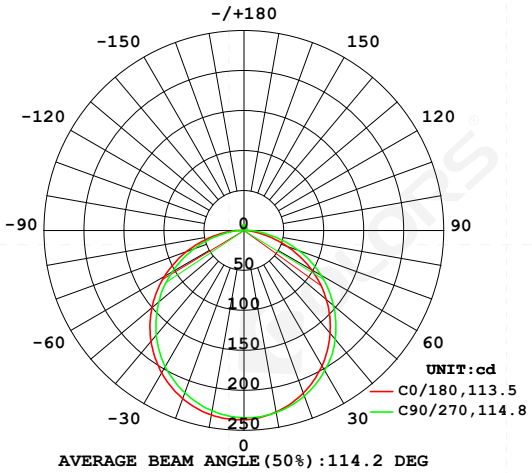
# LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|---|---|---|
| Test:U:24.00V I:0.7346A P:17.63W PF:1.000 Freq:0Hz Lamp Flux:712.582x1 lm | | |
| NAME: HCP-36616162 | TYPE: | WEIGHT: |
| SPEC.:HCP-36616162 | DIM.: 1000*16*16mm | SERIAL No.: |
| MFR.: HAVIT COMMERCIAL | SUR.:1000*16mm | Shielding Angle: |

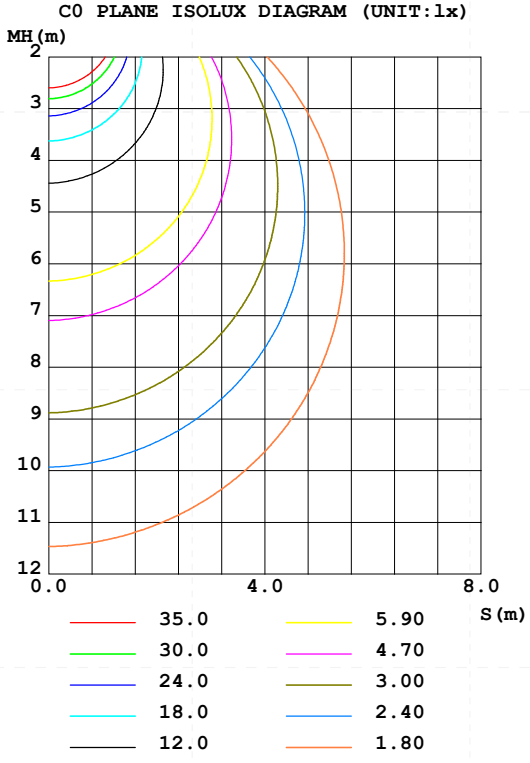
| DATA OF LAMP | | PHOTOMETRIC DATA | | Eff: 40.41 lm/W | |
|---|---|---|---|---|---|
| MODEL | HCP-36616162 | Emax(cd) | 236.8 | S/MH(C0/180) | 1.23 |
| NOMINAL POWER(W) | 18 | LOR(%) | 100.0 | S/MH(C90/270) | 1.25 |
| RATED VOLTAGE(V) | 24 | TOTAL FLUX(lm) | 712.58 | UP,DN(C0-180) | 1.8,48.2 |
| NOMINAL FLUX(lm) | 712.582 | CIE CLASS | DIRECT | UP,DN(C180-360) | 1.8,48.2 |
| LAMPS INSIDE | 1 | up(%) | 3.6 | CIBSE SHR NOM | 1.25 |
| TEST VOLTAGE(V) | 24 | down(%) | 96.4 | CIBSE SHR MAX | 1.35 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM




AVERAGE BEAM ANGLE(50%):114.2 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)




C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

E:\ ! " # \20230906\IES\HCP-36616162\HCP-36616162-9LWM24CS$%&&\IES\HCP-36616162\HCP-36616162.GOS

# ZONAL FLUX DIAGRAM

**ZONAL FLUX DIAGRAM:**

| | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | | zone | total | %lum,lamp |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 230.5 | 231.1 | 231.1 | 230.8 | 234.3 | 231.2 | 229.0 | 227.5 | 0- 10 | 22.22 | 22.22 | 3.12,3.12 |
| 20 | 216.6 | 218.9 | 220.3 | 220.5 | 223.9 | 219.3 | 216.1 | 214.0 | 10- 20 | 63.69 | 85.91 | 12.1,12.1 |
| 30 | 195.4 | 199.4 | 202.3 | 202.6 | 205.8 | 200.0 | 196.9 | 193.5 | 20- 30 | 96.75 | 182.7 | 25.6,25.6 |
| 40 | 167.8 | 173.1 | 177.6 | 178.1 | 181.0 | 174.4 | 170.7 | 166.8 | 30- 40 | 117.2 | 299.9 | 42.1,42.1 |
| 50 | 134.7 | 141.2 | 146.1 | 147.8 | 150.4 | 143.3 | 139.0 | 134.8 | 40- 50 | 122.3 | 422.1 | 59.2,59.2 |
| 60 | 97.17 | 104.3 | 111.2 | 112.5 | 114.9 | 107.7 | 103.6 | 98.37 | 50- 60 | 111.4 | 533.6 | 74.9,74.9 |
| 70 | 56.72 | 63.59 | 71.77 | 73.54 | 75.80 | 69.13 | 65.95 | 59.27 | 60- 70 | 85.88 | 619.4 | 86.9,86.9 |
| 80 | 19.15 | 26.81 | 32.37 | 34.79 | 35.87 | 32.46 | 28.34 | 23.18 | 70- 80 | 50.16 | 669.6 | 94,94 |
| 90 | 2.402 | 6.933 | 4.894 | 8.268 | 6.956 | 8.007 | 4.012 | 4.928 | 80- 90 | 17.07 | 686.7 | 96.4,96.4 |
| 100 | 2.086 | 3.513 | 3.003 | 3.459 | 1.476 | 3.761 | 2.941 | 3.168 | 90-100 | 4.169 | 690.8 | 96.9,96.9 |
| 110 | 2.884 | 2.951 | 2.488 | 3.400 | 2.255 | 3.438 | 2.447 | 3.616 | 100-110 | 2.884 | 693.7 | 97.4,97.4 |
| 120 | 3.740 | 3.830 | 3.351 | 3.886 | 3.083 | 3.909 | 3.268 | 4.030 | 110-120 | 3.266 | 697.0 | 97.8,97.8 |
| 130 | 4.598 | 4.311 | 4.125 | 4.144 | 3.904 | 4.029 | 4.144 | 4.248 | 120-130 | 3.497 | 700.5 | 98.3,98.3 |
| 140 | 5.366 | 5.038 | 4.875 | 4.870 | 4.821 | 5.001 | 4.978 | 5.179 | 130-140 | 3.543 | 704.0 | 98.8,98.8 |
| 150 | 5.924 | 5.721 | 5.534 | 5.541 | 5.566 | 5.600 | 5.709 | 5.618 | 140-150 | 3.345 | 707.4 | 99.3,99.3 |
| 160 | 6.434 | 6.303 | 6.110 | 6.123 | 6.237 | 6.217 | 6.279 | 6.140 | 150-160 | 2.744 | 710.1 | 99.7,99.7 |
| 170 | 6.884 | 6.758 | 6.619 | 6.602 | 6.812 | 6.662 | 6.680 | 6.620 | 160-170 | 1.829 | 711.9 | 99.9,99.9 |
| 180 | 7.082 | 6.998 | 6.830 | 6.848 | 7.172 | 6.920 | 6.890 | 6.794 | 170-180 | 0.6491 | 712.6 | 100,100 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

