

Figure S1. Calibration result (performance certificate and test result)

Certificate No. KTR-2020-25		
PERFORMANCE CERTIFICATE		
Company Name (Business Establishment)	BRILLIANT & COMPANY CO., LTD	
Name (CEO)	JUNGYON YUN	
Location of business establishment	H-1-912D, 5, Hwarang-ro 14-gil, Seongbuk-gu, Seoul, Republic of Korea (Phone Number : 02-6959-5538)	
Authorized Contents	Manufacturer	Producing Nation
	BRILLIANT & COMPANY CO., LTD	Republic of Korea
	Device Name	Measuring Method
	Fine Dust Simple Meter	Laser scattering
	Product Name(distinguished name)	Measuring Range
	PiCOHOME(PMM-130)	Minimum : 5 µg/m ³ Maximum : 200µg/m ³
Minimum Gradation(Unit)	Accredited Measurement Error Range	
1 µg/m ³	Accuracy : 86.2 %	
Performance Certification Rating The first class		
<p>Performance certificate shall be issued as above in accordance with the Article 24(1) of 「Special Act on Fine Dust Reduction & Management」 and Article 16(3) of the Enforcement Rules of the same Act.</p> <p style="text-align: right;">April 3, 2020</p> <p style="text-align: center;">KTR Head of KOREA TESTING & RESEARCH INSTITUTE</p>		



TEST REPORT

98 Kyoyukwon-ro Gwacheon-si, Gyeonggi-do Zip code 13810 TEL(02)2164-0011 FAX(02)2634-1008

Test Report No : TBK-2019-008372 Reception Date Dec. 3, 2019
 CEO : JUNGYON YUN Test completion date Apr. 3, 2020
 Company Name : BRILLIANT & COMPANY CO., LTD
 Address : H-1-912d, 5, Hwarang-ro 14-gil, Seongbuk-gu, Seoul, Republic of Korea

Sample Name Performance certification of Fine Dust Simple Meter

Results of Test

Test Item	Unit	Sample Classification	Result Value	Measuring Method
Repetitive reconstruction	%	-	82.9	Performance certification of fine dust simple meter
Relative precision	%	-	95.8	Performance certification of fine dust simple meter
Data acquisition rate	%	-	100	Performance certification of fine dust simple meter
Accuracy	%	-	86.2	Performance certification of fine dust simple meter
Coefficient of determination	-	-	0.95	Performance certification of fine dust simple meter

Performance Certification No. : KTR-2020-25

Model Name : PiCOHOME(PMM-130)

-Purpose : For quality control

- Note : 1. This report is a result of testing with samples and sample names presented by the client and does not guarantee the quality of the entire product. The authenticity of the report can be verified by the Homepage(www.ktr.or.kr) or QR code.
2. This report shall not be used for publicity, propaganda, advertising or litigation and shall not be used for any other purpose.
3. This report is valid only in the original(including reissue), and copies and electronic prints/files are for reference.

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April 3, 2020

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Figure S2. Time-series plot for PM₁₀ concentrations and MiBP for participant G (similar pattern to Figure 1(a))

