
Lotus LED Lights

Client:

LumCAT: LFR-4R-RB-9W-5CCT-5000K

Luminaire: Fire rated slim panel

Report No:

Ballast type:

Test No: LCZP23080240

Voltage(V): 120.030

LampCAT:

Current(A): 0.096

Lamp flux(lm): 1078.5

Power (W): 9.720

Number of Lamps: 1

PF: 0.847

Length(mm): -80

Width(mm): -80

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1078.48, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 110.95

Central intensity(cd): 453.741, Maximum intensity(cd): 453.741

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=99.0

[C90/270]Total=97.8

Field angle(10%Imax): [C0/180]Total=149.6

[C90/270]Total=148.6

Maximum s/h(1/2): C0_180=1.20 C90_270=1.19

Maximum s/h(1/4): C0_180=1.30 C90_270=1.29

Up flux rate of lamp(%): 0.24%

Down flux rate of lamp(%): 99.76%

Up flux rate of LUM(%): 0.24%

Down flux rate of LUM(%): 99.76%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 84.712%

Lotus LED Lights LFR-4R-RB-9W-5CCT-5000K

Zonal flux distribution table

Appendix Page: 2 Total:12

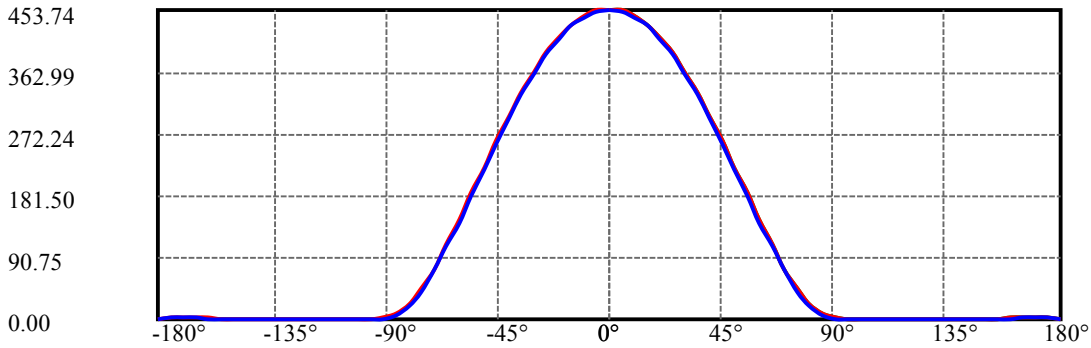
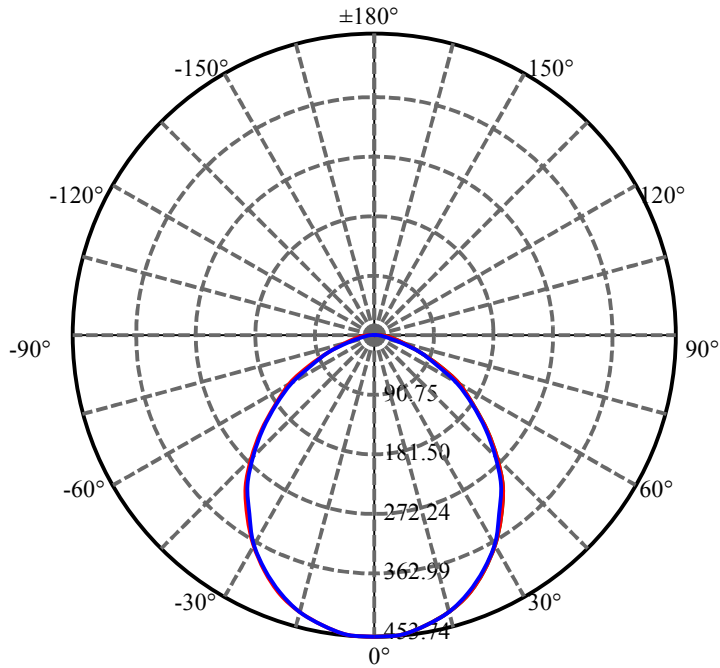
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 453.741 | 0.000 | 0 | 0.00% | 0.00% |
| 5.0 | 451.084 | 10.817 | 10.817 | 1.00% | 1.00% |
| 10.0 | 443.487 | 32.002 | 42.819 | 2.97% | 3.97% |
| 15.0 | 430.275 | 51.831 | 94.65 | 4.81% | 8.78% |
| 20.0 | 412.385 | 69.447 | 164.097 | 6.44% | 15.22% |
| 25.0 | 389.817 | 84.136 | 248.233 | 7.80% | 23.02% |
| 30.0 | 362.911 | 95.258 | 343.491 | 8.83% | 31.85% |
| 35.0 | 330.758 | 102.148 | 445.639 | 9.47% | 41.32% |
| 40.0 | 295.916 | 104.556 | 550.194 | 9.69% | 51.02% |
| 45.0 | 259.649 | 102.867 | 653.062 | 9.54% | 60.55% |
| 50.0 | 220.729 | 97.067 | 750.129 | 9.00% | 69.55% |
| 55.0 | 182.555 | 87.687 | 837.817 | 8.13% | 77.69% |
| 60.0 | 145.282 | 75.779 | 913.595 | 7.03% | 84.71% |
| 65.0 | 107.631 | 61.484 | 975.079 | 5.70% | 90.41% |
| 70.0 | 72.977 | 45.731 | 1020.81 | 4.24% | 94.65% |
| 75.0 | 42.328 | 30.139 | 1050.949 | 2.79% | 97.45% |
