

## Spectrum Test Report

Sample : MR16-5.5-830-35D-DIM  
Specification :  
Sample No. :  
Manufacturer : RAB Lighting Inc  
Remark :  
Device SN :

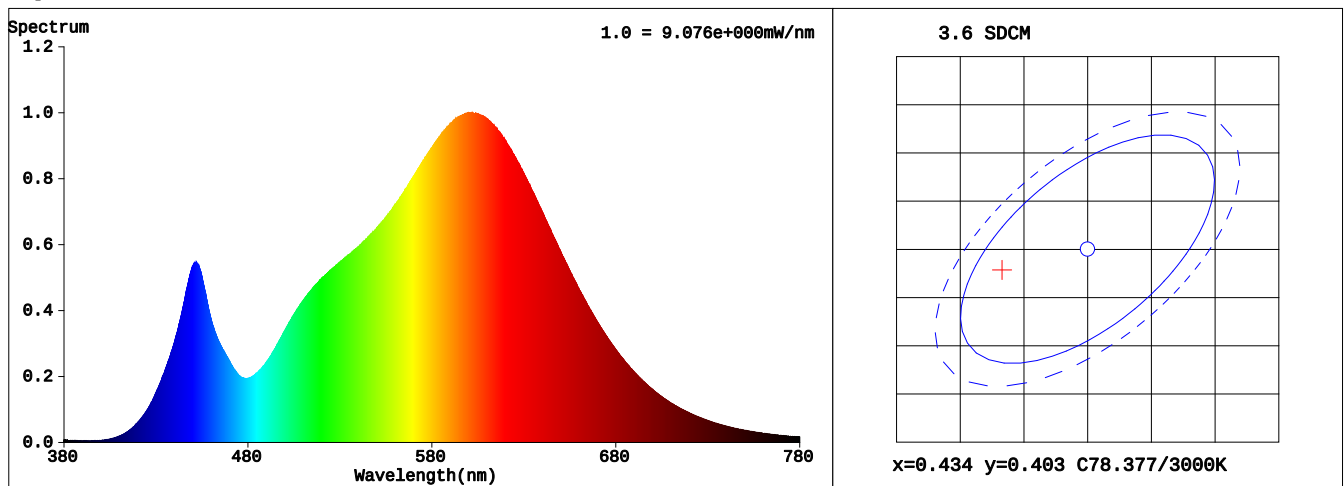
Date : 2020-04-08 10:14:50  
Sam. Status :  
Standard : LM-79-80  
Instrument : HaasSuite(EVERFINE)  
Test by :

### Test Condition

Temperature : 24.5Deg  
WL Range : 380nm-780nm  
Test Mode : Fast Test  
Sensitivity : High

RH : 30.1%  
IP : 49490 (76%)  
T : 389 ms

### Spectrum



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.4272$   $y = 0.4010$  /  $u' = 0.2456$   $v' = 0.5187$  ( $duv=2.30e-04$ )

CCT= 3147K Prpc WL: Ld=582.1nm Purity=48.6%

Peak WL: Lp=600nm FWHM: =136.1nm Ratio:R=21.9% G=75.5% B=2.6%

Render Index: Ra = 82.4

EEL: 0.12772 A+

R1 =80 R2 =90 R3 =97 R4 =81 R5 =81 R6 =87 R7 =84  
R8 =60 R9 =7 R10=76 R11=80 R12=70 R13=83 R14=98 R15=73  
LEVEL:OUT WHITE:ANSI\_3000K

### Photometric & Radiometric Parameters

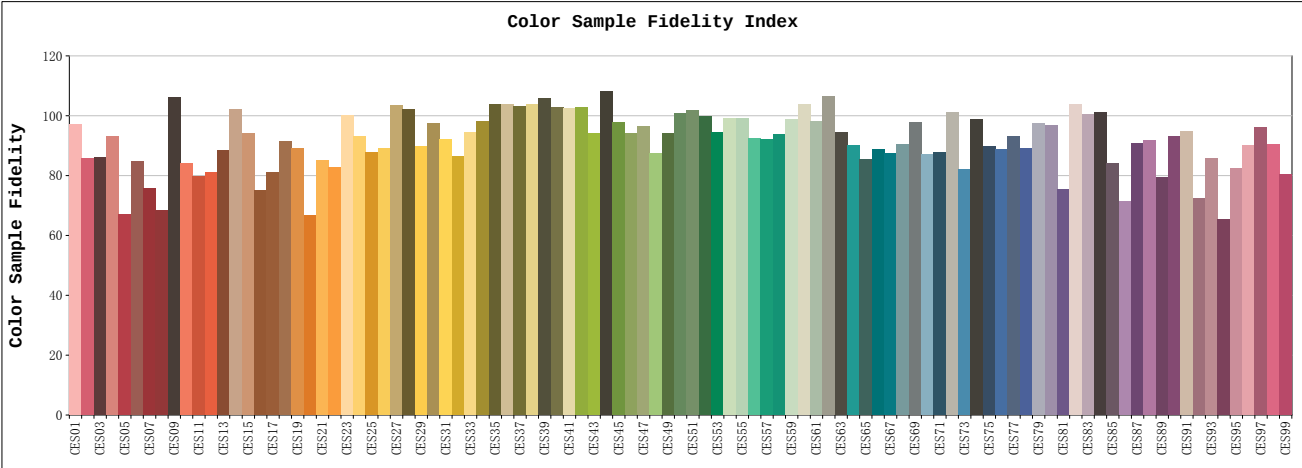
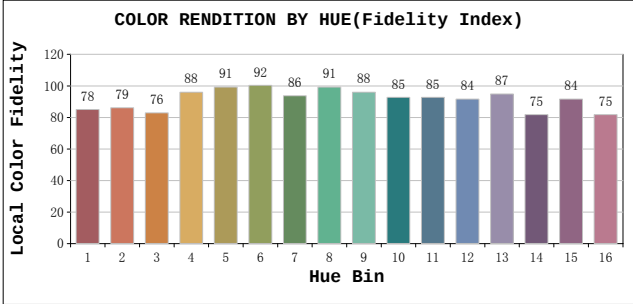
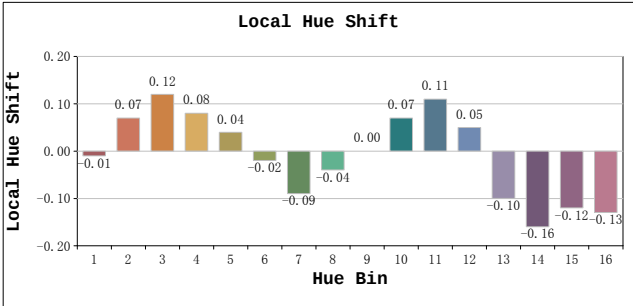
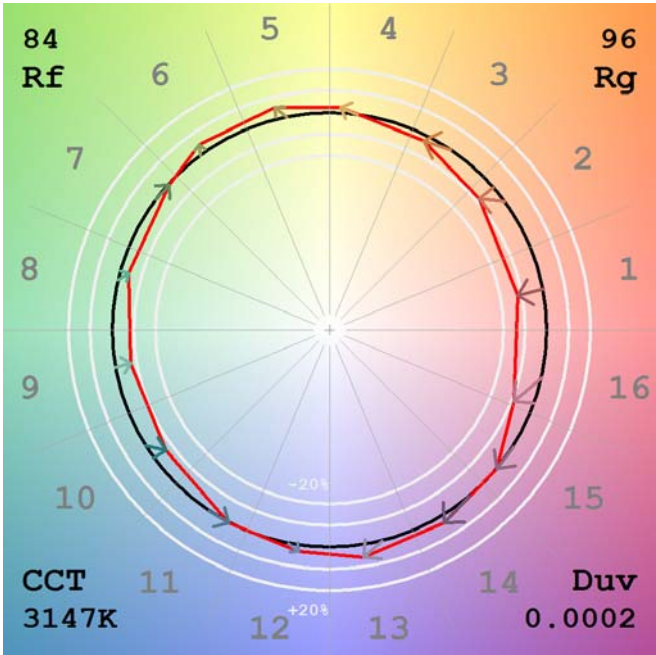
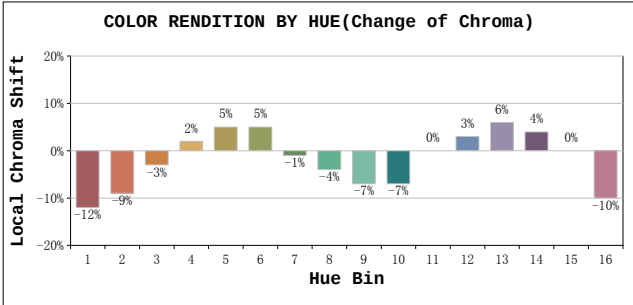
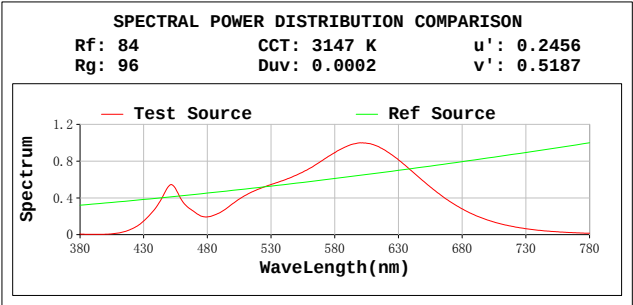
Flux = 460.05 lm Eff. : 86.97 lm/W Fe = 1.4021 W

