

ROOM DATA SURVEY

Always A Pioneer, Always Ahead



UTeM

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

PEJABAT KETUA PEGAWAI MAKLUMAT (CIO) / PUSAT PERKHIDMATAN
PENGETAHUAN DAN KOMUNIKASI (PPPK), (ARAS ATAS), UTeM

Prepared by:

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ROOM DATA SURVEY

PEJABAT KETUA PEGAWAI MAKLUMAT (CIO) / PUSAT PERKHIDMATAN PENGETAHUAN DAN KOMUNIKASI (PPPK)

Disediakan oleh:

(ROSZAIMAH BINTI WAHID – 17 OGOS 2022)

Disahkan oleh:

(PROFESOR DR. MOHD KHANAPI BIN ABD. GHANI – 17 OGOS 2022)

INTRODUCTION

- The RDS Audit Team was carried-out the measurements for each floor to check the comforts level of the **CIO's Office / PPPK (ARAS ATAS)**'s buildings.
- The summary of temperatures, relative humidity, carbon dioxide, and luminance level are illustrated as follows.

Room Temperature

The findings for the temperature room data survey for CIO's Office (ARAS ATAS) are shown in Figure 1-2 and Table 1

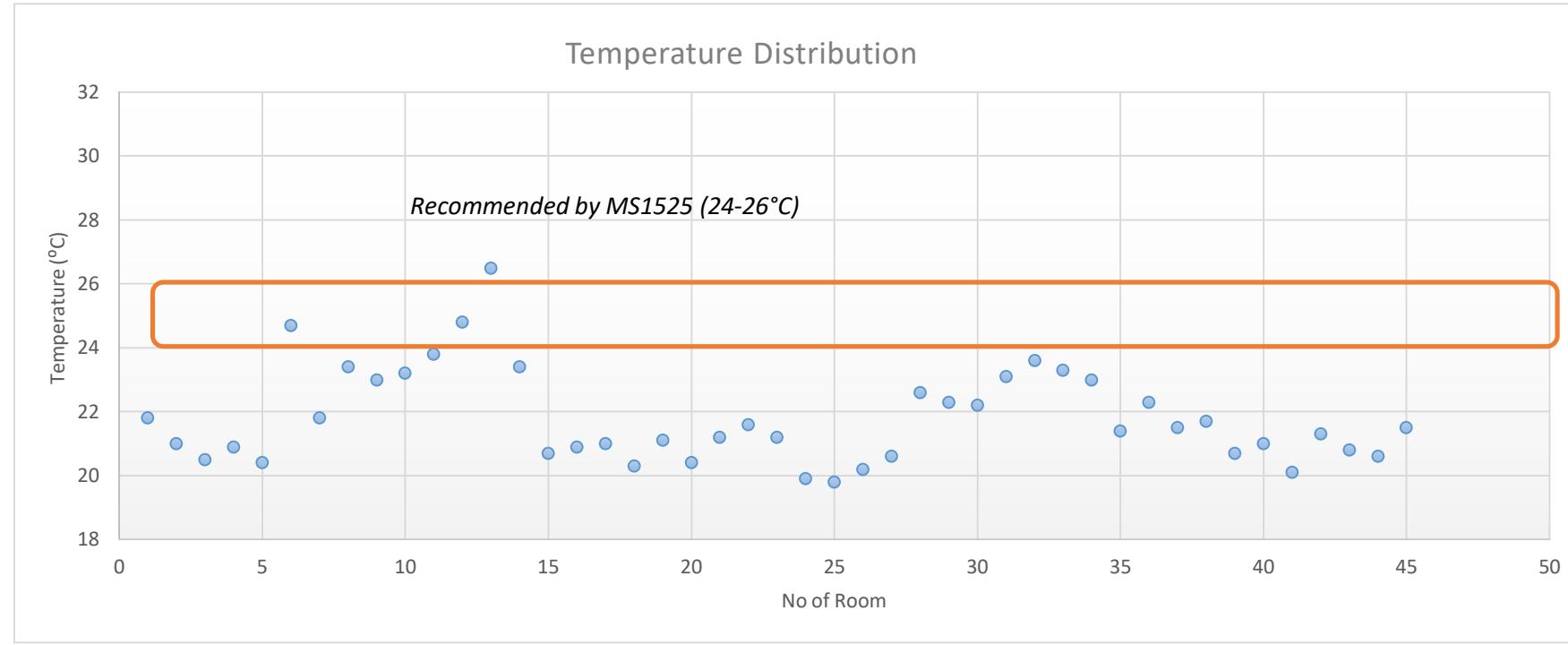


Figure 1: Room temperature survey at CIO's Office (ARAS ATAS)

