

Description

Lighting Study with 78 x high bay 200W at 10 m height

Technical Engineer

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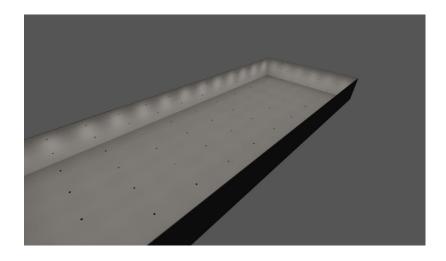
1



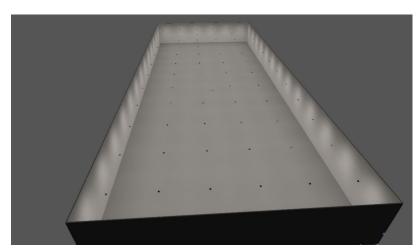
Images

Evedal

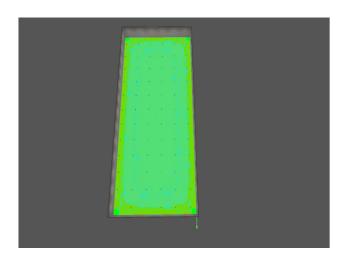
Lighting Study with high bay 200W at 10 m height



Production hall



Calculation of Production hall





Luminaire list

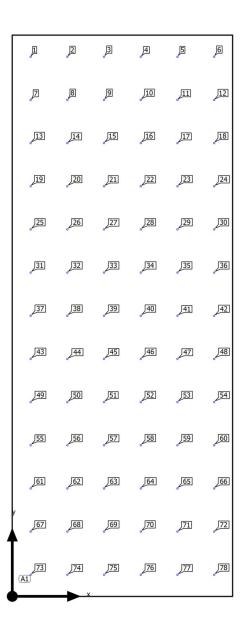
 Φ_{total}
 P_{total}
 Luminous efficacy

 2262000 lm
 15600.0 W
 145.0 lm/W

| pcs. | Manufacturer Article No | . Article name | Р | Φ | Luminous efficacy |
|------|-------------------------|-----------------------|---------|----------|-------------------|
| 78 | Philips | BY698P LED265CW G2 WB | 200.0 W | 29000 lm | 145.0 lm/W |

3

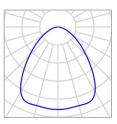






Luminaire layout plan





| Manufacturer | Philips |
|--------------|--------------------------|
| Article name | BY698P LED265CW G2 WB |
| Fitting | 1x LED |

| Р | 200.0 W |
|--------------------|----------|
| $\Phi_{Luminaire}$ | 29000 lm |

78 x Philips BY698P LED265CW G2 WB

| Туре | Field Arrangement |
|-----------------------|--------------------------------------|
| 1st luminaire (X/Y/Z) | 3.890 m / 4.574 m / 10.000 m |
| X-direction | 6 pcs., Centre - centre, 7.780 m |
| Y-direction | 13 pcs., Centre - centre, 9.148 m |
| Arrangement | A1 |

| X | Υ | Mounting height | Luminaire |
|----------|-----------|--------------------|-----------|
| 3.890 m | 114.356 m | 10.000 m | 1 |
| 11.670 m | 114.356 m | 10.000 m | 2 |
| 19.450 m | 114.356 m | 10.000 m | 3 |
| 27.230 m | 114.356 m | 10.000 m | 4 |
| 35.010 m | 114.356 m | 10.000 m | 5 |
| 42.790 m | 114.356 m | 10.000 m | 6 |
| 3.890 m | 105.207 m | 10.000 m | 7 |
| 11.670 m | 105.207 m | 10.000 m | 8 |
| 19.450 m | 105.207 m | 10.000 m | 9 |
| 27.230 m | 105.207 m | 10.000 m | 10 |
| 35.010 m | 105.207 m | 10.000 m | 11 |
| 42.790 m | 105.207 m | 10.000 m | 12 |
| 3.890 m | 96.059 m | 10.000 m | 13 |