Flux of emitted photons( $\mu\text{mol/s}$ ):6.7712 Fluo. and blue light ratio:7.755 Fluorescent eff.:218.2

### Electrical parameters

V = 12.03 V I = 0.4732 A P = 5.290 W PF = 0.9293

TM30

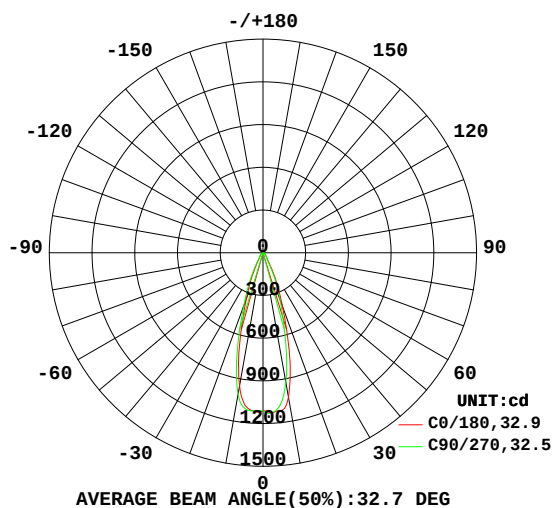


## LUMINAIRE PHOTOMETRIC TEST REPORT

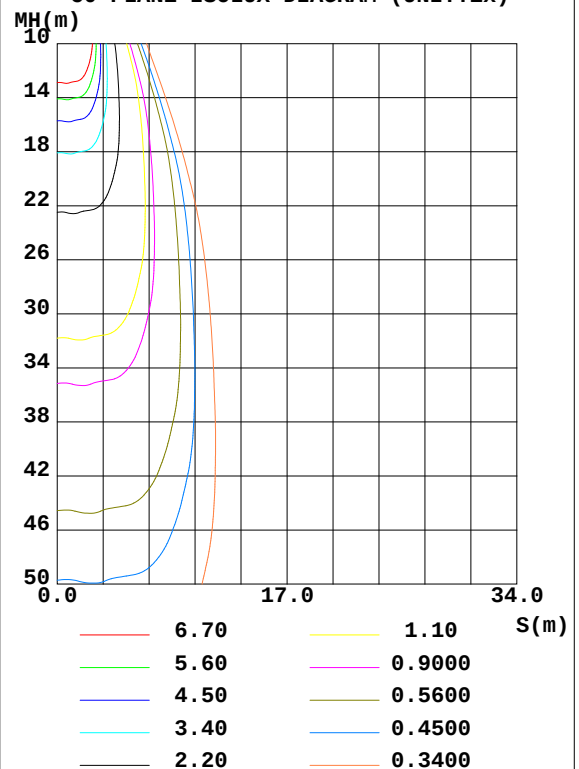
|                            |         |                    |
|----------------------------|---------|--------------------|
| NAME: MR16-5.5-830-35D-DIM | TYPE: / | WEIGHT: /          |
| SPEC.: /                   | DIM.: / | SERIAL No.: /      |
| MFR.: RAB Lighting Inc     | SUR.: / | Shielding Angle: / |

| DATA OF LAMP     |         | PHOTOMETRIC DATA      |        |                    |           | Eff: 91.80 lm/W |
|------------------|---------|-----------------------|--------|--------------------|-----------|-----------------|
| MODEL            | MR16    | I <sub>max</sub> (cd) | 1129   | S/MH(C0/180)       | 0.52      |                 |
| NOMINAL POWER(W) | 5.5     | LOR(%)                | 100.0  | S/MH(C90/270)      | 0.55      |                 |
| RATED VOLTAGE(V) | 12      | TOTAL FLUX(lm)        | 472.75 | η UP, DN(C0-180)   | 0.0, 48.6 |                 |
| NOMINAL FLUX(lm) | 472.745 | CIE CLASS             | DIRECT | η UP, DN(C180-360) | 0.0, 51.4 |                 |
| LAMPS INSIDE     | 1       | η up(%)               | 0.0    | CIBSE SHR NOM      | 0.50      |                 |
| TEST VOLTAGE(V)  | 12      | η down(%)             | 100.0  | CIBSE SHR MAX      | 0.55      |                 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.1DEG  
Operators:  
Test Date: 2020-04-09

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
Humidity: 24.3%  
Test Distance: 1.900m [K=0.6268]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