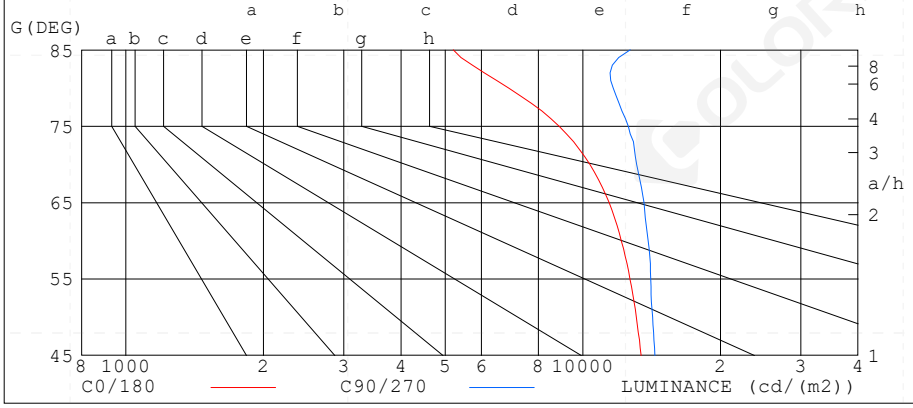
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

# LUMINANCE LIMITATION CURVES

**LUMINANCE LIMITATION CURVES**

| GLARE | CLASS | ILLUMINANCE (lx) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.50 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 500 | <=300 | | |
| 2.20 | D | | | | 2000 | 1000 | 500 | <=300 | |
| 2.55 | E | | | | | 2000 | 1000 | 500 | <=300 |
| | | a | b | c | d | e | f | g | h |




| LUMINANCE cd/(m2) | | |
|---|---|---|
| G(DEG) | C0/180 | C90/270 |
| 85 | 5207 | 12692 |
| 80 | 6894 | 11651 |
| 75 | 8883 | 12576 |
| 70 | 10364 | 13114 |
| 65 | 11412 | 13604 |
| 60 | 12146 | 13897 |
| 55 | 12687 | 14080 |
| 50 | 13098 | 14207 |
| 45 | 13413 | 14373 |

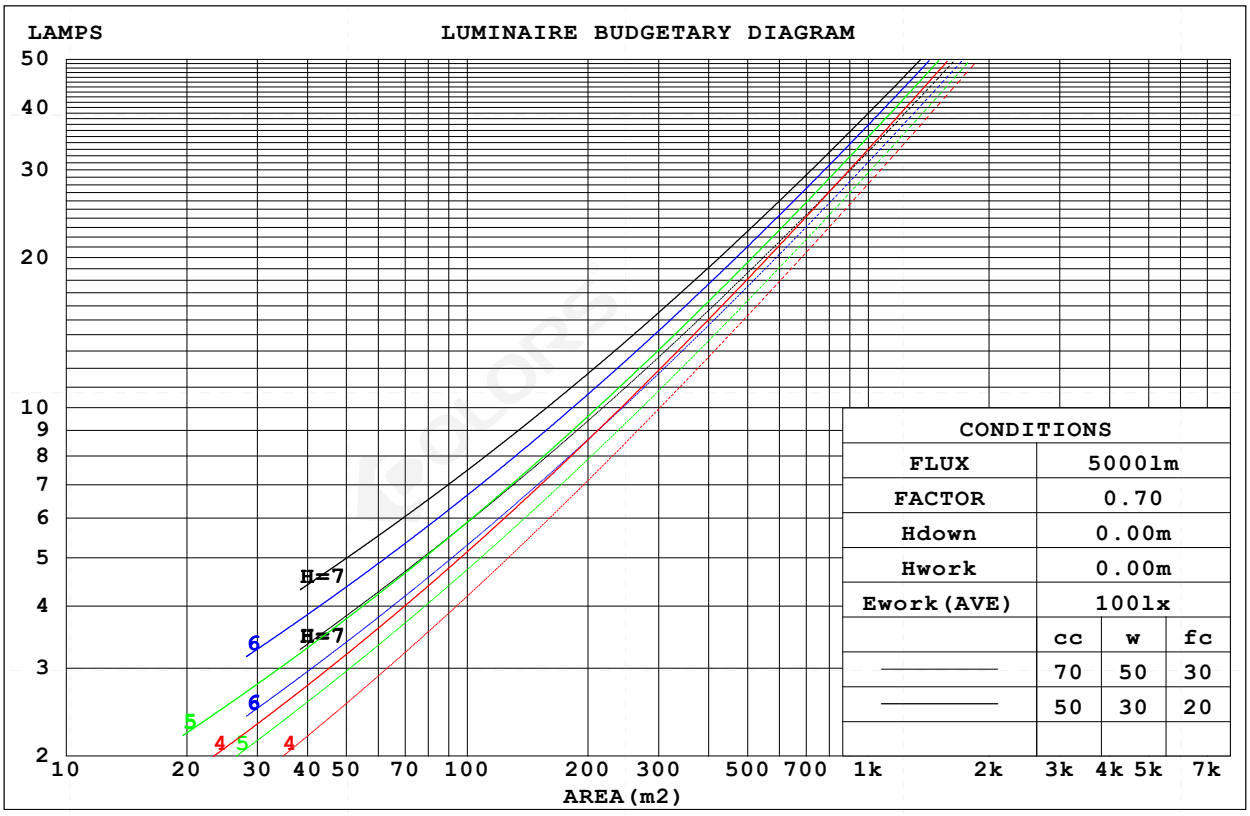
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

