



High Bay Spacing Tables

RAIL® Family

Spacing Tables are to be used for quick reference ONLY. The tables provide average footcandle levels and max:min uniformity ratios for the designated fixture spacing at a given height.

RAB does not recommend all of these configurations. Refer to IES recommended practice for specific Space Applications. For questions contact Lighting Design.

FIXTURE: RAIL90

12,737 Lumens

| Height (ft) | Spacing (ft) | | | | | | | | |
|-------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 10x10 | 15x15 | 20x20 | 25x25 | 30x30 | 35x35 | 40x40 | 45x45 | 50x50 |
| 50 | 75.2 FC | 34.1 FC | 22.7 FC | 14.6 FC | 13.2 FC | 8.1 FC | 7.6 FC | 6.9 FC | 3.9 FC |
| | 2.8:1 | 2.8:1 | 2.3:1 | 2.3:1 | 1.7:1 | 2.1:1 | 1.6:1 | 1.4:1 | 2.5:1 |
| 45 | 78.6 FC | 35.6 FC | 23.8 FC | 15.5 FC | 13.7 FC | 8.5 FC | 7.9 FC | 7.1 FC | 4 FC |
| | 2.9:1 | 3:1 | 2.3:1 | 2.2:1 | 1.6:1 | 2:1 | 1.5:1 | 1.3:1 | 2.9:1 |
| 40 | 82 FC | 37.2 FC | 24.7 FC | 15.9 FC | 14.1 FC | 8.9 FC | 8.1 FC | 7.3 FC | 4.3 FC |
| | 3.1:1 | 3.1:1 | 2.4:1 | 2.4:1 | 1.5:1 | 2.1:1 | 1.6:1 | 1.3:1 | 3.3:1 |
| 35 | 85.5 FC | 38.8 FC | 25.8 FC | 16.6 FC | 14.7 FC | 9.3 FC | 8.6 FC | 7.6 FC | 4.4 FC |
| | 3.3:1 | 3.2:1 | 2.3:1 | 2.3:1 | 1.3:1 | 2.1:1 | 1.4:1 | 1.5:1 | 5.2:1 |
| 30 | 89.3 FC | 40.5 FC | 26.9 FC | 17.6 FC | 15.3 FC | 9.9 FC | 8.9 FC | 7.9 FC | 4.8 FC |
| | 3.5:1 | 3.4:1 | 2.3:1 | 2.3:1 | 1.2:1 | 2.1:1 | 1.9:1 | 2.4:1 | 7.3:1 |
| 25 | 93.2 FC | 42.3 FC | 28.2 FC | 18.2 FC | 15.9 FC | 10.3 FC | 9.4 FC | 8.2 FC | 4.9 FC |
| | 3.7:1 | 3.8:1 | 2.3:1 | 2.8:1 | 1.5:1 | 3.1:1 | 3.4:1 | 4:1 | 12:1 |
| 20 | 97.3 FC | 44.1 FC | 29.6 FC | 19.9 FC | 16.7 FC | 10.8 FC | 10 FC | 8.7 FC | 5 FC |
| | 4.3:1 | 4.3:1 | 2.2:1 | 2.5:1 | 2.7:1 | 5.6:1 | 6.4:1 | 8.4:1 | 31.1:1 |
| 15 | 101.5 FC | 45.9 FC | 31.8 FC | 20.1 FC | 17.7 FC | 11.4 FC | 10.8 FC | 9.4 FC | 5.2 FC |
| | 5.2:1 | 7.5:1 | 3.2:1 | 9.3:1 | 6.8:1 | 14.8:1 | 20:1 | 22.8:1 | 86.4:1 |
| 10 | 109.4 FC | 47.3 FC | 32.6 FC | 21 FC | 19.5 FC | 12.4 FC | 12 FC | 10.6 FC | 5.3 FC |
| | 8.3:1 | 24.4:1 | 14.6:1 | 34.8:1 | 27.3:1 | 68.1:1 | 74.4:1 | 86.5:1 | 366.3:1 |

-Fixture Calculations in 100' x100' open room, 80/50/20 reflectances, readings taken at 2'-6" AFF, CCT 5000K

-Ratios show max:min uniformity

-This information is current as of 6/21/2023.

-The Lighting Analysis provided by RAB Lighting Inc. ("RAB") represents an anticipated prediction of lighting system performance. RAB neither warranties, either implied or stated with regard to actual measured light levels as compared to those illustrated by the Spacing Table. RAB neither warranties, either implied or stated, nor represents the appropriateness, completeness or suitability of the lighting design intent as compliant with any applicable regulatory code requirements. The Spacing Table is issued, in whole or in part, as advisory documents for informational purposes and is not intended for construction nor as being part of a project's construction documentation package.