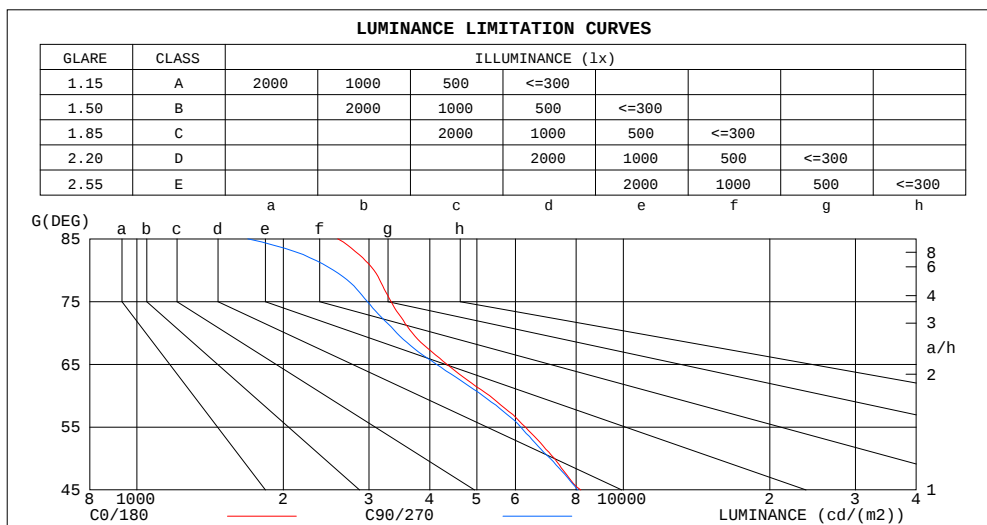
| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\phi$ zone | $\phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 5        | 1116                  | 1104   | 1107   | 1083   | 1104   | 1095   | 1112   | 1111   | 0- 5     | 26.64       | 26.64        | 5.64, 5.64 |
| 10       | 1030                  | 970.9  | 923.7  | 934.6  | 950.7  | 978.4  | 1008   | 1032   | 5- 10    | 75.06       | 101.7        | 21.5, 21.5 |
| 15       | 712.1                 | 690.2  | 597.8  | 634.1  | 619.9  | 712.7  | 694.5  | 783.8  | 10- 15   | 98.67       | 200.4        | 42.4, 42.4 |
| 20       | 402.9                 | 386.6  | 348.7  | 356.1  | 342.5  | 385.6  | 396.2  | 450.7  | 15- 20   | 84.78       | 285.1        | 60.3, 60.3 |
| 25       | 220.6                 | 206.3  | 184.0  | 189.5  | 181.0  | 200.7  | 218.9  | 240.2  | 20- 25   | 59.66       | 344.8        | 72.9, 72.9 |
| 30       | 98.67                 | 108.8  | 83.08  | 102.4  | 86.51  | 106.7  | 104.4  | 127.9  | 25- 30   | 37.06       | 381.9        | 80.8, 80.8 |
| 35       | 49.91                 | 58.23  | 47.25  | 57.53  | 47.55  | 59.53  | 49.85  | 67.54  | 30- 35   | 21.88       | 403.7        | 85.4, 85.4 |
| 40       | 38.27                 | 41.71  | 37.02  | 40.87  | 36.50  | 40.66  | 35.96  | 41.97  | 35- 40   | 15.10       | 418.8        | 88.6, 88.6 |
| 45       | 28.66                 | 34.31  | 28.27  | 32.74  | 27.13  | 32.13  | 28.14  | 33.57  | 40- 45   | 12.83       | 431.7        | 91.3, 91.3 |
| 50       | 23.01                 | 23.96  | 22.56  | 22.94  | 21.90  | 23.55  | 22.51  | 24.64  | 45- 50   | 10.83       | 442.5        | 93.6, 93.6 |
| 55       | 17.89                 | 17.07  | 17.50  | 16.38  | 17.57  | 16.33  | 18.07  | 16.97  | 50- 55   | 8.711       | 451.2        | 95.4, 95.4 |
| 60       | 13.18                 | 12.01  | 12.75  | 11.59  | 13.02  | 11.86  | 13.66  | 12.25  | 55- 60   | 6.849       | 458.1        | 96.9, 96.9 |
| 65       | 9.095                 | 8.673  | 8.654  | 8.299  | 8.584  | 8.818  | 9.308  | 9.046  | 60- 65   | 5.137       | 463.2        | 98.98      |
| 70       | 6.248                 | 6.087  | 5.804  | 5.921  | 5.763  | 6.327  | 6.380  | 6.630  | 65- 70   | 3.746       | 466.9        | 98.8, 98.8 |
| 75       | 4.277                 | 4.096  | 3.822  | 3.952  | 3.871  | 4.365  | 4.377  | 4.599  | 70- 75   | 2.683       | 469.6        | 99.3, 99.3 |
| 80       | 2.645                 | 2.372  | 2.184  | 2.235  | 2.324  | 2.714  | 2.813  | 2.903  | 75- 80   | 1.789       | 471.4        | 99.7, 99.7 |
| 85       | 1.118                 | 0.8651 | 0.7310 | 0.7573 | 0.9212 | 1.197  | 1.314  | 1.318  | 80- 85   | 0.9546      | 472.4        | 99.9, 99.9 |
| 90       | 0.0484                | 0.0029 | 0.0027 | 0.0032 | 0.0058 | 0.1363 | 0.2060 | 0.1886 | 85- 90   | 0.2633      | 472.6        | 100, 100   |
| 95       | 0.0023                | 0.0022 | 0.0020 | 0.0021 | 0.0018 | 0.0018 | 0.0019 | 0.0021 | 90- 95   | 0.0054      | 472.6        | 100, 100   |
| 100      | 0.0023                | 0.0024 | 0.0020 | 0.0021 | 0.0021 | 0.0022 | 0.0021 | 0.0024 | 95- 100  | 0.0011      | 472.6        | 100, 100   |
| 105      | 0.0026                | 0.0026 | 0.0023 | 0.0027 | 0.0024 | 0.0023 | 0.0025 | 0.0027 | 100- 105 | 0.0013      | 472.6        | 100, 100   |
| 110      | 0.0026                | 0.0029 | 0.0026 | 0.0027 | 0.0027 | 0.0028 | 0.0028 | 0.0031 | 105- 110 | 0.0014      | 472.6        | 100, 100   |
| 115      | 0.0040                | 0.0037 | 0.0039 | 0.0035 | 0.0029 | 0.0030 | 0.0032 | 0.0032 | 110- 115 | 0.0016      | 472.7        | 100, 100   |
| 120      | 0.0040                | 0.0042 | 0.0040 | 0.0041 | 0.0031 | 0.0032 | 0.0032 | 0.0034 | 115- 120 | 0.0017      | 472.7        | 100, 100   |
| 125      | 0.0040                | 0.0042 | 0.0040 | 0.0042 | 0.0034 | 0.0033 | 0.0038 | 0.0040 | 120- 125 | 0.0018      | 472.7        | 100, 100   |
| 130      | 0.0040                | 0.0042 | 0.0040 | 0.0042 | 0.0042 | 0.0043 | 0.0043 | 0.0046 | 125- 130 | 0.0018      | 472.7        | 100, 100   |
| 135      | 0.0045                | 0.0051 | 0.0048 | 0.0048 | 0.0059 | 0.0063 | 0.0061 | 0.0066 | 130- 135 | 0.0019      | 472.7        | 100, 100   |
| 140      | 0.0078                | 0.0087 | 0.0080 | 0.0085 | 0.0090 | 0.0098 | 0.0089 | 0.0099 | 135- 140 | 0.0026      | 472.7        | 100, 100   |
| 145      | 0.0146                | 0.0167 | 0.0167 | 0.0188 | 0.0158 | 0.0163 | 0.0146 | 0.0163 | 140- 145 | 0.0040      | 472.7        | 100, 100   |
| 150      | 0.0297                | 0.0331 | 0.0345 | 0.0382 | 0.0301 | 0.0291 | 0.0268 | 0.0283 | 145- 150 | 0.0067      | 472.7        | 100, 100   |
| 155      | 0.0583                | 0.0651 | 0.0676 | 0.0739 | 0.0593 | 0.0561 | 0.0517 | 0.0527 | 150- 155 | 0.0112      | 472.7        | 100, 100   |
| 160      | 0.1018                | 0.1112 | 0.1153 | 0.1224 | 0.1070 | 0.1014 | 0.0932 | 0.0950 | 155- 160 | 0.0172      | 472.7        | 100, 100   |
| 165      | 0.1380                | 0.1458 | 0.1524 | 0.1546 | 0.1456 | 0.1373 | 0.1270 | 0.1282 | 160- 165 | 0.0207      | 472.7        | 100, 100   |
| 170      | 0.1270                | 0.1317 | 0.1366 | 0.1349 | 0.1326 | 0.1259 | 0.1162 | 0.1147 | 165- 170 | 0.0166      | 472.7        | 100, 100   |
| 175      | 0.0832                | 0.0834 | 0.0847 | 0.0825 | 0.0766 | 0.0735 | 0.0685 | 0.0719 | 170- 175 | 0.0076      | 472.7        | 100, 100   |
| 180      | 0                     | 0      | 0      | 0      | 0.0002 | 0.0006 | 0.0005 | 0.0006 | 175- 180 | 0.0013      | 472.7        | 100, 100   |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.1DEG  
 Operators:  
 Test Date: 2020-04-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 24.3%  
 Test Distance: 1.900m [K=0.6268]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                            |         |                    |
|----------------------------|---------|--------------------|
| NAME: MR16-5.5-830-35D-DIM | TYPE: / | WEIGHT: /          |
| SPEC.: /                   | DIM.: / | SERIAL No.: /      |
| MFR.: RAB Lighting Inc     | SUR.: / | Shielding Angle: / |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEG)            | C0/180 | C90/270 |
| 85                | 2587   | 1691    |
| 80                | 3071   | 2536    |
| 75                | 3332   | 2977    |
| 70                | 3683   | 3421    |
| 65                | 4339   | 4128    |
| 60                | 5314   | 5141    |
| 55                | 6289   | 6151    |
| 50                | 7218   | 7075    |
| 45                | 8173   | 8059    |