E:\ ! " # \20230906\IES\HCP-36616162\HCP-36616162-9LWM24CS$0%&&C\IES\HCP-36616162\HCP-36616162.GOS

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| cc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| fc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | Coefficients of Utilization(CU) | | | | | | | | | | | | |
| 0.0 | 1.18 | 1.18 | 1.18 | 1.15 | 1.15 | 1.15 | 1.09 | 1.09 | 1.09 | 1.04 | 1.04 | 1.04 | .99 | .99 | .99 | .96 |
| 1.0 | 1.03 | .98 | .94 | 1.00 | .96 | .92 | .95 | .92 | .89 | .91 | .88 | .85 | .86 | .84 | .82 | .80 |
| 2.0 | .89 | .82 | .76 | .87 | .81 | .75 | .83 | .78 | .73 | .79 | .75 | .71 | .76 | .72 | .69 | .66 |
| 3.0 | .78 | .70 | .63 | .76 | .69 | .63 | .73 | .66 | .61 | .70 | .64 | .59 | .67 | .62 | .58 | .56 |
| 4.0 | .69 | .60 | .53 | .68 | .59 | .53 | .65 | .57 | .52 | .62 | .56 | .51 | .59 | .54 | .50 | .47 |
| 5.0 | .62 | .53 | .46 | .60 | .52 | .46 | .58 | .50 | .45 | .55 | .49 | .44 | .53 | .48 | .43 | .41 |
| 6.0 | .55 | .46 | .40 | .54 | .46 | .40 | .52 | .45 | .39 | .50 | .43 | .38 | .48 | .42 | .38 | .36 |
| 7.0 | .50 | .41 | .35 | .49 | .41 | .35 | .47 | .40 | .34 | .46 | .39 | .34 | .44 | .38 | .33 | .31 |
| 8.0 | .46 | .37 | .31 | .45 | .37 | .31 | .43 | .36 | .31 | .42 | .35 | .30 | .40 | .34 | .30 | .28 |
| 9.0 | .42 | .34 | .28 | .41 | .33 | .28 | .40 | .33 | .28 | .38 | .32 | .27 | .37 | .31 | .27 | .25 |
| 10.0 | .39 | .31 | .26 | .38 | .30 | .25 | .37 | .30 | .25 | .36 | .29 | .25 | .35 | .29 | .25 | .23 |




C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

E:\ ! " # \20230906\IES\HCP-36616162\HCP-36616162-9LWM24CS$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~\HCP-36616162\HCP-36616162.GOS

## WEC AND CCEC

| cc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| fc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coeffcients(WEC) | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | |
| 1.0 | .316 | .180 | .057 | .308 | .176 | .056 | .293 | .168 | .054 | .278 | .161 | .052 | .265 | .154 | .050 | |
| 2.0 | .295 | .162 | .050 | .288 | .158 | .049 | .274 | .152 | .047 | .261 | .147 | .046 | .250 | .141 | .045 | |
| 3.0 | .272 | .145 | .043 | .265 | .142 | .043 | .253 | .137 | .042 | .242 | .133 | .041 | .231 | .128 | .040 | |
| 4.0 | .250 | .130 | .038 | .244 | .128 | .038 | .234 | .124 | .037 | .223 | .120 | .036 | .214 | .116 | .035 | |
| 5.0 | .231 | .118 | .034 | .226 | .116 | .034 | .216 | .113 | .033 | .207 | .109 | .032 | .199 | .106 | .032 | |
| 6.0 | .214 | .107 | .031 | .209 | .106 | .030 | .201 | .103 | .030 | .192 | .100 | .029 | .185 | .097 | .029 | |
| 7.0 | .199 | .098 | .028 | .195 | .097 | .028 | .187 | .095 | .027 | .180 | .092 | .027 | .173 | .090 | .026 | |
| 8.0 | .186 | .091 | .026 | .182 | .090 | .025 | .175 | .087 | .025 | .168 | .085 | .025 | .162 | .083 | .024 | |
| 9.0 | .174 | .084 | .023 | .171 | .083 | .023 | .164 | .081 | .023 | .158 | .079 | .023 | .152 | .077 | .022 | |
| 10.0 | .163 | .078 | .022 | .160 | .077 | .022 | .155 | .076 | .021 | .149 | .074 | .021 | .144 | .072 | .021 | |