| 80.0 | 19.120 | 16.442 | 1067.391 | 1.52% | 98.97% |
| 85.0 | 5.537 | 6.700 | 1074.091 | 0.62% | 99.59% |
| 90.0 | 0.972 | 1.782 | 1075.873 | 0.17% | 99.76% |
| 95.0 | 0.000 | 0.266 | 1076.139 | 0.02% | 99.78% |
| 100.0 | 0.000 | 0.000 | 1076.139 | 0.00% | 99.78% |
| 105.0 | 0.150 | 0.040 | 1076.179 | 0.00% | 99.79% |
| 110.0 | 0.187 | 0.088 | 1076.267 | 0.01% | 99.80% |
| 115.0 | 0.075 | 0.066 | 1076.333 | 0.01% | 99.80% |
| 120.0 | 0.112 | 0.046 | 1076.379 | 0.00% | 99.81% |
| 125.0 | 0.075 | 0.043 | 1076.422 | 0.00% | 99.81% |
| 130.0 | 0.037 | 0.024 | 1076.447 | 0.00% | 99.81% |
| 135.0 | 0.449 | 0.098 | 1076.545 | 0.01% | 99.82% |
| 140.0 | 0.823 | 0.235 | 1076.78 | 0.02% | 99.84% |
| 145.0 | 0.898 | 0.287 | 1077.068 | 0.03% | 99.87% |
| 150.0 | 0.898 | 0.265 | 1077.332 | 0.02% | 99.89% |
| 155.0 | 0.898 | 0.227 | 1077.559 | 0.02% | 99.91% |
| 160.0 | 1.609 | 0.263 | 1077.822 | 0.02% | 99.94% |
| 165.0 | 1.796 | 0.281 | 1078.103 | 0.03% | 99.97% |
| 170.0 | 1.796 | 0.213 | 1078.316 | 0.02% | 99.99% |
| 175.0 | 1.796 | 0.129 | 1078.445 | 0.01% | 100.00% |
| 180.0 | 0.898 | 0.032 | 1078.477 | 0.00% | 100.00% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|---------|---------|
| 0-30 | 343.49 | 31.85% | 31.85% |
| 0-40 | 550.19 | 51.02% | 51.02% |
| 0-60 | 913.60 | 84.71% | 84.71% |
| 0-90 | 1075.87 | 99.76% | 99.76% |
| 0-120 | 1076.38 | 99.81% | 99.81% |
| 0-180 | 1078.48 | 100.00% | 100.00% |
| 60-90 | 162.28 | 15.05% | 15.05% |
| 90-120 | 0.51 | 0.05% | 0.05% |
| 90-130 | 0.57 | 0.05% | 0.05% |
| 90-150 | 1.46 | 0.14% | 0.14% |
| 90-180 | 2.57 | 0.24% | 0.24% |
| 0-56.65 | 862.78 | 80.00% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 42.82 |
| 10-20 | 121.28 |
| 20-30 | 179.39 |
| 30-40 | 206.70 |
| 40-50 | 199.93 |
| 50-60 | 163.47 |
| 60-70 | 107.21 |
| 70-80 | 46.58 |
| 80-90 | 8.48 |
| 90-100 | 0.27 |
| 100-110 | 0.13 |
| 110-120 | 0.11 |
| 120-130 | 0.07 |
| 130-140 | 0.33 |
| 140-150 | 0.55 |
| 150-160 | 0.49 |
| 160-170 | 0.49 |
| 170-180 | 0.13 |



