46	13.37	15.53	35.723	30.00
11ax HE80	NSS1-MCS0	12	155	5775	9.45	11.07	13.35	21.604	30.00



(ESY22I1E) MIMO

FCC Maximum Conducted Output Power (Within 5150-5250MHz band) RF Output Power(dBm)											
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A	ANT B					
50	8	11ax HE160	NSS1-MCS0	5250	3.66	1.61	5.77	0.18	3.931	5.95	24.00

FCC Maximum Conducted Output Power (Extends across 5250MHz band) RF Output Power(dBm)											
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A	ANT B					
50	8	11ax HE160	NSS1-MCS0	5250	3.01	2.24	5.65	0.18	3.830	5.83	24.00

Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	Avg Power Output (dBm)		Total Power
					ANT A	ANT B	(dBm)
Meter power (for full power)							
50	8	11ax HE160	NSS1-MCS0	5250	8.68	6.98	10.92

Note: Power Meter Average power is for reference only.



(ESY22I1E) SISO ANT A

FCC Maximum Conducted Output Power (Within 5470-5725MHz band) RF Output Power(dBm)										
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A					
144	14	11a	6M	5720	9.26	9.26	0.71	9.931	9.97	22.62

FCC Maximum Conducted Output Power (Extends across 5725MHz band) RF Output Power(dBm)										
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A					
144	14	11a	6M	5720	1.58	1.58	0.71	1.694	2.29	30.00

Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	Avg Power Output (dBm)	Total Power
					ANT A	(dBm)
Meter power (for full power)						
Ch144	14	11a	6 Mbps	5720MHz	11.34	11.34

Note: Power Meter Average power is for reference only.



(ESY22I1E) SISO ANT B

FCC Maximum Conducted Output Power (Within 5470-5725MHz band) RF Output Power(dBm)										
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT B					
144	16	11a	6M	5720	8.36	8.36	0.71	8.072	9.07	22.62

FCC Maximum Conducted Output Power (Extends across 5725MHz band) RF Output Power(dBm)										
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT B					
144	16	11a	6M	5720	0.61	0.61	0.71	1.355	1.32	30.00

Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	Avg Power Output (dBm)	Total Power
					ANT B	(dBm)
Meter power (for full power)						
Ch144	16	11a	6 Mbps	5720MHz	14.14	14.14

Note: Power Meter Average power is for reference only.



(ESY22I1E) MIMO

FCC Maximum Conducted Output Power (Within 5470-5725MHz band) RF Output Power(dBm)											
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A	ANT B					
144	15	11ax HE20	NSS1-MCS0	5720	9.33	10.29	12.85	0.52	21.711	13.37	22.85
142	15	11ax HE40	NSS1-MCS0	5710	10.08	11.20	13.69	0.30	25.040	13.99	24.00
138	15	11ax HE80	NSS1-MCS0	5690	10.92	11.49	14.22	0.27	28.149	14.49	24.00

FCC Maximum Conducted Output Power (Extends across 5725MHz band) RF Output Power(dBm)											
Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
					ANT A	ANT B					
144	15	11ax HE20	NSS1-MCS0	5720	2.50	3.61	6.10	0.52	4.593	6.62	30.00
142	15	11ax HE40	NSS1-MCS0	5710	-1.22	-0.06	2.41	0.30	1.866	2.71	30.00
138	15	11ax HE80	NSS1-MCS0	5690	-4.75	-4.17	-1.44	0.27	0.764	-1.17	30.00

Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	Avg Power Output (dBm)		Total Power
					ANT A	ANT B	(dBm)
Meter power (for full power)							
Ch144	15	11ax HE20	NSS1-MCS0	5720MHz	11.83	12.75	15.32
Ch142	15	11ax HE40	NSS1-MCS0	5710MHz	12.62	12.07	15.36
Ch138	15	11ax HE80	NSS1-MCS0	5690MHz	12.43	12.81	15.63

Note: Power Meter Average power is for reference only.



