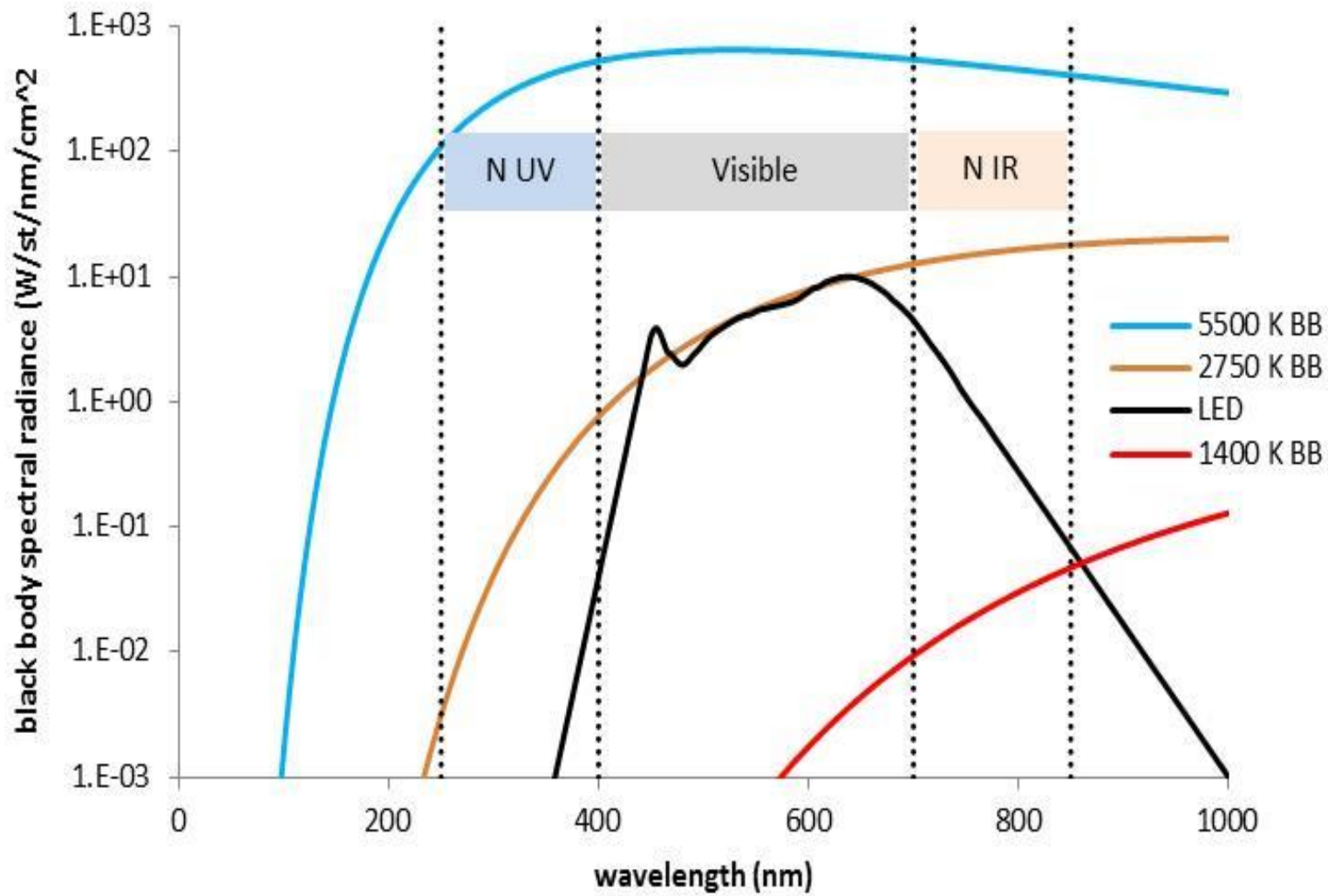


**International Commission on Illumination (CIE)
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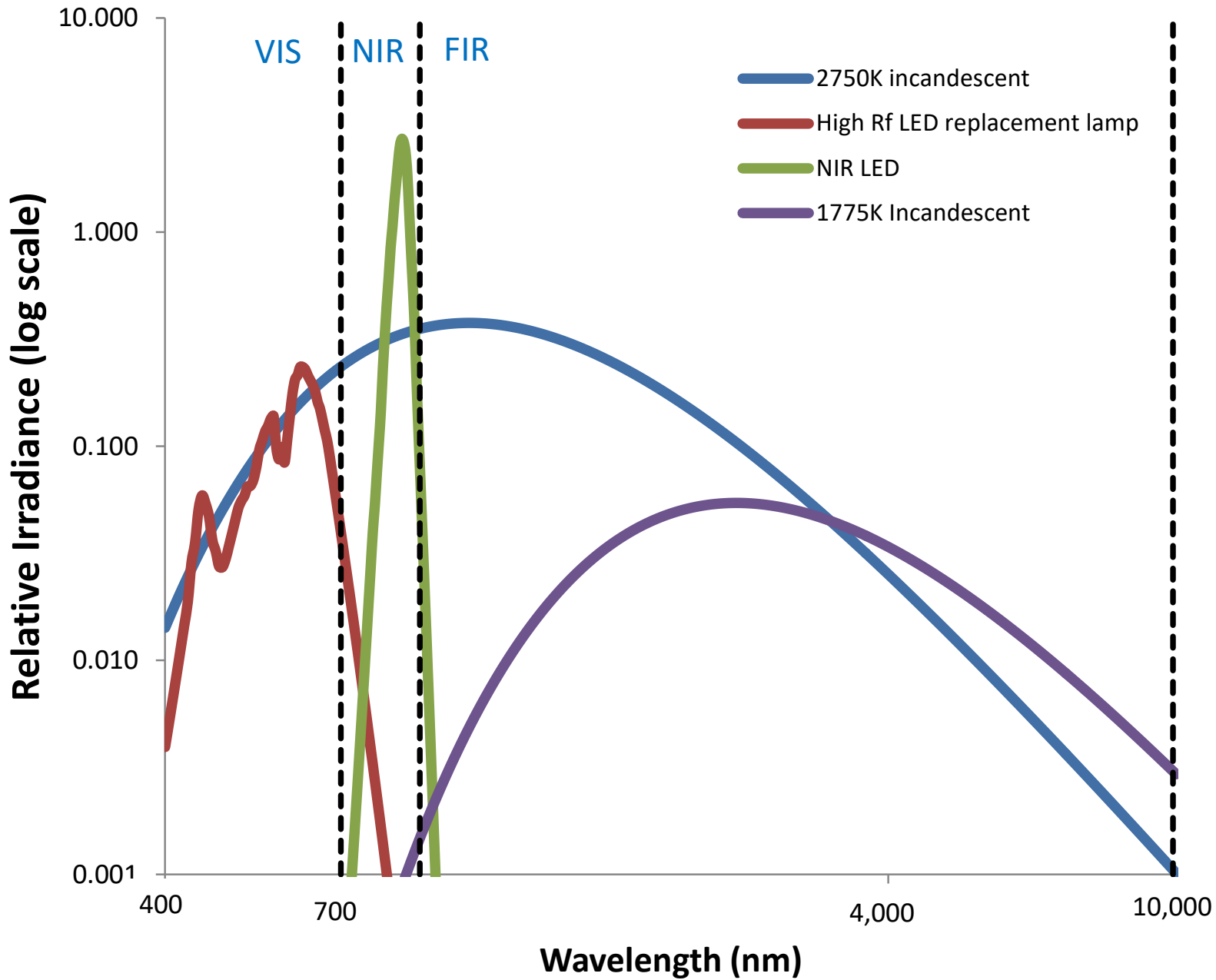
Possible Health Implications of Low
Infrared Levels in Indoor Illumination

Lorne Whitehead, University of British Columbia



examples of sources of NIR exposure

light source	observing condition	color temp K	ratio NR W to lum flux mW / lm	viewing luminance cd/m²	NR radiance mW/cm²/st
wood fire	direct view	1400	19.0	200	0.4
sun on leaves	mid day	4000	8.00	2000	1.6
sun through eyelid	mid day	5500	8.00	10000	8.0
incandescent lamp	reading book	2750	5.5	300	0.17
early, late daylight	land in shade cloudy	4000	2.5	500	0.13
mid-day daylight	ground in shade sunny	5500	1.6	2000	0.3
low e window	indirect mid day	5500	0.4	2000	0.08
LED lamp	reading book	2750	0.3	300	0.01



Source	2750K	LED	NIR	1175K
Lumens	1732	1732	0	0
Vis W	6	5	0	0
NIR W	12	0	25	0
FIR W	101	0	0	25
Total W	120	6	25	25

