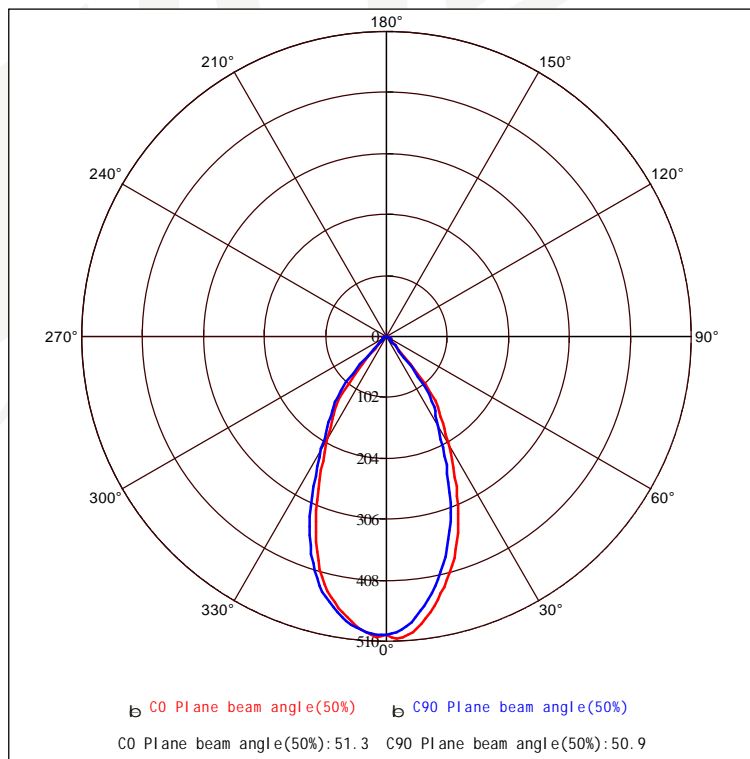


LED CEILING LIGHT

| Measured Para U: 216.4V I: 68.0mA P: 6.70W PF: 0.459 Test LM: 399.00lm |       |                       |                  |                     |      |
|--|-------|-----------------------|------------------|---------------------|------|
| Lamp Name: LP-C0B08F01-Y1  |       | Lamp Type:            |                  | Weight(kg):         |      |
| Lamp ID: LP-C0B08F01-Y1  |       | Lamp Spec:            |                  | Shape Size:         |      |
| Manufactory: LIPER   |       | Sur(m <sup>2</sup> ): |                  | Protect Angle(Deg): |      |
| Light Source Data  |       |                       | Photometric Data |                     |      |
| Model  |       | Peak Value(cd)        | 507.0            | Efficiency(lm/w)    | 59.6 |
| Nominal P(w)   | 1.0   | Position              | 0.0, 1.0         | UP(C0-C180)         | 0.0  |
| Rated Volt(v)  | 220.0 | Total Flux(lm)        | 398.996          | Down(C0-C180)       | 51.6 |
| Rated Flux(lm)   | 1.0   | Up Flux Rate(%)       | 0.0              | UP(C180-C360)       | 0.0  |
| Illuminant QTY   | 1     | Dw Flux Rate(%)       | 100.0            | Down(C180-C360)     | 48.4 |

Planar Intensity Distribution Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