| cc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| fc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | |
| 0.0 | .218 | .218 | .218 | .186 | .186 | .186 | .127 | .127 | .127 | .073 | .073 | .073 | .023 | .023 | .023 | |
| 1.0 | .209 | .184 | .162 | .179 | .158 | .139 | .122 | .109 | .096 | .070 | .063 | .056 | .023 | .020 | .018 | |
| 2.0 | .201 | .160 | .126 | .172 | .138 | .109 | .118 | .095 | .076 | .068 | .055 | .044 | .022 | .018 | .014 | |
| 3.0 | .193 | .143 | .102 | .166 | .123 | .089 | .114 | .085 | .062 | .066 | .050 | .037 | .021 | .016 | .012 | |
| 4.0 | .186 | .129 | .087 | .159 | .112 | .075 | .109 | .078 | .053 | .063 | .046 | .031 | .020 | .015 | .010 | |
| 5.0 | .178 | .119 | .076 | .153 | .103 | .066 | .105 | .072 | .046 | .061 | .042 | .028 | .020 | .014 | .009 | |
| 6.0 | .171 | .111 | .068 | .147 | .096 | .059 | .101 | .067 | .042 | .059 | .040 | .025 | .019 | .013 | .008 | |
| 7.0 | .164 | .104 | .062 | .141 | .090 | .054 | .098 | .063 | .038 | .057 | .037 | .023 | .018 | .012 | .008 | |
| 8.0 | .158 | .098 | .057 | .136 | .085 | .050 | .094 | .060 | .036 | .055 | .035 | .021 | .018 | .012 | .007 | |
| 9.0 | .152 | .093 | .054 | .131 | .081 | .047 | .090 | .057 | .033 | .053 | .034 | .020 | .017 | .011 | .007 | |
| 10.0 | .146 | .089 | .051 | .126 | .077 | .045 | .087 | .054 | .032 | .051 | .032 | .019 | .017 | .011 | .006 | |

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

# UGR(Unified Glare Rating) Table

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ceiling/cavity | | 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 |
| working plane | | 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 | 22.6 | 24.1 | 22.9 | 24.3 | 24.6 | 23.0 | 24.5 | 23.4 | 24.8 | 25.1 |
| | 3H | 23.9 | 25.3 | 24.3 | 25.6 | 25.9 | 24.7 | 26.0 | 25.0 | 26.3 | 26.6 |
| | 4H | 24.4 | 25.7 | 24.8 | 26.0 | 26.4 | 25.3 | 26.6 | 25.7 | 26.9 | 27.3 |
| | 6H | 24.7 | 25.9 | 25.1 | 26.2 | 26.6 | 25.8 | 27.1 | 26.2 | 27.4 | 27.7 |
| | 8H | 24.7 | 25.9 | 25.1 | 26.3 | 26.6 | 26.0 | 27.2 | 26.4 | 27.5 | 27.9 |
| | 12H | 24.7 | 25.9 | 25.1 | 26.2 | 26.6 | 26.2 | 27.3 | 26.6 | 27.7 | 28.0 |
| 4H | 2H | 23.2 | 24.5 | 23.6 | 24.8 | 25.2 | 23.6 | 24.9 | 24.0 | 25.2 | 25.5 |
| | 3H | 24.8 | 25.9 | 25.2 | 26.3 | 26.6 | 25.4 | 26.5 | 25.8 | 26.9 | 27.2 |
| | 4H | 25.3 | 26.4 | 25.8 | 26.8 | 27.2 | 26.2 | 27.2 | 26.6 | 27.6 | 28.0 |
| | 6H | 25.7 | 26.6 | 26.2 | 27.1 | 27.5 | 26.8 | 27.7 | 27.2 | 28.1 | 28.6 |
| | 8H | 25.8 | 26.7 | 26.3 | 27.1 | 27.6 | 27.0 | 27.9 | 27.5 | 28.3 | 28.8 |
| | 12H | 25.9 | 26.7 | 26.3 | 27.1 | 27.6 | 27.2 | 28.0 | 27.7 | 28.5 | 29.0 |
| 8H | 4H | 25.6 | 26.5 | 26.1 | 26.9 | 27.4 | 26.4 | 27.2 | 26.8 | 27.6 | 28.1 |
| | 6H | 26.2 | 26.9 | 26.7 | 27.3 | 27.8 | 27.1 | 27.8 | 27.6 | 28.3 | 28.8 |
| | 8H | 26.3 | 27.0 | 26.8 | 27.4 | 28.0 | 27.5 | 28.1 | 28.0 | 28.6 | 29.1 |
| | 12H | 26.4 | 27.0 | 27.0 | 27.5 | 28.1 | 27.8 | 28.3 | 28.3 | 28.8 | 29.4 |
| 12H | 4H | 25.7 | 26.4 | 26.1 | 26.9 | 27.4 | 26.3 | 27.1 | 26.8 | 27.6 | 28.1 |
| | 6H | 26.2 | 26.9 | 26.7 | 27.3 | 27.9 | 27.2 | 27.8 | 27.7 | 28.3 | 28.8 |
| | 8H | 26.4 | 27.0 | 27.0 | 27.5 | 28.1 | 27.5 | 28.1 | 28.1 | 28.6 | 29.2 |
| Variations with the observer position at spacings: | | | | | | | | | | | |
| S = 1.0H | | + 0.2 / - 0.2 | | | | | + 0.1 / - 0.2 | | | | |
| 1.5H | | + 0.2 / - 0.4 | | | | | + 0.2 / - 0.3 | | | | |
| 2.0H | | + 0.2 / - 0.4 | | | | | + 0.2 / - 0.3 | | | | |

