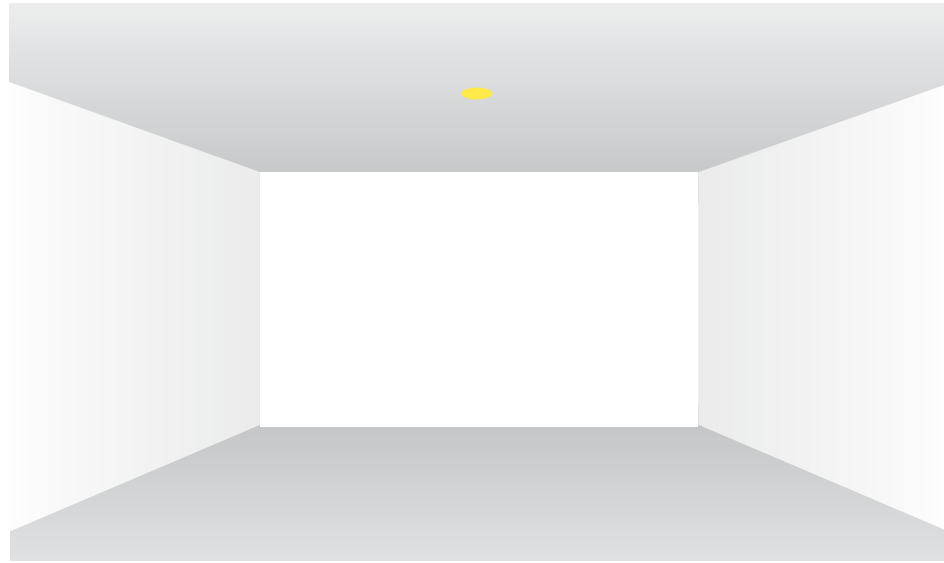


# 4" ProTools Single Downlight - Performance

WG 100SPTD, WG 100RPTD, WG 100SPTDL, WG 100RPTDL, WG 100SPTDLX, WG 100SPTDLX



The ProTools series offers Plaster Trim and Bezel Trim fixed, wall wash and adjustable downlights with various cover options and accessories creating a flexible and versatile range of luminaires with a single consistent minimal appearance throughout.

A downlight can be used to deliver general light over a broad area, or a focused beam of concentrated light. Suitable for general area lighting in single units, grid patterns or groups as well as focused lighting and task oriented application.

This design guide provides the average light levels and beam spread which can be expected at task and floor level from a single downlight at the ceiling heights shown, and relative to the performance of each luminaire.

Refer to the diagram on the left, select your luminaire, ceiling height and distance, and read off the light level achieved in the table below.

Calculated on the following basis:

### Reflectances

Ceiling 70%  
Walls 50%  
Floor 20%

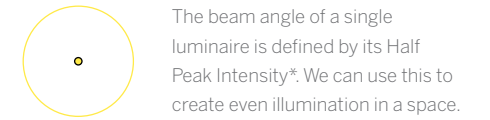
### Maintenance factor

1.0

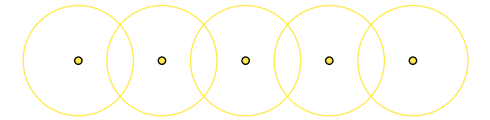
### LED

High Power  
3000 Kelvin  
90 CRI

How to create 'Even Illumination' in a space:

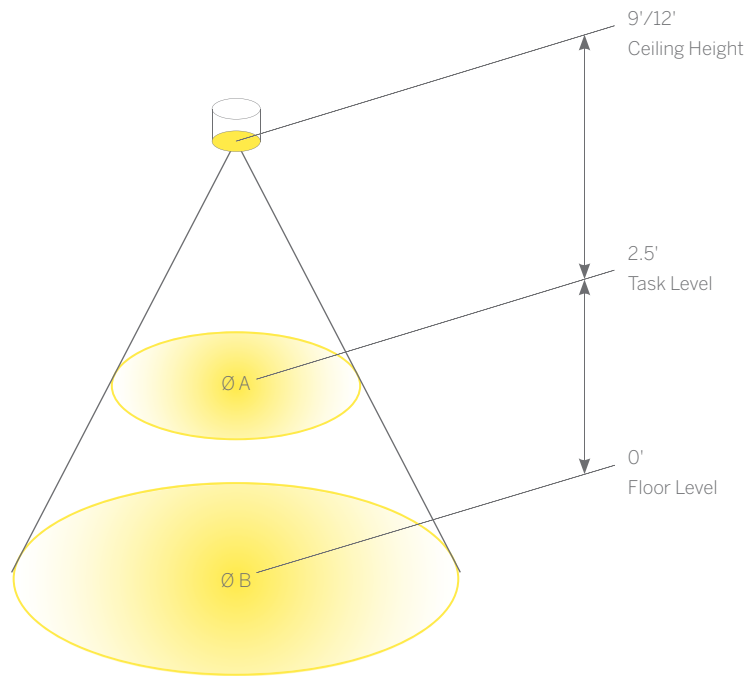


Arrange luminaires equally. Use the center of the luminaire as a base and ensure that neighboring beam spreads touch or slightly overlap.



\*The point at which the beam reaches half of the intensity relative to the center of its beam.

## Average Light Levels



The diagram shows the average light level achieved, across an area the size shown, at the given distance from a single luminaire.

Product Code	Beam Spread
WG 100SPTD, WG 100RPTD	- 90°
WG 100SPTDL, WG 100RPTDL	- 16°
	- 32°
	- 41°
WG 100SPTDLX, WG 100SPTDLX	- 16°
	- 32°
	- 41°
	- 8°

## Calculation Results

Fixtures	Power	Beam	Accessory	Ceiling Height	Ø A	Task Level (2.5') Average	Ø B	Floor Level (0') Average
WG 100SPTD, WG 100RPTD	1512lm*	90°	Flush Lens	9.0'	Ø 13'	6.4 fc	Ø 18'	3.7 fc
				12.0'	Ø 19'	3.1 fc	Ø 24'	2.1 fc
WG 100SPTDL, WG 100RPTDL, WG 100SPTDLX, WG 100SPTDLX	2027lm*	16°	Open Aperture	9.0'	Ø 1.8'	102 fc	Ø 2.5'	54 fc
				12.0'	Ø 2.7'	49 fc	Ø 3.4'	31 fc
				9.0'	Ø 4.2'	33 fc	Ø 5.8'	18 fc
12.0'	Ø 6.2'	16 fc	Ø 7.8'					
9.0'	Ø 5'	24 fc	Ø 6.7'	13 fc				
					12.0'	Ø 7.1'	12 fc	Ø 8.9'
WG 100SPTDLX, WG 100SPTDLX	1638lm*	8°	Glare Shield/ Snoot	9.0'	Ø 0.9'	277 fc	Ø 1.2'	149 fc
				12.0'	Ø 1.3'	132 fc	Ø 1.7'	82 fc

Values in Foot Candles

### 4" ProTools D Downlight All Covers

Product Details

76-77

### 4" ProTools DL Downlight All Covers

Product Details

82-85

### 4" ProTools DL Adjustable All Covers

Product Details

88-93

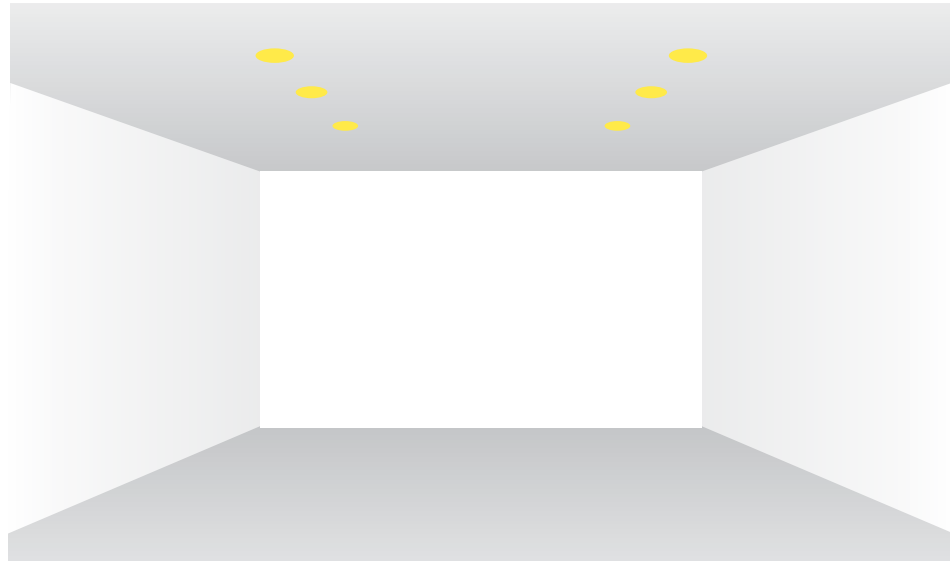
### 4" ProTools DLX Downlight All Covers

