

# ETHOS 4420 SPECIFICATION

## Technical Data

Temperature range	Operation:-10~50 °C, max 80% HR (Non-Condensed) Storage:-10~50 °C, max 80% HR (Non-Condensed)
Sampling rate	≥2 times/s
Display	3½ digits, max reading of 1999, with analog bar display
Sensor	silicon photoelectric diode
Measured spectral range	320~730nm
Measurement ranges	20, 200, 2000, 20000, 200000 Lux 20, 200, 2000, 20000 FC
Operating environment	indoor use
Height	2000mhighest
Battery life	Approx. 200 hours
Power supply	1×9 V, IEC 6LR61
Dimensions (H×W×D)	190 mm×89 mm×42.5 mm
Weight	Approx. 360 g without batteries Approx. 420 g with batteries
Accuracy	±3% (calibrated with incandescent lamps in 2854K) ±6% other visible light source

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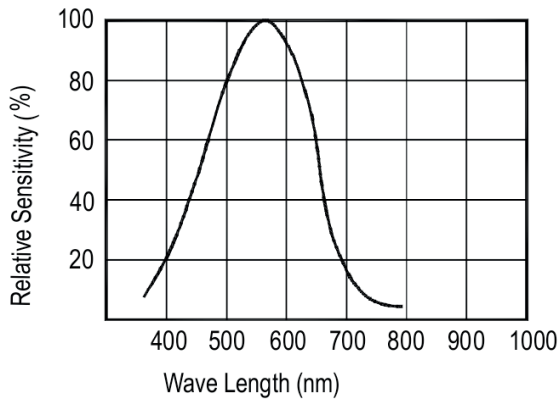
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Cosine angle deviation characteristics	
Cosine angle	Deviations
30°	±2%
60°	±6%

Tips: cosine angle is corrected in accordance with JIS C 1609:1993 and CNS 5119 Grade A General Specification.

Luminous sensitivity characteristics:



## Reference Table for Illumination Standard of Various Locations

Fc illuminance value can be got from Lux illumination value divided by 10.6.

### Schools:

Illuminance (Lux)	Locations
1500~300	Drafting classroom, sewing classroom, computer classroom
750~200	Classroom, laboratory, practice workshop, research room, reading room, stack room, office, staff lounge, conference room, health center, restaurant, kitchen, pantry, radio room, printing room, switchboard room, guard room, indoor stadium
300~150	Large classroom, auditorium, storage cabinet room, lounge, staircase
150~75	Corridor, elevator corridor, toilet, duty room, workers room, bridge, school outdoor playground
75~30	Warehouse, garage, fire escape

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## Office:

Illuminance (Lux)	Locations
2000~1500	Design office, clerk's office
1500~750	Hall information channel (daytime), parlor, drawing office, punching, typing
750~300	Calculator room, conference room, printing room, switchboard room, control room, reception room, recreation room, restaurant
300~150	Stack room, entertainment room, dining room, lounge, guard room, elevator (passway), washroom, toilet
150~75	Tea room, changing room, warehouse, nightwatchmen office (entrance)
75~30	Fire escape

## Factories:

Illuminance (Lux)	Locations
3000~1500	Ultra-precision operation, design, drafting, precision inspection
1500~750	Design office, analysis, assemble line, coating
750~300	Packaging, measurement, surface treatment, warehouse office
300~150	Dyeing, casting, electrical room
150~75	Entrance and exit, corridor, information channel, staircase, dressing room, toilet, operation warehouse
75~30	Fire escape, warehouse, outdoor power equipment (loading and unloading, inventory move operation)



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## Hospital:

Illuminance (Lux)	Locations
10000~5000	Visual function test chamber (ophthalmology light room)
1500~750	Operating room
750~300	Consulting room, treatment room, pharmacy room, prescription room, drug store, dissection room, pathological bacteria room, emergency rooms, maternity ward, dean's office, offices, nursing room, conference room
300~150	Ward, medicine room, bed reading, medicine changing, plaster bandage for fractures, infant room, record room, waiting room, consulting room, outpatient corridor
150~75	Locker room, physical therapy room, X-ray room, ward corridor, medicine room, sterilization room, ward room, stairs, endoscopy room
75~30	Animal room, dark room (photo), fire escape

## Hair salon:

Illuminance (Lux)	Locations
1500~750	Haircut, perm, hair dyeing, cosmetics
750~300	Shave, hairdressing, lobby registration counter, makeup
300~150	Toilet in salon
150~75	Corridor, stairways

## Hotel, restaurant, recreation ground:

Illuminance (Lux)	Locations
1500~750	Counter
750~300	Halfway, banquet hall, business room, parking lot, kitchen
300~150	Restaurant, toilet, a large Japanese-style room
150~75	Recreation room, corridor, stairways, guest room, bathroom, accent lighting for gardens, changing room
75~30	Fire escape

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## Shop, department store:

Illuminance (Lux)	Locations
3000~750	Indoor display, decorative window display, demonstration area, checkout counter, packaging table
750~300	Elevator lobby, escalators
300~150	Discussion room, dressing room, toilet, stairs, walkways
150~75	Lounge, general lighting in store

## House:

Illuminance (Lux)	Locations
2000~750	Handcraft, tailoring
1000~500	Writing, work
750~300	Reading, makeup, kitchen table, processing area, telephone
300~150	Wash sink, entertainment room, living room, family reunion, entrance (inside) mirror
150~70	Wardrobe, bedroom, bathroom, stairs, corridor
75~30	Doorplate, mailbox, doorbell key, terrace



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