CIE Pub.117, 712.6 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.2)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

E:\ ! " # \20230906\IES\HCP-36616162\HCP-36616162-9LWM24CS$0%&C\IES\HCP-36616162\HCP-36616162.GOS

# UTILIZATION FACTORS TABLE

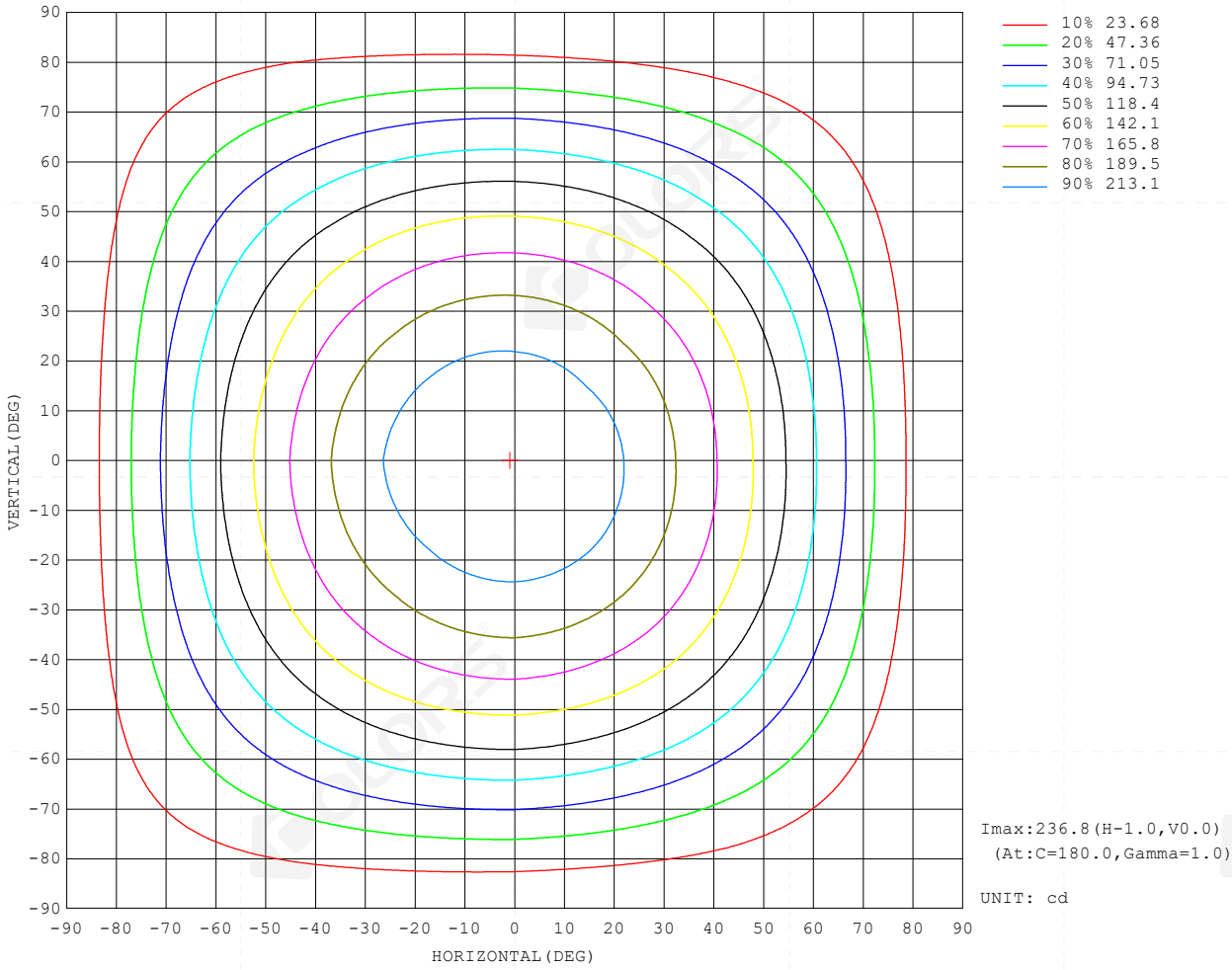
| REFLECTANCE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0 |
| ROOM INDEX | UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5 | | | | | | | | | |
| k = 0.60 | 56 | 44 | 37 | 55 | 44 | 37 | 54 | 43 | 37 | 30 |
| 0.80 | 66 | 54 | 47 | 65 | 54 | 46 | 63 | 53 | 46 | 39 |
| 1.00 | 74 | 63 | 56 | 73 | 62 | 55 | 70 | 63 | 54 | 47 |
| 1.25 | 81 | 71 | 63 | 80 | 70 | 63 | 77 | 68 | 62 | 54 |
| 1.50 | 86 | 76 | 69 | 84 | 75 | 68 | 81 | 73 | 67 | 59 |
| 2.00 | 93 | 84 | 78 | 91 | 83 | 77 | 87 | 80 | 75 | 66 |
| 2.50 | 97 | 89 | 83 | 95 | 88 | 82 | 91 | 85 | 80 | 70 |
| 3.00 | 101 | 94 | 88 | 98 | 92 | 87 | 94 | 88 | 84 | 74 |
| 4.00 | 105 | 99 | 94 | 102 | 97 | 92 | 97 | 93 | 89 | 79 |
| 5.00 | 107 | 102 | 98 | 105 | 100 | 96 | 99 | 96 | 93 | 82 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | | Suspended | | | | | SHRNOM = 1.25 | |