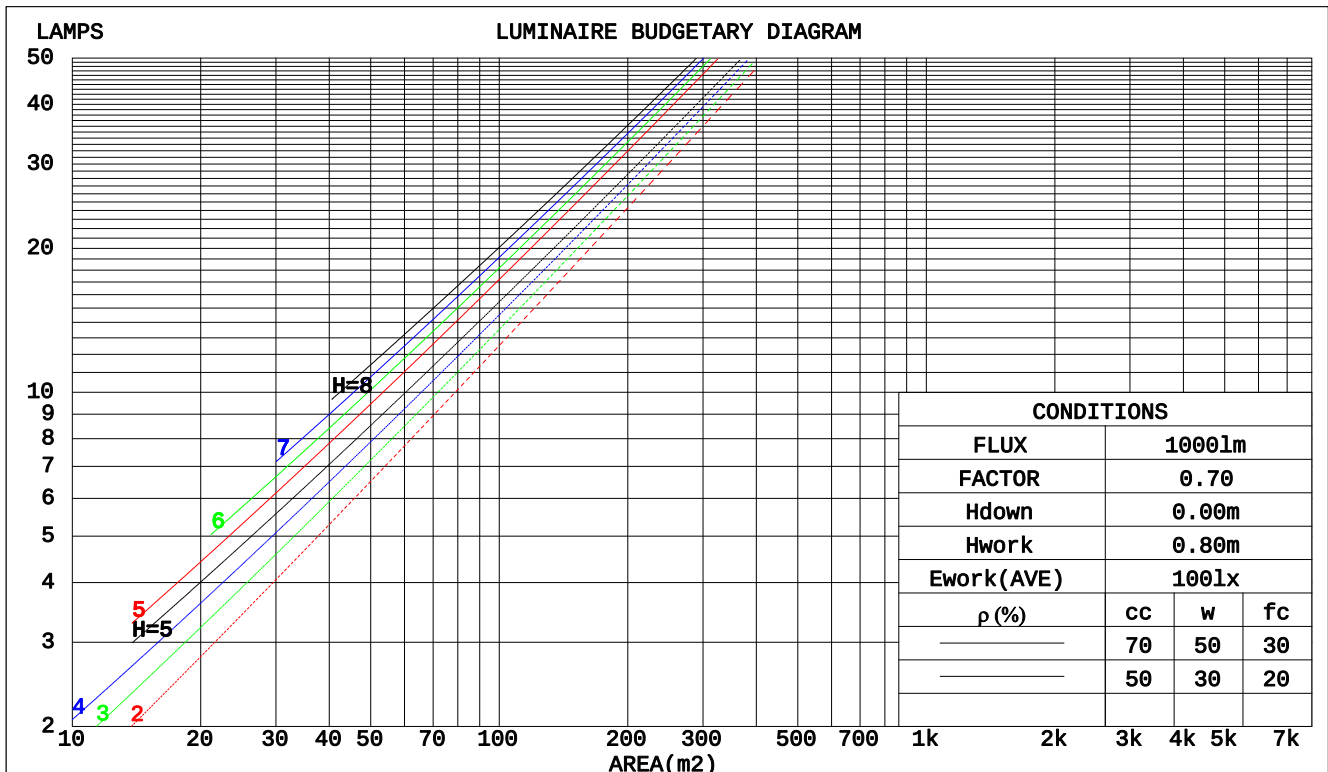
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.1DEG  
Operators:  
Test Date: 2020-04-09

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
Humidity: 24.3%  
Test Distance: 1.900m [K=0.6268]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                            |         |                    |
|----------------------------|---------|--------------------|
| NAME: MR16-5.5-830-35D-DIM | TYPE: / | WEIGHT: /          |
| SPEC.: /                   | DIM.: / | SERIAL No.: /      |
| MFR.: RAB Lighting Inc     | SUR.: / | Shielding Angle: / |

| $\rho_{CC}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0   |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| $\rho_W$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0   |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0   |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization(CU) |      |      |      |      |      |      |      |      |     |
| 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 | .00 |
| 1.0         | 1.11                  | 1.09 | 1.06 | 1.09 | 1.07 | 1.05 | 1.05                            | 1.03 | 1.02 | 1.01 | .99  | .99  | .98  | .97  | .96  | .94 |
| 2.0         | 1.04                  | 1.00 | .97  | 1.02 | .99  | .96  | .99                             | .96  | .94  | .96  | .94  | .92  | .93  | .91  | .90  | .88 |
| 3.0         | .98                   | .93  | .89  | .96  | .92  | .89  | .94                             | .90  | .87  | .91  | .88  | .86  | .89  | .87  | .85  | .83 |
| 4.0         | .92                   | .87  | .83  | .91  | .87  | .83  | .89                             | .85  | .82  | .87  | .84  | .81  | .85  | .82  | .80  | .79 |
| 5.0         | .88                   | .82  | .78  | .87  | .82  | .78  | .85                             | .81  | .77  | .83  | .80  | .77  | .82  | .79  | .76  | .75 |
| 6.0         | .83                   | .78  | .74  | .83  | .78  | .74  | .81                             | .77  | .73  | .80  | .76  | .73  | .78  | .75  | .72  | .71 |
| 7.0         | .80                   | .74  | .70  | .79  | .74  | .70  | .78                             | .73  | .70  | .77  | .73  | .70  | .75  | .72  | .69  | .68 |
| 8.0         | .76                   | .71  | .67  | .76  | .71  | .67  | .75                             | .70  | .67  | .74  | .69  | .66  | .73  | .69  | .66  | .65 |
| 9.0         | .73                   | .68  | .64  | .72  | .68  | .64  | .72                             | .67  | .64  | .71  | .67  | .64  | .70  | .66  | .64  | .62 |
| 10.0        | .70                   | .65  | .62  | .70  | .65  | .62  | .69                             | .65  | .61  | .68  | .64  | .61  | .68  | .64  | .61  | .60 |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.1DEG  
 Operators:  
 Test Date: 2020-04-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 24.3%  
 Test Distance: 1.900m [K=0.6268]  
 Remarks:

# WEC AND CCEC

|                            |         |                    |
|----------------------------|---------|--------------------|
| NAME: MR16-5.5-830-35D-DIM | TYPE: / | WEIGHT: /          |
| SPEC.: /                   | DIM.: / | SERIAL No.: /      |
| MFR.: RAB Lighting Inc     | SUR.: / | Shielding Angle: / |

| $\rho_{cc}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |  |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| $\rho_w$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |  |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |  |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |  |
| 0.0         |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |  |
| 1.0         | .173                  | .098 | .031 | .166 | .095 | .030 | .153                            | .088 | .028 | .142 | .082 | .026 | .131 | .076 | .024 |   |  |
| 2.0         | .162                  | .089 | .027 | .157 | .086 | .027 | .146                            | .081 | .025 | .136 | .077 | .024 | .127 | .072 | .023 |   |  |
| 3.0         | .152                  | .081 | .024 | .147 | .079 | .024 | .138                            | .075 | .023 | .130 | .071 | .022 | .123 | .068 | .021 |   |  |
| 4.0         | .143                  | .074 | .022 | .139 | .073 | .021 | .131                            | .070 | .021 | .124 | .067 | .020 | .117 | .064 | .019 |   |  |
| 5.0         | .135                  | .069 | .020 | .131 | .067 | .020 | .124                            | .065 | .019 | .118 | .062 | .019 | .113 | .060 | .018 |   |  |
| 6.0         | .127                  | .064 | .018 | .124 | .063 | .018 | .118                            | .061 | .018 | .113 | .059 | .017 | .108 | .057 | .017 |   |  |
| 7.0         | .121                  | .060 | .017 | .118 | .059 | .017 | .113                            | .057 | .016 | .108 | .055 | .016 | .104 | .054 | .016 |   |  |
| 8.0         | .115                  | .056 | .016 | .112 | .055 | .016 | .108                            | .054 | .015 | .103 | .052 | .015 | .099 | .051 | .015 |   |  |
| 9.0         | .109                  | .053 | .015 | .107 | .052 | .015 | .103                            | .051 | .014 | .099 | .050 | .014 | .096 | .049 | .014 |   |  |
| 10.0        | .104                  | .050 | .014 | .102 | .049 | .014 | .099                            | .048 | .014 | .095 | .047 | .013 | .092 | .046 | .013 |   |  |