| X | Υ | Mounting height | Luminaire |
|----------|----------|--------------------|-----------|
| 11.670 m | 96.059 m | 10.000 m | 14 |
| 19.450 m | 96.059 m | 10.000 m | 15 |
| 27.230 m | 96.059 m | 10.000 m | 16 |
| 35.010 m | 96.059 m | 10.000 m | 17 |
| 42.790 m | 96.059 m | 10.000 m | 18 |
| 3.890 m | 86.910 m | 10.000 m | 19 |
| 11.670 m | 86.910 m | 10.000 m | 20 |
| 19.450 m | 86.910 m | 10.000 m | 21 |
| 27.230 m | 86.910 m | 10.000 m | 22 |
| 35.010 m | 86.910 m | 10.000 m | 23 |
| 42.790 m | 86.910 m | 10.000 m | 24 |
| 3.890 m | 77.762 m | 10.000 m | 25 |
| 11.670 m | 77.762 m | 10.000 m | 26 |
| 19.450 m | 77.762 m | 10.000 m | 27 |
| 27.230 m | 77.762 m | 10.000 m | 28 |
| 35.010 m | 77.762 m | 10.000 m | 29 |
| 42.790 m | 77.762 m | 10.000 m | 30 |
| 3.890 m | 68.613 m | 10.000 m | 31 |
| 11.670 m | 68.613 m | 10.000 m | 32 |
| 19.450 m | 68.613 m | 10.000 m | 33 |
| 27.230 m | 68.613 m | 10.000 m | 34 |
| 35.010 m | 68.613 m | 10.000 m | 35 |
| 42.790 m | 68.613 m | 10.000 m | 36 |
| 3.890 m | 59.465 m | 10.000 m | 37 |



| X | Υ | Mounting height | Luminaire |
|----------|----------|--------------------|-----------|
| 11.670 m | 59.465 m | 10.000 m | 38 |
| 19.450 m | 59.465 m | 10.000 m | 39 |
| 27.230 m | 59.465 m | 10.000 m | 40 |
| 35.010 m | 59.465 m | 10.000 m | 41 |
| 42.790 m | 59.465 m | 10.000 m | 42 |
| 3.890 m | 50.317 m | 10.000 m | 43 |
| 11.670 m | 50.317 m | 10.000 m | 44 |
| 19.450 m | 50.317 m | 10.000 m | 45 |
| 27.230 m | 50.317 m | 10.000 m | 46 |
| 35.010 m | 50.317 m | 10.000 m | 47 |
| 42.790 m | 50.317 m | 10.000 m | 48 |
| 3.890 m | 41.168 m | 10.000 m | 49 |
| 11.670 m | 41.168 m | 10.000 m | 50 |
| 19.450 m | 41.168 m | 10.000 m | 51 |
| 27.230 m | 41.168 m | 10.000 m | 52 |
| 35.010 m | 41.168 m | 10.000 m | 53 |
| 42.790 m | 41.168 m | 10.000 m | 54 |
| 3.890 m | 32.020 m | 10.000 m | 55 |
| 11.670 m | 32.020 m | 10.000 m | 56 |
| 19.450 m | 32.020 m | 10.000 m | 57 |
| 27.230 m | 32.020 m | 10.000 m | 58 |
| 35.010 m | 32.020 m | 10.000 m | 59 |
| 42.790 m | 32.020 m | 10.000 m | 60 |
| 3.890 m | 22.871 m | 10.000 m | 61 |



| X | Υ | Mounting height | Luminaire |
|----------|----------|--------------------|-----------|
| 11.670 m | 22.871 m | 10.000 m | 62 |
| 19.450 m | 22.871 m | 10.000 m | 63 |
| 27.230 m | 22.871 m | 10.000 m | 64 |
| 35.010 m | 22.871 m | 10.000 m | 65 |
| 42.790 m | 22.871 m | 10.000 m | 66 |
| 3.890 m | 13.723 m | 10.000 m | 67 |
| 11.670 m | 13.723 m | 10.000 m | 68 |
| 19.450 m | 13.723 m | 10.000 m | 69 |
| 27.230 m | 13.723 m | 10.000 m | 70 |
| 35.010 m | 13.723 m | 10.000 m | 71 |
| 42.790 m | 13.723 m | 10.000 m | 72 |
| 3.890 m | 4.574 m | 10.000 m | 73 |
| 11.670 m | 4.574 m | 10.000 m | 74 |
| 19.450 m | 4.574 m | 10.000 m | 75 |
| 27.230 m | 4.574 m | 10.000 m | 76 |
| 35.010 m | 4.574 m | 10.000 m | 77 |
| 42.790 m | 4.574 m | 10.000 m | 78 |



