
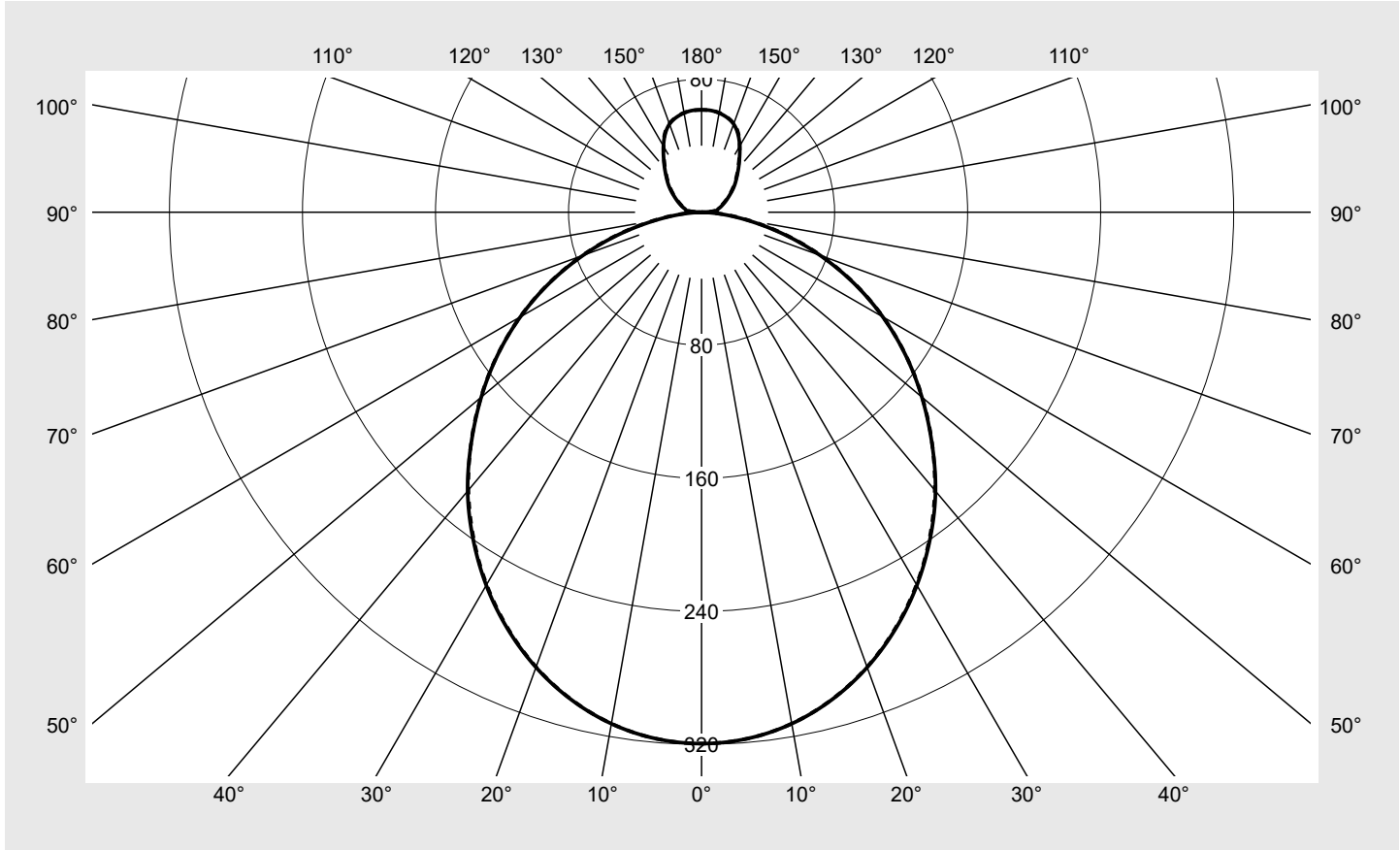


Photometric test report

| | | |
|--|--|---|
| Family Round 21 M | Order number: 51MR36GM8421B EAN: 4058352881729 | LP number 59513_2 |
|  | Version Suspended luminaire, cover, opal, PMMA, symmetric extremely wide distribution, direct-/indirect distribution, aluminium housing, black | serial documentation 08.11.2023 |
| | Lamps LED 4000 K CRI ≥ 80 | Controlgear ECG Multilumen |
| Rated values | Net luminous flux = 8190 lm Power consumption = 60.8 W Luminous efficacy = 134.7 lm/W | |