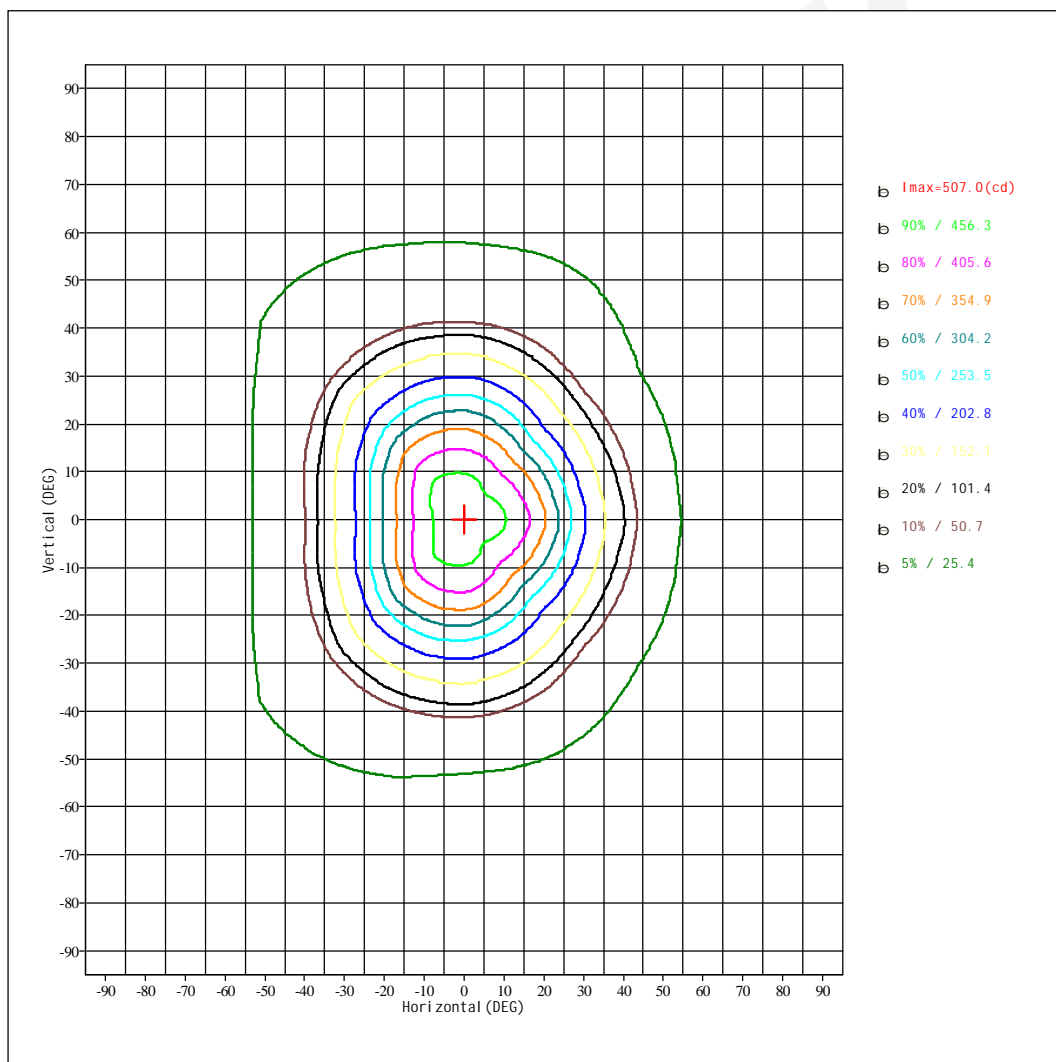
Humidity(%): 60

Date: 2018-8-13

Remark:

|  |                       |                     |
|--|-----------------------|---------------------|
| Measured Para U: 216.4V I: 68.0mA P: 6.70W PF: 0.459 Test LM: 399.00lm |                       |                     |
| Lamp Name: LP-COB08F01-Y1  | Lamp Type:            | Weight(kg):         |
| Lamp ID: LP-COB08F01-Y1  | Lamp Spec:            | Shape Si ze:        |
| Manufactory: LIPER   | Sur(m <sup>2</sup> ): | Protect Angle(Deg): |

Planar IsoCandela Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

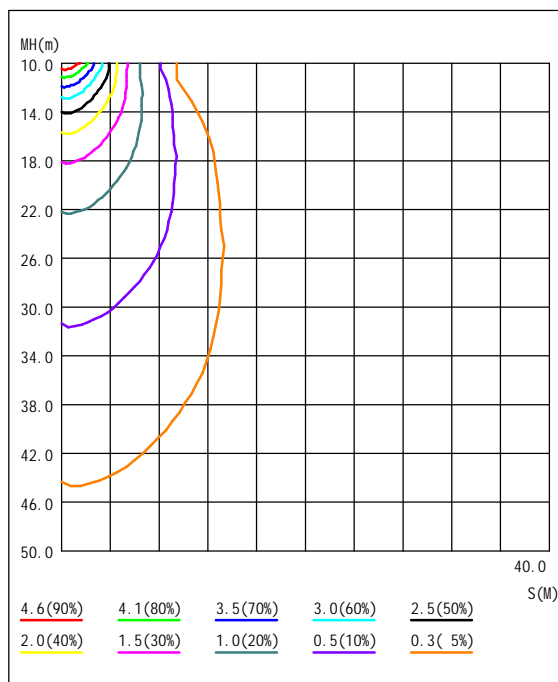
Humi di ty(%): 60

Date: 2018-8-13

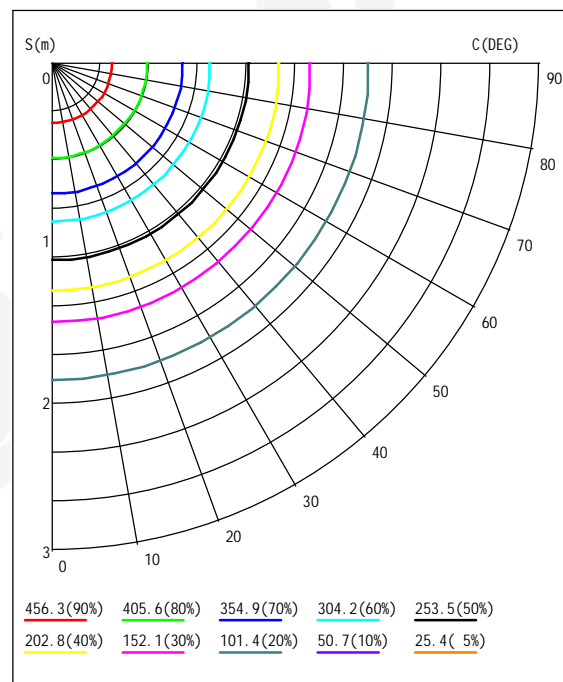
Remark:

|  |            |                     |
|--|------------|---------------------|
| Measured Para U: 216.4V I: 68.0mA P: 6.70W PF: 0.459 Test LM: 399.00lm |            |                     |
| Lamp Name: LP-COB08F01-Y1  | Lamp Type: | Weight(kg):         |
| Lamp ID: LP-COB08F01-Y1  | Lamp Spec: | Shape Si ze:        |
| Manufactory: LIPER   | Sur(m^2):  | Protect Angle(Deg): |