For 24070407-TRFCC04

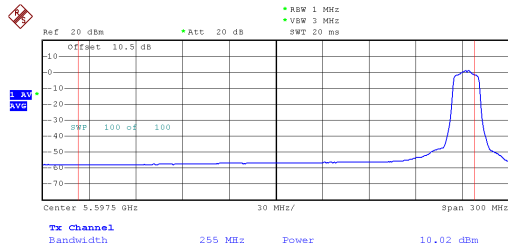
ESY22I1E SISO

Within 5470-5725MHz Band, Straddle Channel

ANT A

Modulation Type: 802.11a

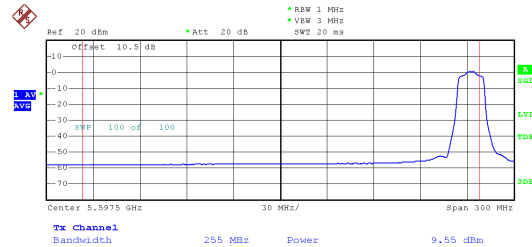
CH144



ANT B

Modulation Type: 802.11ax20

CH144



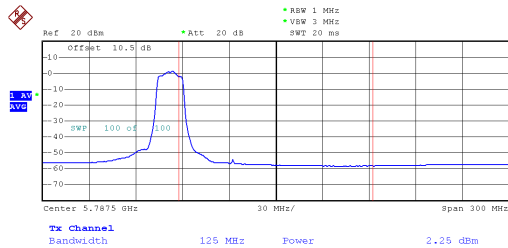
SISO

Extends across 5725MHz band, Straddle Channel

ANT A

Modulation Type: 802.11a

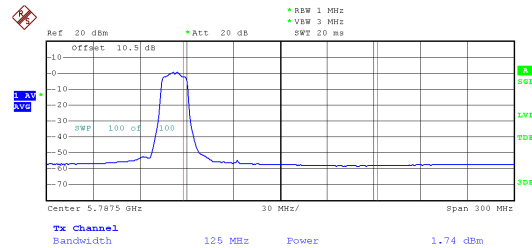
CH144



ANT B

Modulation Type: 802.11ax20

CH144





ESY2211E

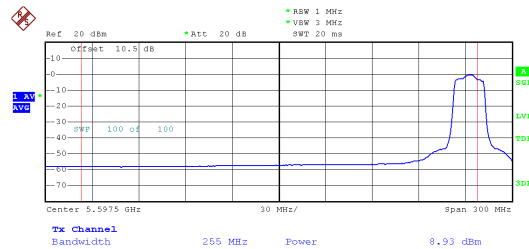
MIMO

Within 5470-5725MHz Band, Straddle Channel

ANT A

Modulation Type: 802.11ax20

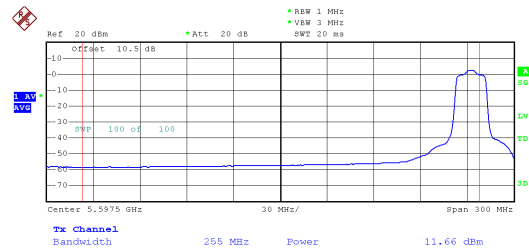
CH144



ANT B

Modulation Type: 802.11ax20

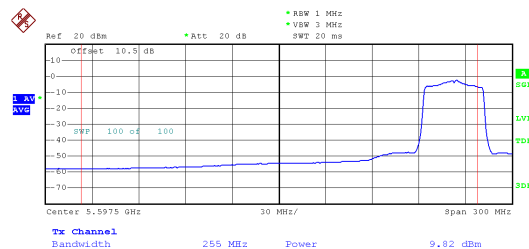
CH144



ANT A

Modulation Type: 802.11ax40

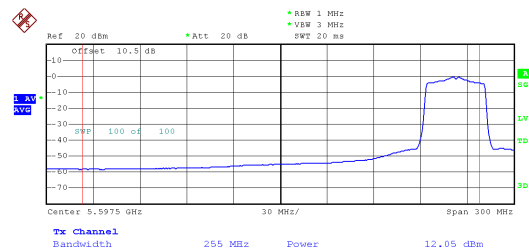
CH142



ANT B

Modulation Type: 802.11ax40