Luminous intensity in cd/klm C180-0 C270-90 Imax: 320 cd/klm



| Classifications | |
|-----------------|-----------------------------------|
| DIN 5040 | B 4 3 |
| CIE | N1=49 N2=80 N3=96 N4=85 N5=100 |

| Luminaire light output ratios | |
|-------------------------------|--------|
| η_{LB} | 100.0% |
| ϕ_u | 85.0% |
| ϕ_o | 15.0% |

Measurement conditions
 DIN EN 13032 and DIN 5032

Photometric test report

| | | |
|--|---|----------------------------|
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| Table of values for luminous intensities | | Maximum luminous intensity |
| | | siteco |

| C-planes γ | 0° 180° | 15° | 30° | 45° | 60° | 75° | 90° 270° | Phi-zone | Total Phi-zone |
|------------------------------|------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------------|----------|-------------------|
| | | 165° 195° 345° | 150° 210° 330° | 135° 225° 315° | 120° 240° 300° | 105° 255° 285° | | | |
| Luminous intensity in cd/klm | | | | | | | Luminous flux in lm/klm | | |
| 0° | 319.5 | 319.5 | 319.5 | 319.5 | 319.5 | 319.5 | 319.5 | 1.9 | 1.9 |
| 5° | 317.7 | 317.8 | 317.8 | 317.7 | 317.7 | 317.7 | 317.7 | 15.2 | 17.1 |
| 10° | 312.3 | 312.3 | 312.3 | 312.2 | 312.2 | 312.2 | 312.2 | 29.7 | 46.8 |
| 15° | 303.3 | 303.5 | 303.4 | 303.3 | 303.3 | 303.3 | 303.2 | 43.0 | 89.8 |
| 20° | 291.2 | 291.3 | 291.2 | 291.2 | 291.0 | 291.0 | 291.0 | 54.6 | 144.4 |
| 25° | 276.2 | 276.6 | 276.2 | 276.3 | 275.9 | 276.0 | 275.9 | 64.0 | 208.4 |
| 30° | 259.0 | 259.3 | 259.0 | 258.9 | 258.6 | 258.6 | 258.5 | 70.9 | 279.4 |
| 35° | 239.6 | 240.1 | 239.7 | 239.7 | 239.3 | 239.3 | 239.1 | 75.3 | 354.7 |
| 40° | 218.9 | 219.3 | 218.8 | 219.0 | 218.3 | 218.8 | 218.1 | 77.1 | 431.8 |
| 45° | 195.8 | 197.7 | 196.8 | 197.2 | 196.3 | 196.9 | 196.0 | 76.3 | 508.0 |
| 50° | 172.9 | 174.9 | 174.1 | 174.4 | 173.6 | 174.1 | 173.3 | 73.1 | 581.1 |
| 55° | 149.7 | 151.6 | 150.7 | 151.3 | 150.2 | 150.8 | 150.0 | 67.7 | 648.8 |
| 60° | 125.8 | 127.7 | 126.8 | 127.4 | 126.3 | 126.7 | 126.1 | 60.2 | 709.0 |
| 65° | 101.1 | 103.0 | 102.1 | 102.9 | 101.7 | 102.5 | 101.5 | 50.8 | 759.8 |
| 70° | 75.9 | 78.1 | 77.0 | 77.8 | 76.7 | 77.7 | 76.5 | 39.8 | 799.6 |
| 75° | 51.2 | 53.2 | 52.4 | 53.1 | 52.2 | 53.0 | 52.1 | 27.8 | 827.4 |
| 80° | 28.4 | 30.2 | 29.8 | 30.3 | 29.8 | 30.0 | 29.7 | 16.1 | 843.5 |
| 85° | 10.5 | 12.5 | 12.3 | 12.9 | 12.5 | 12.4 | 12.2 | 6.7 | 850.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 850.3 |
| 95° | 7.6 | 7.9 | 7.6 | 7.8 | 7.5 | 7.5 | 7.0 | 4.2 | 854.4 |
| 100° | 9.9 | 10.0 | 10.0 | 10.0 | 9.8 | 9.8 | 9.4 | 5.3 | 859.7 |
| 105° | 11.7 | 11.8 | 11.8 | 11.8 | 11.7 | 11.7 | 11.2 | 6.2 | 865.9 |
| 110° | 13.7 | 13.9 | 13.9 | 13.9 | 13.9 | 13.7 | 13.2 | 7.1 | 873.1 |
| 115° | 16.1 | 16.4 | 16.4 | 16.4 | 16.2 | 16.1 | 15.7 | 8.1 | 881.1 |
| 120° | 18.9 | 19.1 | 19.2 | 19.4 | 19.0 | 18.9 | 18.6 | 9.0 | 890.2 |
| 125° | 22.3 | 22.4 | 22.3 | 22.6 | 22.2 | 22.1 | 21.9 | 10.0 | 900.2 |
| 130° | 26.1 | 26.1 | 26.0 | 26.2 | 25.8 | 25.9 | 25.5 | 10.9 | 911.1 |
| 135° | 30.0 | 30.1 | 30.1 | 30.1 | 30.0 | 30.0 | 29.5 | 11.6 | 922.7 |
| 140° | 34.5 | 34.5 | 34.7 | 34.6 | 34.7 | 34.6 | 34.1 | 12.2 | 934.9 |
| 145° | 39.8 | 39.6 | 39.8 | 39.8 | 39.7 | 39.7 | 39.5 | 12.5 | 947.4 |
| 150° | 45.9 | 45.3 | 45.7 | 45.5 | 46.0 | 45.9 | 45.8 | 12.5 | 959.9 |
| 155° | 51.8 | 51.9 | 51.7 | 52.5 | 52.1 | 52.4 | 52.3 | 12.1 | 972.0 |
| 160° | 56.4 | 56.5 | 56.5 | 56.6 | 56.5 | 56.5 | 56.6 | 10.6 | 982.6 |
| 165° | 59.0 | 59.0 | 59.0 | 59.0 | 59.1 | 59.1 | 59.2 | 8.4 | 990.9 |
| 170° | 60.6 | 60.5 | 60.6 | 60.6 | 60.7 | 60.7 | 60.8 | 5.8 | 996.7 |
| 175° | 61.5 | 61.3 | 61.3 | 61.4 | 61.4 | 61.4 | 61.4 | 2.9 | 999.6 |
| 180° | 61.5 | 61.5 | 61.5 | 61.5 | 61.5 | 61.5 | 61.5 | 0.4 | 1000.0 |

