



PENGUMUMAN

Nomor: 457/DJSDPPI.5/SP.04.09/06/2021

TENTANG

KEWAJIBAN MELAMPIRKAN RANGKUMAN REFERENSI HALAMAN LAPORAN HASIL UJI (LHU) ATAU TEST REPORT

Berdasarkan Diktum KETIGA Keputusan Direktur Jenderal Sumber Daya dan Perangkat Pos dan Informatika No 11 Tahun 2021 tentang Pengakuan Balai Uji Luar Negeri Dalam Rangka Sertifikasi Alat dan/atau Perangkat Telekomunikasi, dinyatakan bahwa *“Untuk keperluan sertifikasi alat dan/atau perangkat telekomunikasi, Balai Uji Luar Negeri wajib melampirkan rangkuman referensi halaman Laporan Hasil Uji (LHU) atau test report yang terkait dengan persyaratan teknis yang berlaku di Indonesia yang menjadi acuan pengujian”*

Sehubungan dengan hal tersebut di atas, dengan ini disampaikan:

1. Permohonan sertifikasi alat dan/atau perangkat telekomunikasi yang menggunakan Laporan Hasil Uji (LHU) atau *test report* yang diterbitkan Balai Uji Luar Negeri wajib melampirkan rangkuman referensi halaman Laporan Hasil Uji (LHU) atau test report yang terkait dengan persyaratan teknis yang berlaku di Indonesia yang menjadi acuan pengujian;
2. Rangkuman referensi halaman Laporan Hasil Uji (LHU) atau *test report* sebagaimana dimaksud pada Nomor 1 diterbitkan oleh Balai Uji Luar Negeri;
3. Format Rangkuman Referensi Halaman Laporan Hasil Uji sebagaimana dimaksud pada Nomor 1 tercantum dalam Lampiran yang merupakan bagian tidak terpisahkan dari Pengumuman ini;
4. Ketentuan pada pengumuman ini berlaku mulai tanggal 4 Juli 2021.

Demikian pengumuman ini kami sampaikan untuk diketahui dan dipedomani.
Atas perhatian dan kerjasamanya kami ucapkan terima kasih.

Dikeluarkan di Jakarta

Pada tanggal 2 Juni 2021

**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)	Bluetooth
Regulasi (Technical Requirement Regulation)	Perdir SDPPI No. 161 tahun 2019 (DG Decree Number 161 year 2019)

No.	Parameter Uji (Test Item)	Halaman (Page)	Butir (Section)	Limit														
1	Frequency Range			2400 - 2483,5 MHz														
2	Field Strength/Maximum Transmit Power			≤ - 10 dBW (100 mW) EIRP														
3	Output Power (conducted measurement)			as in Bluetooth SIG Standard														
4	Spread spectrum			FHSS or DSSS														
5	Transmitter unwanted emission in the out of band domain			<p>A: -10 dBm/MHz e.i.p. B: -20 dBm/MHz e.i.p. C: Spurious Domain limit</p> <p>BW = Occupied Channel Bandwidth in MHz or 1 MHz whichever is greater</p>														
6	Transmitter unwanted emission in spurious domain			<table border="1"> <thead> <tr> <th rowspan="2">Frequency Range</th> <th colspan="2">Operating</th> <th colspan="2">Standby</th> </tr> <tr> <th>in 100 kHz</th> <th>in 1 MHz</th> <th>in 100 kHz</th> <th>in 1 MHz</th> </tr> </thead> <tbody> <tr> <td>1 GHz - 12,75 GHz</td> <td>n.a</td> <td>-30 dBm (1 μW)</td> <td>n.a</td> <td>-47 dBm (20 nW)</td> </tr> </tbody> </table>	Frequency Range	Operating		Standby		in 100 kHz	in 1 MHz	in 100 kHz	in 1 MHz	1 GHz - 12,75 GHz	n.a	-30 dBm (1 μW)	n.a	-47 dBm (20 nW)
Frequency Range	Operating		Standby															
	in 100 kHz	in 1 MHz	in 100 kHz	in 1 MHz														
1 GHz - 12,75 GHz	n.a	-30 dBm (1 μW)	n.a	-47 dBm (20 nW)														
7	Catu daya/Power supply			AC 220 V ± 10% or DC														

**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)	WLAN
Regulasi (Technical Requirement Regulation)	Perdir SDPPPI No. 2 tahun 2019/ DG Decree Number 2 year 2019