Room Temperature

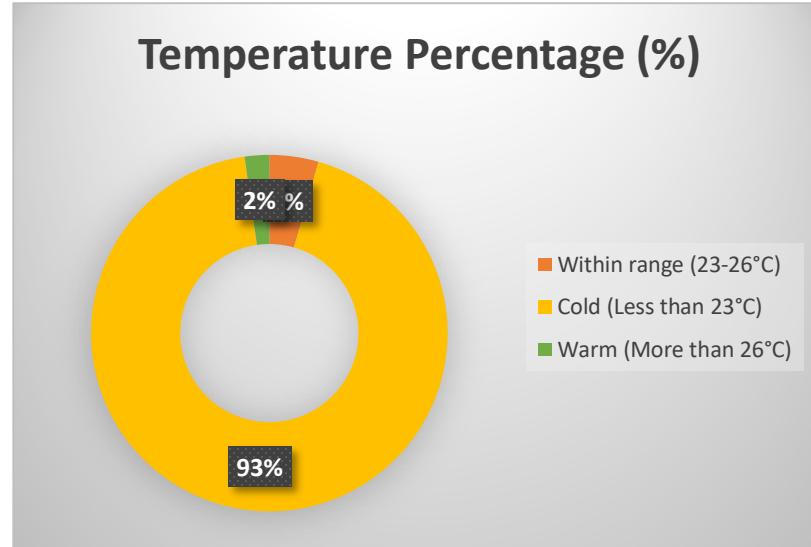


Figure 2: Summary in percentage for room temperature survey at CIO's Office (ARAS ATAS)

| Category | No of Room | Percentage |
|------------------------|------------|------------|
| Within range (23-26°C) | 2 | 4% |
| Cold (Less than 23°C) | 42 | 93% |
| Warm (More than 26°C) | 1 | 2% |
| Total | 45 | 100% |

Table 1: Summary of room temperature survey at CIO's Office (ARAS ATAS)

The findings from room temperature survey are summarized as follows:

- 2 @ 4% rooms are within the recommended level (MS1525);
- 42 @ 93% rooms are cold level;
- 1 @ 2% room are warm level

Room Relative Humidity

The findings for the relative humidity room data survey for CIO's Office (ARAS ATAS) are shown in Figure 3-4 and Table 2