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

E:\ ! " # \20230906\IES\HCP-36616162\HCP-36616162-9LWM24CS$0%&&C\IES\HCP-36616162\HCP-36616162.GOS

## ISOCANDELA DIAGRAM



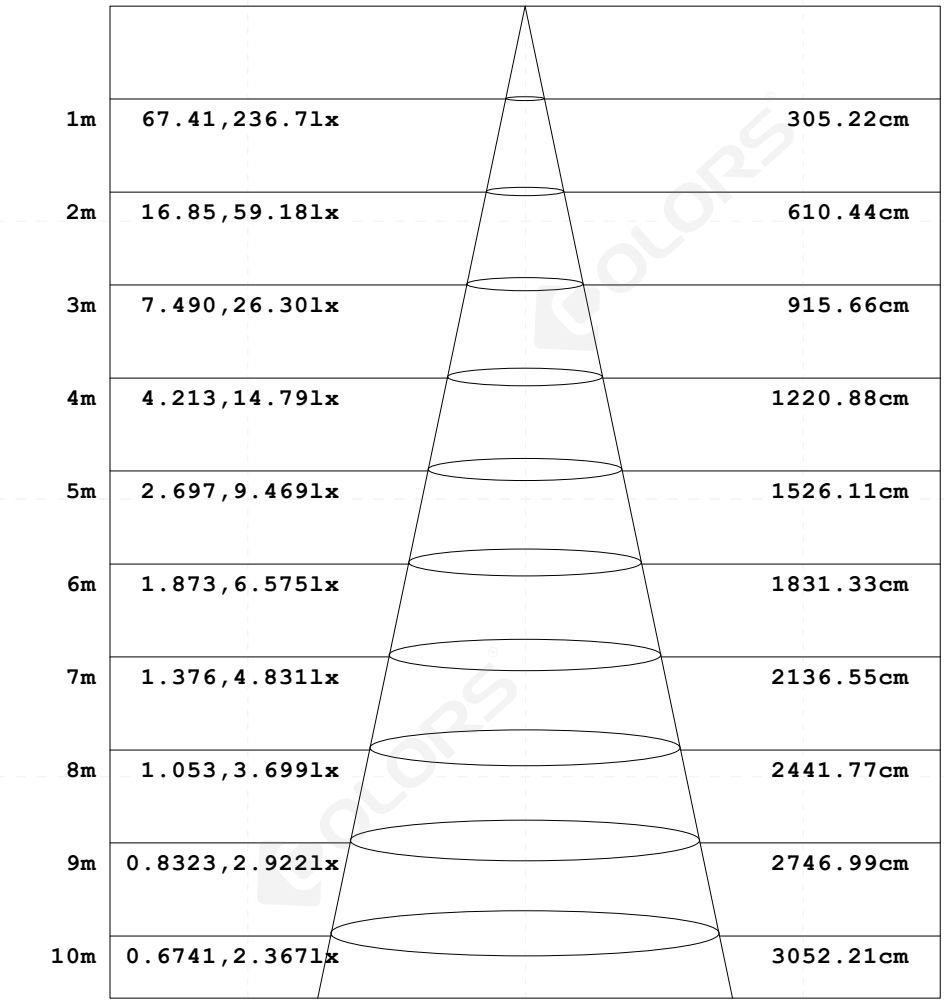

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

E:\ ! " # \20230906\IES\HCP-36616162\HCP-36616162-9LWM24CS$0%&&C\IES\HCP-36616162\HCP-36616162.GOS

## AAI Figure

Flux out:502.2 lm



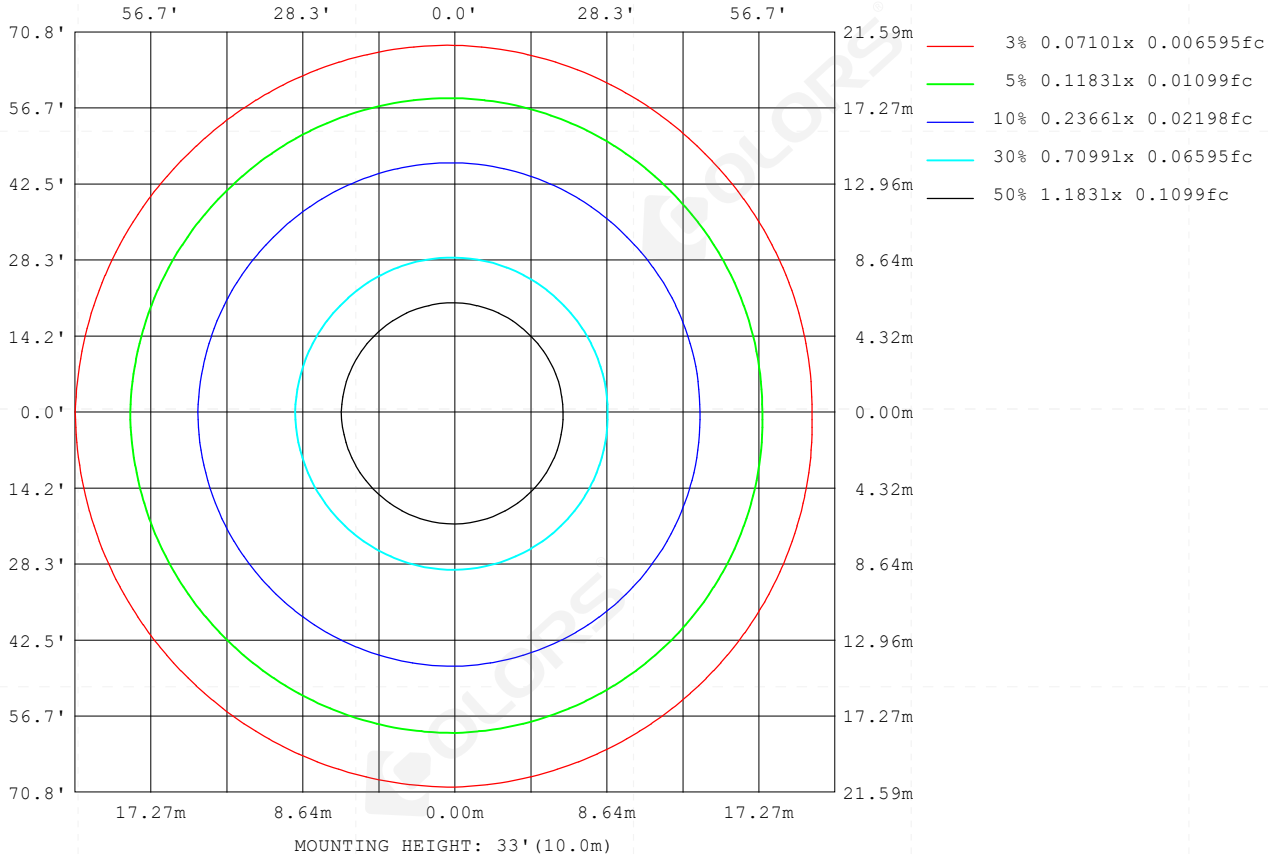

Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

E:\ ! " # \20230906\IES\HCP-36616162\HCP-36616162-9LWM24CS$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~\HCP-36616162\HCP-36616162.GOS

## ISOLUX DIAGRAM




C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