C0(Max): —————

C0/C180: —————

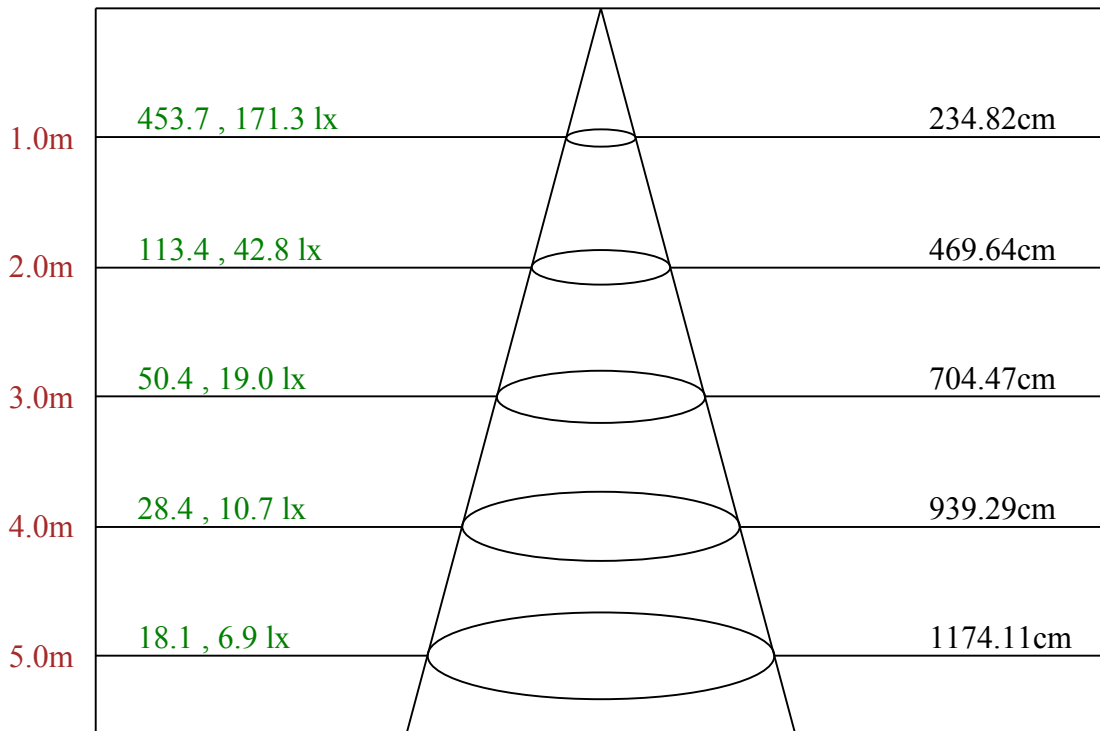
C90/C270: —————

Field angle(10%Imax):C0/180Left:74.8 Right:74.8

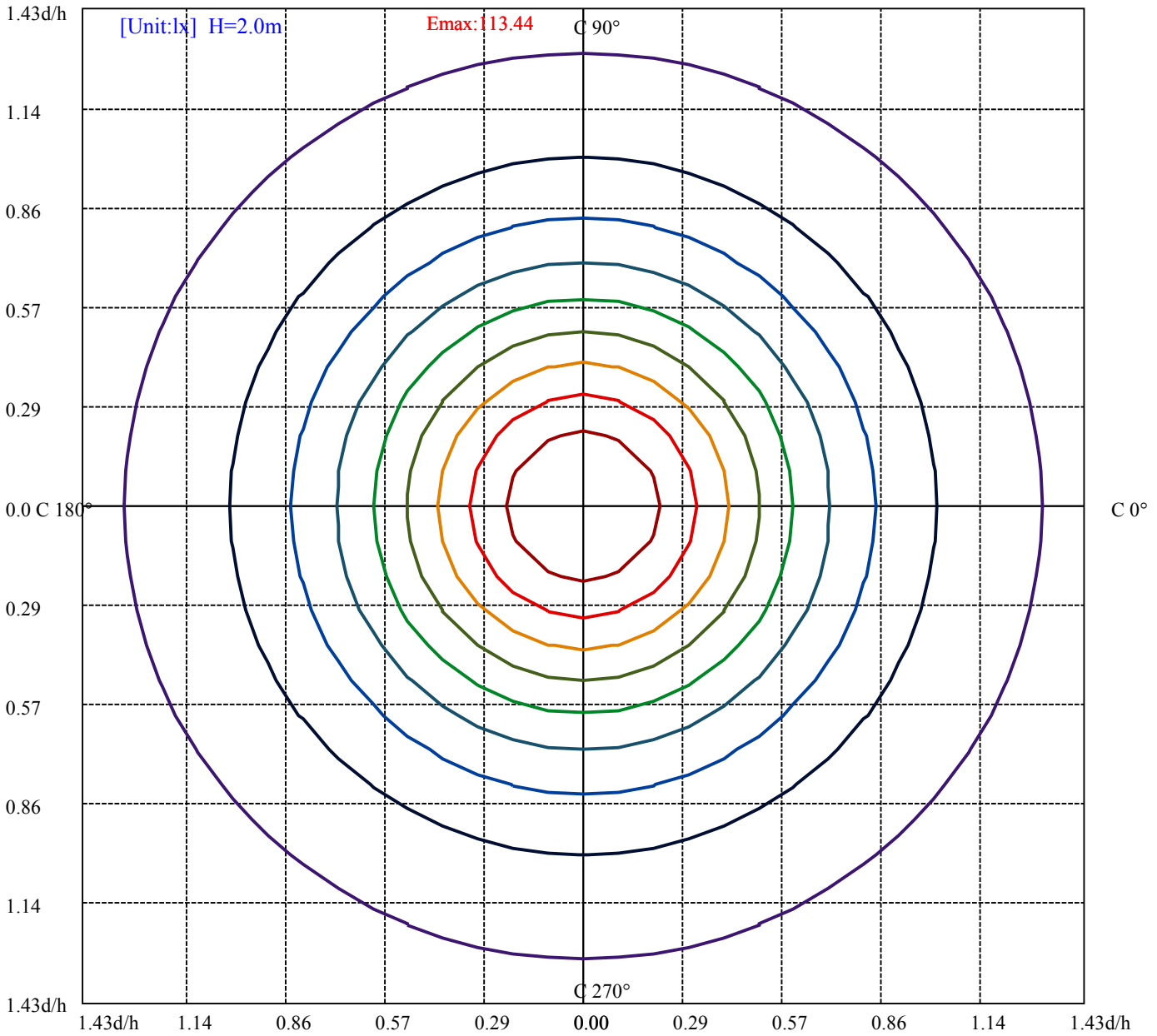
:C90/270Left:74.3 Right:74.3

Beam Angle(50%Imax):C0/180Left:49.5 Right:49.5

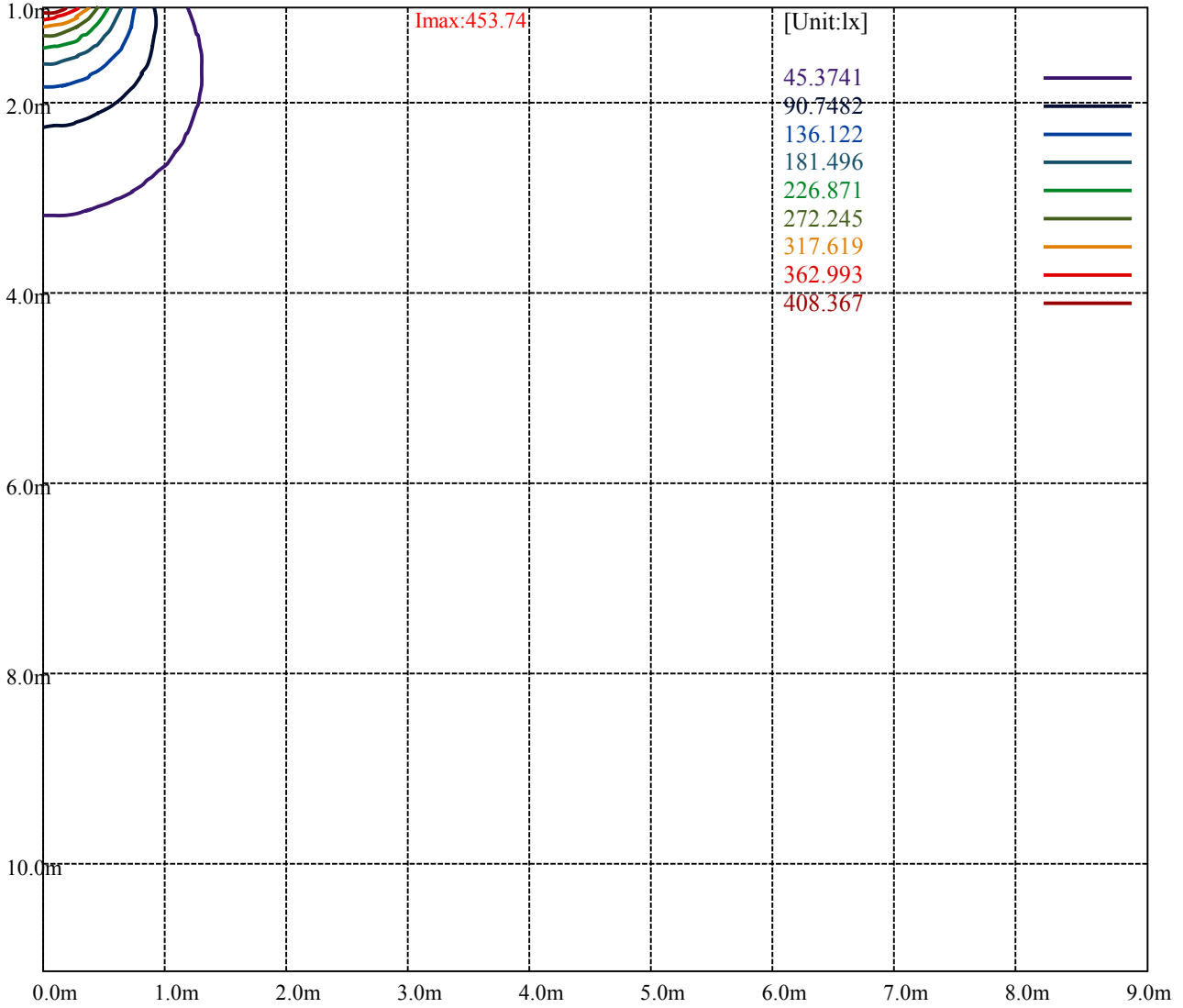
:C90/270Left:48.9 Right:48.9



Max , Ave Beam angle of C0 plane 99.16



- (10%Emax) 11.34352
- (20%Emax) 22.68705
- (30%Emax) 34.0305