Spacial ISOLUX Curve



Planar ISOLUX Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

Humi di ty(%): 60

Date: 2018-8-13

Remark:

|  |            |                     |
|--|------------|---------------------|
| Measured Para U: 216.4V I: 68.0mA P: 6.70W PF: 0.459 Test LM: 399.001m |            |                     |
| Lamp Name: LP-C0B08F01-Y1  | Lamp Type: | Weight(kg):         |
| Lamp ID: LP-C0B08F01-Y1  | Lamp Spec: | Shape Si ze:        |
| Manufactory: LIPER   | Sur(m^2):  | Protect Angle(Deg): |

Luminance Limit Curve

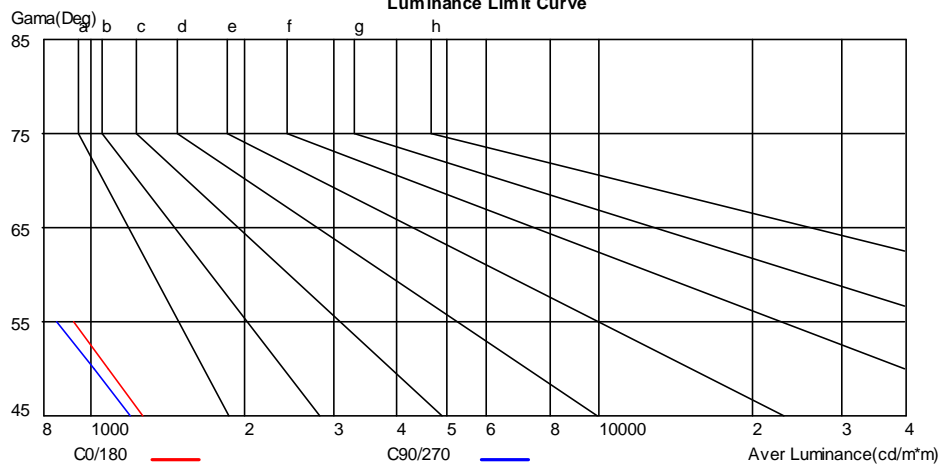
Aver Luminance(cd/m²)

| Gm(Deg) | 45     | 50     | 55    | 60    | 65    | 70    | 75    | 80    | 85    |
|---------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| C0      | 1263.6 | 1076.7 | 923.7 | 793.3 | 686.8 | 603.8 | 519.8 | 391.4 | 232.4 |
| C90     | 1192.6 | 1009.7 | 854.2 | 729.3 | 569.8 | 230.4 | 206.4 | 164.0 | 139.5 |

Glare

| Glare | Class | Illuminance(lx) |      |      |       |       |       |       |       |
|-------|-------|-----------------|------|------|-------|-------|-------|-------|-------|
|       |       | a               | b    | c    | d     | e     | f     | g     | h     |
| 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 |