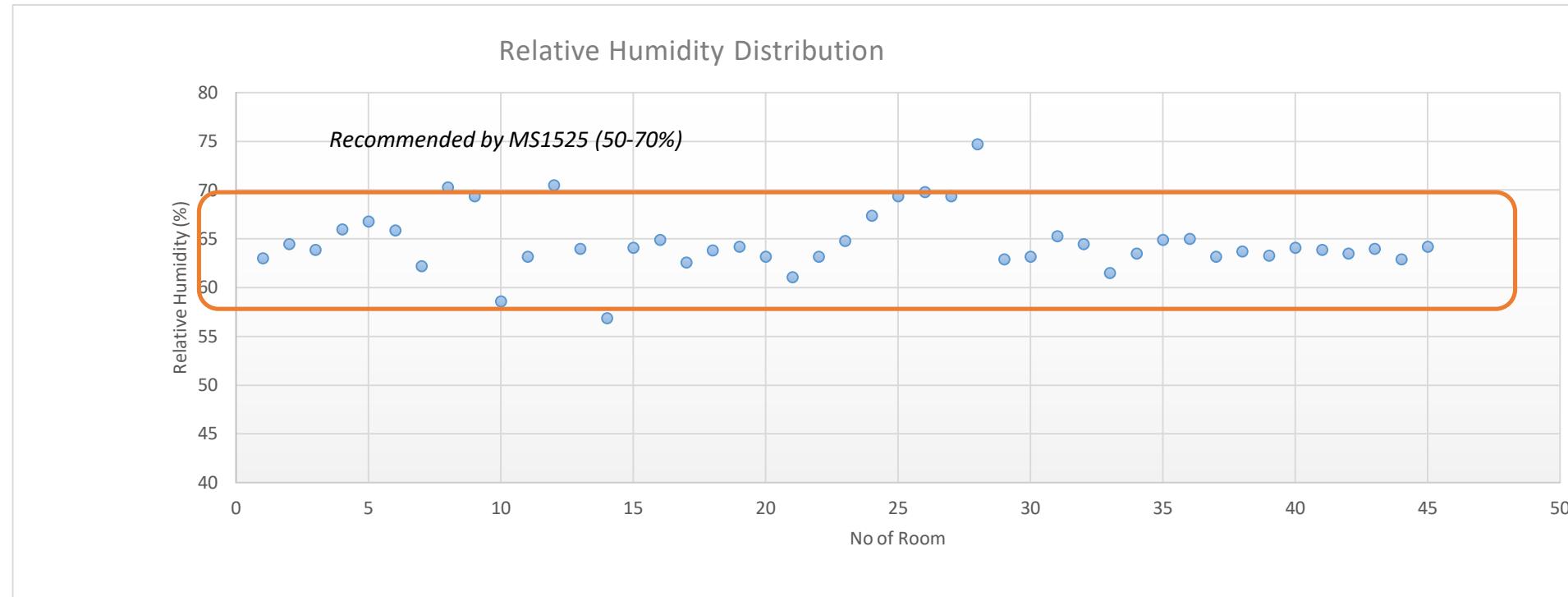


Figure 3: Room relative humidity survey at CIO's Office (ARAS ATAS)

Room Relative Humidity

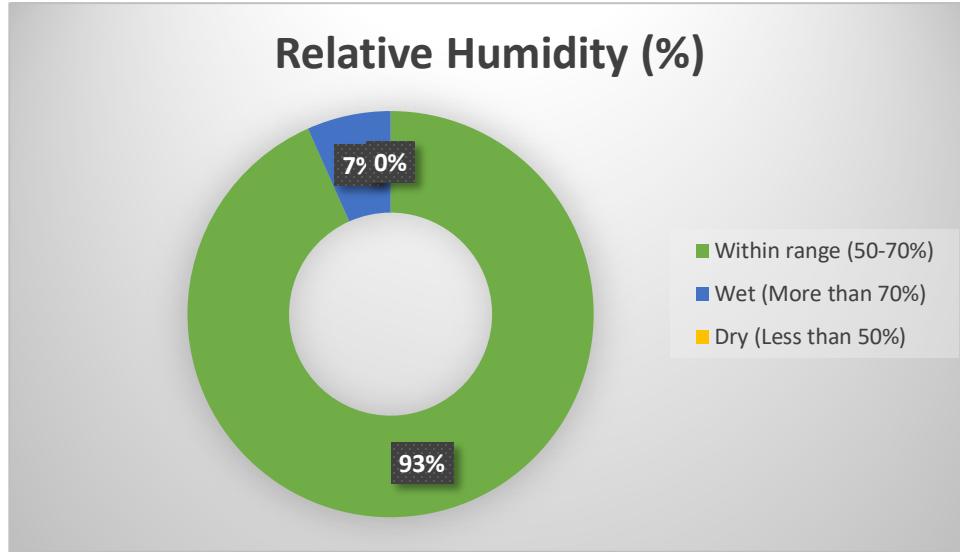


Figure 4: Summary in percentage for room relative humidity survey at CIO's Office (ARAS ATAS)

| Category | No of Room | Percentage |
|-----------------------|------------|------------|
| Within range (50-70%) | 42 | 93% |
| Wet (More than 70%) | 3 | 7% |
| Dry (Less than 50%) | 0 | 0% |
| Total | 45 | 100% |

Table 2: Summary of room relative humidity survey at CIO's Office (ARAS ATAS)

The findings from room relative humidity survey are summarized as follows:

- i. 42 @ 93% rooms are within the recommended category (MS1525);
- ii. 3 @ 7% rooms are wet level;
- iii. 0 @ 0% rooms are dry levels

Room Carbon Dioxide

The findings for the carbon dioxide room data survey for CIO's Office (ARAS ATAS) are shown in Figure 5-6 and Table 3