- (40%Emax) 45.374
- (50%Emax) 56.71775
- (60%Emax) 68.06125
- (70%Emax) 79.40475
- (80%Emax) 90.74825
- (90%Emax) 102.0918



Lotus LED Lights LFR-4R-RB-9W-5CCT-5000K

Luminance Limiting Curve(no luminous side)

Luminance Table

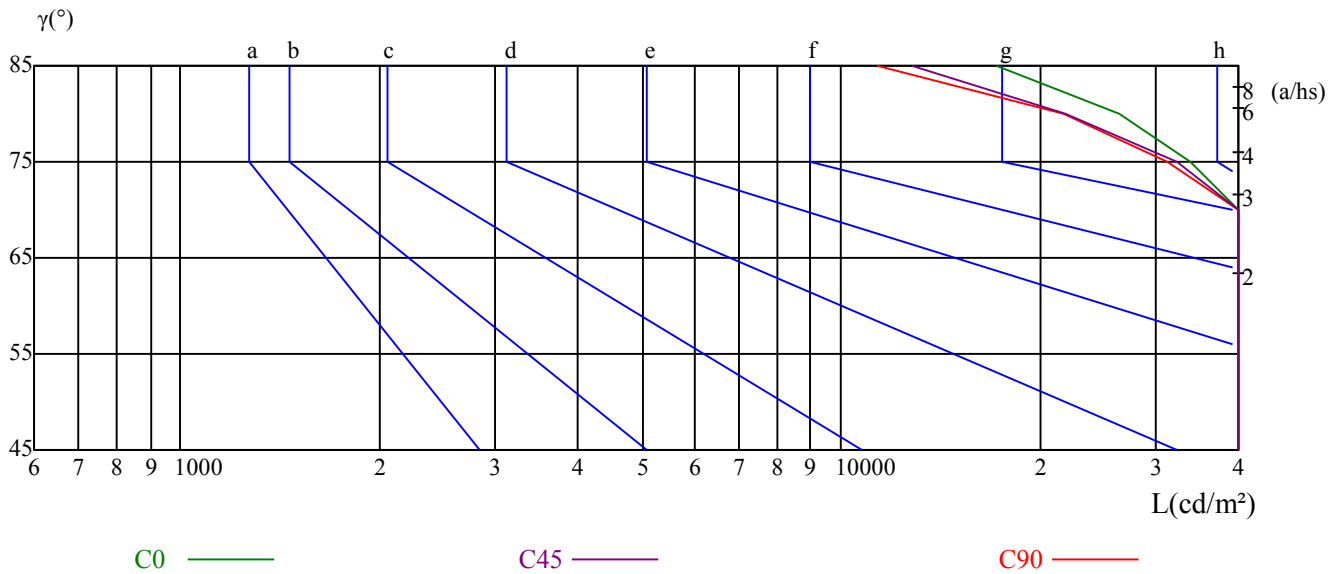
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C0 | 73823 | 68980 | 64214 | 58295 | 51413 | 43127 | 33785 | 26450 | 17228 |
| C45 | 73940 | 68271 | 63186 | 57380 | 50333 | 42465 | 32290 | 21883 | 12828 |
| C90 | 72332 | 67704 | 62576 | 56530 | 50108 | 42239 | 31202 | 21703 | 11325 |

| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 51413 | 50108 | 50333 | 33785 | 31202 | 32290 | 17228 | 11325 | 12828 |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 500 | <=300 | | |
| 2.2 | D | | | | 2000 | 1000 | 500 | <=300 | |
| 2.55 | E | | | | | 2000 | 1000 | 500 | <=300 |
| | | a | b | c | d | e | f | g | h |