Luminance Limit Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

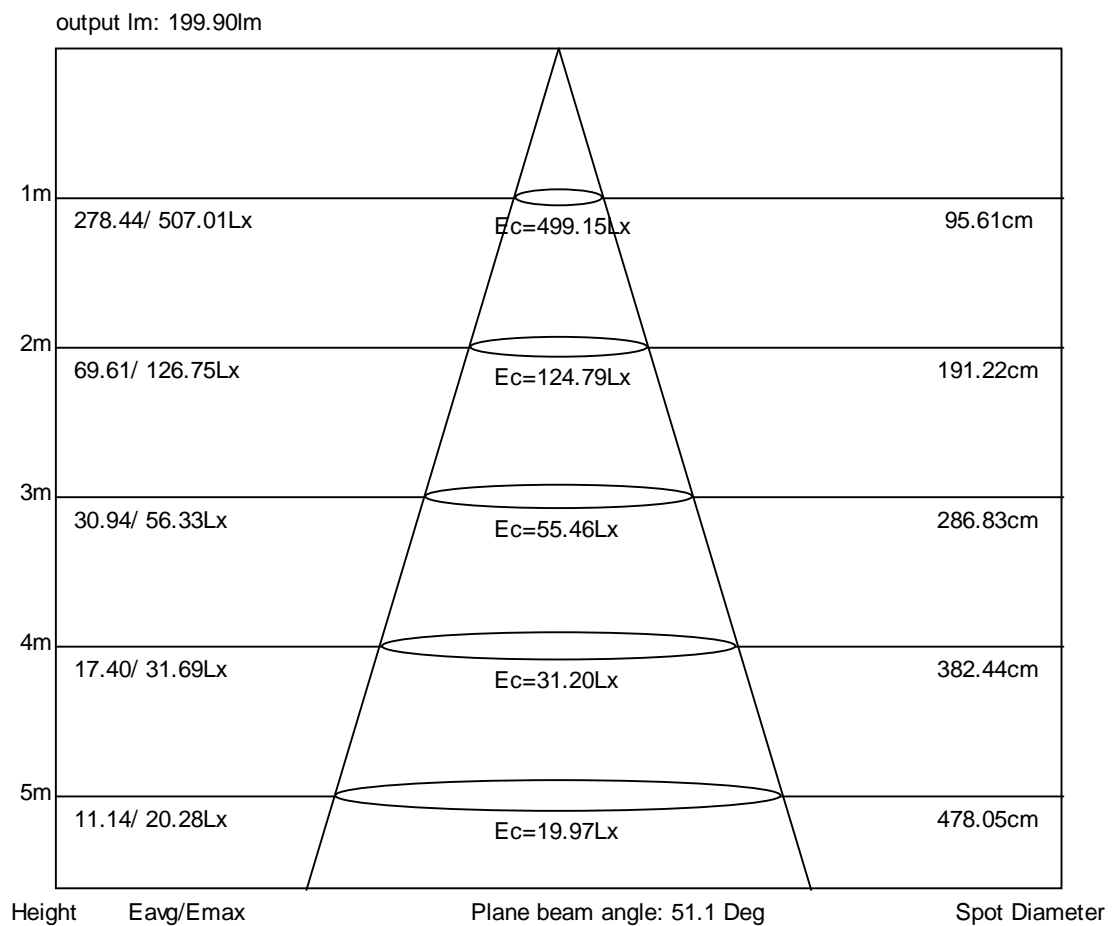
Humi di ty(%): 60

Date: 2018-8-13

Remark:

|  |                       |                     |
|--|-----------------------|---------------------|
| Measured Para U: 216.4V I: 68.0mA P: 6.70W PF: 0.459 Test LM: 399.00lm |                       |                     |
| Lamp Name: LP-C0B08F01-Y1  | Lamp Type:            | Weight(kg):         |
| Lamp ID: LP-C0B08F01-Y1  | Lamp Spec:            | Shape Si ze:        |
| Manufactory: LIPER   | Sur(m <sup>2</sup> ): | Protect Angle(Deg): |

Average Illumination



Gama Angle Range: -90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

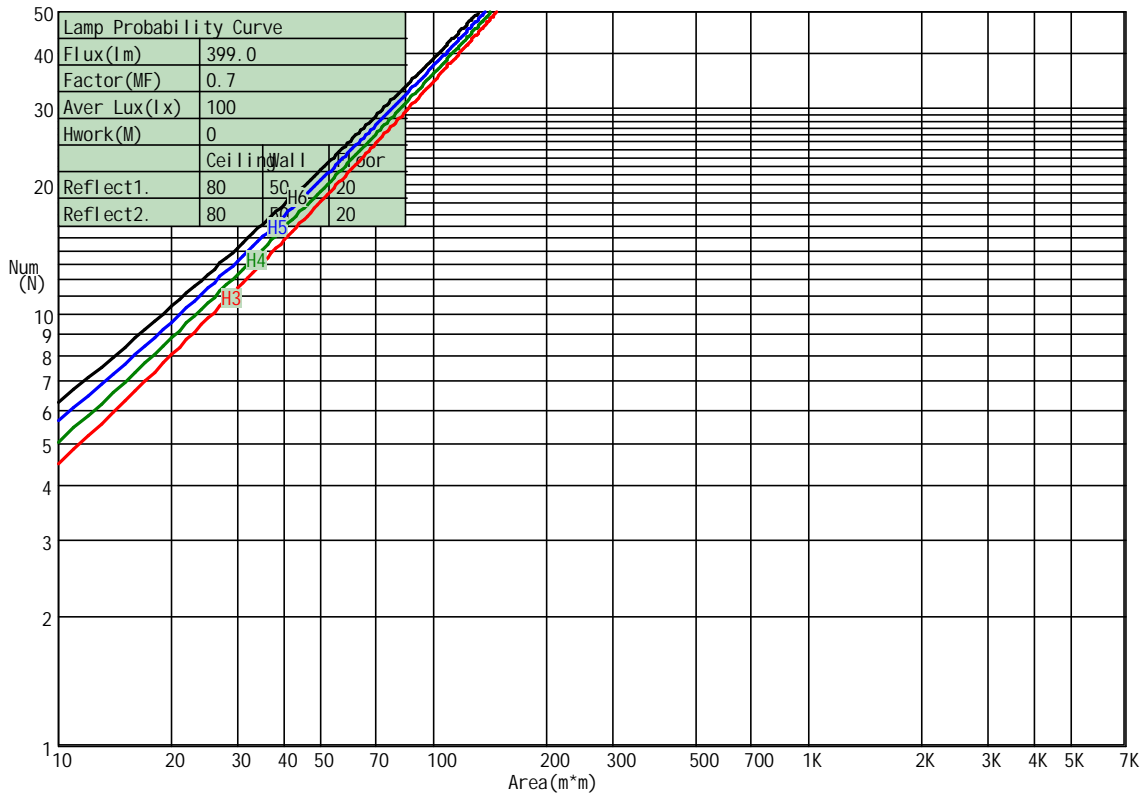
Humi di ty(%): 60

Date: 2018-8-13

Remark:

|  |                       |                     |
|--|-----------------------|---------------------|
| Measured Para U: 216.4V I: 68.0mA P: 6.70W PF: 0.459 Test LM: 399.00lm |                       |                     |
| Lamp Name: LP-COB08F01-Y1  | Lamp Type:            | Weight(kg):         |
| Lamp ID: LP-COB08F01-Y1  | Lamp Spec:            | Shape Size:         |
| Manufactory: LIPER   | Sur(m <sup>2</sup> ): | Protect Angle(Deg): |

Lamp Probability Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humi dity(%): 60