No.	Parameter Uji (Test Item)	Halaman (Page)	Butir (Section)	Limit (Outdoor)	Limit (Indoor)												
1	Frequency Range			1. 2 400 - 2 483,5 MHz 2. 5 725 - 5 825 MHz	1. 2 400 - 2 483,5 MHz 2. 5 150 - 5 250 MHz 3. 5 250 - 5 350 MHz 4. 5 725 - 5 825 MHz												
2	Maximum Bandwidth			≤ 20 MHz	<table border="1"> <tr> <td>2 400 - 2 483,5 MHz</td> <td>≤ 40 MHz</td> </tr> <tr> <td>5 150 - 5 250 MHz</td> <td>≤ 80MHz</td> </tr> <tr> <td>5 250 - 5 350 MHz</td> <td></td> </tr> <tr> <td>5 725 - 5 825 MHz</td> <td></td> </tr> </table>	2 400 - 2 483,5 MHz	≤ 40 MHz	5 150 - 5 250 MHz	≤ 80MHz	5 250 - 5 350 MHz		5 725 - 5 825 MHz					
2 400 - 2 483,5 MHz	≤ 40 MHz																
5 150 - 5 250 MHz	≤ 80MHz																
5 250 - 5 350 MHz																	
5 725 - 5 825 MHz																	
3	Maximum Output Power			≤ 100 mW	-												
4	Maximum Outdoor EIRP (for outdoor device)			≤ 4 W (36.02 dBm)	-												
5	Maximum Indoor EIRP (for indoor device)			-	1. 2 400 - 2 483,5 MHz : ≤ 500 mW (27 dBm) 2. 5 150 - 5 250 MHz : ≤ 200 mW (23 dBm) 3. 5 250 - 5 350 MHz : ≤ 200 mW (23 dBm) 4. 5 725 - 5 825 MHz : ≤ 200 mW (23 dBm)												
6	unwanted emissions in the spurious domain			<table border="1"> <thead> <tr> <th>Frequency Range</th> <th>Maximum Emission</th> <th>Bandwidth</th> </tr> </thead> <tbody> <tr> <td>1 GHz - 12,75 GHz</td> <td>-30 dBm</td> <td>1 MHz</td> </tr> </tbody> </table>	Frequency Range	Maximum Emission	Bandwidth	1 GHz - 12,75 GHz	-30 dBm	1 MHz	<table border="1"> <thead> <tr> <th>Frequency Range</th> <th>Maximum Emission</th> <th>Bandwidth</th> </tr> </thead> <tbody> <tr> <td>1 GHz - 12,75 GHz</td> <td>-30 dBm</td> <td>1 MHz</td> </tr> </tbody> </table>	Frequency Range	Maximum Emission	Bandwidth	1 GHz - 12,75 GHz	-30 dBm	1 MHz
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1 GHz - 12,75 GHz	-30 dBm	1 MHz															
7	unwanted emissions in the out of band			Mengacu pada ETSI EN 300 328 atau EN 300 893	Mengacu pada ETSI EN 300 328 atau EN 300 893												
8	DFS and TPC function (for 5 GHz indoor device)			-	ada												
9	Catu daya/Power supply			220 V ± 10%, frekuensi 50 Hz ± 2%	220 V ± 10%, frekuensi 50 Hz ± 2%												

**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)	Short Range Device
Regulasi (Technical Requirement Regulation)	Perdir SDPPI No. 161 tahun 2019/ DG Decree Number 161 year 2019

No.	Parameter Uji (Test Item)	Halaman (Page)	Buix (Section)	Limit
1	Frequency Range			
2	Field Strength/Maximum Transmit Power			
3	Spurious emission (transmitter and receiver)			
4	Catu daya/Power supply			

No.	STRA PERALIHAN FREKUENSI	KUANTITAS METERAN/ALAT UKUR/ALAT BANTUAN	BAHAYU/PROSEDUR PENGALIHAN DAIRY/PROSEDUR	STANDAR SASARAN/DAIRY STANDARDS/PERALIHAN	APLIKASI/REKAM
1	14-152 MHz	+ 40 dBm/10 meter	Selesai dengan Tabel 2.9	EN 300 330	Radio untuk industri, sistem industri
2	14-150 MHz	+ 100 dBm/10 meter	Selesai dengan Tabel 2.9	EN 300 330	Radio untuk industri, sistem industri
3	9-315 kHz	+ 20 dBm/10 meter	Selesai dengan Tabel 2.9	EN 300 185	Radio untuk industri, sistem industri
4	500-1500 MHz	+ 10 dBm/10 meter	Selesai dengan Tabel 2.9	EN 300 330	Radio untuk industri, sistem industri
5	6705-6795 MHz	+ 40 dBm/10 meter	Selesai dengan Tabel 2.9	EN 300 330	Radio untuk industri, sistem industri
6	7300-8900 MHz	+ 5 dBm/10 meter	Selesai dengan Tabel 2.9	EN 300 330	Radio untuk industri, sistem industri
7	11.053-11.067 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 330	Radio untuk industri, sistem industri
8	25.50-25.28 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 330	Radio untuk industri, sistem industri
9	25.56-25.28 MHz	+ 500 mW ERP	Selesai dengan Tabel 2.9	EN 300 330	Radio untuk industri, sistem industri
10	25.50-25.28 MHz	+ 40 dBm/10 meter	Selesai dengan Tabel 2.9	EN 300 330	Radio untuk industri, sistem industri