Luminaire list

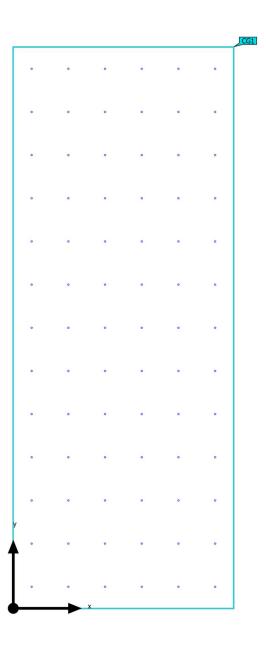
| Φ_{total} | P_{total} | Luminous efficacy |
|-----------------------|-------------|-------------------|
| 2262000 lm | 15600.0 W | 145.0 lm/W |

| pcs. | Manufacturer | Article No. | Article name | Р | Φ | Luminous efficacy |
|------|--------------|-------------|-----------------------|---------|----------|-------------------|
| 78 | Philips | | BY698P LED265CW G2 WB | 200.0 W | 29000 lm | 145.0 lm/W |



Building 1 · Storey 1 · Room 1 (Light scene 1)

Calculation objects





Building 1 · Storey 1 · Room 1 (Light scene 1)

Calculation objects

Calculation surfaces

| Properties | Ē | Emin | E _{max} | U₀ (g₁) | g ₂ | Index |
|--|--------|--------|------------------|---------|-----------------------|-------|
| Calculation of Production hall Perpendicular illuminance Height: 0.100 m | 329 lx | 182 lx | 373 lx | 0.55 | 0.49 | CG1 |

Utilisation profile: DIALux presetting (5.26.2 Standard (office))



Building 1 · Storey 1 · Room 1 (Light scene 1)

Calculation of Production hall



,25g31(234)344535(356)35(356)35(354)35(234)634(30(22)3 ,25g30(334)234(235)356)35(35)35(35)35(35)34(234)230(25)3 ,25g30(334)24(235)35(35)35(35)35(334)234(230)255 ,25g334)24(2356)35(337)356337(337)235(237)35(335)35(34)254 _255304343348354366358365365358362355348343304555 +264314342352363374362372373862374364356342314254 ,262311347355361372365372372365372361354347311252 ,261309345353360371363370370363371360352346309250 ,259305343349356367359366366360367359349347394725 ,269319347353369374363379379363374359352346309250 ,263317247355364377365374372365374364354347814252 ,255305343349356362359366366359362356349342304255 ,260309346354359370364369369364370359354345302259 26431434835636337236737387236737236335634731325 ,25G30G34434Q35G36Z35Q36G36G35G35G35G34Q34Z304255 ,25G30G34434Q35G36G36G36G236G35G35G34Q34430G257 ,2643-434,25C,36337,136237237,236237,1363366342374264 ,255304343349355362359365365365365365342342304255 ,256304342342342354362356365365355434234234256 ,263314346356362370366374374362370362355346314263 ,265303344342353366352365365352365353342342303255 .252302340345352364356363363356364352345340302263 ,260310343352358362363368368363362359352343310250 ,2523093883433503623533643643533623503433388300252 ,2+62°95332389344356848355356348356345338338455246 ,2+92°92333333344355334935335434353345339383239252 ,23289348322328333333333333333333283223482823

| Properties | Ē | E _{min} | E _{max} | U₀ (g₁) | g ₂ | Index |
|--|--------|------------------|------------------|---------|-----------------------|-------|
| Calculation of Production hall Perpendicular illuminance Height: 0.100 m | 329 lx | 182 lx | 373 lx | 0.55 | 0.49 | CG1 |

Utilisation profile: DIALux presetting (5.26.2 Standard (office))