Date: 2018-8-13

Remark:

|  |            |                     |
|--|------------|---------------------|
| Measured Para U: 216.4V I: 68.0mA P: 6.70W PF: 0.459 Test LM: 399.00lm |            |                     |
| Lamp Name: LP-COB08F01-Y1  | Lamp Type: | Weight(kg):         |
| Lamp ID: LP-COB08F01-Y1  | Lamp Spec: | Shape Si ze:        |
| Manufactory: LIPER   | Sur(m^2):  | Protect Angle(Deg): |

UF Table

|         |     |     |     |     |     |     |     |     |     |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 |
| Wall    | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 |
| Floor   | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 0.60    | 46  | 30  | 20  | 44  | 29  | 20  | 41  | 28  | 19  |
| 0.80    | 50  | 32  | 20  | 48  | 31  | 20  | 44  | 29  | 19  |
| 1.00    | 54  | 35  | 21  | 51  | 33  | 21  | 46  | 31  | 20  |
| 1.25    | 57  | 37  | 22  | 54  | 35  | 21  | 48  | 32  | 20  |
| 1.50    | 59  | 39  | 23  | 55  | 37  | 22  | 49  | 33  | 20  |
| 2.00    | 62  | 41  | 25  | 58  | 39  | 24  | 51  | 35  | 21  |
| 2.50    | 64  | 43  | 26  | 60  | 41  | 24  | 52  | 36  | 22  |
| 3.00    | 66  | 45  | 27  | 62  | 42  | 25  | 53  | 37  | 22  |
| 4.00    | 68  | 47  | 28  | 63  | 44  | 26  | 55  | 38  | 23  |
| 5.00    | 70  | 48  | 29  | 65  | 45  | 27  | 56  | 39  | 24  |

CoEfficients Utilization

|            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Ceiling(%) |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |
| Wall (%)   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |      |
| Floor (%)  |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |
| 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          | 1.1  | 1.07 | 1.05 | 1.08 | 1.06 | 1.03 | 1.04 | 1.02 | 1    | 1    | 0.99 | 0.97 | 0.97 | 0.95 | 0.94 |
| 2          | 1.02 | 0.98 | 0.94 | 1    | 0.96 | 0.93 | 0.97 | 0.94 | 0.91 | 0.94 | 0.91 | 0.89 | 0.91 | 0.89 | 0.87 |
| 3          | 0.95 | 0.9  | 0.86 | 0.94 | 0.89 | 0.85 | 0.91 | 0.87 | 0.84 | 0.88 | 0.85 | 0.82 | 0.86 | 0.83 | 0.81 |
| 4          | 0.89 | 0.83 | 0.79 | 0.87 | 0.82 | 0.78 | 0.85 | 0.81 | 0.77 | 0.83 | 0.79 | 0.76 | 0.81 | 0.78 | 0.75 |
| 5          | 0.83 | 0.77 | 0.73 | 0.82 | 0.76 | 0.72 | 0.8  | 0.75 | 0.72 | 0.79 | 0.74 | 0.71 | 0.77 | 0.73 | 0.7  |
| 6          | 0.78 | 0.72 | 0.67 | 0.77 | 0.71 | 0.67 | 0.76 | 0.7  | 0.67 | 0.74 | 0.7  | 0.66 | 0.73 | 0.69 | 0.66 |
| 7          | 0.73 | 0.67 | 0.63 | 0.73 | 0.67 | 0.63 | 0.71 | 0.66 | 0.62 | 0.7  | 0.65 | 0.62 | 0.69 | 0.65 | 0.62 |
| 8          | 0.69 | 0.63 | 0.59 | 0.68 | 0.63 | 0.59 | 0.67 | 0.62 | 0.58 | 0.66 | 0.62 | 0.58 | 0.65 | 0.61 | 0.58 |
| 9          | 0.65 | 0.59 | 0.55 | 0.65 | 0.59 | 0.55 | 0.64 | 0.59 | 0.55 | 0.63 | 0.58 | 0.55 | 0.62 | 0.58 | 0.55 |
| 10         | 0.62 | 0.56 | 0.52 | 0.61 | 0.56 | 0.52 | 0.61 | 0.55 | 0.52 | 0.6  | 0.55 | 0.52 | 0.59 | 0.55 | 0.52 |

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humi dity(%): 60

Date: 2018-8-13

Remark:

|  |            |                     |
|--|------------|---------------------|
| Measured Para U: 216.4V I: 68.0mA P: 6.70W PF: 0.459 Test LM: 399.00lm |            |                     |
| Lamp Name: LP-COB08F01-Y1  | Lamp Type: | Weight(kg):         |
| Lamp ID: LP-COB08F01-Y1  | Lamp Spec: | Shape Si ze:        |
| Manufactory: LIPER   | Sur(m^2):  | Protect Angle(Deg): |