| ρ <sub>cc</sub> | 80%                   |      |      | 70%  |      |      | 50%                                        |      |      | 30%  |      |      | 10%  |      |      | 0 |
|-----------------|-----------------------|------|------|------|------|------|--------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρ <sub>w</sub>  | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                        | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρ <sub>fc</sub> | 20%                   |      |      | 20%  |      |      | 20%                                        |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR             | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0             | .191                  | .191 | .191 | .163 | .163 | .163 | .111                                       | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0             | .171                  | .158 | .145 | .146 | .135 | .125 | .100                                       | .093 | .087 | .058 | .054 | .050 | .018 | .017 | .016 |   |
| 2.0             | .155                  | .133 | .114 | .133 | .114 | .098 | .091                                       | .079 | .069 | .053 | .046 | .040 | .017 | .015 | .013 |   |
| 3.0             | .142                  | .114 | .091 | .122 | .098 | .079 | .084                                       | .068 | .055 | .048 | .040 | .033 | .016 | .013 | .011 |   |
| 4.0             | .131                  | .099 | .074 | .112 | .085 | .065 | .077                                       | .059 | .045 | .045 | .035 | .027 | .014 | .011 | .009 |   |
| 5.0             | .121                  | .087 | .062 | .104 | .075 | .054 | .072                                       | .053 | .038 | .042 | .031 | .022 | .013 | .010 | .007 |   |
| 6.0             | .113                  | .077 | .052 | .097 | .067 | .045 | .067                                       | .047 | .032 | .039 | .028 | .019 | .013 | .009 | .006 |   |
| 7.0             | .106                  | .070 | .044 | .091 | .060 | .038 | .063                                       | .042 | .027 | .037 | .025 | .016 | .012 | .008 | .005 |   |
| 8.0             | .100                  | .063 | .038 | .086 | .055 | .033 | .059                                       | .038 | .023 | .035 | .023 | .014 | .011 | .007 | .005 |   |
| 9.0             | .094                  | .058 | .033 | .081 | .050 | .029 | .056                                       | .035 | .020 | .033 | .021 | .012 | .011 | .007 | .004 |   |
| 10.0            | .089                  | .053 | .029 | .077 | .046 | .025 | .053                                       | .032 | .018 | .031 | .019 | .011 | .010 | .006 | .004 |   |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:  
Test Date:2020-04-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
Humidity:24.3%  
Test Distance:1.900m [K=0.6268]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                    |     |     |     |     |     |                  |      |      |      |      |                    |      |      |      |      |
|----------------------------------------------------|-----|-----|-----|-----|-----|------------------|------|------|------|------|--------------------|------|------|------|------|
| NAME: MR16-5.5-830-35D-DIM                         |     |     |     |     |     | TYPE: /          |      |      |      |      | WEIGHT: /          |      |      |      |      |
| SPEC.: /                                           |     |     |     |     |     | DIM.: /          |      |      |      |      | SERIAL No.: /      |      |      |      |      |
| MFR.: RAB Lighting Inc                             |     |     |     |     |     | SUR.: /          |      |      |      |      | Shielding Angle: / |      |      |      |      |
| ceiling/cavity                                     | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7              | 0.7  | 0.5  | 0.5  | 0.3  | 0.7                | 0.7  | 0.5  | 0.5  | 0.3  |
| walls                                              | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5              | 0.3  | 0.5  | 0.3  | 0.3  | 0.5                | 0.3  | 0.5  | 0.3  | 0.3  |
| working plane                                      | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2              | 0.2  | 0.2  | 0.2  | 0.2  | 0.2                | 0.2  | 0.2  | 0.2  | 0.2  |
| Room dimensions                                    |     |     |     |     |     | Viewed crosswise |      |      |      |      | Viewed endwise     |      |      |      |      |
| x = 2H y = 2H                                      |     |     |     |     |     | 17.0             | 17.9 | 17.2 | 18.0 | 18.2 | 16.9               | 17.8 | 17.2 | 17.9 | 18.1 |
| 3H                                                 |     |     |     |     |     | 17.7             | 18.5 | 17.9 | 18.7 | 18.9 | 17.5               | 18.3 | 17.8 | 18.5 | 18.7 |
| 4H                                                 |     |     |     |     |     | 17.9             | 18.7 | 18.2 | 18.9 | 19.1 | 17.8               | 18.5 | 18.0 | 18.7 | 18.9 |
| 6H                                                 |     |     |     |     |     | 18.1             | 18.9 | 18.4 | 19.1 | 19.3 | 17.9               | 18.6 | 18.2 | 18.9 | 19.1 |
| 8H                                                 |     |     |     |     |     | 18.2             | 18.9 | 18.5 | 19.1 | 19.4 | 17.9               | 18.6 | 18.2 | 18.9 | 19.1 |
| 12H                                                |     |     |     |     |     | 18.2             | 18.9 | 18.6 | 19.2 | 19.4 | 17.9               | 18.6 | 18.3 | 18.9 | 19.1 |
| 4H 2H                                              |     |     |     |     |     | 17.3             | 18.0 | 17.5 | 18.2 | 18.5 | 17.2               | 17.9 | 17.5 | 18.2 | 18.4 |
| 3H                                                 |     |     |     |     |     | 18.1             | 18.7 | 18.4 | 19.0 | 19.3 | 18.0               | 18.6 | 18.3 | 18.9 | 19.2 |
| 4H                                                 |     |     |     |     |     | 18.4             | 19.0 | 18.8 | 19.3 | 19.6 | 18.3               | 18.9 | 18.6 | 19.2 | 19.5 |
| 6H                                                 |     |     |     |     |     | 18.7             | 19.3 | 19.1 | 19.6 | 20.0 | 18.5               | 19.0 | 18.9 | 19.4 | 19.7 |
| 8H                                                 |     |     |     |     |     | 18.8             | 19.3 | 19.2 | 19.7 | 20.1 | 18.6               | 19.1 | 19.0 | 19.4 | 19.8 |
| 12H                                                |     |     |     |     |     | 18.9             | 19.4 | 19.3 | 19.7 | 20.1 | 18.6               | 19.0 | 19.0 | 19.4 | 19.8 |
| 8H 4H                                              |     |     |     |     |     | 18.5             | 19.0 | 18.9 | 19.4 | 19.7 | 18.4               | 18.9 | 18.8 | 19.2 | 19.6 |
| 6H                                                 |     |     |     |     |     | 18.9             | 19.3 | 19.3 | 19.7 | 20.1 | 18.7               | 19.1 | 19.1 | 19.5 | 19.9 |
| 8H                                                 |     |     |     |     |     | 19.1             | 19.4 | 19.5 | 19.9 | 20.3 | 18.8               | 19.2 | 19.2 | 19.6 | 20.0 |
| 12H                                                |     |     |     |     |     | 19.2             | 19.5 | 19.7 | 19.9 | 20.4 | 18.8               | 19.2 | 19.3 | 19.6 | 20.1 |
| 12H 4H                                             |     |     |     |     |     | 18.5             | 19.0 | 18.9 | 19.3 | 19.7 | 18.3               | 18.8 | 18.8 | 19.2 | 19.6 |
| 6H                                                 |     |     |     |     |     | 18.9             | 19.3 | 19.4 | 19.7 | 20.1 | 18.7               | 19.1 | 19.1 | 19.5 | 19.9 |
| 8H                                                 |     |     |     |     |     | 19.1             | 19.4 | 19.6 | 19.9 | 20.3 | 18.8               | 19.1 | 19.3 | 19.6 | 20.0 |
| Variations with the observer position at spacings: |     |     |     |     |     |                  |      |      |      |      |                    |      |      |      |      |
| S = 1.0H                                           |     |     |     |     |     | + 0.5 / - 0.6    |      |      |      |      | + 0.6 / - 0.7      |      |      |      |      |
| 1.5H                                               |     |     |     |     |     | + 0.3 / - 0.3    |      |      |      |      | + 0.3 / - 0.4      |      |      |      |      |
| 2.0H                                               |     |     |     |     |     | + 0.9 / - 0.9    |      |      |      |      | + 1.0 / - 0.9      |      |      |      |      |

CIE Pub.117, 472.7 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.6)

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.1DEG  
Operators:  
Test Date: 2020-04-09

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
Humidity: 24.3%  
Test Distance: 1.900m [K=0.6268]  
Remarks:

### UTILIZATION FACTORS TABLE

|                            |         |                    |
|----------------------------|---------|--------------------|
| NAME: MR16-5.5-830-35D-DIM | TYPE: / | WEIGHT: /          |
| SPEC.: /                   | DIM.: / | SERIAL No.: /      |
| MFR.: RAB Lighting Inc     | SUR.: / | Shielding Angle: / |