CH142





ESY2211E

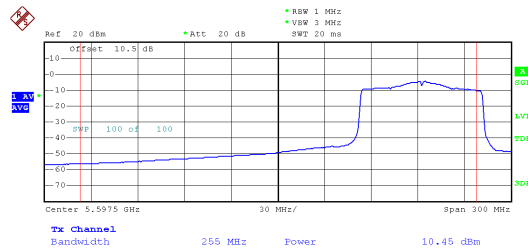
MIMO

Within 5470-5725MHz Band, Straddle Channel

ANT A

Modulation Type: 802.11ax80

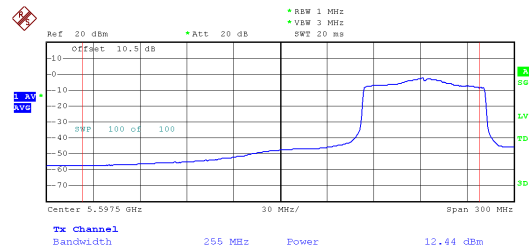
CH138



ANT B

Modulation Type: 802.11ax80

CH138





ESY2211E

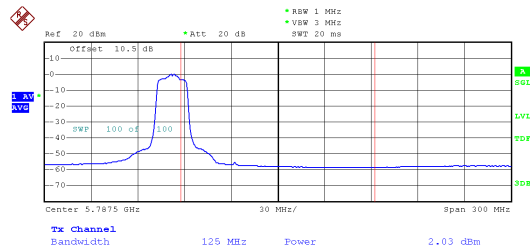
MIMO

Extends across 5725MHz band, Straddle Channel

ANT A

Modulation Type: 802.11ax20

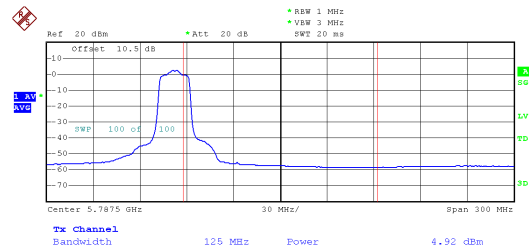
CH144



ANT B

Modulation Type: 802.11ax20

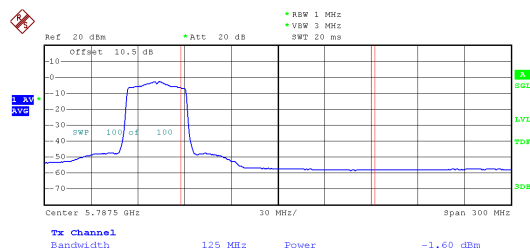
CH144



ANT A

Modulation Type: 802.11ax40

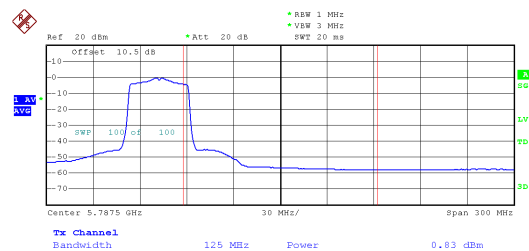
CH142



ANT B

Modulation Type: 802.11ax40

CH142





ESY2211E

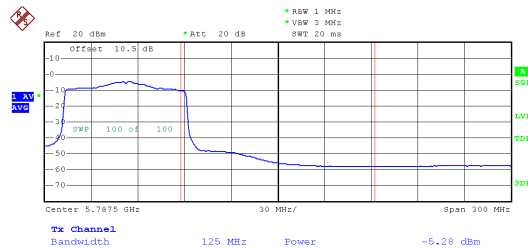
MIMO

Extends across 5725MHz band, Straddle Channel

ANT A

Modulation Type: 802.11ax80

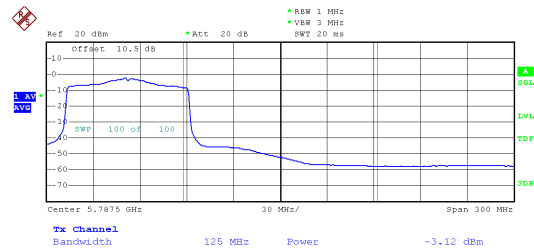
CH138



ANT B