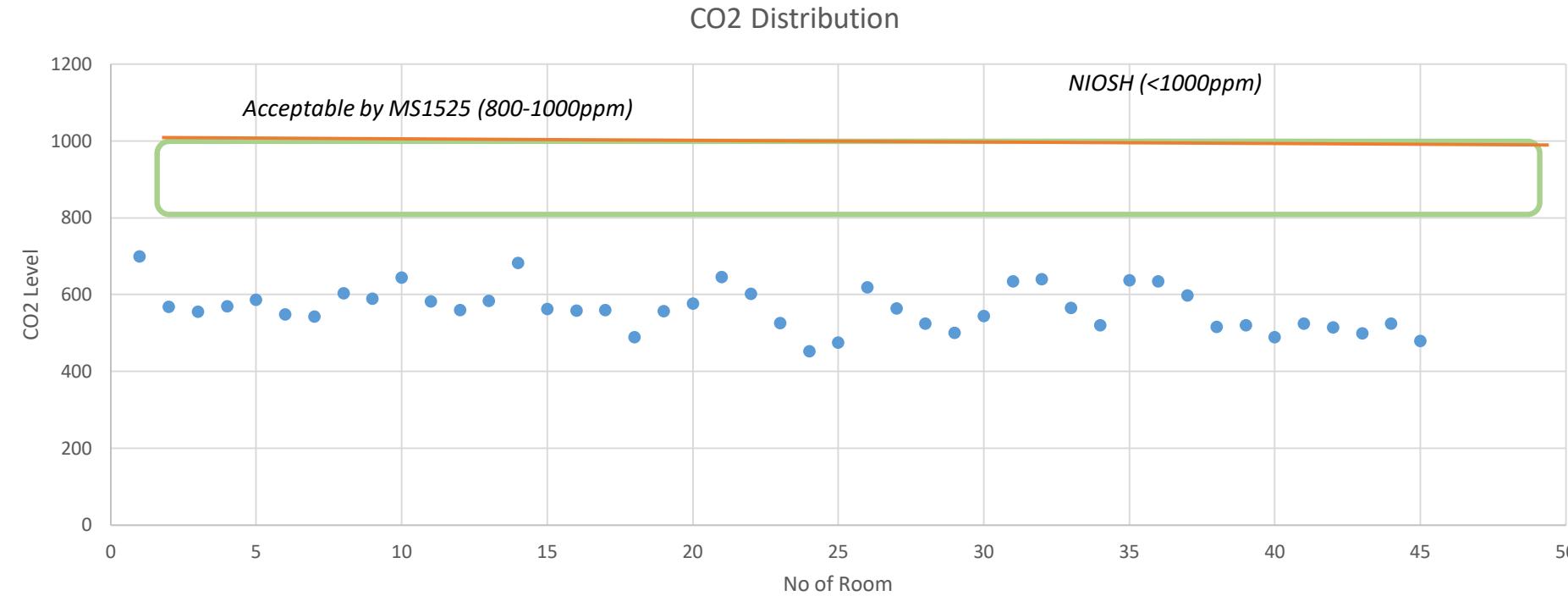


Figure 5: Room carbon dioxide survey at CIO's Office (ARAS ATAS)

Room Carbon Dioxide

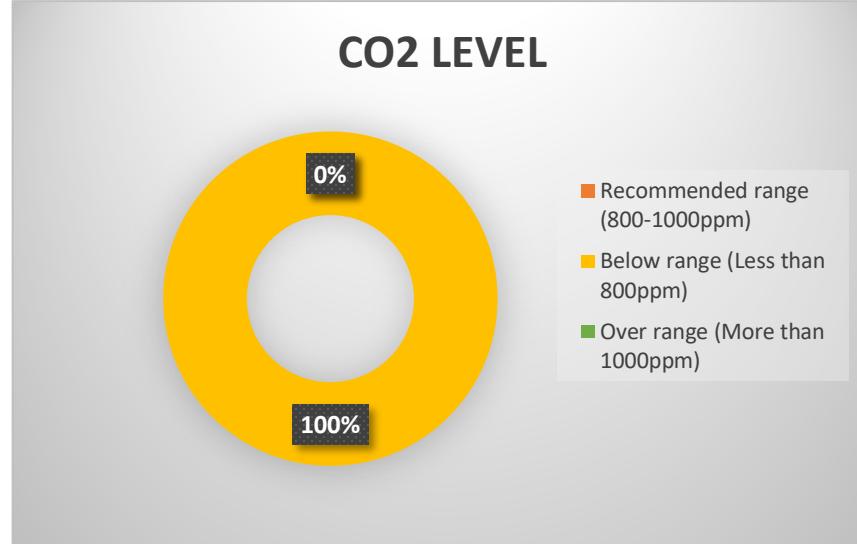


Figure 6: Summary in percentage for room carbon dioxide survey at CIO's Office (ARAS ATAS)

| Category | No of Room | Percentage |
|---------------------------------|------------|------------|
| Recommended range (800-1000ppm) | 0 | 0% |
| Below range (Less than 800ppm) | 45 | 100% |
| Over range (More than 1000ppm) | 0 | 0% |
| Total | 45 | 100% |