FIXTURE: RAIL150

20,154 Lumens

| Height (ft) | Spacing (ft) | | | | | | | | |
|-------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 10x10 | 15x15 | 20x20 | 25x25 | 30x30 | 35x35 | 40x40 | 45x45 | 50x50 |
| 50 | 119.2 FC | 54.1 FC | 36.1 FC | 23.2 FC | 20.9 FC | 12.9 FC | 12.1 FC | 10.9 FC | 6.1 FC |
| | 2.8:1 | 2.8:1 | 2.3:1 | 2.3:1 | 1.7:1 | 2.1:1 | 1.6:1 | 1.4:1 | 2.5:1 |
| 45 | 124.7 FC | 56.5 FC | 37.7 FC | 24.6 FC | 21.7 FC | 13.5 FC | 12.5 FC | 11.3 FC | 6.4 FC |
| | 2.9:1 | 3:1 | 2.3:1 | 2.2:1 | 1.6:1 | 2.1:1 | 1.5:1 | 1.3:1 | 2.9:1 |
| 40 | 130.1 FC | 59 FC | 39.2 FC | 25.3 FC | 22.4 FC | 14.1 FC | 12.9 FC | 11.6 FC | 6.8 FC |
| | 3.1:1 | 3.1:1 | 2.5:1 | 2.5:1 | 1.5:1 | 2:1 | 1.7:1 | 1.3:1 | 3.2:1 |
| 35 | 135.6 FC | 61.5 FC | 40.9 FC | 26.4 FC | 23.4 FC | 14.7 FC | 13.6 FC | 12 FC | 7 FC |
| | 3.2:1 | 3.3:1 | 2.3:1 | 2.4:1 | 1.3:1 | 2.1:1 | 1.4:1 | 1.5:1 | 5:1 |
| 30 | 141.5 FC | 64.2 FC | 42.7 FC | 28 FC | 24.2 FC | 15.7 FC | 14.2 FC | 12.4 FC | 7.6 FC |
| | 3.5:1 | 3.4:1 | 2.3:1 | 2.3:1 | 1.2:1 | 2.1:1 | 1.9:1 | 2.4:1 | 7.2:1 |
| 25 | 147.7 FC | 67 FC | 44.7 FC | 28.9 FC | 25.2 FC | 16.3 FC | 14.9 FC | 13 FC | 7.7 FC |
| | 3.7:1 | 3.9:1 | 2.3:1 | 2.8:1 | 1.5:1 | 3.1:1 | 3.4:1 | 4.1:1 | 12.2:1 |
| 20 | 154.2 FC | 69.9 FC | 47 FC | 31.5 FC | 26.4 FC | 17.2 FC | 15.9 FC | 13.8 FC | 8 FC |
| | 4.3:1 | 4.3:1 | 2.2:1 | 2.5:1 | 2.7:1 | 5.6:1 | 6.5:1 | 8.5:1 | 28.8:1 |
| 15 | 160.6 FC | 72.7 FC | 50.4 FC | 31.8 FC | 28.1 FC | 18 FC | 17.2 FC | 14.9 FC | 8.2 FC |
| | 5.3:1 | 7.7:1 | 3.2:1 | 9.5:1 | 6.9:1 | 14.9:1 | 20.5:1 | 24.1:1 | 85.4:1 |
| 10 | 173.1 FC | 74.9 FC | 51.6 FC | 33.2 FC | 31 FC | 19.6 FC | 19 FC | 16.9 FC | 8.4 FC |
| | 8.4:1 | 25:1 | 14.8:1 | 35.7:1 | 27.9:1 | 70.6:1 | 78.7:1 | 87.1:1 | 435.8:1 |