Modulation Type: 802.11ax80

CH138





ESY22I1E

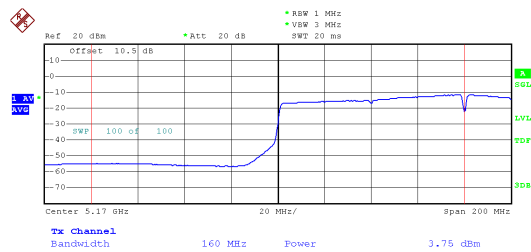
MIMO

Within 5150-5250MHz band

ANT A

Modulation Type: 802.11ax160

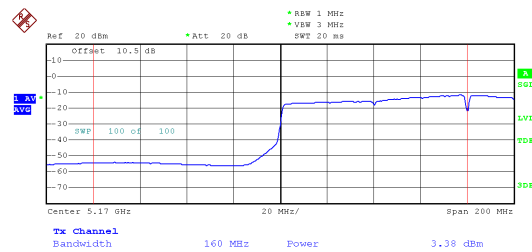
CH50



ANT B

Modulation Type: 802.11ax160

CH50



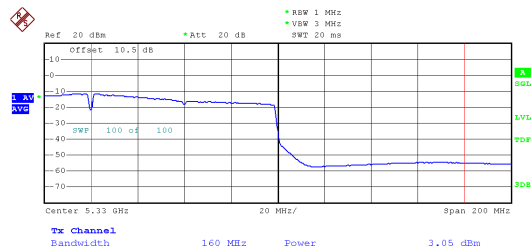
MIMO

Extends across 5250MHz band

ANT A

Modulation Type: 802.11ax160

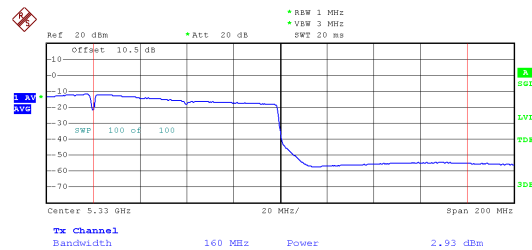
CH50



ANT B

Modulation Type: 802.11ax160

CH50





Verify Data

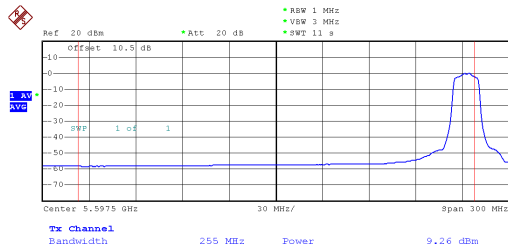
ESY2211E SISO

Within 5470-5725MHz Band, Straddle Channel

ANT A

Modulation Type: 802.11a

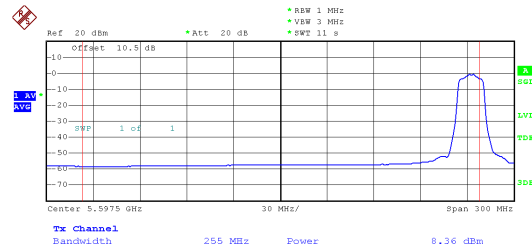
CH144



ANT B

Modulation Type: 802.11ax20

CH144



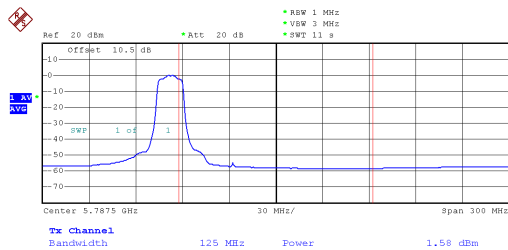
SISO

Extends across 5725MHz band, Straddle Channel

ANT A

Modulation Type: 802.11a

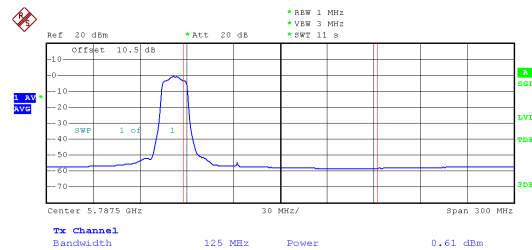