No.	STRA PERALIHAN FREKUENSI	KUANTITAS METERAN/ALAT UKUR/ALAT BANTUAN	BAHAYU/PROSEDUR PENGALIHAN DAIRY/PROSEDUR	STANDAR SASARAN/DAIRY STANDARDS/PERALIHAN	APLIKASI/REKAM
11	30-70 MHz	+ 500 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
12	40.5-41 MHz	+ 500 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
13	40.50-40.50 MHz	+ 40 dBm/10 meter	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
14	40.50-40.50 MHz	+ 500 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
15	72.00 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
16	72.20 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
17	72.40 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
18	72.60 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
19	88.00-100 MHz	+ 50 dBm/10 meter	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
20	144.30-144.30 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
21	144.375-144.375 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
22	144.350-144.350 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri

No.	STRA PERALIHAN FREKUENSI	KUANTITAS METERAN/ALAT UKUR/ALAT BANTUAN	BAHAYU/PROSEDUR PENGALIHAN DAIRY/PROSEDUR	STANDAR SASARAN/DAIRY STANDARDS/PERALIHAN	APLIKASI/REKAM
23	173.275 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
24	173.275 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
25	173.275 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
26	173.275 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
27	180.00-200.00 MHz	+ 10 dBm/10 meter	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
28	244.15-244.15 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
29	300-300.15 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
30	312.00-312.00 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri

No.	STRA PERALIHAN FREKUENSI	KUANTITAS METERAN/ALAT UKUR/ALAT BANTUAN	BAHAYU/PROSEDUR PENGALIHAN DAIRY/PROSEDUR	STANDAR SASARAN/DAIRY STANDARDS/PERALIHAN	APLIKASI/REKAM
31	440-440.20 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
32	487-487 MHz	+ 50 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
33	500-500 MHz	+ 50 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
34	5 MHz-5 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
35	5.100-5.100 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
36	5.300-5.300 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri

No.	STRA PERALIHAN FREKUENSI	KUANTITAS METERAN/ALAT UKUR/ALAT BANTUAN	BAHAYU/PROSEDUR PENGALIHAN DAIRY/PROSEDUR	STANDAR SASARAN/DAIRY STANDARDS/PERALIHAN	APLIKASI/REKAM
37	5.100-5.100 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
38	5.300-5.300 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
39	5.100-5.100 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
40	5.100-5.100 MHz	+ 100 mW ERP	Selesai dengan Tabel 2.9	EN 300 220-1	Radio untuk industri, sistem industri
41	70-77 GHz	Selesai dengan Peraturan Perundang-undangan		EN 300 300-1	Radio untuk industri, sistem industri

Tipe/urutan	Frekuensi
1	14-152 MHz
2	14-150 MHz
3	9-315 kHz
4	500-1500 MHz
5	6705-6795 MHz
6	7300-8900 MHz
7	11.053-11.067 MHz
8	25.50-25.28 MHz
9	25.56-25.28 MHz
10	25.50-25.28 MHz
11	30-70 MHz
12	40.5-41 MHz
13	40.50-40.50 MHz
14	40.50-40.50 MHz
15	72.00 MHz
16	72.20 MHz
17	72.40 MHz
18	72.60 MHz
19	88.00-100 MHz
20	144.30-144.30 MHz
21	144.375-144.375 MHz
22	144.350-144.350 MHz
23	173.275 MHz
24	173.275 MHz
25	173.275 MHz
26	173.275 MHz
27	180.00-200.00 MHz
28	244.15-244.15 MHz
29	300-300.15 MHz
30	312.00-312.00 MHz
31	440-440.20 MHz
32	487-487 MHz
33	500-500 MHz
34	5 MHz-5 MHz
35	5.100-5.100 MHz
36	5.300-5.300 MHz
37	5.100-5.100 MHz
38	5.300-5.300 MHz
39	5.100-5.100 MHz
40	5.100-5.100 MHz
41	70-77 GHz