Wall Exitance CoEfficients

|            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Ceiling(%) |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |
| Wall (%)   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Floor (%)  |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |
| 0          | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 1          | 0.19 | 0.11 | 0.03 | 0.18 | 0.1  | 0.03 | 0.17 | 0.1  | 0.03 | 0.16 | 0.09 | 0.03 | 0.15 | 0.09 | 0.03 |
| 2          | 0.18 | 0.1  | 0.03 | 0.17 | 0.1  | 0.03 | 0.16 | 0.09 | 0.03 | 0.15 | 0.09 | 0.03 | 0.14 | 0.08 | 0.03 |
| 3          | 0.17 | 0.09 | 0.03 | 0.17 | 0.09 | 0.03 | 0.16 | 0.08 | 0.03 | 0.15 | 0.08 | 0.02 | 0.14 | 0.08 | 0.02 |
| 4          | 0.16 | 0.08 | 0.02 | 0.16 | 0.08 | 0.02 | 0.15 | 0.08 | 0.02 | 0.14 | 0.08 | 0.02 | 0.13 | 0.07 | 0.02 |
| 5          | 0.15 | 0.08 | 0.02 | 0.15 | 0.08 | 0.02 | 0.14 | 0.07 | 0.02 | 0.14 | 0.07 | 0.02 | 0.13 | 0.07 | 0.02 |
| 6          | 0.14 | 0.07 | 0.02 | 0.14 | 0.07 | 0.02 | 0.14 | 0.07 | 0.02 | 0.13 | 0.07 | 0.02 | 0.12 | 0.07 | 0.02 |
| 7          | 0.14 | 0.07 | 0.02 | 0.14 | 0.07 | 0.02 | 0.13 | 0.07 | 0.02 | 0.12 | 0.06 | 0.02 | 0.12 | 0.06 | 0.02 |
| 8          | 0.13 | 0.06 | 0.02 | 0.13 | 0.06 | 0.02 | 0.12 | 0.06 | 0.02 | 0.12 | 0.06 | 0.02 | 0.12 | 0.06 | 0.02 |
| 9          | 0.13 | 0.06 | 0.02 | 0.12 | 0.06 | 0.02 | 0.12 | 0.06 | 0.02 | 0.12 | 0.06 | 0.02 | 0.11 | 0.06 | 0.02 |
| 10         | 0.12 | 0.06 | 0.02 | 0.12 | 0.06 | 0.02 | 0.11 | 0.06 | 0.02 | 0.11 | 0.06 | 0.02 | 0.11 | 0.05 | 0.02 |

Ceiling Cavity Exitance CoEfficients

|            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Ceiling(%) |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |
| Wall (%)   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Floor (%)  |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |      | 0    |      |
| 0          | 0.19 | 0.19 | 0.19 | 0.16 | 0.16 | 0.16 | 0.11 | 0.11 | 0.11 | 0.06 | 0.06 | 0.06 | 0.02 | 0.02 | 0.02 |
| 1          | 0.17 | 0.16 | 0.14 | 0.15 | 0.13 | 0.12 | 0.1  | 0.09 | 0.09 | 0.06 | 0.05 | 0.05 | 0.02 | 0.02 | 0.02 |
| 2          | 0.16 | 0.13 | 0.11 | 0.13 | 0.11 | 0.1  | 0.09 | 0.08 | 0.07 | 0.05 | 0.05 | 0.04 | 0.02 | 0.01 | 0.01 |
| 3          | 0.15 | 0.11 | 0.09 | 0.12 | 0.1  | 0.08 | 0.09 | 0.07 | 0.05 | 0.05 | 0.04 | 0.03 | 0.02 | 0.01 | 0.01 |
| 4          | 0.14 | 0.1  | 0.07 | 0.12 | 0.09 | 0.06 | 0.08 | 0.06 | 0.04 | 0.05 | 0.03 | 0.03 | 0.01 | 0.01 | 0.01 |
| 5          | 0.13 | 0.09 | 0.06 | 0.11 | 0.08 | 0.05 | 0.07 | 0.05 | 0.04 | 0.04 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 |
| 6          | 0.12 | 0.08 | 0.05 | 0.1  | 0.07 | 0.04 | 0.07 | 0.05 | 0.03 | 0.04 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 |
| 7          | 0.11 | 0.07 | 0.04 | 0.1  | 0.06 | 0.04 | 0.07 | 0.04 | 0.03 | 0.04 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 |
| 8          | 0.11 | 0.06 | 0.04 | 0.09 | 0.06 | 0.03 | 0.06 | 0.04 | 0.02 | 0.04 | 0.02 | 0.01 | 0.01 | 0.01 | 0    |
| 9          | 0.1  | 0.06 | 0.03 | 0.09 | 0.05 | 0.03 | 0.06 | 0.04 | 0.02 | 0.04 | 0.02 | 0.01 | 0.01 | 0.01 | 0    |
| 10         | 0.1  | 0.05 | 0.03 | 0.08 | 0.05 | 0.02 | 0.06 | 0.03 | 0.02 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 | 0    |

Gama Angle Range: -90 - 90(Deg)

C Angle Range: 0 - 180(Deg)

Gama interval (Deg): 1

C interval (Deg): 45

Temperature(Deg): 30

Humi di ty(%): 60

Tester: WH

Date: 2018-8-13

Distance(m): 7.070

Remark:

Test System: ZWL Goni ophotometer System V3.0



|  |            |                     |
|--|------------|---------------------|
| Measured Para U: 216.4V I: 68.0mA P: 6.70W PF: 0.459 Test LM: 399.00lm |            |                     |
| Lamp Name: LP-COB08F01-Y1  | Lamp Type: | Weight (kg):        |
| Lamp ID: LP-COB08F01-Y1  | Lamp Spec: | Shape Size:         |
| Manufactory: LIPER   | Sur(m^2):  | Protect Angle(Deg): |