FIXTURE: RAIL175

25,527 Lumens

| Height (ft) | Spacing (ft) | | | | | | | | |
|-------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 10x10 | 15x15 | 20x20 | 25x25 | 30x30 | 35x35 | 40x40 | 45x45 | 50x50 |
| 50 | 151.5 FC | 68.7 FC | 45.8 FC | 29.5 FC | 26.6 FC | 16.4 FC | 15.3 FC | 13.8 FC | 7.8 FC |
| | 2.8:1 | 2.8:1 | 2.3:1 | 2.4:1 | 1.7:1 | 2.2:1 | 1.6:1 | 1.4:1 | 2.6:1 |
| 45 | 158.4 FC | 71.8 FC | 47.9 FC | 31.3 FC | 27.5 FC | 17.1 FC | 15.9 FC | 14.3 FC | 8.1 FC |
| | 2.9:1 | 3:1 | 2.3:1 | 2.2:1 | 1.6:1 | 2.1:1 | 1.5:1 | 1.3:1 | 3:1 |
| 40 | 165.1 FC | 74.9 FC | 49.8 FC | 32.1 FC | 28.5 FC | 17.9 FC | 16.4 FC | 14.7 FC | 8.7 FC |
| | 3.1:1 | 3.1:1 | 2.4:1 | 2.5:1 | 1.6:1 | 2.1:1 | 1.7:1 | 1.3:1 | 3.5:1 |
| 35 | 172.1 FC | 78.1 FC | 51.9 FC | 33.5 FC | 29.6 FC | 18.7 FC | 17.3 FC | 15.2 FC | 8.9 FC |
| | 3.3:1 | 3.3:1 | 2.3:1 | 2.4:1 | 1.3:1 | 2.1:1 | 1.4:1 | 1.6:1 | 5.3:1 |
| 30 | 179.5 FC | 81.5 FC | 54.2 FC | 35.5 FC | 30.7 FC | 20 FC | 18 FC | 15.8 FC | 9.6 FC |
| | 3.6:1 | 3.5:1 | 2.3:1 | 2.3:1 | 1.2:1 | 2.1:1 | 1.9:1 | 2.4:1 | 7.5:1 |
| 25 | 187.4 FC | 85 FC | 56.7 FC | 36.6 FC | 32 FC | 20.7 FC | 18.9 FC | 16.6 FC | 9.8 FC |
| | 3.8:1 | 4:1 | 2.2:1 | 2.9:1 | 1.5:1 | 3.3:1 | 3.5:1 | 4.2:1 | 12.3:1 |
| 20 | 195.5 FC | 88.6 FC | 59.5 FC | 40 FC | 33.5 FC | 21.8 FC | 20.2 FC | 17.5 FC | 10.1 FC |
| | 4.3:1 | 4.3:1 | 2.3:1 | 2.6:1 | 2.8:1 | 5.8:1 | 6.8:1 | 8.8:1 | 32:1 |
| 15 | 203.6 FC | 92.1 FC | 63.9 FC | 40.3 FC | 35.7 FC | 22.8 FC | 21.8 FC | 18.9 FC | 10.4 FC |
| | 5.5:1 | 8:1 | 3.2:1 | 10:1 | 7:1 | 15.8:1 | 21:1 | 24.6:1 | 88.7:1 |
| 10 | 219.2 FC | 94.8 FC | 65.3 FC | 42.1 FC | 39.3 FC | 24.8 FC | 24.1 FC | 21.4 FC | 10.7 FC |
| | 8.6:1 | 26.5:1 | 15.3:1 | 36.8:1 | 28.5:1 | 74.3:1 | 82.2:1 | 92.7:1 | 449:1 |

FIXTURE: RAIL225

34,847 Lumens

| Height (ft) | Spacing (ft) | | | | | | | | |
|-------------|-------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| | 10x10 | 15x15 | 20x20 | 25x25 | 30x30 | 35x35 | 40x40 | 45x45 | 50x50 |
| 50 | 205.5 FC 2.8:1 | 93.3 FC 2.8:1 | 62.2 FC 2.3:1 | 40.1 FC 2.3:1 | 36.1 FC 1.7:1 | 22.3 FC 2.1:1 | 20.8 FC 1.6:1 | 18.8 FC 1.4:1 | 10.5 FC 2.5:1 |
| 45 | 215.1 FC 2.9:1 | 97.6 FC 3:1 | 65.1 FC 2.3:1 | 42.5 FC 2.2:1 | 37.4 FC 1.6:1 | 23.2 FC 2.1:1 | 21.6 FC 1.5:1 | 19.5 FC 1.3:1 | 11 FC 2.9:1 |
| 40 | 224.4 FC 3.1:1 | 101.8 FC 3.1:1 | 67.8 FC 2.4:1 | 43.6 FC 2.5:1 | 38.7 FC 1.6:1 | 24.3 FC 2:1 | 22.3 FC 1.7:1 | 20 FC 1.3:1 | 11.8 FC 3.3:1 |
| 35 | 234 FC 3.3:1 | 106.2 FC 3.3:1 | 70.6 FC 2.3:1 | 45.5 FC 2.4:1 | 40.3 FC 1.3:1 | 25.4 FC 2.1:1 | 23.5 FC 1.4:1 | 20.7 FC 1.5:1 | 12.1 FC 5:1 |
| 30 | 244.2 FC 3.5:1 | 110.9 FC 3.4:1 | 73.8 FC 2.3:1 | 48.3 FC 2.3:1 | 41.9 FC 1.2:1 | 27.1 FC 2.1:1 | 24.5 FC 1.9:1 | 21.5 FC 2.4:1 | 13.1 FC 7.2:1 |
| 25 | 255 FC 3.7:1 | 115.7 FC 3.9:1 | 77.2 FC 2.2:1 | 49.9 FC 2.8:1 | 43.5 FC 1.5:1 | 28.2 FC 3.1:1 | 25.7 FC 3.4:1 | 22.5 FC 4:1 | 13.3 FC 12:1 |
| 20 | 266.3 FC 4.3:1 | 120.7 FC 4.3:1 | 81.1 FC 2.2:1 | 54.5 FC 2.5:1 | 45.6 FC 2.7:1 | 29.7 FC 5.6:1 | 27.4 FC 6.5:1 | 23.8 FC 8.5:1 | 13.8 FC 29.8:1 |
| 15 | 277.3 FC 5.3:1 | 125.6 FC 7.7:1 | 87 FC 3.1:1 | 54.9 FC 9.5:1 | 48.5 FC 6.8:1 | 31.1 FC 14.9:1 | 29.7 FC 20:1 | 25.8 FC 23.6:1 | 14.2 FC 90.4:1 |
| 10 | 299 FC 8.4:1 | 129.3 FC 25.1:1 | 89.1 FC 14.7:1 | 57.4 FC 35.4:1 | 53.5 FC 27.9:1 | 33.8 FC 70.2:1 | 32.9 FC 79.2:1 | 29.1 FC 88.5:1 | 14.5 FC 428.1:1 |