Table 3: Summary of room carbon dioxide survey at CIO's Office (ARAS ATAS)

The findings from room carbon dioxide survey are summarized as follows:

- 0 @ 0% rooms are within the recommended value category (MS1525);
- 45 @ 100% rooms are below range;
- 0 @ 0% rooms are over recommended category;

Room Luminance

The findings for the luminance room data survey for CIO's Office (ARAS ATAS) are shown in Figure 7-8 and Table 4

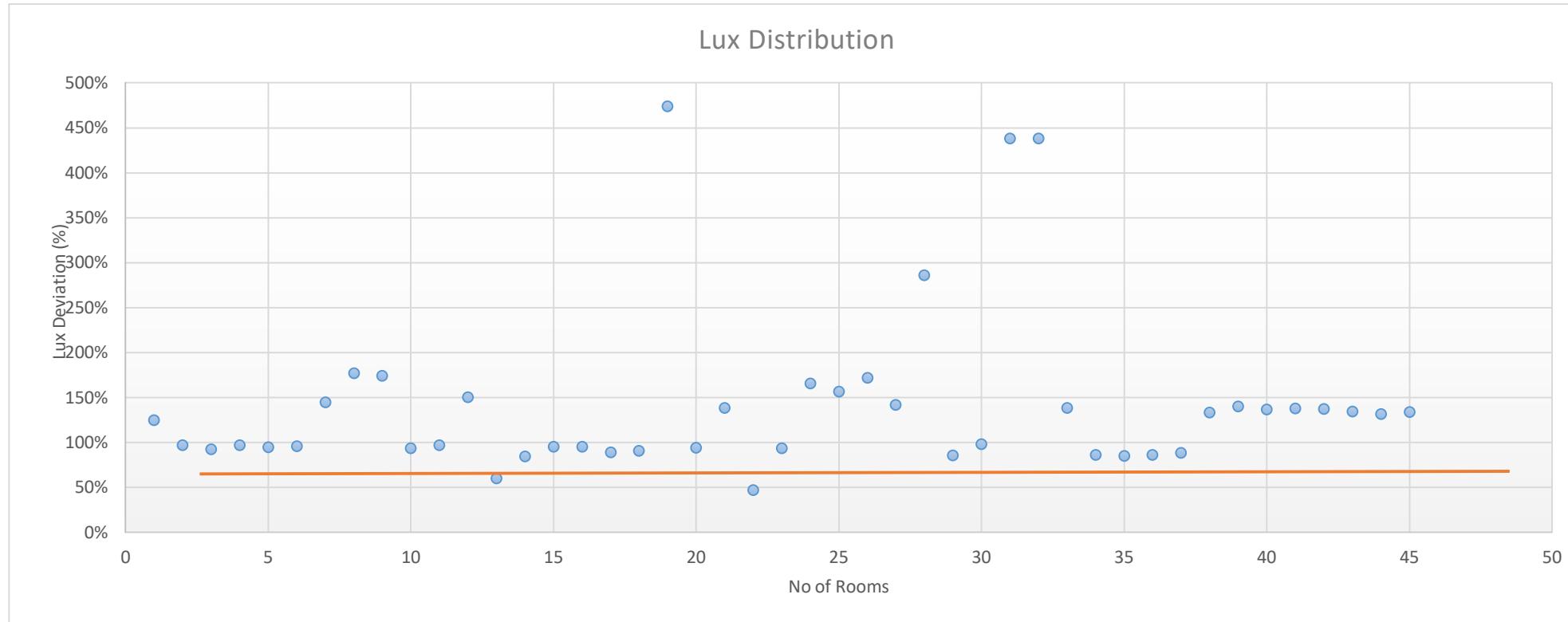


Figure 7: Room luminance survey at CIO's Office (ARAS ATAS)