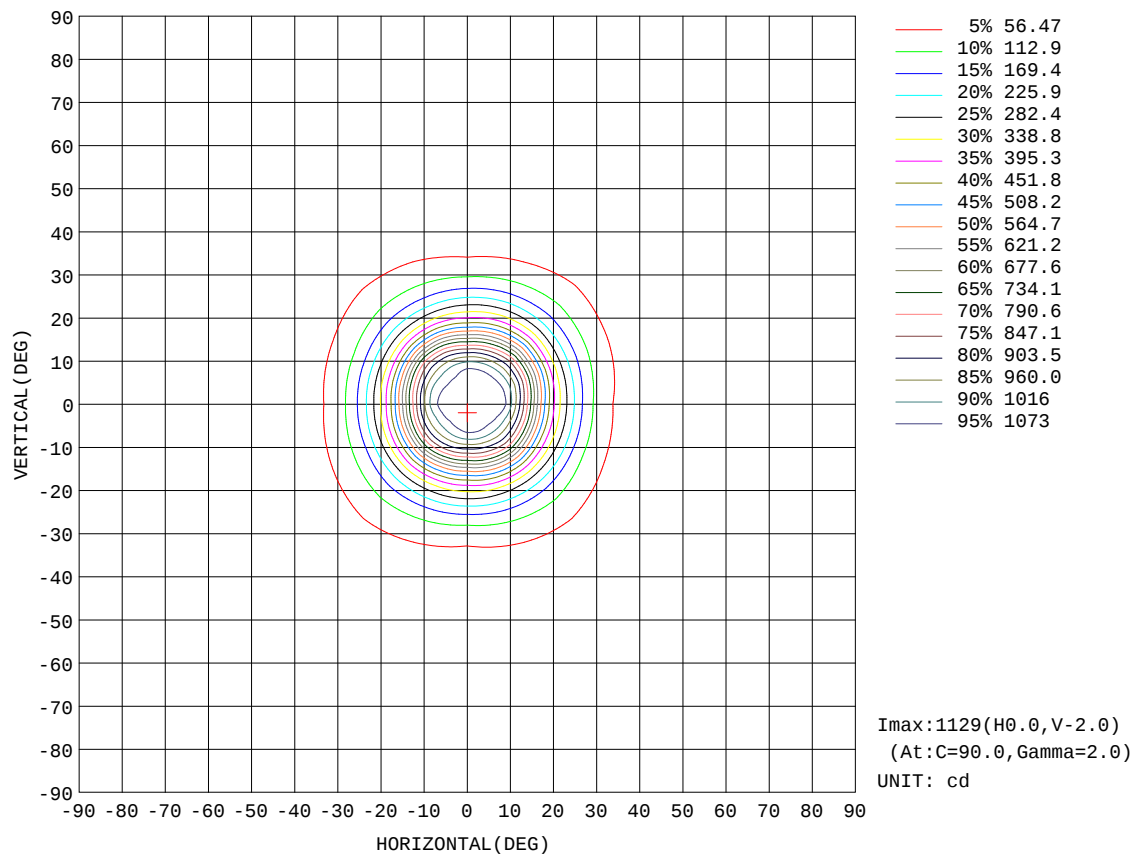
| REFLECTANCE                      |                                                 |     |     |     |     |     |     |     |     |        |
|----------------------------------|-------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Ceiling                          | 0.8                                             | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0      |
| Walls                            | 0.7                                             | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0      |
| Working plane                    | 0.2                                             | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS(PERCENT)    k(RI) × RCR = 5 |     |     |     |     |     |     |     |     |        |
| k = 0.60                         | 84                                              | 78  | 73  | 84  | 77  | 73  | 83  | 77  | 73  | 69     |
| 0.80                             | 92                                              | 86  | 82  | 91  | 85  | 81  | 90  | 85  | 81  | 77     |
| 1.00                             | 97                                              | 91  | 87  | 96  | 90  | 87  | 94  | 90  | 86  | 82     |
| 1.25                             | 101                                             | 96  | 92  | 100 | 95  | 91  | 98  | 94  | 91  | 86     |
| 1.50                             | 104                                             | 99  | 95  | 103 | 98  | 95  | 101 | 97  | 94  | 89     |
| 2.00                             | 107                                             | 103 | 99  | 106 | 102 | 98  | 103 | 100 | 97  | 91     |
| 2.50                             | 109                                             | 105 | 102 | 107 | 104 | 101 | 104 | 101 | 99  | 93     |
| 3.00                             | 111                                             | 107 | 104 | 109 | 106 | 103 | 106 | 103 | 101 | 94     |
| 4.00                             | 113                                             | 110 | 108 | 111 | 108 | 106 | 107 | 105 | 103 | 96     |
| 5.00                             | 114                                             | 112 | 110 | 112 | 110 | 108 | 108 | 107 | 105 | 97     |
| ROOM INDEX                       | UF(total)                                       |     |     |     |     |     |     |     |     | Direct |
| According to DIN EN 13032-2 2004 |                                                 |     |     |     |     |     |     |     |     |        |
| Suspended                        |                                                 |     |     |     |     |     |     |     |     |        |
| SHRNM = 1.25                     |                                                 |     |     |     |     |     |     |     |     |        |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.1DEG  
Operators:  
Test Date: 2020-04-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
Humidity: 24.3%  
Test Distance: 1.900m [K=0.6268]  
Remarks:

## ISOCANDELA DIAGRAM

|                            |         |                    |
|----------------------------|---------|--------------------|
| NAME: MR16-5.5-830-35D-DIM | TYPE: / | WEIGHT: /          |
| SPEC.: /                   | DIM.: / | SERIAL No.: /      |
| MFR.: RAB Lighting Inc     | SUR.: / | Shielding Angle: / |

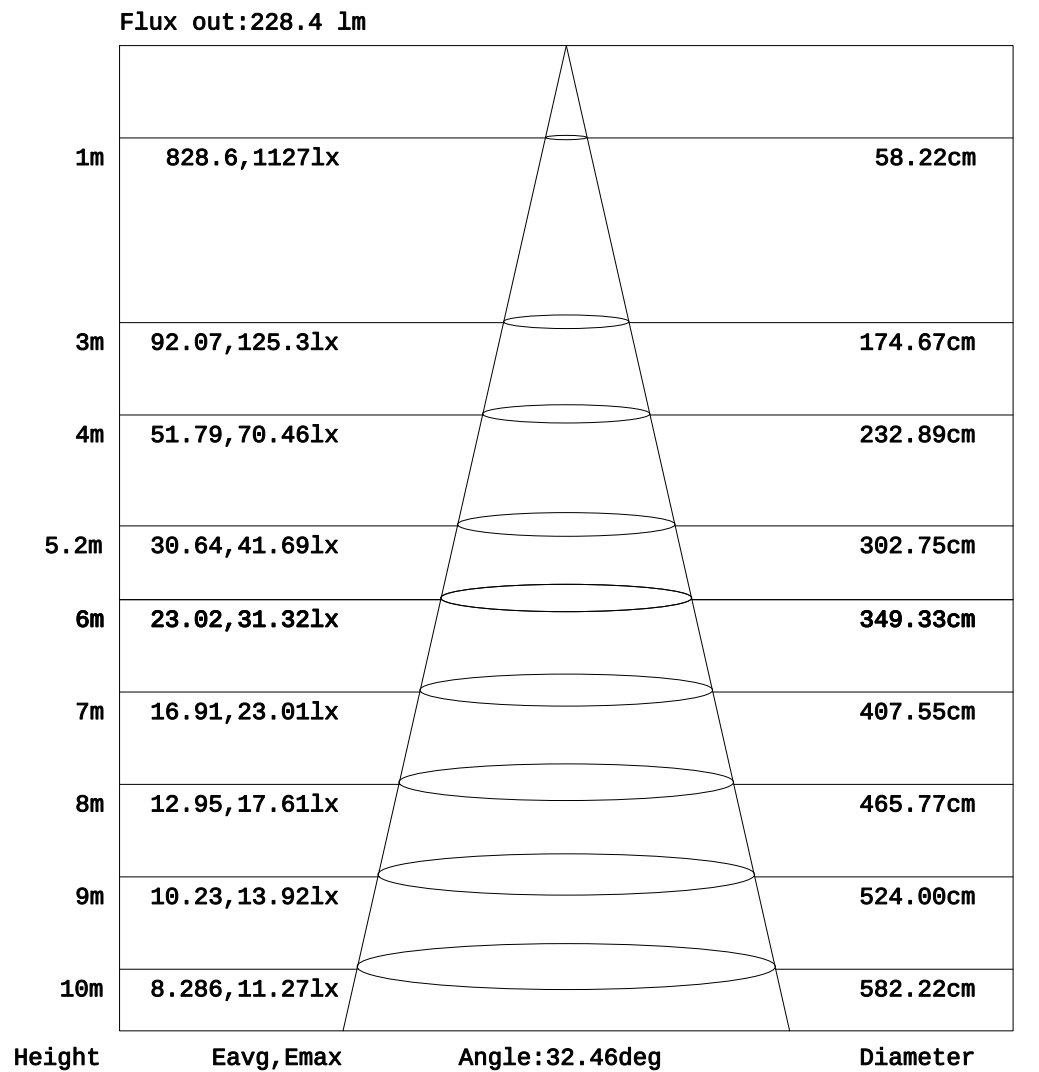


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.1DEG  
Operators:  
Test Date: 2020-04-09

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
Humidity: 24.3%  
Test Distance: 1.900m [K=0.6268]  
Remarks:

### AAI Figure

|                            |         |                    |
|----------------------------|---------|--------------------|
| NAME: MR16-5.5-830-35D-DIM | TYPE: / | WEIGHT: /          |
| SPEC.: /                   | DIM.: / | SERIAL No.: /      |
| MFR.: RAB Lighting Inc     | SUR.: / | Shielding Angle: / |



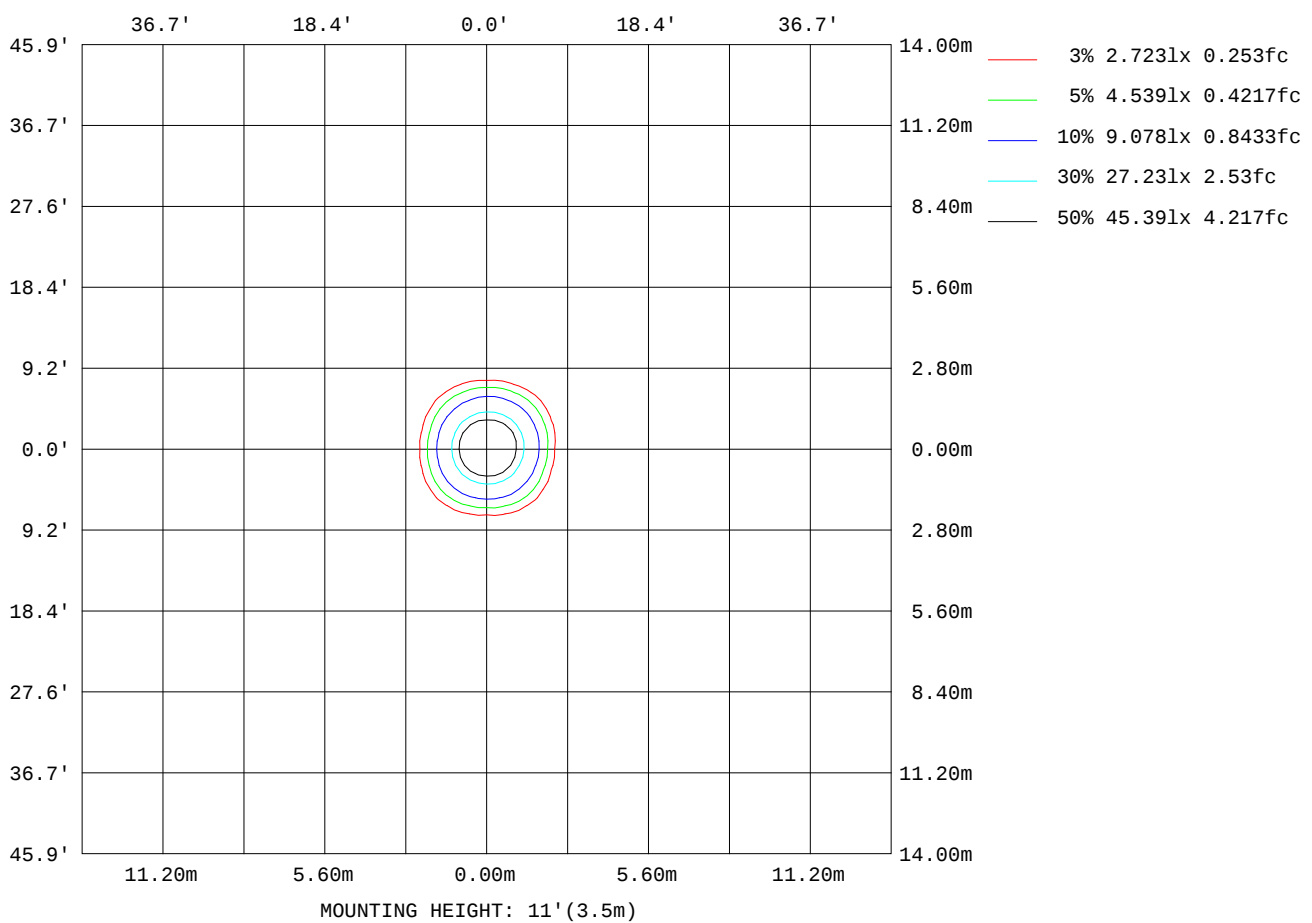
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.1DEG  
 Operators:  
 Test Date: 2020-04-09

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 24.3%  
 Test Distance: 1.900m [K=0.6268]  
 Remarks:

### ISOLUX DIAGRAM

|                            |         |                    |
|----------------------------|---------|--------------------|
| NAME: MR16-5.5-830-35D-DIM | TYPE: / | WEIGHT: /          |
| SPEC.: /                   | DIM.: / | SERIAL No.: /      |
| MFR.: RAB Lighting Inc     | SUR.: / | Shielding Angle: / |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.1DEG  
Operators:  
Test Date: 2020-04-09

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
Humidity: 24.3%  
Test Distance: 1.900m [K=0.6268]  
Remarks:

## LED Avg.L Report

|                            |         |                    |
|----------------------------|---------|--------------------|
| NAME: MR16-5.5-830-35D-DIM | TYPE: / | WEIGHT: /          |
| SPEC.: /                   | DIM.: / | SERIAL No.: /      |
| MFR.: RAB Lighting Inc     | SUR.: / | Shielding Angle: / |

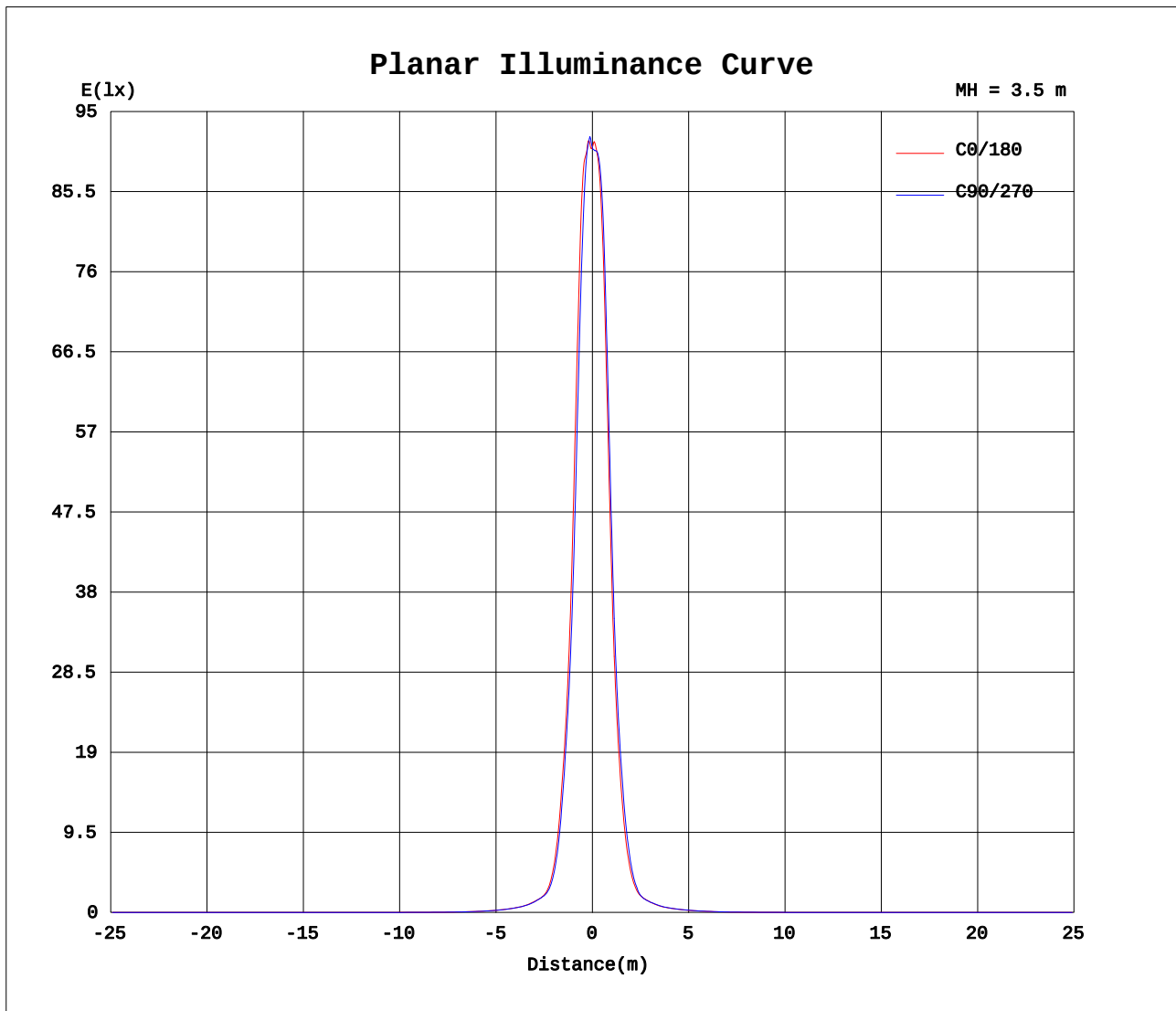
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 4217  |
| L_0~180(75)av  | 3173  |
| L_0~180(85)av  | 2359  |
| L_90~270(65)av | 4285  |
| L_90~270(75)av | 3194  |
| L_90~270(85)av | 2365  |
| L_45(65)av     | 4155  |
| L_45(75)av     | 3313  |
| L_45(85)av     | 2393  |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.1DEG  
Operators:  
Test Date: 2020-04-09

