

現場電磁輻射評估和 電磁屏蔽防護服務

Hong Kong Productivity Council
19 December 2019

EM radiation all around us

- Over 47,000 mobile base stations (2G,3G,4G)
- Over 18,000 electricity substations
- 10 Railway lines, Sound & TV broadcast
- IoT infrastructure (e.g. WiFi router, iBeacon, RFID, GPS)
- Others unintentional EM radiation (e.g. LED lamp, Electric car)
- 5G & NBIoT network in the future
- Smart Electronic Devices

EM radiation all around us



EM Radiation ↔ Health



Mrs. Lee (inset) blames her stage three cervical cancer on mobile phone radiation. Photo: HKEJ

Home > Hong Kong > Local



HKEJ
Mar 6, 2017 3:55pm

Rooftop cellphone cancer scare

23 people like this. Sign Up to see what your friends like.

A Hong Kong man said three members of his family died within five years which he blames on radio base stations installed at the rooftop of the building.

The man, surnamed Liu, made the allegation after he discovered that at least 21 radio base stations for mobile communication devices had been installed above the roof or near their flat at Tai Ping Estate in Sheung Shui.

Liu's case is similar to 31 others who sought assistance from legislator Andrew Wan Siu-kin of the Democratic Party.

據悉，現時他仍未想到平易樓大廈內有12支基站，有12支緊貼其單位。連同樓內其他樓宇的4支，全邨約25支。其後他得悉平易樓中高層單位的中學同學，數年前亦患惡性神經膠質瘤去世。

廖先生曾將手書交給區議員，但未有後續。

單位回售及轉租戶身份，廖媽媽亦因想念女兒，最終搬回平易樓，但除了煮飯睡覺，她多去圖書館或返教會。

廖先生曾視察北區十多個屋邨，發現平易樓

射防護委員會)的41.3 V/m 限值，符合輻射安全標準。

家住上水太平邨平易樓頂樓的廖氏一家，5年間一屋3人患癌，妹妹和父親先後患惡性神經膠質瘤及食道癌離世，媽媽亦患肺癌及出現腦癌先兆，同一大廈另有居民患腦癌去世，廖氏才發現屋頂天台被安裝21支手機發射站。目前全港有逾4.7萬個手機發射站，6成多公屋都有出租天台安裝發射站，通訊事務管理局過去3年收到300宗有關發射站輻射安全的投訴和查詢，但均無發現超標。

通訊局：輻射無超標

300投訴



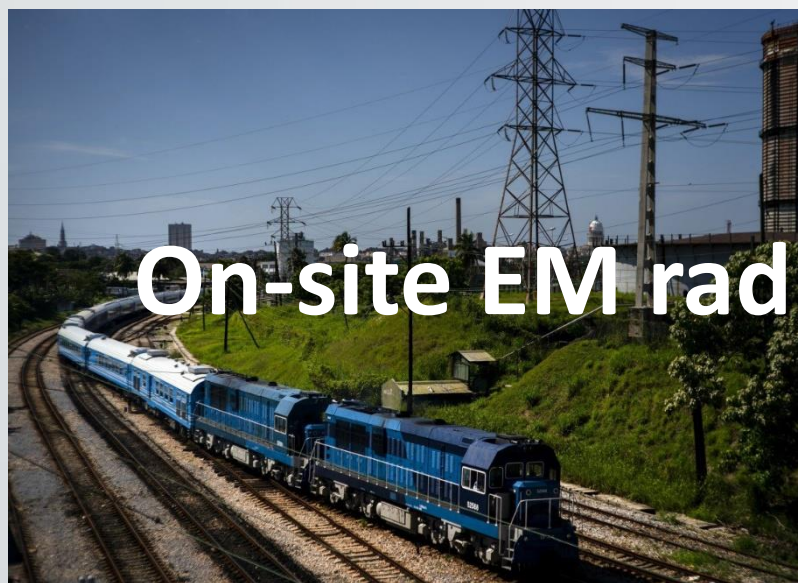
1屋3患癌

疑手機發射站肇禍

上水太平邨平易樓

涉事

望到



On-site EM radiation Assessment



EM Radiation ↔ Health



- By On-site EM radiation Risk Assessment
- WHO, ICNIRP Guidelines, Code of Practice (OFCA)
- To establish guidelines and reference levels for limiting EMF exposure that will provide protection against known adverse health effects