Room Luminance

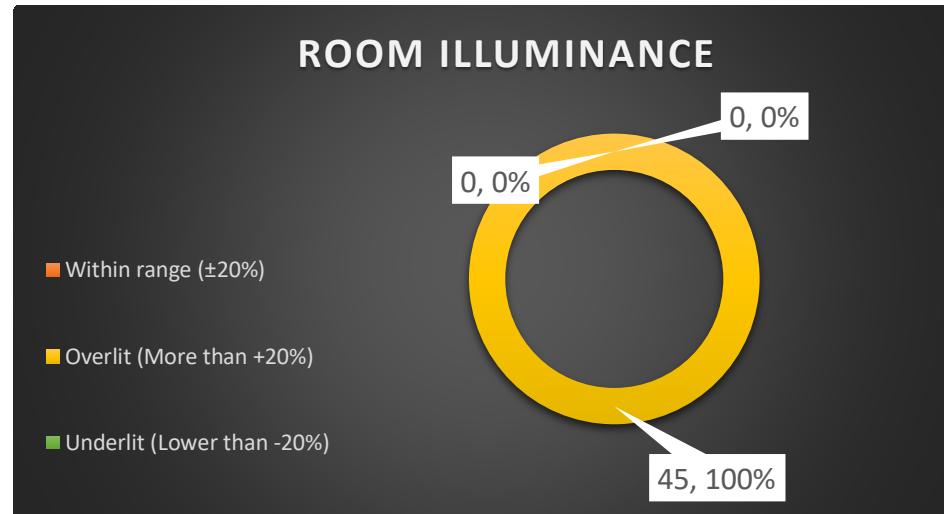


Figure 8: Summary in percentage for room luminance survey at PPPK (ARAS ATAS)

The findings from the room luminance survey are summarized as follows:

- i. 0 @ 0% rooms are within the recommended range category (MS1525);
- ii. 45 @ 100% rooms are over range category.
- iii. 0 @ 0% rooms are under range category.

| Category | No of Room | Percentage |
|-----------------------------|------------|------------|
| Within range ($\pm 20\%$) | 0 | 0% |
| Overlit (More than +20%) | 45 | 100% |
| Underlit (Lower than -20%) | 0 | 0% |
| Total | 45 | 100% |

Table 4:
Summary of room luminance survey at
PPPK (ARAS ATAS)

ROOM DATA COLLECTION: Temperature, Relative Humidity, Luminance, and CO2 Analysis