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
Humidity: 24.3%  
Test Distance: 1.900m [K=0.6268]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.1DEG  
Operators:  
Test Date: 2020-04-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
Humidity: 24.3%  
Test Distance: 1.900m [K=0.6268]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                            |         |                    |
|----------------------------|---------|--------------------|
| NAME: MR16-5.5-830-35D-DIM | TYPE: / | WEIGHT: /          |
| SPEC.: /                   | DIM.: / | SERIAL No.: /      |
| MFR.: RAB Lighting Inc     | SUR.: / | Shielding Angle: / |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 22.5 | 45   | 67.5 | 90   | 112.5 | 135  | 157.5 | 180  | 202.5 | 225  | 247.5 | 270  | 292.5 | 315  | 337.5 |  |  |  |
|--------------------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|--|--|--|
| 0                  | 1112 | 1112 | 1111 | 1111 | 1111 | 1112  | 1111 | 1111  | 1112 | 1112  | 1111 | 1111  | 1111 | 1112  | 1111 | 1111  |  |  |  |
| 5                  | 1116 | 1107 | 1104 | 1107 | 1107 | 1093  | 1083 | 1093  | 1104 | 1098  | 1095 | 1097  | 1112 | 1119  | 1111 | 1112  |  |  |  |
| 10                 | 1030 | 988  | 971  | 944  | 924  | 929   | 935  | 941   | 951  | 971   | 978  | 996   | 1008 | 1023  | 1032 | 1043  |  |  |  |
| 15                 | 712  | 696  | 690  | 641  | 598  | 608   | 634  | 623   | 620  | 657   | 713  | 713   | 694  | 734   | 784  | 768   |  |  |  |
| 20                 | 403  | 393  | 387  | 367  | 349  | 348   | 356  | 350   | 343  | 360   | 386  | 394   | 396  | 425   | 451  | 436   |  |  |  |
| 25                 | 221  | 212  | 206  | 195  | 184  | 185   | 189  | 181   | 181  | 187   | 201  | 206   | 219  | 233   | 240  | 233   |  |  |  |
| 30                 | 98.7 | 99.5 | 109  | 96.4 | 83.1 | 92.8  | 102  | 95.3  | 86.5 | 93.3  | 107  | 107   | 104  | 117   | 128  | 118   |  |  |  |
| 35                 | 49.9 | 52.6 | 58.2 | 52.9 | 47.2 | 52.0  | 57.5 | 52.4  | 47.5 | 50.8  | 59.5 | 57.0  | 49.9 | 58.0  | 67.5 | 60.8  |  |  |  |
| 40                 | 38.3 | 39.4 | 41.7 | 39.9 | 37.0 | 39.2  | 40.9 | 38.6  | 36.5 | 38.0  | 40.7 | 38.7  | 36.0 | 38.1  | 42.0 | 40.5  |  |  |  |
| 45                 | 28.7 | 31.1 | 34.3 | 31.7 | 28.3 | 30.5  | 32.7 | 30.0  | 27.1 | 29.2  | 32.1 | 30.3  | 28.1 | 29.2  | 33.6 | 31.9  |  |  |  |
| 50                 | 23.0 | 23.7 | 24.0 | 23.3 | 22.6 | 22.9  | 22.9 | 22.5  | 21.9 | 22.5  | 23.6 | 23.6  | 22.5 | 23.5  | 24.6 | 23.9  |  |  |  |
| 55                 | 17.9 | 17.5 | 17.1 | 17.5 | 17.5 | 17.2  | 16.4 | 16.4  | 17.6 | 17.0  | 16.3 | 17.2  | 18.1 | 17.8  | 17.0 | 17.6  |  |  |  |
| 60                 | 13.2 | 12.7 | 12.0 | 12.5 | 12.7 | 12.3  | 11.6 | 12.0  | 13.0 | 12.4  | 11.9 | 12.6  | 13.7 | 13.4  | 12.2 | 12.6  |  |  |  |
| 65                 | 9.10 | 8.83 | 8.67 | 8.69 | 8.65 | 8.56  | 8.30 | 8.60  | 8.58 | 8.55  | 8.82 | 9.06  | 9.31 | 9.35  | 9.05 | 8.95  |  |  |  |
| 70                 | 6.25 | 6.11 | 6.09 | 5.97 | 5.80 | 5.89  | 5.92 | 5.91  | 5.76 | 5.95  | 6.33 | 6.53  | 6.38 | 6.51  | 6.63 | 6.46  |  |  |  |
| 75                 | 4.28 | 4.18 | 4.10 | 3.97 | 3.82 | 3.89  | 3.95 | 3.92  | 3.87 | 4.07  | 4.37 | 4.55  | 4.38 | 4.50  | 4.60 | 4.51  |  |  |  |
| 80                 | 2.65 | 2.50 | 2.37 | 2.27 | 2.18 | 2.19  | 2.23 | 2.26  | 2.32 | 2.50  | 2.71 | 2.85  | 2.81 | 2.89  | 2.90 | 2.82  |  |  |  |
| 85                 | 1.12 | 0.99 | 0.87 | 0.78 | 0.73 | 0.73  | 0.76 | 0.82  | 0.92 | 1.06  | 1.20 | 1.29  | 1.31 | 1.34  | 1.32 | 1.25  |  |  |  |
| 90                 | 0.05 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.01 | 0.04  | 0.14 | 0.20  | 0.21 | 0.21  | 0.19 | 0.15  |  |  |  |
| 95                 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  |  |  |  |
| 100                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  |  |  |  |
| 105                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  |  |  |  |
| 110                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  |  |  |  |
| 115                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  |  |  |  |
| 120                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  |  |  |  |
| 125                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  |  |  |  |
| 130                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  |  |  |  |
| 135                | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.01 | 0.01  | 0.01 | 0.01  | 0.01 | 0.01  | 0.01 | 0.01  |  |  |  |
| 140                | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 0.01 | 0.01  | 0.01 | 0.01  | 0.01 | 0.01  | 0.01 | 0.01  | 0.01 | 0.01  |  |  |  |
| 145                | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02  | 0.02 | 0.02  | 0.02 | 0.02  | 0.02 | 0.02  | 0.02 | 0.01  | 0.02 | 0.02  |  |  |  |
| 150                | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04  | 0.04 | 0.04  | 0.03 | 0.03  | 0.03 | 0.03  | 0.03 | 0.03  | 0.03 | 0.03  |  |  |  |
| 155                | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07  | 0.07 | 0.07  | 0.06 | 0.06  | 0.06 | 0.05  | 0.05 | 0.05  | 0.05 | 0.05  |  |  |  |
| 160                | 0.10 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12  | 0.12 | 0.12  | 0.11 | 0.10  | 0.10 | 0.10  | 0.09 | 0.09  | 0.09 | 0.10  |  |  |  |
| 165                | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16  | 0.15 | 0.15  | 0.15 | 0.14  | 0.14 | 0.13  | 0.13 | 0.13  | 0.13 | 0.13  |  |  |  |
| 170                | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14  | 0.13 | 0.13  | 0.13 | 0.13  | 0.13 | 0.12  | 0.12 | 0.12  | 0.11 | 0.12  |  |  |  |
| 175                | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08  | 0.08 | 0.08  | 0.08 | 0.08  | 0.07 | 0.07  | 0.07 | 0.07  | 0.07 | 0.07  |  |  |  |
| 180                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.1DEG  
Operators:  
Test Date: 2020-04-09

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.0.366  
Humidity: 24.3%  
Test Distance: 1.900m [K=0.6268]  
Remarks: