Data collected by smart lampposts in Hong Kong Science Park

Company name	Type or field of data	Usage of data	Technology/ system used for collecting data and data format	Frequency of data updating
1. Beghelli Asia Pacific Limited	Weather data, including: temperature, humidity, pressure, wind speed, wind direction, noise level	Weather observation	Sensor	Every 20 minutes, or as needed
	Colour Image	Real-time viewing of road conditions near bicycle parking spaces and road conditions near the lamppoles; no image storage	CCTV	Video streaming
2. Infineon Technologies Hong Kong Limited	Traffic data, including: number of vehicles, speed, driving direction	Traffic management, road design	Radar sensor	As needed, e.g. when a car enters the in-scope areas
	Image	Verification of the operating conditions of radar sensor, experimental use; no image storage	Verification lens	Video streaming
	LED lamp operating data	Switch on/off and adjust LED output luminosity	Cloud	As needed
	Smart lamppole operating electrical parameters	Monitor lamppole operating conditions	Wire transmission	Real-time
3. Inspiring Light Electronics Software Development Limited	Ambient brightness	Switch on/off and adjust LED output luminosity	Lux photometric sensor, LoRa communication gate	Every 15 minutes
	Weather data, including: temperature, humidity, carbon dioxide levels	Weather observation	Sensor	Every 15 minutes, or as needed
4. Siemens Limited	Ambient brightness	Switch on/off and adjust LED output luminosity	Photometric sensor	Every 20 seconds, or as needed

Company name	Type or field of data	Usage of data	Technology/ system used for collecting data and data format	Frequency of data updating
5. United Technologies Global Limited	Road traffic data	Adjust LED output luminosity, energy saving, traffic management	CCTV	Video streaming
	Environmental data, including: temperature, humidity, pressure, PM2.5, PM10, VOC, NO2, SO2, CO, O3, noise and vibration levels	Environmental observation	Sensor	Every 20 seconds, or as needed
	Weather data, including: temperature, humidity, pressure, wind speed, wind direction, UV, PM2.5, CO, NO/NO2, O3	Weather observation, air quality monitoring	Sensor	Every 30 minutes, or as needed
	Ordinary images: traffic & people flow	Real-time viewing of road conditions near the lamppole; no image storage	CCTV	Video Streaming
	Smart lamppole operating electrical parameters	Monitoring operation condition of lamppole, energy saving	Wire transmission	Real-time