CH144



ANT B

Modulation Type: 802.11ax20

CH144





ESY2211E

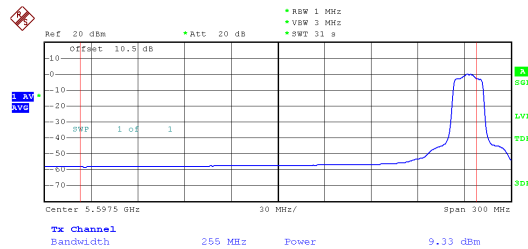
MIMO

Within 5470-5725MHz Band, Straddle Channel

ANT A

Modulation Type: 802.11ax20

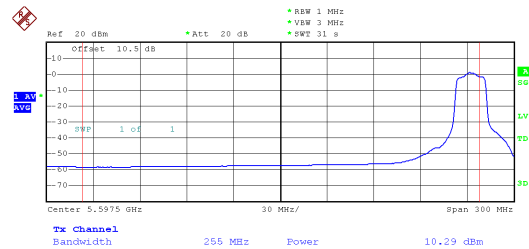
CH144



ANT B

Modulation Type: 802.11ax20

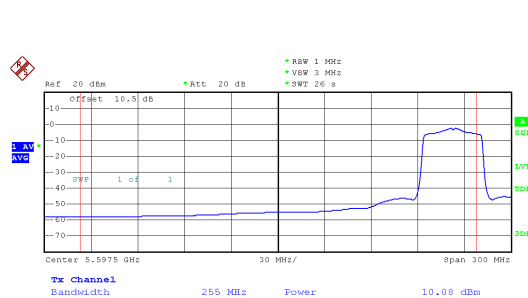
CH144



ANT A

Modulation Type: 802.11ax40

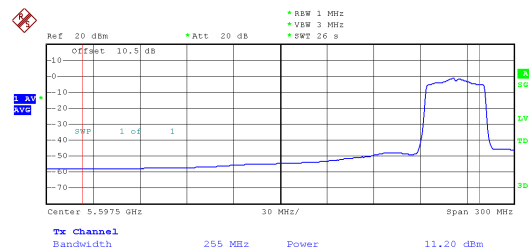
CH142



ANT B

Modulation Type: 802.11ax40

CH142





ESY2211E

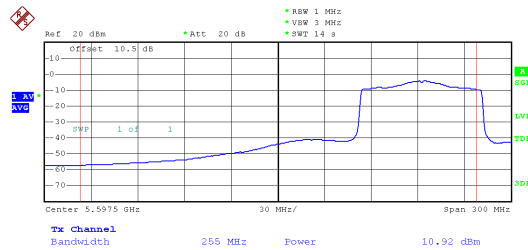
MIMO

Within 5470-5725MHz Band, Straddle Channel

ANT A

Modulation Type: 802.11ax80

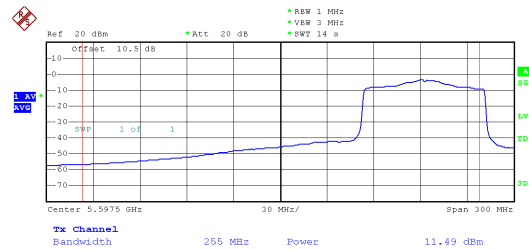
CH138



ANT B

Modulation Type: 802.11ax80

CH138





ESY2211E

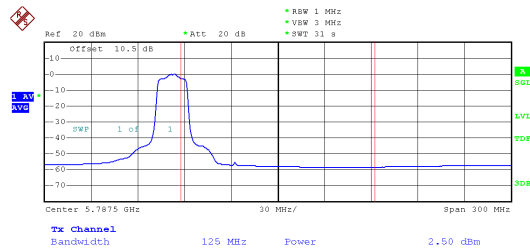
MIMO

Extends across 5725MHz band, Straddle Channel

ANT A

Modulation Type: 802.11ax20

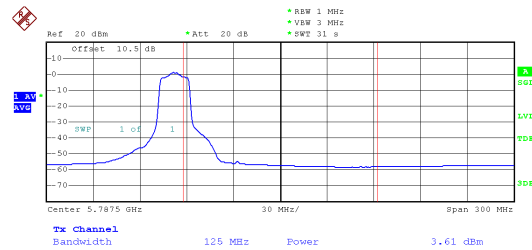