Product Details

94-99

# 4" ProTools Multiple Downlight - Grid Set Out

WG 100SPTD, WG 100RPTD, WG 100SPTDL, WG 100RPTDL, WG 100SPTDLX, WG 100SPTDLX



Plaster Trim and Bezel Trim fixed, wall wash and adjustable downlights with various cover options and accessories creating a flexible and versatile range of luminaires with a single consistent minimal appearance throughout.

A downlight can be used to deliver general light over a broad area, or a focused beam of concentrated light. Suitable for general area lighting in single units, grid patterns or groups as well as focused lighting and task oriented application.

This design guide provides the average light levels which can be expected at floor level from a grid of downlights at the ceiling heights shown, and relative to the performance of each luminaire.

Refer to the diagram on the left, select your luminaire, ceiling height and set out, and read off the light level achieved in the table below.

Calculated in a 20'x20' room size and on the following basis:

### Reflectances

Ceiling 70%  
Walls 50%  
Floor 20%

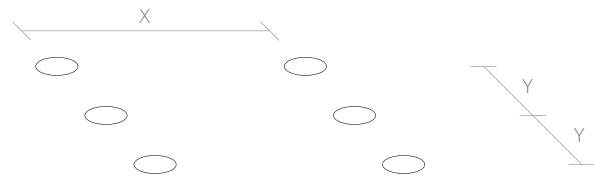
### Maintenance factor

1.0

### LED

High Power  
3000 Kelvin  
90 CRI

## Light Levels



The diagram and table can be read to establish light levels achieved when luminaires are set out at the dimensions indicated, at the ceiling heights shown.

Product Code	Beam Spread
WG 100SPTD, WG 100RPTD	- 90°
WG 100SPTDL, WG 100RPTDL	- 32° - 41°
WG 100SPTDLX, WG 100SPTDLX	- 32° - 41°

X = luminaire spacing center to center  
Y = distance between rows

## Calculation Results

Fixtures	Power	Beam	Accessory	Ceiling Height	Y	X		
						Average Light Levels (fc)		
						4.0'	6.0'	8.0'
WG 100SPTD, WG 100RPTD	1512lm*	90°	Flush Lens	9.0'	4.0'	46	38	34
					6.0'	38	32	28
					8.0'	34	28	25
				12.0'	4.0'	35	30	27
					6.0'	30	27	23
					8.0'	27	23	21
WG 100SPTDL, WG 100RPTDL, WG 100SPTDLX, WG 100SPTDLX	2027lm*	32°	Open Aperture	9.0'	4.0'	33	32	29
					6.0'	32	30	28
					8.0'	30	28	26
				12.0'	4.0'	30	29	27
					6.0'	29	28	26
					8.0'	27	26	24
		41°	Open Aperture	9.0'	4.0'	32	31	28
					6.0'	30	29	27
					8.0'	28	27	25
				12.0'	4.0'	29	28	25
					6.0'	28	26	24
					8.0'	25	24	22

Values in Foot Candles

4" ProTools D Downlight  
All Covers

4" ProTools DL Downlight  
All Covers

4" ProTools DL Adjustable  
All Covers

4" ProTools DLX Downlight  
All Covers

Product Details

76-77

Product Details

82-85

Product Details

88-93

Product Details

94-99