Ring-shaped Flux Data Table

| Gm\C(Deg) | 0    | 45   | 90   | 135  | 180  | 225  | 270  | 315  | Range   | Ring | T(lm) |
|-----------|------|------|------|------|------|------|------|------|---------|------|-------|
| 5         | 494  | 500  | 476  | 490  | 490  | 470  | 491  | 475  | 0-5     | 11.8 | 11.8  |
| 10        | 454  | 468  | 431  | 462  | 458  | 432  | 466  | 436  | 5-10    | 33.4 | 45.2  |
| 15        | 404  | 419  | 376  | 420  | 411  | 376  | 426  | 383  | 10-15   | 50.5 | 95.8  |
| 20        | 343  | 359  | 305  | 359  | 340  | 301  | 365  | 311  | 15-20   | 60.7 | 156   |
| 25        | 269  | 286  | 232  | 281  | 256  | 230  | 286  | 235  | 20-25   | 62   | 219   |
| 30        | 198  | 216  | 169  | 208  | 191  | 169  | 210  | 173  | 25-30   | 56.3 | 275   |
| 35        | 149  | 165  | 129  | 156  | 147  | 127  | 159  | 128  | 30-35   | 49.1 | 324   |
| 40        | 72.2 | 113  | 37.8 | 104  | 72.9 | 34.2 | 111  | 36.9 | 35-40   | 37.2 | 361   |
| 45        | 12.6 | 23.3 | 11.9 | 14.9 | 11.3 | 9.23 | 22.8 | 9.31 | 40-45   | 13.9 | 375   |
| 50        | 10.8 | 11.9 | 10.1 | 11.6 | 8.9  | 7.58 | 9.38 | 7.73 | 45-50   | 4.47 | 379   |
| 55        | 9.24 | 10.2 | 8.54 | 9.74 | 7.24 | 6.26 | 7.7  | 6.46 | 50-55   | 3.88 | 383   |
| 60        | 7.93 | 8.6  | 7.29 | 8.3  | 6    | 5.32 | 6.42 | 5.42 | 55-60   | 3.48 | 387   |
| 65        | 6.87 | 7.31 | 5.7  | 7.2  | 5.15 | 4.63 | 5.41 | 4.68 | 60-65   | 3.11 | 390   |
| 70        | 6.04 | 6.4  | 2.3  | 6.29 | 4.48 | 4.05 | 4.71 | 4.1  | 65-70   | 2.66 | 393   |
| 75        | 5.2  | 5.63 | 2.06 | 5.49 | 3.84 | 3.26 | 4.1  | 3.33 | 70-75   | 2.34 | 395   |
| 80        | 3.91 | 4.6  | 1.64 | 4.38 | 2.81 | 1.87 | 3.21 | 2.03 | 75-80   | 1.94 | 397   |
| 85        | 2.32 | 2.92 | 1.39 | 2.75 | 1.41 | 0.94 | 1.84 | 1.05 | 80-85   | 1.32 | 398   |
| 90        | 1.64 | 1.69 | 1.29 | 1.62 | 0.6  | 0.66 | 0.82 | 0.72 | 85-90   | 0.78 | 399   |
| 95        |      |      |      |      |      |      |      |      | 90-95   |      |       |
| 100       |      |      |      |      |      |      |      |      | 95-100  |      |       |
| 105       |      |      |      |      |      |      |      |      | 100-105 |      |       |
| 110       |      |      |      |      |      |      |      |      | 105-110 |      |       |
| 115       |      |      |      |      |      |      |      |      | 110-115 |      |       |
| 120       |      |      |      |      |      |      |      |      | 115-120 |      |       |
| 125       |      |      |      |      |      |      |      |      | 120-125 |      |       |
| 130       |      |      |      |      |      |      |      |      | 125-130 |      |       |
| 135       |      |      |      |      |      |      |      |      | 130-135 |      |       |
| 140       |      |      |      |      |      |      |      |      | 135-140 |      |       |
| 145       |      |      |      |      |      |      |      |      | 140-145 |      |       |
| 150       |      |      |      |      |      |      |      |      | 145-150 |      |       |
| 155       |      |      |      |      |      |      |      |      | 150-155 |      |       |
| 160       |      |      |      |      |      |      |      |      | 155-160 |      |       |
| 165       |      |      |      |      |      |      |      |      | 160-165 |      |       |
| 170       |      |      |      |      |      |      |      |      | 165-170 |      |       |
| 175       |      |      |      |      |      |      |      |      | 170-175 |      |       |
| 180       |      |      |      |      |      |      |      |      | 175-180 |      |       |

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 30

Tester: WH

Distance(m): 7.070

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humi dity(%): 60

Date: 2018-8-13

Remark:

|  |            |                     |
|--|------------|---------------------|
| Measured Para U: 216.4V I: 68.0mA P: 6.70W PF: 0.459 Test LM: 399.001m |            |                     |
| Lamp Name: LP-COB08F01-Y1  | Lamp Type: | Weight (kg):        |
| Lamp ID: LP-COB08F01-Y1  | Lamp Spec: | Shape Si ze:        |
| Manufactory: LIPER   | Sur(m^2):  | Protect Angle(Deg): |