Photometric test report

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| UGR-Table | Standard room | siteco |
|------------------|----------------------|---------------|

| | | | | | | | | | | | |
|------------------------------|---------------------|------|------|------|------|--------------------|------|------|------|------|------|
| Reflection factor of ceiling | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | |
| Reflection factor of walls | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | |
| Reflection factor of floor | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | |
| Room dimensions | View crosswise (C0) | | | | | View endwise (C90) | | | | | |
| x | y | | | | | | | | | | |
| 2H | 2H | 18.6 | 20.0 | 19.2 | 20.6 | 21.2 | 18.6 | 20.0 | 19.2 | 20.6 | 21.2 |
| | 3H | 20.1 | 21.3 | 20.7 | 21.9 | 22.6 | 20.1 | 21.3 | 20.7 | 21.9 | 22.6 |
| | 4H | 20.7 | 21.9 | 21.3 | 22.5 | 23.1 | 20.7 | 21.9 | 21.3 | 22.5 | 23.1 |
| | 6H | 21.1 | 22.2 | 21.7 | 22.8 | 23.5 | 21.1 | 22.2 | 21.7 | 22.8 | 23.5 |
| | 8H | 21.2 | 22.2 | 21.8 | 22.8 | 23.5 | 21.2 | 22.2 | 21.8 | 22.8 | 23.6 |
| | 12H | 21.3 | 22.2 | 21.9 | 22.8 | 23.6 | 21.3 | 22.3 | 21.9 | 22.9 | 23.6 |
| 4H | 2H | 19.3 | 20.5 | 19.9 | 21.1 | 21.7 | 19.3 | 20.5 | 19.9 | 21.0 | 21.7 |
| | 3H | 21.0 | 22.0 | 21.6 | 22.6 | 23.3 | 21.0 | 22.0 | 21.6 | 22.6 | 23.3 |
| | 4H | 21.7 | 22.6 | 22.3 | 23.2 | 23.9 | 21.7 | 22.5 | 22.3 | 23.2 | 23.9 |
| | 6H | 22.2 | 23.0 | 22.8 | 23.6 | 24.4 | 22.2 | 23.0 | 22.8 | 23.6 | 24.4 |
| | 8H | 22.3 | 23.0 | 23.0 | 23.7 | 24.4 | 22.3 | 23.0 | 23.0 | 23.7 | 24.4 |
| | 12H | 22.4 | 23.0 | 23.1 | 23.7 | 24.5 | 22.5 | 23.1 | 23.1 | 23.8 | 24.5 |
| 8H | 4H | 21.9 | 22.6 | 22.6 | 23.3 | 24.1 | 21.9 | 22.6 | 22.6 | 23.3 | 24.1 |
| | 6H | 22.5 | 23.1 | 23.2 | 23.8 | 24.6 | 22.5 | 23.1 | 23.2 | 23.8 | 24.6 |
| | 8H | 22.7 | 23.2 | 23.4 | 23.9 | 24.8 | 22.7 | 23.2 | 23.4 | 24.0 | 24.8 |
| | 12H | 22.9 | 23.4 | 23.6 | 24.1 | 24.9 | 22.9 | 23.4 | 23.7 | 24.1 | 24.9 |
| 12H | 4H | 22.0 | 22.6 | 22.7 | 23.3 | 24.1 | 22.0 | 22.6 | 22.7 | 23.3 | 24.1 |
| | 6H | 22.6 | 23.1 | 23.3 | 23.8 | 24.6 | 22.6 | 23.1 | 23.3 | 23.8 | 24.6 |
| | 8H | 22.9 | 23.3 | 23.6 | 24.0 | 24.8 | 22.9 | 23.3 | 23.6 | 24.0 | 24.8 |