CH144



ANT B

Modulation Type: 802.11ax20

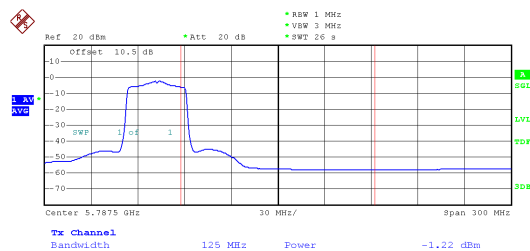
CH144



ANT A

Modulation Type: 802.11ax40

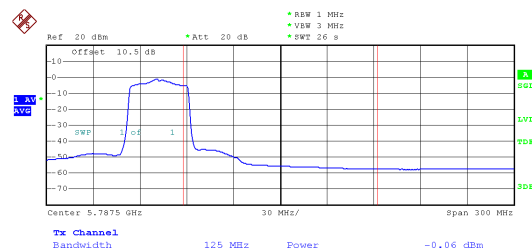
CH142



ANT B

Modulation Type: 802.11ax40

CH142





ESY2211E

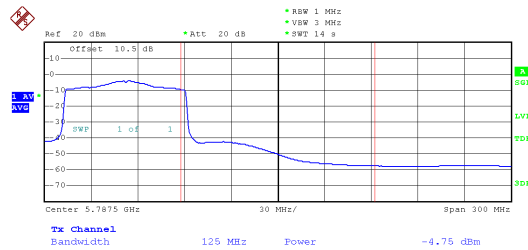
MIMO

Extends across 5725MHz band, Straddle Channel

ANT A

Modulation Type: 802.11ax80

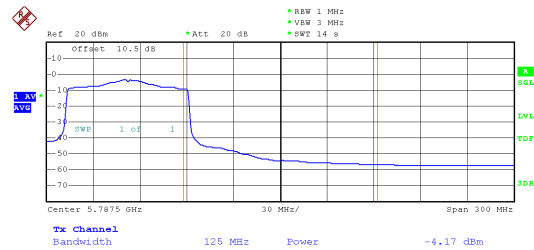
CH138



ANT B

Modulation Type: 802.11ax80

CH138





ESY2211E

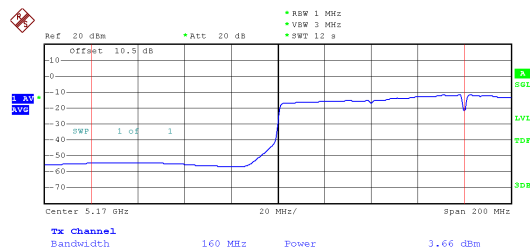
MIMO

Within 5150-5250MHz band

ANT A

Modulation Type: 802.11ax160

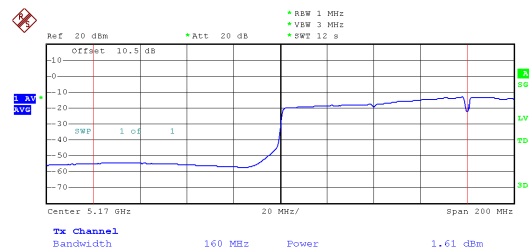
CH50



ANT B

Modulation Type: 802.11ax160

CH50



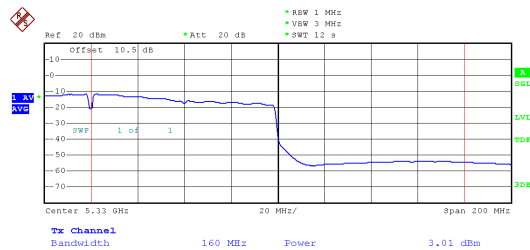
MIMO

Extends across 5250MHz band

ANT A

Modulation Type: 802.11ax160

CH50



ANT B

Modulation Type: 802.11ax160

CH50