Luminance Limiting Curve



| RHOCC | 80 | | | 70 | | | 50 | | | 30 | | | 10 | | | 0 |
|-------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| RHOW | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | COEFFICIENTS OF UTILIZATION RHOFC=20 CU | | | | | | | | | | | | | | | |
| 0 | 1.19 | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 |
| 1 | 1.06 | 1.02 | 0.98 | 1.03 | 1.00 | 0.97 | 0.99 | 0.96 | 0.94 | 0.95 | 0.93 | 0.91 | 0.92 | 0.90 | 0.88 | 0.86 |
| 2 | 0.93 | 0.87 | 0.82 | 0.91 | 0.86 | 0.81 | 0.88 | 0.83 | 0.79 | 0.84 | 0.80 | 0.77 | 0.81 | 0.78 | 0.75 | 0.73 |
| 3 | 0.83 | 0.75 | 0.69 | 0.81 | 0.74 | 0.68 | 0.78 | 0.72 | 0.67 | 0.75 | 0.70 | 0.66 | 0.73 | 0.68 | 0.65 | 0.63 |
| 4 | 0.74 | 0.65 | 0.59 | 0.72 | 0.65 | 0.59 | 0.70 | 0.63 | 0.58 | 0.68 | 0.62 | 0.57 | 0.65 | 0.60 | 0.56 | 0.54 |
| 5 | 0.66 | 0.58 | 0.51 | 0.65 | 0.57 | 0.51 | 0.63 | 0.56 | 0.50 | 0.61 | 0.55 | 0.50 | 0.59 | 0.54 | 0.49 | 0.47 |
| 6 | 0.60 | 0.51 | 0.45 | 0.59 | 0.51 | 0.45 | 0.57 | 0.50 | 0.45 | 0.55 | 0.49 | 0.44 | 0.54 | 0.48 | 0.44 | 0.42 |
| 7 | 0.54 | 0.46 | 0.40 | 0.54 | 0.46 | 0.40 | 0.52 | 0.45 | 0.40 | 0.51 | 0.44 | 0.39 | 0.49 | 0.44 | 0.39 | 0.37 |
| 8 | 0.50 | 0.42 | 0.36 | 0.49 | 0.41 | 0.36 | 0.48 | 0.41 | 0.36 | 0.47 | 0.40 | 0.35 | 0.45 | 0.40 | 0.35 | 0.33 |
| 9 | 0.46 | 0.38 | 0.33 | 0.45 | 0.38 | 0.32 | 0.44 | 0.37 | 0.32 | 0.43 | 0.37 | 0.32 | 0.42 | 0.36 | 0.32 | 0.30 |
| 10 | 0.42 | 0.35 | 0.30 | 0.42 | 0.35 | 0.30 | 0.41 | 0.34 | 0.29 | 0.40 | 0.34 | 0.29 | 0.39 | 0.33 | 0.29 | 0.27 |

Lotus LED Lights LFR-4R-RB-9W-5CCT-5000K

Intensity data(cd)

| | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| C/γ(°) | 0.0 | 5.0 | 10.0 | 15.0 | 20.0 | 25.0 | 30.0 | 35.0 | 40.0 |
| 0.0 | 453.74 | 458.18 | 455.52 | 448.41 | 435.09 | 417.34 | 395.14 | 368.50 | 338.31 |
| 15.0 | 453.74 | 457.32 | 457.32 | 448.37 | 438.53 | 419.73 | 394.67 | 370.51 | 338.29 |
| 30.0 | 453.74 | 458.24 | 457.34 | 447.44 | 438.44 | 418.63 | 397.92 | 370.02 | 339.41 |
| 45.0 | 453.74 | 455.54 | 454.64 | 448.34 | 434.84 | 416.83 | 397.02 | 367.31 | 337.61 |
| 60.0 | 453.74 | 454.64 | 452.84 | 444.76 | 433.08 | 416.00 | 391.74 | 364.79 | 332.44 |
| 75.0 | 453.74 | 454.64 | 451.05 | 442.06 | 430.38 | 411.51 | 388.15 | 361.20 | 327.95 |
| 90.0 | 453.74 | 455.55 | 451.03 | 443.82 | 429.39 | 410.44 | 386.09 | 358.12 | 324.75 |
| 105.0 | 453.74 | 456.45 | 451.03 | 441.09 | 426.63 | 407.64 | 383.24 | 350.70 | 320.87 |
| 120.0 | 453.74 | 455.54 | 449.24 | 437.54 | 423.13 | 402.43 | 378.12 | 348.41 | 315.10 |
| 135.0 | 453.74 | 452.84 | 445.67 | 435.81 | 419.67 | 399.04 | 372.14 | 342.55 | 308.47 |
| 150.0 | 453.74 | 452.84 | 446.54 | 436.64 | 419.53 | 397.92 | 371.82 | 340.31 | 306.10 |
| 165.0 | 453.74 | 450.16 | 443.00 | 432.26 | 414.36 | 393.78 | 366.04 | 337.40 | 302.49 |
| 180.0 | 453.74 | 446.64 | 433.32 | 415.56 | 392.47 | 365.83 | 333.87 | 298.35 | 260.17 |
| 195.0 | 453.74 | 445.69 | 433.16 | 413.47 | 389.30 | 364.25 | 332.03 | 296.23 | 257.75 |
| 210.0 | 453.74 | 446.54 | 434.84 | 414.13 | 388.92 | 362.81 | 329.50 | 296.19 | 257.48 |
| 225.0 | 453.74 | 445.64 | 430.33 | 414.13 | 390.72 | 364.61 | 330.40 | 293.49 | 256.58 |
| 240.0 | 453.74 | 443.86 | 431.28 | 413.31 | 389.95 | 362.09 | 329.75 | 293.81 | 256.97 |
| 255.0 | 453.74 | 444.76 | 433.08 | 415.11 | 391.74 | 362.99 | 333.34 | 297.40 | 258.77 |
| 270.0 | 453.74 | 447.43 | 434.80 | 416.76 | 395.11 | 368.04 | 337.37 | 301.29 | 264.31 |
| 285.0 | 453.74 | 448.32 | 438.38 | 420.30 | 396.80 | 371.49 | 341.66 | 307.31 | 270.26 |
| 300.0 | 453.74 | 448.34 | 438.44 | 421.33 | 401.52 | 374.52 | 345.71 | 311.50 | 273.69 |
| 315.0 | 453.74 | 446.57 | 438.50 | 422.36 | 402.63 | 378.42 | 348.82 | 316.54 | 278.88 |
| 330.0 | 453.74 | 450.14 | 442.04 | 426.73 | 406.93 | 384.42 | 369.11 | 321.40 | 286.29 |
| 345.0 | 453.74 | 450.16 | 440.32 | 426.89 | 408.10 | 384.83 | 356.19 | 324.87 | 289.07 |
| 360.0 | 453.74 | 458.18 | 455.52 | 448.41 | 435.09 | 417.34 | 395.14 | 368.50 | 338.31 |
| C/γ(°) | 45.0 | 50.0 | 55.0 | 60.0 | 65.0 | 70.0 | 75.0 | 80.0 | 85.0 |
| 0.0 | 301.90 | 262.83 | 225.54 | 186.47 | 148.29 | 110.11 | 74.59 | 42.62 | 15.10 |
| 15.0 | 303.39 | 265.80 | 227.32 | 188.84 | 150.35 | 112.76 | 76.97 | 43.85 | 16.11 |
| 30.0 | 303.39 | 267.38 | 227.77 | 189.96 | 151.25 | 112.54 | 77.42 | 43.21 | 16.21 |
| 45.0 | 302.49 | 264.68 | 225.07 | 187.26 | 147.65 | 110.73 | 75.62 | 43.21 | 15.30 |
| 60.0 | 297.40 | 260.56 | 221.93 | 182.39 | 145.56 | 107.82 | 72.78 | 40.43 | 12.58 |
| 75.0 | 292.91 | 256.07 | 216.54 | 177.90 | 140.17 | 103.33 | 69.18 | 36.84 | 10.78 |
| 90.0 | 288.66 | 250.78 | 211.08 | 172.30 | 135.31 | 100.13 | 64.05 | 34.28 | 9.92 |
| 105.0 | 284.72 | 245.85 | 207.89 | 169.02 | 130.16 | 94.91 | 59.66 | 29.83 | 8.13 |
| 120.0 | 278.19 | 239.47 | 201.66 | 162.95 | 126.94 | 90.03 | 55.82 | 25.21 | 6.30 |
| 135.0 | 272.60 | 235.84 | 196.38 | 157.82 | 120.16 | 86.09 | 52.01 | 22.42 | 5.38 |
| 150.0 | 271.88 | 231.37 | 193.56 | 155.75 | 118.84 | 81.03 | 48.62 | 19.81 | 4.50 |
| 165.0 | 266.70 | 227.32 | 189.73 | 151.25 | 114.55 | 77.86 | 45.64 | 17.00 | 3.58 |
| 180.0 | 222.87 | 182.92 | 144.74 | 106.55 | 70.15 | 38.18 | 13.32 | 3.55 | 0.00 |
| 195.0 | 219.26 | 180.78 | 144.09 | 104.71 | 68.91 | 36.69 | 12.53 | 2.68 | 0.00 |
| 210.0 | 217.87 | 180.96 | 141.34 | 105.33 | 68.42 | 36.91 | 11.70 | 2.70 | 0.00 |
| 225.0 | 217.87 | 179.16 | 141.34 | 104.43 | 68.42 | 36.91 | 11.70 | 2.70 | 0.00 |
| 240.0 | 217.44 | 179.70 | 141.96 | 106.02 | 70.08 | 38.64 | 10.78 | 2.70 | 0.00 |
| 255.0 | 220.13 | 183.29 | 145.56 | 108.72 | 72.78 | 41.33 | 12.58 | 2.70 | 0.00 |
| 270.0 | 225.52 | 186.73 | 149.74 | 111.86 | 77.58 | 45.10 | 17.14 | 3.61 | 0.00 |
| 285.0 | 230.49 | 192.52 | 153.66 | 117.50 | 81.35 | 48.81 | 33.44 | 4.52 | 0.90 |
| 300.0 | 236.77 | 198.06 | 160.25 | 139.54 | 87.33 | 54.02 | 24.31 | 6.30 | 0.90 |
| 315.0 | 258.26 | 202.66 | 165.89 | 127.33 | 91.47 | 58.29 | 28.70 | 8.07 | 1.79 |
| 330.0 | 248.48 | 209.77 | 172.85 | 134.14 | 96.33 | 63.02 | 32.41 | 9.90 | 2.70 |
| 345.0 | 252.38 | 213.00 | 175.41 | 138.72 | 101.13 | 66.23 | 34.90 | 10.74 | 2.68 |
| 360.0 | 301.90 | 262.83 | 225.54 | 186.47 | 148.29 | 110.11 | 74.59 | 42.62 | 15.10 |