| | | | |
|------------------------|---|--------------------------------------|----------------|
| Luminance table | Max. for $\gamma \geq 65^\circ$ | Photometric dimensions in mm: | D = 590 |
|------------------------|---|--------------------------------------|----------------|

| C-planes | γ | Luminance in cd/m ² | | | | | | | |
|----------|----------|--------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|--|
| | | 0° 180° | 15° 165° 195° 345° | 30° 150° 210° 330° | 45° 135° 225° 315° | 60° 120° 240° 300° | 75° 105° 255° 285° | 90° 270° | |
| 45° | | 8296.4 | 8374.7 | 8338.0 | 8354.6 | 8315.1 | 8342.9 | 8302.9 | |
| 50° | | 8059.6 | 8151.8 | 8112.1 | 8128.4 | 8088.1 | 8115.3 | 8074.5 | |
| 55° | | 7820.8 | 7919.6 | 7871.6 | 7900.9 | 7846.5 | 7873.8 | 7831.8 | |
| 60° | | 7539.1 | 7650.9 | 7594.5 | 7632.9 | 7565.7 | 7588.1 | 7552.4 | |
| 65° | | 7167.2 | 7303.7 | 7235.5 | 7295.2 | 7207.8 | 7264.4 | 7194.1 | |
| 70° | | 6647.8 | 6843.1 | 6742.3 | 6815.6 | 6714.1 | 6803.5 | 6701.3 | |
| 75° | | 5927.4 | 6157.1 | 6063.9 | 6143.0 | 6043.2 | 6135.9 | 6034.0 | |
| 80° | | 4897.8 | 5214.4 | 5142.6 | 5221.3 | 5136.0 | 5179.3 | 5115.5 | |
| 85° | | 3615.2 | 4285.4 | 4225.9 | 4442.1 | 4280.2 | 4264.1 | 4201.2 | |