**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)	Low Power Device
Regulasi (Technical Requirement Regulation)	Perdir SDPPI No. 161 tahun 2019/ DG Decree Number 161 year 2019

No.	Parameter Uji (Test Item)	Halaman (Page)	Butir (Section)	Limit																								
1	Frequency Range			1) 3 – 190 kHz; 2) 10,2 – 11 MHz; 3) 13,553 –13,567 MHz; 4) 26,957 – 27,283 MHz; 5) 29,7 – 47 MHz; 6) 40,66 – 40,7 MHz; 7) 44 – 50 MHz; 8) 72,610 – 73,910 MHz; 9) 74,000 – 74,800 MHz; 10) 75.4 – 76 MHz; 11) 84 – 87 MHz; 12) 87,5 – 108 MHz; 13) 138,2 – 138,45 MHz; 14) 169,4 – 169,8125 MHz; 15) 173,965 – 216 MHz; 16) 216 – 225 MHz; 17) 230 – 242 MHz; 18) 244 – 250 MHz; 19) 266,75 – 267,25 MHz; 20) 300 – 322 MHz; 21) 380,2125 – 381,3125 MHz; 22) 402 – 405 MHz; 23) 407 – 425 MHz; 24) 430 – 432 MHz; 25) 433 – 434,79 MHz; 26) 470 – 806 MHz; 27) 863 – 865 MHz; 28) 868,6 – 868,7 MHz; 29) 869,2 – 869,3 MHz; 30) 916,1 – 916,5 MHz; 31) 917,3 – 917,7 MHz; 32) 918,5 – 918,9 MHz; 33) 919,5 – 923 MHz; 34) 2 400 – 2 483.5 MHz; 35) 5 250 – 5 350 MHz; 36) 5 725 – 5 825 MHz; 37) 24 – 24,25 GHz.																								
3	Radiated emission limit			<table border="1"> <thead> <tr> <th>Frekuensi Radio (MHz)</th> <th>Field Strength (microVolts/meter)</th> <th>Jarak Pengukuran (meter)</th> </tr> </thead> <tbody> <tr> <td>0.000-0.499</td> <td>2400 / f (Hz)</td> <td>300</td> </tr> <tr> <td>0.499-1.705</td> <td>24000 / f (Hz)</td> <td>30</td> </tr> <tr> <td>1.705-30.0</td> <td>30</td> <td>30</td> </tr> <tr> <td>30-88</td> <td>100</td> <td>3</td> </tr> <tr> <td>88-216</td> <td>150</td> <td>3</td> </tr> <tr> <td>216-960</td> <td>200</td> <td>3</td> </tr> <tr> <td>Above 960</td> <td>500</td> <td>3</td> </tr> </tbody> </table> <p>atau ≤ -26 dbm</p>	Frekuensi Radio (MHz)	Field Strength (microVolts/meter)	Jarak Pengukuran (meter)	0.000-0.499	2400 / f (Hz)	300	0.499-1.705	24000 / f (Hz)	30	1.705-30.0	30	30	30-88	100	3	88-216	150	3	216-960	200	3	Above 960	500	3
Frekuensi Radio (MHz)	Field Strength (microVolts/meter)	Jarak Pengukuran (meter)																										
0.000-0.499	2400 / f (Hz)	300																										
0.499-1.705	24000 / f (Hz)	30																										
1.705-30.0	30	30																										
30-88	100	3																										
88-216	150	3																										
216-960	200	3																										
Above 960	500	3																										
4	Frequency error			$\leq \pm 50$ KHz																								
5	Receiver sensitivity			-113dbm																								
6	Output Power			≤ 10 mW																								

**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)	GSM (Base Station)
Regulasi (Technical Requirement Regulation)	Perdir SDPPI No. 5 tahun 2019/ DG Decree Number 5 year 2019

No.	Parameter Uji (Test Item)	Halaman (Page)	Butir (Section)	Limit																																																																																										
1	Range Frequency			Transmit: 925 MHz – 960 MHz 1805 MHz – 1880 MHz Receive: 880 MHz – 915 MHz 1710 MHz – 1785 MHz																																																																																										
2	Frequency stability			2,5 ppm																																																																																										
3	Spurious emission			-36 dBm (250 mW)																																																																																										
4	Nominal Error Rate			c.Static Channel:BER ≤ 104 d.EQ 50 Channel:BER ≤ 3 %																																																																																										
5	Daya Pancar			Memenuhi Tabel berikut: <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>TRX Power Class</th> <th>Daya Pancar Maksimum</th> </tr> </thead> <tbody> <tr><td>1</td><td>320 - (<640) Watt</td></tr> <tr><td>2</td><td>160 - (<320) Watt</td></tr> <tr><td>3</td><td>80 - (<160) Watt</td></tr> <tr><td>4</td><td>40 - (<80) Watt</td></tr> <tr><td>5</td><td>20 - (<40) Watt</td></tr> <tr><td>6</td><td>10 - (<20) Watt</td></tr> <tr><td>7</td><td>5 - (<10) Watt</td></tr> <tr><td>8</td><td>2,5 - (<5) Watt</td></tr> </tbody> </table>	TRX Power Class	Daya Pancar Maksimum	1	320 - (<640) Watt	2	160 - (<320) Watt	3	80 - (<160) Watt	4	40 - (<80) Watt	5	20 - (<40) Watt	6	10 - (<20) Watt	7	5 - (<10) Watt	8	2,5 - (<5) Watt																																																																								
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6	Micro-RBT			Memenuhi Tabel berikut: <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>TRX Power Class</th> <th>Daya Pancar Maksimum</th> </tr> </thead> <tbody> <tr><td>M 1</td><td>(>19) - 24 dBm (>0,08) - 0,25W)</td></tr> <tr><td>M 2</td><td>(>14) - 19 dBm (>0,03) - 0,08 W)</td></tr> <tr><td>M 3</td><td>(>9) - 14 dBm (>0,01) - 0,03 W)</td></tr> </tbody> </table>	TRX Power Class	Daya Pancar Maksimum	M 1	(>19) - 24 dBm (>0,08) - 0,25W)	M 2	(>14) - 19 dBm (>0,03) - 0,08 W)	M 3	(>9) - 14 dBm (>0,01) - 0,03 W)																																																																																		
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7	RF Level sensitivity			a.Normal RBT:-104 dBm b.Micro RBT M1:-97 dBm c.Micro RBT M2:-92 dBm d.Micro RBT M3:-87 dBm																																																																																										
8	Spektrum Modulasi dan Wide Band Noise			Memenuhi Tabel berikut: <table border="1" style="margin-left: 40px;"> <thead> <tr> <th rowspan="3">Power Level (dBm)</th> <th colspan="10">Spektrum Pengukuran Lebar Band</th> </tr> <tr> <th colspan="6">30 kHz (carrier)</th> <th colspan="2">100 kHz RBT (normal)</th> <th colspan="2">100 kHz Micro RBT</th> </tr> <tr> <th>100</th> <th>200</th> <th>250</th> <th>400</th> <th>600 s/d < 1200</th> <th>1200 s/d < 1800</th> <th>1800 s/d < 3000</th> <th>≥ 6000</th> <th>≥ 1800</th> </tr> </thead> <tbody> <tr><td>≥ 43</td><td>+ 0,5</td><td>- 30</td><td>- 33</td><td>- 60</td><td>- 70</td><td>- 73</td><td>- 75</td><td>- 80</td><td></td></tr> <tr><td>41</td><td>+ 0,5</td><td>- 30</td><td>- 33</td><td>- 60</td><td>- 68</td><td>- 71</td><td>- 73</td><td>- 80</td><td></td></tr> <tr><td>39</td><td>+ 0,5</td><td>- 30</td><td>- 33</td><td>- 60</td><td>- 66</td><td>- 69</td><td>- 71</td><td>- 80</td><td></td></tr> <tr><td>37</td><td>+ 0,5</td><td>- 30</td><td>- 33</td><td>- 60</td><td>- 64</td><td>- 67</td><td>- 69</td><td>- 80</td><td></td></tr> <tr><td>35</td><td>+ 0,5</td><td>- 30</td><td>- 33</td><td>- 60</td><td>- 62</td><td>- 65</td><td>- 67</td><td>- 80</td><td>- 76</td></tr> <tr><td>≤ 33</td><td>+ 0,5</td><td>- 30</td><td>- 33</td><td>- 60</td><td>- 60</td><td>- 63</td><td>- 65</td><td>- 80</td><td>- 76</td></tr> </tbody> </table>	Power Level (dBm)	Spektrum Pengukuran Lebar Band										30 kHz (carrier)						100 kHz RBT (normal)		100 kHz Micro RBT		100	200	250	400	600 s/d < 1200	1200 s/d < 1800	1800 s/d < 3000	≥ 6000	≥ 1800	≥ 43	+ 0,5	- 30	- 33	- 60	- 70	- 73	- 75	- 80		41	+ 0,5	- 30	- 33	- 60	- 68	- 71	- 73	- 80		39	+ 0,5	- 30	- 33	- 60	- 66	- 69	- 71	- 80		37	+ 0,5	- 30	- 33	- 60	- 64	- 67	- 69	- 80		35	+ 0,5	- 30	- 33	- 60	- 62	- 65	- 67	- 80	- 76	≤ 33	+ 0,5	- 30	- 33	- 60	- 60	- 63	- 65	- 80	- 76
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**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)	GSM (Subscriber Station)
Regulasi (Technical Requirement Regulation)	Perdir SDPPI No. 5 tahun 2019/ DG Decree Number 5 year 2019

No.	Parameter Uji (Test Item)	Halaman (Page)	Butir (Section)	Limit																																																																		
				900 Mhz	1800 MHz																																																																	
1	Range Frequency			Tx : 880 - 915 MHz Rx : 925 - 960 MHz	Tx : 1710 - 1785 MHz Rx : 1805 - 1880 MHz																																																																	
2	Channel Spacing			200 kHz																																																																		
3	Number of channel			0 < n < 124 dan 975 < n < 1023	525 < n < 885																																																																	
4	Frequency stability			± 0,05 ppm	-																																																																	
5	Spurious emission			a) < 600 kHz = -36 dBm b) ≥ 600 kHz , < 1800 kHz = -56 dBm c) ≥ 1800 kHz = -51 dBm																																																																		
6	Output power			Class 1 : - Class 2 : 8 Watt = (39 ± 2) dBm Class 3 : 5 Watt = (37 ± 2) dBm Class 4 : 2 Watt = (33 ± 2) dBm Class 5 : 0,8 Watt = (29 ± 2) dBm	Class 1 : 1 Watt = (30 ± 2) dBm Class 2 : 0,25 Watt = (24 ± 2) dBm Class 3 : 2 Watt = (33 ± 2) dBm Class 4 : - Class 5 : -																																																																	
7	RF Level sensitivity			-102 dBm	power class 1 = -100 dBm power class 2 = -102 dBm power class 3 = -102 dBm																																																																	
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9	Spectrum mask			<table border="1"> <thead> <tr> <th></th> <th>100</th> <th>200</th> <th>250</th> <th>400</th> </tr> </thead> <tbody> <tr> <td>≥ 39 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> <tr> <td>37 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> <tr> <td>35 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> <tr> <td>≤ 3 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> </tbody> </table>		100	200	250	400	≥ 39 dBm	+ 0,5	-30	-33	-60	37 dBm	+ 0,5	-30	-33	-60	35 dBm	+ 0,5	-30	-33	-60	≤ 3 dBm	+ 0,5	-30	-33	-60	<table border="1"> <thead> <tr> <th></th> <th>100</th> <th>200</th> <th>250</th> <th>400</th> </tr> </thead> <tbody> <tr> <td>36 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> <tr> <td>34 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> <tr> <td>32 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> <tr> <td>30 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> <tr> <td>28 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> <tr> <td>26 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> <tr> <td>≤ 33 dBm</td> <td>+ 0,5</td> <td>-30</td> <td>-33</td> <td>-60</td> </tr> </tbody> </table>		100	200	250	400	36 dBm	+ 0,5	-30	-33	-60	34 dBm	+ 0,5	-30	-33	-60	32 dBm	+ 0,5	-30	-33	-60	30 dBm	+ 0,5	-30	-33	-60	28 dBm	+ 0,5	-30	-33	-60	26 dBm	+ 0,5	-30	-33	-60	≤ 33 dBm	+ 0,5	-30	-33	-60
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10	Catu daya/Power supply			-																																																																		

**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)		WCDMA (Base Station)					
Regulasi (Technical Requirement Regulation)		Perdir SDPPI No. 5 tahun 2019/ DG Decree Number 5 year 2019					
No.	Parameter Uji (Test Item)	Halaman (Page)	Butir (Section)	Limit			
				Band Frekuensi	Frequency Uplink UE (Tx) - Node B (Rx) (MHz)	Frequency Downlink UE (Rx) - Node B (Tx) (MHz)	
1	Range Frequency			I	1 920 - 1 980	2 110 - 2 170	
				VIII	880 - 915	925 - 960	
2	Frequency eror			BS class		Accuracy	
				Wide Area BS		± 0.05 ppm	
				Medium Range BS		± 0.1 ppm	
				Local Area BS		± 0.1 ppm	
				Home BS		± 0.25 ppm	
3	Spurious emission			Band	Maximum Level	Measurement Bandwidth	Note
				9 kHz - 150 kHz	-13 dBm	1 kHz	Note 1
				150 kHz - 30 MHz		10 kHz	Note 1
				30 MHz - 1 GHz		100 kHz	Note 1
				1 GHz - 12.75 GHz	-13 dBm	1 MHz	Note 2
12.75 GHz - 5 th harmonic of the upper frequency edge of the DL operating band in GHz	1 MHz	Note 2, Note 3					
NOTE 1 : Bandwidth as in ITU-R SM.329 [1], s4.1 NOTE 2 : Upper frequency as in ITU-R SM.329 [1], s2.5 Tabel 1 NOTE 3 : Applies only for Band XXII							
4	Sensitivity			BS Class	Reference Measurement Channel Data Rate	BS Reference Sensitivity Level (dBm)	BER
				Wide Area BS	12.2 kbps	-121	BER ≤ 0.001
				Medium Range BS	12.2 kbps	-111	BER ≤ 0.001
5	BER			Local Area / Home BS	12.2 kbps	-107	BER ≤ 0.001
6	Adjacent Channel Leakgae Power Ratio			Power Class	Adjacent Channel Frequency Relative to Assigned Channel Frequency	ACLR Limit	
				3	+ 5 MHz or - 5 MHz	33 dBm	
				3	+ 10 MHz or - 10 MHz	43 dBm	
				4	+ 5 MHz or - 5 MHz	33 dBm	
				4	+ 10 MHz or - 10 MHz	43 dBm	
7	error vector magnitude			Skema modulasi PDSCH		Persyaratan EVM [%]	
				QPSK		17.5 %	
				16QAM		12.5 %	
8	Catu Daya			<p>BS WCDMA bisa dicatu daya AC atau DC. Untuk perangkat yang dicatu daya AC, perangkat harus bisa beroperasi dengan balk pada:</p> <p>a. Legangan 220V ± 10%: dan</p> <p>b. frekuensi 50 Hz ± 2%.</p> <p>Bila menggunakan catu daya eksternal (misalnya AC/DC power converter), perangkat harus bisa beroperasi tanpa pengaruh catu daya tersebut.</p>			

**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)	WCDMA (Subscriber Station)
Regulasi (Technical Requirement Regulation)	Perdir SDPPPI No. 5 tahun 2019/ DG Decree Number 5 year 2019

No.	Parameter Uji (Test Item)	Halaman (Page)	Butir (Section)	Limit																																
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Band I	+33	+1/-3	+27	+1/-3	+24	+1/-3	-	-	+21	+2/-2																										
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8	Occupied Bandwidth			≤ 5 MHz (OBW <5 MHz).																																
9	Adjacent Channel Leakage Power Ratio			<table border="1"> <thead> <tr> <th>Power Class</th> <th>Adjacent Channel Frequency Relative to Assigned Channel Frequency</th> <th>ACLR Limit</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>+ 5 MHz or - 5 MHz</td> <td>33 dBm</td> </tr> <tr> <td>3</td> <td>+ 10 MHz or - 10 MHz</td> <td>43 dBm</td> </tr> <tr> <td>4</td> <td>+ 5 MHz or - 5 MHz</td> <td>33 dBm</td> </tr> <tr> <td>4</td> <td>+ 10 MHz or - 10 MHz</td> <td>43 dBm</td> </tr> </tbody> </table>	Power Class	Adjacent Channel Frequency Relative to Assigned Channel Frequency	ACLR Limit	3	+ 5 MHz or - 5 MHz	33 dBm	3	+ 10 MHz or - 10 MHz	43 dBm	4	+ 5 MHz or - 5 MHz	33 dBm	4	+ 10 MHz or - 10 MHz	43 dBm																	
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10	Catu Daya			SS yang beroperasi dengan SELV dalam lingkungan yang memungkinkan tegangan berlebih dari jaringan telekomunikasi. SELV merujuk kepada tegangan yang tidak melebihi 42.4 V peak atau 60 V DC																																

**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)		LTE (Subscriber Station)										
Regulasi (Technical Requirement Regulation)		PM Kominfo No. 27 tahun 2015/ Ministry Decree Number 27 year 2015										
No.	Parameter Uji (Test Item)	Halaman (Page)	Butir (Section)	Limit								
1	Range Frequency			LTE Band Number (f)	Uplink (MHz)	Downlink (MHz)	Mode Duplex					
				1 (2 100)	1 920 – 1 980	2 110 – 2 170	FDD					
				3 (1 800)	1 710 – 1 785	1 805 -1 880	FDD					
				5 (800)	824 – 849	869 – 894	FDD					
				8 (900)	880 – 915	925 – 960	FDD					
				40 (2 300)	2 300 – 2 400	2 300 – 2 400	TDD					
2	Channel Bandwidth			Channel Bandwidth BW _{channel}	1,4 MHz	3,0 MHz	5 MHz	10 MHz	15 MHz	20 MHz		
				Transmission Bandwidth Configuration No	6	15	25	50	75	100		
3	Maximum Output Power			E-UTRA Band (dBm)	Class 1	Tolerance (dB)	Class 2	Tolerance (dB)	Class 3	Tolerance (dB)	Class 4	Tolerance (dB)
				1				-23	±2			
				3				-23	±2			
				5				-23	±2			
				8				-23	±2			
40				-23	±2							
4	Output Power Dynamic: Minimum Output Power			Channel Bandwidth								
				1,4 MHz	3,0 MHz	5 MHz	10 MHz	15 MHz	20 MHz			
5	Output Power Dynamic: Transmit OFF Power			Channel Bandwidth								
				1,4 MHz	3,0 MHz	5 MHz	10 MHz	15 MHz	20 MHz			
6	Kualitas Sinyal Pemancar: Frekuensi Error			±0.1 ppm /0,5ms								
7	Kualitas Sinyal Pemancar: Error Vector Magnitude (EVM)			Parameter	Unit	Average EVM Level	Reference Signal EVM Level					
				QPSK or BPSK	%	17.5	17.5					
8	Output RF Spectrum Emission: Occupied Bandwidth			Occupied Channel Bandwidth/Channel Bandwidth								
				1,4 MHz	3,0 MHz	5 MHz	10 MHz	15 MHz	20 MHz			
9	Output RF Spectrum Emission: Spectrum Emission Mask			Spectrum Emission Limit (dBm) / Channel Bandwidth								
				1,4 MHz	3,0 MHz	5 MHz	10 MHz	15 MHz	20 MHz			
10	Output RF Spectrum Emission: ACLR			Channel bandwidth / E-UTRA _{channel} / measurement bandwidth								
				1,4 MHz	3,0 MHz	5 MHz	10 MHz	15 MHz	20 MHz			
11	Transmitter Spurious Emission			Channel bandwidth / E-UTRA _{channel} / measurement bandwidth								
				1,4 MHz	3,0 MHz	5 MHz	10 MHz	15 MHz	20 MHz			
12	Sensitivitas			Channel bandwidth / E-UTRA _{channel} / measurement bandwidth								
				1,4 MHz	3,0 MHz	5 MHz	10 MHz	15 MHz	20 MHz			
13	Maximum Input Level			Channel bandwidth								
				1,4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz			
14	Receiver Spurious Emission			Channel bandwidth								
				1,4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz			
15	Kondisi Lingkungan			Channel bandwidth								
				1,4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz			
16	EMC			Channel bandwidth								
				1,4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz			

**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)	LTE 450 (Base Station)
Regulasi (Technical Requirement Regulation)	Perdir SDPPPI No. 5 tahun 2019/ DG Decree Number 5 year 2019

No.	Parameter Uji (Test Item)	Halaman (Page)	Butir (Section)	Limit																																								
1	Range Frequency			<table border="1"> <tr> <th>Opening Frequency (MHz)</th> <th>Upper (MHz)</th> <th>Downward (MHz)</th> <th>Band Depth</th> </tr> <tr> <td>450</td> <td>450 - 457.5</td> <td>400 - 407.5</td> <td>FDD</td> </tr> </table>	Opening Frequency (MHz)	Upper (MHz)	Downward (MHz)	Band Depth	450	450 - 457.5	400 - 407.5	FDD																																
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12	Catu Daya			<p>BS bisa dicatu daya AC atau DC. Untuk perangkat yang dicatu daya AC, perangkat harus bisa beroperasi dengan baik pada:</p> <ol style="list-style-type: none"> tegangan 220V ± 10%; dan frekuensi 50 Hz ± 2%. <p>Bila menggunakan catu daya eksternal (misalnya AC/DC power converter), perangkat harus bisa beroperasi tanpa pengaruh catu daya tersebut.</p>																																								

**Rangkuman Hasil Uji
Test Report Summary**

Perangkat (Device)	LTE 450 (Subscriber Station)
Regulasi (Technical Requirement Regulation)	Perdir SDPPI No. 5 tahun 2019/ DG Decree Number 5 year 2019

No.	Parameter Uji (Test Item)	Halaman (Page)	Butir (Section)	Limit																																							
1	Range Frequency			Uplink 450 - 457,5 Downlink 460 467,5 MHz																																							
2	Channel Bandwidth			1,4 MHz 3 MHz 5 MHz																																							
3	Transmitter frequency error			± 0,01 PPM																																							
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