| NO | BILIK | AREM m ² | ILLUMINANCE | | | | TEMP | RH | CO ₂ | LAMPU QTY OK | KUASA (WATT) | BIL | PERALATAN LAIN | | | | REMARK |
|---|--------------------------------|---------------------|-------------|------|------|---------|------|------|-----------------|--------------|--------------|-----|--------------------------|--------------|-----|--|--------------------|
| | | | P1 | P2 | P3 | JUMLAH | | | | | | | NAMA ALAT | KUASA (WATT) | BIL | | |
| BAHAGIAN PENTADBIRAN | | | | | | | | | | | | | | | | | |
| 1 | BILIK MESYUARAT | 80.50 | 549 | 722 | 756 | 675.67 | 21.8 | 57.4 | 699 | OK | 28 | 24 | PC | 300 | 1 | | |
| 2 | BILIK PEGAWAI 1 | 11.40 | 580 | 546 | 648 | 591.33 | 21.0 | 64.5 | 568 | OK | 28 | 12 | COMPACT FLUORESCENT LAMP | 16 | | | |
| 3 | BILIK PEGAWAI 2 | 11.40 | 550 | 541 | 644 | 578.33 | 20.5 | 63.9 | 556 | OK | 36 | 4 | MICROFON | 22 | 1 | | |
| 4 | BILIK PEGAWAI 3 | 11.40 | 565 | 520 | 689 | 591.33 | 20.9 | 66.0 | 569 | OK | 36 | 4 | KIPAS | 0.24 | | | |
| 5 | BILIK PEGAWAI 4 | 11.40 | 539 | 536 | 678 | 584.33 | 20.4 | 66.8 | 587 | OK | 36 | 4 | PC | 300 | 1 | | |
| 6 | BILIK PEGAWAI 5 | 11.35 | 548 | 560 | 659 | 589.00 | 24.7 | 65.9 | 548 | OK | 28 | 4 | LAMPU LINDEK | 16 | | | |
| 7 | BILIK KAIL | 16.53 | 100 | 448 | 431 | 390.00 | 21.8 | 62.2 | 541 | OK | 28 | 6 | PC | 300 | 1 | | |
| 8 | SURAU LELAKI | 11.45 | 1048 | 1143 | 986 | 1048.33 | 21.4 | 60.3 | 604 | OK | 28 | 4 | KIPAS | 55 | 1 | | |
| 9 | SURAU PEREMPUAN | 11.65 | 1039 | 1054 | 979 | 1024.00 | 23.0 | 69.4 | 589 | OK | 28 | 4 | PRINTER | 50 | 1 | | |
| 10 | STOR ALAT TULIS | 8.13 | 437 | 631 | 674 | 580.67 | 23.2 | 58.6 | 645 | OK | 28 | 2 | PC | 300 | 1 | | |
| 11 | TANDAS LELAKI | 12.56 | 572 | 679 | 525 | 592.00 | 23.8 | 63.2 | 582 | OK | 14 | 6 | PRINTER | 50 | 1 | | |
| 12 | PANTRI | 8.43 | 893 | 725 | 639 | 752.33 | 24.8 | 70.5 | 560 | OK | 28 | 4 | COWAY | 300 | 1 | | |
| 13 | BILIK UTILITI | 3.57 | 529 | 498 | 476 | 501.00 | 26.5 | 64.0 | 583 | OK | 28 | 2 | PC | 300 | 1 | | |
| 14 | BILIK SUMBER | 46.08 | 466 | 653 | 543 | 554.00 | 23.4 | 56.9 | 682 | OK | 28 | 20 | KIPAS | 75 | 1 | | |
| 15 | BILIK PEGAWAI 6 | 11.35 | 578 | 542 | 642 | 587.33 | 20.7 | 64.1 | 562 | OK | 28 | 4 | MESIN SHREDDER | 150 | 1 | | |
| 16 | BILIK PEGAWAI 7 | 11.35 | 577 | 540 | 645 | 587.33 | 20.9 | 64.9 | 558 | OK | 28 | 4 | MESIN FOTOSTAT | 686 | 1 | | |
| 17 | BILIK PEGAWAI 8 | 11.35 | 581 | 539 | 586 | 568.67 | 21.0 | 62.6 | 560 | OK | 28 | 4 | PC | 300 | 1 | | |
| 18 | BILIK PEGAWAI 9 | 11.35 | 569 | 550 | 598 | 572.33 | 20.3 | 63.8 | 489 | OK | 28 | 4 | KIPAS | 75 | 1 | | |
| 19 | BILIK PEGAWAI 10 | 11.35 | 565 | 528 | 630 | 574.33 | 21.1 | 64.2 | 557 | OK | 28 | 4 | PRINTER | 50 | 1 | | |
| 20 | BILIK PEGAWAI 11 | 11.35 | 583 | 546 | 639 | 589.33 | 20.4 | 63.5 | 577 | OK | 28 | 4 | PC | 300 | 1 | | |
| 21 | BILIK PEGAWAI | 29.69 | 720 | 865 | 699 | 761.33 | 21.2 | 63.1 | 646 | OK | 28 | 12 | PRINTER | 50 | 1 | | |
| 22 | RUANG PENTADBIRAN | 97.40 | 437 | 273 | 335 | 348.33 | 21.6 | 63.2 | 602 | OK | 28 | 4 | PC | 300 | 1 | | |
| 23 | BILIK PENGARAH | 18.52 | 502 | 606 | 702 | 603.33 | 21.2 | 64.8 | 526 | OK | 28 | 8 | KIPAS | 55 | 1 | | |