CD Table

| Gm\C(Deg) | 0    | 20   | 40   | 60   | 80   | 100  | 120  | 140  | 160  | 180  | 200  | 220  | 240  | 260  | 280  | 300  | 320  | 340  |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 5.0       | 494  | 497  | 499  | 492  | 481  | 479  | 485  | 490  | 490  | 490  | 481  | 472  | 477  | 487  | 488  | 480  | 477  | 486  |
| 10.0      | 454  | 460  | 466  | 456  | 439  | 438  | 452  | 462  | 460  | 458  | 446  | 435  | 443  | 458  | 459  | 446  | 438  | 446  |
| 15.0      | 404  | 410  | 417  | 405  | 385  | 386  | 405  | 419  | 415  | 411  | 396  | 380  | 392  | 415  | 417  | 397  | 385  | 395  |
| 20.0      | 343  | 350  | 358  | 342  | 317  | 317  | 342  | 357  | 348  | 340  | 323  | 305  | 322  | 351  | 353  | 329  | 315  | 329  |
| 25.0      | 269  | 277  | 284  | 268  | 244  | 243  | 265  | 279  | 267  | 256  | 245  | 233  | 248  | 274  | 275  | 252  | 239  | 254  |
| 30.0      | 198  | 206  | 214  | 200  | 179  | 177  | 195  | 206  | 198  | 191  | 181  | 172  | 183  | 201  | 202  | 185  | 176  | 187  |
| 35.0      | 149  | 156  | 163  | 153  | 137  | 135  | 147  | 155  | 151  | 147  | 138  | 129  | 137  | 152  | 152  | 138  | 130  | 140  |
| 40.0      | 72.2 | 89.8 | 108  | 88   | 54.1 | 52.2 | 82   | 100  | 86.3 | 72.9 | 56   | 38.5 | 59.3 | 94   | 94.6 | 61.1 | 40.8 | 56.7 |
| 45.0      | 12.6 | 17.3 | 22.2 | 19.6 | 14.4 | 12.6 | 13.9 | 14.5 | 12.9 | 11.3 | 10.4 | 9.45 | 13.7 | 19.8 | 19.8 | 13.7 | 9.68 | 11.2 |
| 50.0      | 10.8 | 11.3 | 11.8 | 11.3 | 10.5 | 10.4 | 11.1 | 11.3 | 10.1 | 8.9  | 8.32 | 7.72 | 8.17 | 8.98 | 9.02 | 8.27 | 8.06 | 9.44 |
| 55.0      | 9.24 | 9.65 | 10.1 | 9.64 | 8.9  | 8.8  | 9.35 | 9.47 | 8.34 | 7.24 | 6.81 | 6.37 | 6.73 | 7.38 | 7.43 | 6.87 | 6.77 | 8.02 |
| 60.0      | 7.93 | 8.22 | 8.52 | 8.17 | 7.58 | 7.51 | 7.97 | 8.05 | 7    | 6    | 5.7  | 5.4  | 5.68 | 6.18 | 6.2  | 5.75 | 5.69 | 6.83 |
| 65.0      | 6.87 | 7.06 | 7.26 | 6.78 | 6.05 | 6.03 | 6.71 | 6.98 | 6.05 | 5.15 | 4.92 | 4.69 | 4.89 | 5.24 | 5.25 | 4.92 | 4.92 | 5.91 |
| 70.0      | 6.04 | 6.2  | 6.36 | 5.05 | 3.2  | 3.18 | 4.98 | 6.09 | 5.27 | 4.48 | 4.29 | 4.1  | 4.27 | 4.57 | 4.58 | 4.3  | 4.32 | 5.19 |
| 75.0      | 5.2  | 5.39 | 5.59 | 4.46 | 2.85 | 2.81 | 4.36 | 5.31 | 4.56 | 3.84 | 3.59 | 3.33 | 3.54 | 3.92 | 3.93 | 3.58 | 3.54 | 4.38 |
| 80.0      | 3.91 | 4.21 | 4.52 | 3.63 | 2.29 | 2.24 | 3.48 | 4.21 | 3.5  | 2.81 | 2.4  | 1.98 | 2.31 | 2.92 | 2.95 | 2.42 | 2.24 | 3.09 |
| 85.0      | 2.32 | 2.59 | 2.86 | 2.42 | 1.73 | 1.69 | 2.31 | 2.61 | 2    | 1.41 | 1.21 | 1    | 1.24 | 1.65 | 1.67 | 1.31 | 1.19 | 1.77 |
| 90.0      | 1.64 | 1.67 | 1.69 | 1.56 | 1.38 | 1.36 | 1.51 | 1.51 | 1.05 | 0.6  | 0.63 | 0.66 | 0.72 | 0.79 | 0.8  | 0.75 | 0.82 | 1.24 |
| 95.0      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 100.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 105.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 110.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 115.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 120.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 125.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 130.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 135.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 140.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 145.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 150.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 155.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 160.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 165.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 170.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 175.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 180.0     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

Gama Angle Range: -90 - 90(Deg)

C Angle Range: 0 - 180(Deg)

Gama interval (Deg): 1

C interval (Deg): 45

Temperature(Deg): 30

Humi di ty(%): 60

Tester: WH

Date: 2018-8-13

Distance(m): 7.070

Remark:

Test System: ZWL Goniophotometer System V3.0