E:\ ! " # \20230906\IES\HCP-36616162\HCP-36616162-9LWM24CS$0%&&\IES\HCP-36616162\HCP-36616162.GOS

## LED Avg.L Report

| Test:U:24.00V I:0.7346A P:17.63W PF:1.000 Freq:0Hz Lamp Flux:712.582x1 lm | | |
|---|---|---|
| NAME: HCP-36616162 | TYPE: | WEIGHT: |
| SPEC.:HCP-36616162 | DIM.: 1000*16*16mm | SERIAL No.: |
| MFR.: HAVIT COMMERCIAL | SUR.:1000*16mm | Shielding Angle: |

| AvgL | cd/m2 |
|---|---|
| L_0~180(65)av | 12783 |
| L_0~180(75)av | 11141 |
| L_0~180(85)av | 9349 |
| L_90~270(65)av | 13095 |
| L_90~270(75)av | 11890 |
| L_90~270(85)av | 11271 |
| L_45(65)av | 12761 |
| L_45(75)av | 11348 |
| L_45(85)av | 10862 |

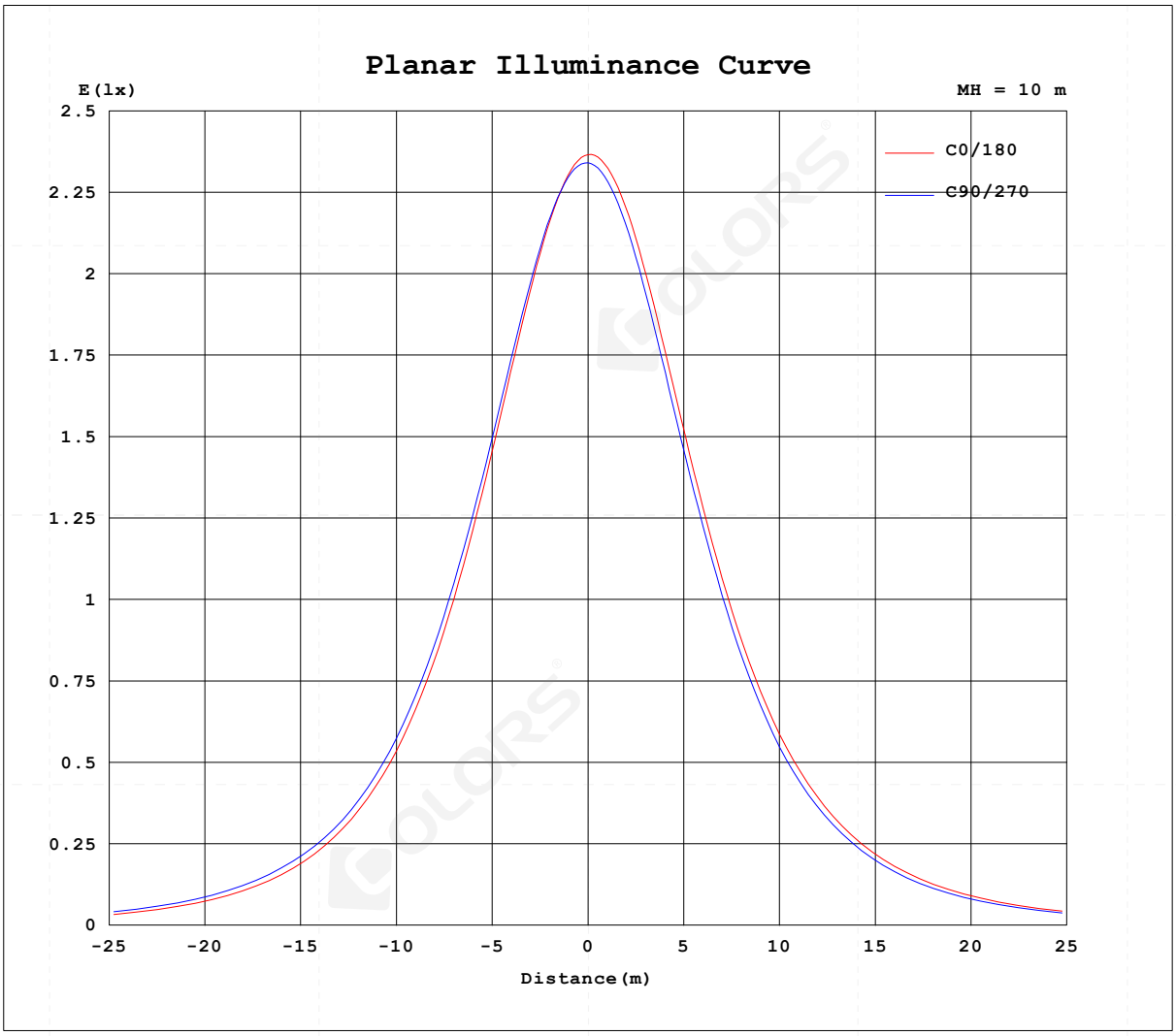
Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