| 24 | BILIK LATIHAN 1 | 120.98 | 508 | 578 | 517 | 534.33 | 19.9 | 67.4 | 453 | OK | 28 | 48 | PC | 300 | 41 | | |
| 25 | RUANG MAKAN | 85.89 | 658 | 928 | 875 | 820.33 | 39.8 | 69.4 | 475 | OK | 28 | 28 | LCD | 282 | 1 | | |
| 26 | BILIK LATIHAN 2 | 120.00 | 937 | 968 | 826 | 910.33 | 20.2 | 69.8 | 619 | OK | 28 | 72 | SPEAKER (CEILING) | 111.25 | 3 | | |
| BAHAGIAN CRIM, BENDAHARI (ZON KEWANGAN DAN PENYELOKAN) | | | | | | | | | | | | | | | | | |
| 18 | RUANG PEJABAT CRIM | 193.91 | 849 | 615 | 715 | 726.33 | 20.6 | 69.4 | 564 | OK | 28 | 80 | PC | 300 | 13 | | |
| 19 | BILIK MESYUARAT UTAMA CRIM | 22.72 | 998 | 1002 | 1474 | 1158.00 | 22.6 | 74.7 | 524 | OK | 28 | 16 | TV (75 INCH) | 374 | 1 | | |
| 20 | BILIK PENGARAH | 29.50 | 587 | 531 | 554 | 557.33 | 22.3 | 62.9 | 501 | OK | 28 | 12 | TV | 185 | 1 | | |
| 21 | BILIK PENOLONG PENDAFTAR KANAN | 10.44 | 650 | 594 | 541 | 595.00 | 22.2 | 63.2 | 544 | OK | 28 | 4 | COMPUTER | 60 | 1 | | |
| 22 | BILIK PENOLONG PENDAFTAR KANAN | 15.57 | 1315 | 1018 | 2514 | 1615.67 | 23.1 | 65.3 | 634 | OK | 28 | 8 | MESIN FOTOSTAT | 686 | 1 | | |
| 23 | BILIK PENOLONG PENDAFTAR KANAN | 18.62 | 1320 | 1030 | 2498 | 1616.00 | 23.6 | 64.5 | 640 | OK | 28 | 8 | LCD | 282 | 1 | | |
| 24 | BILIK TIMBALAN PENGARAH | 21.77 | 122 | 987 | 1040 | 716.33 | 23.3 | 61.5 | 566 | OK | 28 | 8 | AIR PURIFIER | 75 | 1 | | |
| 25 | BILIK TIMBALAN PENGARAH | | | | | | | | | | | | PC | 300 | 1 | | PC TIDAK DIGUNAKAN |
| BAHAGIAN UCC DAN PROGRAMMAR | | | | | | | | | | | | | | | | | |
| 27 | BILIK TIMBALAN PENGARAH | 17.89 | 520 | 540 | 619 | 559.67 | 23 | 63.5 | 520 | OK | 28 | 12 | PETI SEJUK | 222 | 1 | | |
| 28 | PANTRI | 16.99 | 519 | 538 | 610 | 555.67 | 21.4 | 64.9 | 638 | OK | 28 | 8 | PC | 300 | 1 | | |
| 29 | STOR ALAT TULIS | 15.41 | 533 | 549 | 598 | 560.00 | 22.3 | 65 | 634 | OK | 28 | 8 | KIPAS | 55 | 1 | | |
| 30 | BILIK PENOLONG PENDAFTAR KANAN | 15.87 | 529 | 556 | 614 | 566.33 | 21.5 | 63.2 | 598 | OK | 28 | 8 | PC | 300 | 1 | | |
| 31 | RUANG PROGRAMMAR | 253.45 | 678 | 787 | 636 | 700.33 | 21.7 | 63.7 | 636 | OK | 28 | 126 | PC | 300 | 24 | | |
| 31 | PEGAWAI TEKNOLOGI MAKLUMAT 1 | 14.5 | 734 | 606 | 821 | 720.33 | 20.7 | 63.3 | 516 | OK | 28 | 8 | MESIN FOTOSTAT | 686 | 1 | | |
| 32 | PEGAWAI TEKNOLOGI MAKLUMAT 2 | 14.5 | 729 | 589 | 815 | 711.00 | 21 | 64.1 | 520 | OK | 28 | 8 | PETI SEJUK | 222 | 1 | | |
| 33 | PEGAWAI TEKNOLOGI MAKLUMAT 3 | 14.5 | 731 | 599 | 814 | 714.67 | 20.1 | 63.9 | 489 | OK | 28 | 8 | PC | 300 | 1 | | |
| 34 | PEGAWAI TEKNOLOGI MAKLUMAT 4 | 14.5 | 725 | 578 | 833 | 712.00 | 21.3 | 63.5 | 524 | OK | 28 | 8 | COVAY | 660 | 2 | | |
| 35 | PEGAWAI TEKNOLOGI MAKLUMAT 5 | 14.5 | 745 | 556 | 810 | 703.67 | 20.8 | 64 | 514 | OK | 28 | 8 | PC | 300 | 1 | | |
| 36 | PEGAWAI TEKNOLOGI MAKLUMAT 6 | 14.5 | 729 | 580 | 778 | 695.67 | 20.6 | 62.9 | 490 | OK | 28 | 8 | PC | 300 | 1 | | |
| 37 | PEGAWAI TEKNOLOGI MAKLUMAT 7 | 14.5 | 730 | 579 | 798 | 702.33 | 21.5 | 64.2 | 479 | OK | 28 | 8 | PC | 300 | 1 | | |

Thank You



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