On-site EM Radiation Assessment



Commercial building, Office



Residence



Medical Centers, Hospital



Shopping Mall



Factory



Rail line



Data Centre



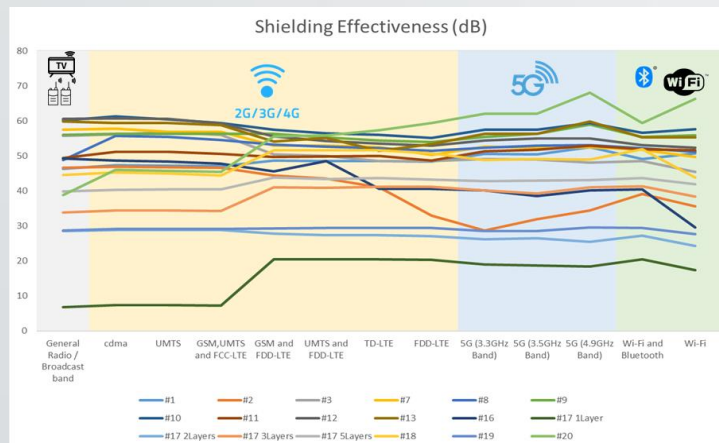
Airport

Service Scope

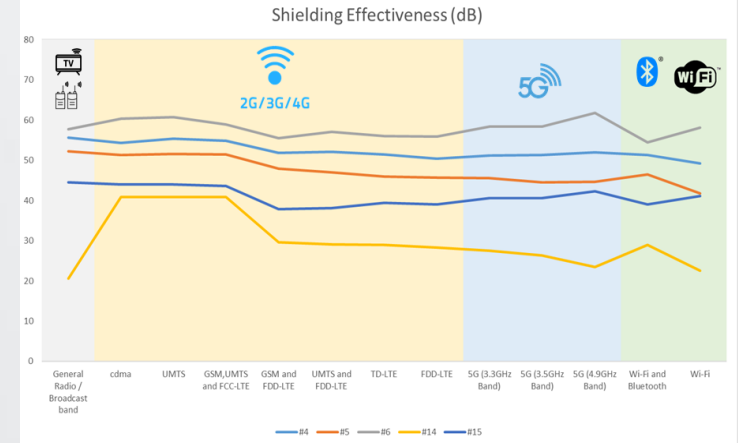
Electromagnetic Shielding Solution

- New test service “Shielding Effectiveness Measurement for EMI shielding material and products”
- New database on EMI shielding material and products

Home decoration materials



Personal use materials



Electromagnetic Shielding Effectiveness Measurement Service

Measurement Specification

Frequency Range: 30 MHz — 10 GHz (covered 3G, 4G, 5G, WiFi, Bluetooth and TV/Radio Broadcast)

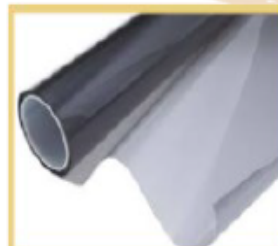
Applicable Products: Domestic and Industrial applications such as cloth, paints, wallpapers, nets, window films, blanket, wallets, hats

Standard: ASTM D4935-18 or GJB 6190-2008

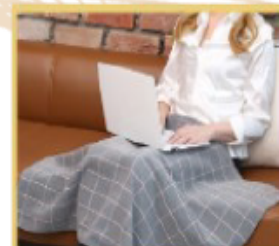
Dynamic Range: > 80 dB

Test Sample: Planar material $\leq 2\text{mm}$ thickness

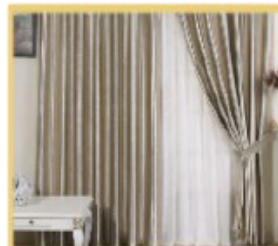
Measured parameter: Ratio (dB) or percent (%)



Window films



Blanket



Curtain



Hats

One-Stop service for EMI Safety Solution:

On-site EM radiation Risk Assessment + Shielding Solution

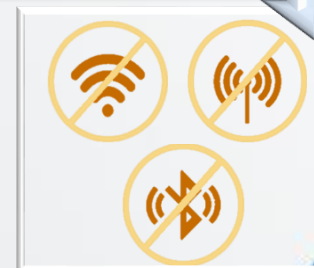
On-site Risk Assessment
on EMI exposure level



Determination of
EMI threat source



Recommendations on
EMI mitigation



HKPC Laboratory Testing



EMC
Centre



Concessions for SMEs and Startups

A blue speech bubble containing a white icon of a person with four arrows pointing outwards in different directions, representing research and development or consultancy.

30% off
the list price of
labour portion for
**R&D and
consultancy services**

A purple speech bubble containing a white icon of a lightbulb with a circuit board inside, representing testing or technical services.

30% off
the list price of
labour portion for
testing services

*These concessionary offers are applicable to SMEs and startups engaging HKPC's services and training courses till 31 March 2020.



Hong Kong Productivity Council
香港生產力促進局

HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong
香港九龍達之路78號生產力大樓
+852 2788 5678 www.hkpc.org