E:\ ! " # \20230906\IES\HCP-36616162\HCP-36616162-9LWM24CS$0%&&\IES\HCP-36616162\HCP-36616162.GOS

# Planar Illuminance Curve




C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2023-07-13

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

E:\ ! " # \20230906\IES\HCP-36616162\HCP-36616162-9LWM24CS$%&\IES\HCP-36616162\HCP-36616162.GOS

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1 UNIT: cd

| C(DEG) / (DEG) | 0 | 45 | 90 | 135 | 180 | 225 | 270 | 315 |
|---|---|---|---|---|---|---|---|---|
| 0 | 237 | 235 | 234 | 233 | 237 | 235 | 234 | 233 |
| 5 | 235 | 234 | 234 | 233 | 236 | 234 | 233 | 231 |
| 10 | 231 | 231 | 231 | 231 | 234 | 231 | 229 | 228 |
| 15 | 225 | 226 | 227 | 227 | 230 | 226 | 224 | 222 |
| 20 | 217 | 219 | 220 | 220 | 224 | 219 | 216 | 214 |
| 25 | 207 | 210 | 212 | 212 | 216 | 210 | 207 | 205 |
| 30 | 195 | 199 | 202 | 203 | 206 | 200 | 197 | 194 |
| 35 | 182 | 187 | 191 | 191 | 194 | 188 | 185 | 181 |
| 40 | 168 | 173 | 178 | 178 | 181 | 174 | 171 | 167 |
| 45 | 152 | 158 | 163 | 164 | 166 | 159 | 155 | 151 |
| 50 | 135 | 141 | 146 | 148 | 150 | 143 | 139 | 135 |
| 55 | 116 | 123 | 129 | 131 | 133 | 126 | 122 | 117 |
| 60 | 97.2 | 104 | 111 | 112 | 115 | 108 | 104 | 98.4 |
| 65 | 77.2 | 84.3 | 92.0 | 93.3 | 95.7 | 88.6 | 85.1 | 79.0 |
| 70 | 56.7 | 63.6 | 71.8 | 73.5 | 75.8 | 69.1 | 66.0 | 59.3 |
| 75 | 36.8 | 44.0 | 52.1 | 53.7 | 55.5 | 50.1 | 46.4 | 40.2 |
| 80 | 19.2 | 26.8 | 32.4 | 34.8 | 35.9 | 32.5 | 28.3 | 23.2 |
| 85 | 7.26 | 13.6 | 17.7 | 18.7 | 18.8 | 17.6 | 13.7 | 10.6 |
| 90 | 2.40 | 6.93 | 4.89 | 8.27 | 6.96 | 8.01 | 4.01 | 4.93 |
| 95 | 1.81 | 4.72 | 3.36 | 4.46 | 1.76 | 4.63 | 3.92 | 3.74 |
| 100 | 2.09 | 3.51 | 3.00 | 3.46 | 1.48 | 3.76 | 2.94 | 3.17 |
| 105 | 2.46 | 2.98 | 2.09 | 3.23 | 1.84 | 3.39 | 2.05 | 3.35 |
| 110 | 2.88 | 2.95 | 2.49 | 3.40 | 2.25 | 3.44 | 2.45 | 3.62 |
| 115 | 3.33 | 3.53 | 2.89 | 3.65 | 2.67 | 3.63 | 2.86 | 3.83 |
| 120 | 3.74 | 3.83 | 3.35 | 3.89 | 3.08 | 3.91 | 3.27 | 4.03 |
| 125 | 4.22 | 3.86 | 3.72 | 4.08 | 3.50 | 3.96 | 3.71 | 3.92 |
| 130 | 4.60 | 4.31 | 4.13 | 4.14 | 3.90 | 4.03 | 4.14 | 4.25 |
| 135 | 4.98 | 4.65 | 4.53 | 4.49 | 4.38 | 4.49 | 4.58 | 4.59 |
| 140 | 5.37 | 5.04 | 4.87 | 4.87 | 4.82 | 5.00 | 4.98 | 5.18 |
| 145 | 5.62 | 5.40 | 5.27 | 5.21 | 5.21 | 5.37 | 5.40 | 5.37 |
| 150 | 5.92 | 5.72 | 5.53 | 5.54 | 5.57 | 5.60 | 5.71 | 5.62 |
| 155 | 6.18 | 6.02 | 5.85 | 5.84 | 5.91 | 5.91 | 6.01 | 5.91 |
| 160 | 6.43 | 6.30 | 6.11 | 6.12 | 6.24 | 6.22 | 6.28 | 6.14 |
| 165 | 6.69 | 6.55 | 6.35 | 6.37 | 6.56 | 6.46 | 6.50 | 6.40 |
| 170 | 6.88 | 6.76 | 6.62 | 6.60 | 6.81 | 6.66 | 6.68 | 6.62 |
| 175 | 7.03 | 6.91 | 6.71 | 6.77 | 7.03 | 6.80 | 6.82 | 6.70 |
| 180 | 7.08 | 7.00 | 6.83 | 6.85 | 7.17 | 6.92 | 6.89 | 6.79 |

HCP-36616162

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