

Sample Applications for DualLED 2x2

Open Area

The controlled high angle lighting distribution of DualLED provides diffuse uniform lighting with balanced brightness and creates significant vertical illumination. Wide luminaire spacing is possible.

A sample area:

40' long x 24' wide x 9' ceiling

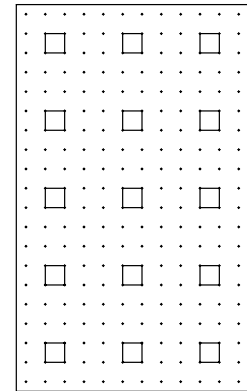
80/50/20 reflectances

Calculation grid at 2.5'

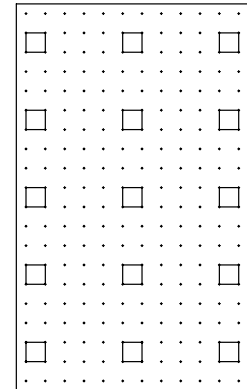
Maintenance factors 0.85 LLD, 0.94 LDD, 0.799 LLF

Spacing	Number of Luminaires	Model	Maintained Average Illumination	Max./Min.	Input Power per lum.	Watts/Sq. foot
8'x8'	15	2DLG27L840-2-D	30.7 fc	2.1	31W	0.48
		2DLG34L840-2-D	38.8 fc	2.1	39W	0.61
		2DLG38L840-2-D	43.6 fc	2.2	45W	0.70
		2DLG44L840-2-D	50.7 fc	2.1	54W	0.84
8'x10'	15	2DLG27L840-2-D	28.8 fc	1.8	31W	0.48
		2DLG34L840-2-D	36.5 fc	1.8	39W	0.61
		2DLG38L840-2-D	41.0 fc	1.8	45W	0.70
		2DLG44L840-2-D	47.7 fc	1.8	54W	0.84
10'x10'	12	2DLG27L840-2-D	23.2 fc	2.0	31W	0.39
		2DLG34L840-2-D	29.4 fc	2.0	39W	0.49
		2DLG38L840-2-D	33.1 fc	2.0	45W	0.56
		2DLG44L840-2-D	38.4 fc	2.0	54W	0.68
10'x12'	12	2DLG27L840-2-D	21.7 fc	1.7	31W	0.39
		2DLG34L840-2-D	27.5 fc	1.7	39W	0.49
		2DLG38L840-2-D	30.9 fc	1.7	45W	0.56
		2DLG44L840-2-D	35.9 fc	1.7	54W	0.68

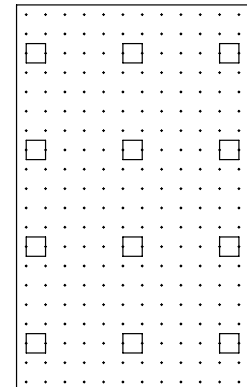
Uniformity is excellent at 2.2 or less, even when moving to extended 10'x12' luminaire spacing. High delivered lumen options allow the extended spacing to provide IES recommended illumination levels for many tasks. Smooth, uniform lighting at recommended light levels with good vertical illumination is available with power density between 0.5 and 0.85 Watts per square foot, satisfying any known energy codes.



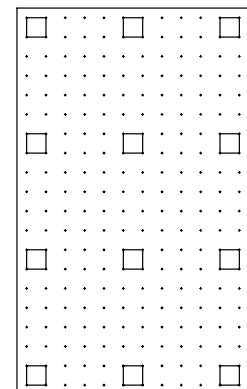
8x8



8x10



10x10



10x12

Corridor

DuaLED allows uniform corridor lighting with wide luminaire spacing and good vertical illumination with reduced scalloping.

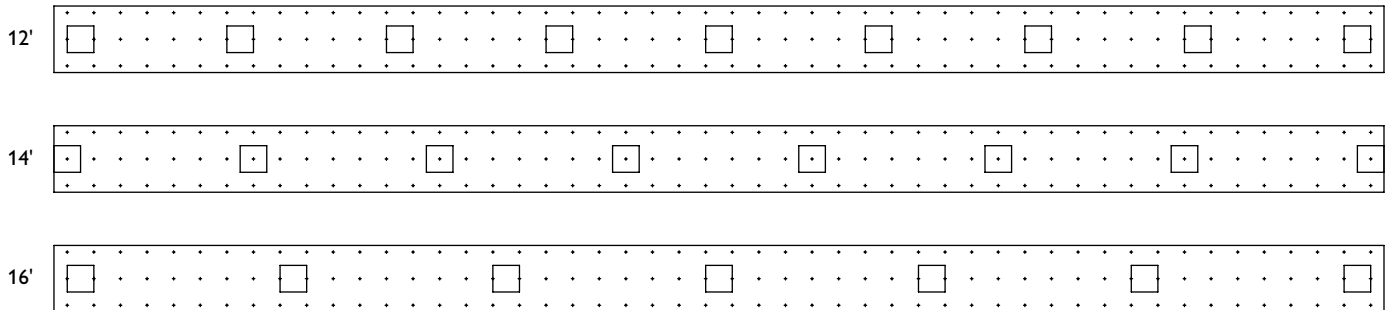
A sample corridor:

100' long x 5' wide x 9' ceiling

80/50/20 reflectances

Calculation grid at 2.5'

Maintenance factors 0.85 LLD, 0.94 LDD, 0.799 LLF



Spacing	Number of Luminaires	Model	Maintained Average Illumination	Max./Min.	Input Power per lum.	Watts/ Sq. foot
12'	9	2DLG27L840-2-D	19.6 fc	1.9	31W	0.56
		2DLG34L840-2-D	24.8 fc	1.9	39W	0.70
		2DLG38L840-2-D	27.8 fc	1.9	45W	0.81
		2DLG44L840-2-D	32.3 fc	1.9	54W	0.97
14'	8	2DLG27L840-2-D	16.9 fc	2.6	31W	0.50
		2DLG34L840-2-D	21.4 fc	2.6	39W	0.62
		2DLG38L840-2-D	24.1 fc	2.6	45W	0.72
		2DLG44L840-2-D	28.0 fc	2.6	54W	0.86
16'	7	2DLG27L840-2-D	15.0 fc	3.3	31W	0.43
		2DLG34L840-2-D	18.9 fc	3.3	39W	0.55
		2DLG38L840-2-D	21.3 fc	3.3	45W	0.63
		2DLG44L840-2-D	24.8 fc	3.3	54W	0.76

Uniformity is excellent at less than 3 to 1 with 12' or 14' spacing and only 3.3 to 1 at extended 16' spacing. Smooth, uniform lighting at recommended light levels with good vertical illumination is available with power density less than 0.5 Watts per square foot.