FIXTURE: RAIL400

54,007 Lumens

| Height (ft) | Spacing (ft) | | | | | | | | |
|-------------|-------------------|--------------------|--------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| | 10x10 | 15x15 | 20x20 | 25x25 | 30x30 | 35x35 | 40x40 | 45x45 | 50x50 |
| 50 | 313.6 FC 2.7:1 | 142.6 FC 2.7:1 | 95.2 FC 2.3:1 | 61.3 FC 2.3:1 | 55.2 FC 1.7:1 | 34.1 FC 2.1:1 | 32 FC 1.6:1 | 28.8 FC 1.4:1 | 16.1 FC 2.5:1 |
| 45 | 328.6 FC 2.8:1 | 149.3 FC 2.9:1 | 99.7 FC 2.3:1 | 65 FC 2.2:1 | 57.3 FC 1.6:1 | 35.6 FC 2.1:1 | 33.3 FC 1.5:1 | 29.9 FC 1.3:1 | 16.9 FC 2.8:1 |
| 40 | 343.2 FC 3:1 | 155.9 FC 3.1:1 | 103.9 FC 2.4:1 | 66.9 FC 2.4:1 | 59.4 FC 1.6:1 | 37.3 FC 2.1:1 | 34.3 FC 1.7:1 | 30.7 FC 1.3:1 | 18 FC 3.2:1 |
| 35 | 358.6 FC 3.2:1 | 162.8 FC 3.2:1 | 108.4 FC 2.3:1 | 69.9 FC 2.4:1 | 61.9 FC 1.3:1 | 39.1 FC 2.1:1 | 36.1 FC 1.4:1 | 31.8 FC 1.5:1 | 18.6 FC 4.7:1 |
| 30 | 374.5 FC 3.5:1 | 170.3 FC 3.4:1 | 113.4 FC 2.3:1 | 74.2 FC 2.3:1 | 64.4 FC 1.2:1 | 41.7 FC 2.1:1 | 37.6 FC 1.8:1 | 33.1 FC 2.2:1 | 20.1 FC 6.6:1 |
| 25 | 391.8 FC 3.7:1 | 178 FC 3.9:1 | 118.8 FC 2.2:1 | 76.7 FC 2.8:1 | 67 FC 1.5:1 | 43.3 FC 3.1:1 | 39.6 FC 3.1:1 | 34.7 FC 3.7:1 | 20.5 FC 10.8:1 |
| 20 | 409.7 FC 4.2:1 | 186 FC 4.2:1 | 124.9 FC 2.2:1 | 83.9 FC 2.5:1 | 70.2 FC 2.5:1 | 45.7 FC 5.2:1 | 42.2 FC 6.1:1 | 36.5 FC 7.8:1 | 21.3 FC 26.3:1 |
| 15 | 427.4 FC 5.3:1 | 194 FC 7.3:1 | 134.1 FC 3:1 | 84.6 FC 8.9:1 | 74.6 FC 6.1:1 | 48 FC 14.1:1 | 45.7 FC 17.7:1 | 39.6 FC 21.3:1 | 22 FC 80.2:1 |
| 10 | 462.2 FC 8:1 | 200.4 FC 23.4:1 | 137.7 FC 13.6:1 | 88.6 FC 31.3:1 | 82 FC 25.2:1 | 52.4 FC 66.9:1 | 50.5 FC 72.5:1 | 44.6 FC 81.4:1 | 22.6 FC 374:1 |