Lotus LED Lights LFR-4R-RB-9W-5CCT-5000K

Intensity data(cd)

| | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C/γ(°) | 90.0 | 95.0 | 100.0 | 105.0 | 110.0 | 115.0 | 120.0 | 125.0 | 130.0 |
| 0.0 | 3.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15.0 | 3.58 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30.0 | 3.60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 45.0 | 2.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 60.0 | 2.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 75.0 | 1.80 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 90.0 | 1.80 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 105.0 | 1.81 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 120.0 | 0.90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 135.0 | 0.90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 150.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 165.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 180.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.89 | 0.00 | 0.00 | 0.00 | 0.00 |
| 195.0 | 0.00 | 0.00 | 0.00 | 0.89 | 0.89 | 0.89 | 0.89 | 0.00 | 0.00 |
| 210.0 | 0.00 | 0.00 | 0.00 | 0.90 | 0.90 | 0.00 | 0.90 | 0.90 | 0.00 |
| 225.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.90 | 0.00 | 0.90 | 0.00 | 0.00 |
| 240.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.90 | 0.90 |
| 255.0 | 0.00 | 0.00 | 0.00 | 0.90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 270.0 | 0.00 | 0.00 | 0.00 | 0.90 | 0.90 | 0.90 | 0.00 | 0.00 | 0.00 |
| 285.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 300.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 315.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 330.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 345.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 360.0 | 3.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| C/γ(°) | 135.0 | 140.0 | 145.0 | 150.0 | 155.0 | 160.0 | 165.0 | 170.0 | 175.0 |
| 0.0 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 1.78 | 1.78 | 1.78 | 1.78 |
| 15.0 | 0.00 | 0.89 | 0.89 | 0.89 | 0.89 | 1.79 | 1.79 | 1.79 | 1.79 |
| 30.0 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 45.0 | 0.00 | 0.00 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 60.0 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 75.0 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 90.0 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 105.0 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.81 | 1.81 | 1.81 | 1.81 |
| 120.0 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 135.0 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 1.79 | 1.79 | 1.79 | 1.79 |
| 150.0 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 165.0 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 1.79 | 1.79 | 1.79 | 1.79 |
| 180.0 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 1.78 | 1.78 | 1.78 | 1.78 |
| 195.0 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 1.79 | 1.79 | 1.79 | 1.79 |
| 210.0 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 225.0 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 240.0 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 255.0 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 | 1.80 |
| 270.0 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 |
| 285.0 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.81 | 1.81 | 1.81 |
| 300.0 | 0.00 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 |
| 315.0 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.79 | 1.79 | 1.79 |
| 330.0 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 1.80 | 1.80 | 1.80 |
| 345.0 | 0.00 | 0.89 | 0.89 | 0.89 | 0.89 | 1.79 | 1.79 | 1.79 | 1.79 |
| 360.0 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 1.78 | 1.78 | 1.78 | 1.78 |

Lotus LED Lights LFR-4R-RB-9W-5CCT-5000K

Appendix Page: 12 Total:12

Intensity data(cd)

| | |
|--------|-------|
| C/γ(°) | 180.0 |
| 0.0 | 1.78 |
| 15.0 | 1.79 |
| 30.0 | 1.80 |
| 45.0 | 1.80 |
| 60.0 | 1.80 |
| 75.0 | 1.80 |
| 90.0 | 1.80 |
| 105.0 | 1.81 |
| 120.0 | 1.80 |
| 135.0 | 1.79 |
| 150.0 | 1.80 |
| 165.0 | 1.79 |
| 180.0 | 0.00 |
| 195.0 | 0.00 |
| 210.0 | 0.00 |
| 225.0 | 0.00 |
| 240.0 | 0.00 |
| 255.0 | 0.00 |
| 270.0 | 0.00 |
| 285.0 | 0.00 |
| 300.0 | 0.00 |
| 315.0 | 0.00 |
| 330.0 | 0.00 |
| 345.0 | 0.00 |
| 360.0 | 1.78 |