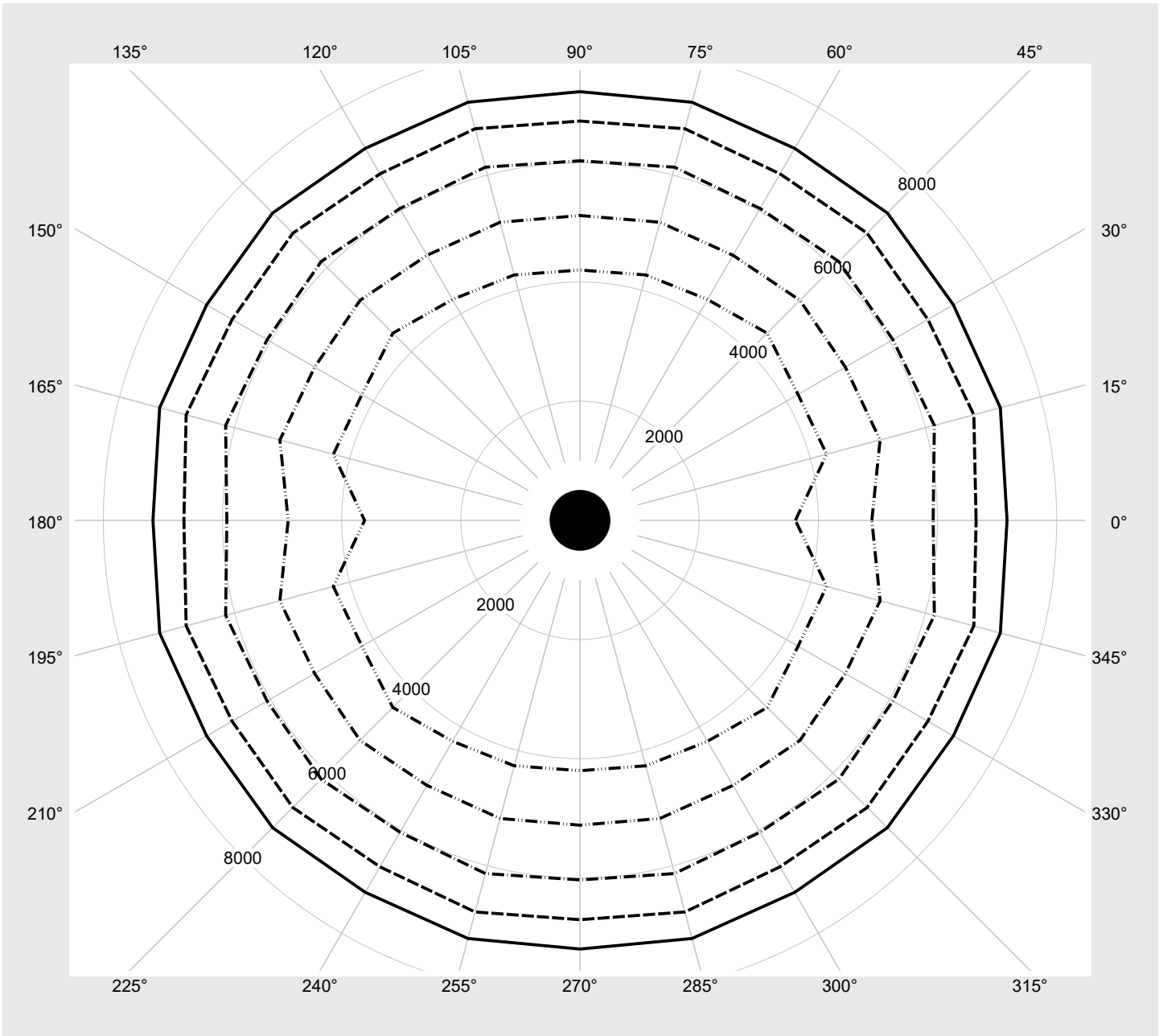
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| | | |
|-----------------------------|---|-----------------------------|
| Family Round 21 M | Order number: 51MR36GM8421B EAN: 4058352881729 | LP number 59513_2 |
|-----------------------------|---|-----------------------------|

Luminance values in cd/m²

γ 65°
 γ 70°
 γ 75°
 γ 80°
 γ 85°

siteco



Photometric test report

| | | |
|----------------------|---|----------------------|
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|----------------------|---|----------------------|

| | | |
|------------------|---------------------------------|---------------|
| Multilumen Table | environmental temperature: 25°C | siteco |
|------------------|---------------------------------|---------------|

| DIP-Step | Switch Setting | | | | Luminous flux [lm] | Power consumption [W] |
|----------|----------------|-----|-----|-----|-----------------------|--------------------------|
| | 1 | 2 | 3 | 4 | | |
| 15 | ON | ON | ON | ON | 8190 | 60.8 |
| 14 | ON | ON | ON | OFF | 7900 | 58.5 |
| 13 | ON | ON | OFF | ON | 7610 | 56.2 |
| 12 | ON | ON | OFF | OFF | 7320 | 54.1 |
| 11 | ON | OFF | ON | ON | 7100 | 51.9 |
| 10 | ON | OFF | ON | OFF | 6800 | 49.6 |
| 9 | ON | OFF | OFF | ON | 6510 | 47.4 |
| 8 | ON | OFF | OFF | OFF | 6210 | 45.1 |
| 7 | OFF | ON | ON | ON | 5970 | 43.0 |
| 6 | OFF | ON | ON | OFF | 5670 | 40.8 |
| 5 | OFF | ON | OFF | ON | 5370 | 38.5 |
| 4 | OFF | ON | OFF | OFF | 5070 | 36.3 |
| 3 | OFF | OFF | ON | ON | 4810 | 34.2 |
| 2 | OFF | OFF | ON | OFF | 4510 | 32.0 |
| 1 | OFF | OFF | OFF | ON | 4200 | 29.6 |
| 0 | OFF | OFF | OFF | OFF | 3900 | 27.7 |