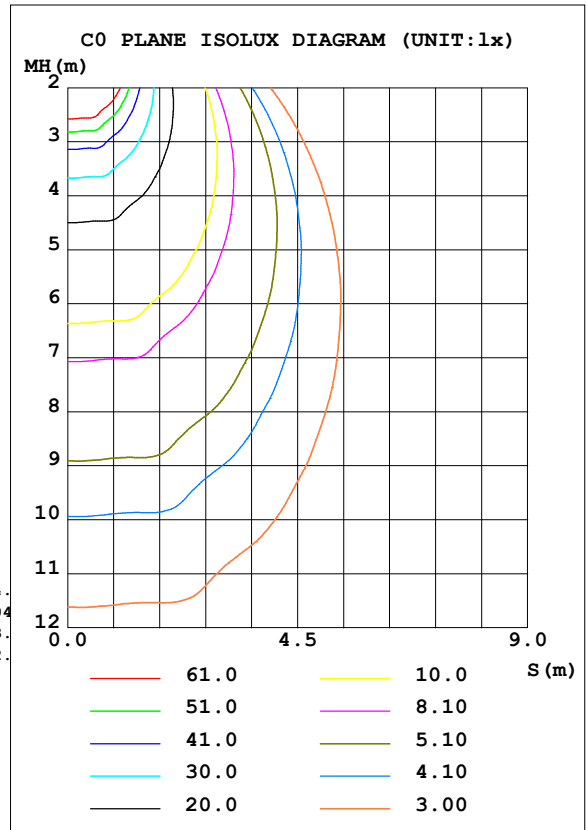
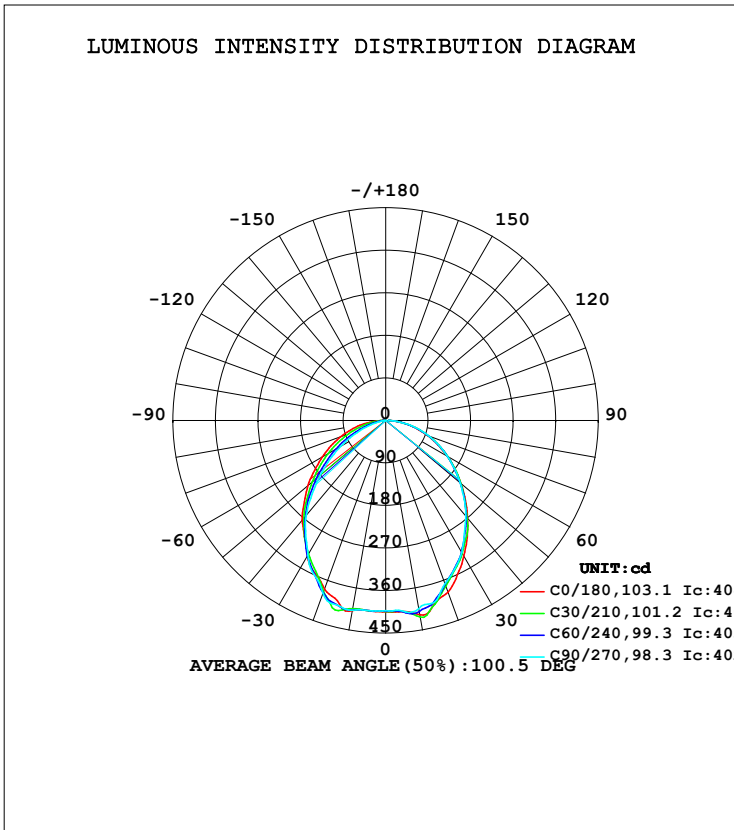


LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|--|-----------------------|-----------------------|
| Test:U:120.3V I:0.1540A P:18.36W PF:0.9909 Freq:59.98Hz Lamp Flux:1028.03x1 lm | | |
| NAME: outdoor wall lighting | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.:2020031903 |
| MFR.: EVERFINE | SUR.:3.14*0.775*0.775 | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 56.00 lm/W | | | |
|-------------------|-----------------|----------------------------------|--------|---------------------|-----------|
| MODEL | ELMW0704LAJD2BK | I _{max} (cd) | 424.0 | S/MH (C0/180) | 1.21 |
| NOMINAL POWER (W) | 20 | LOR (%) | 100.0 | S/MH (C90/270) | 1.21 |
| RATED VOLTAGE (V) | 120 | TOTAL FLUX (lm) | 1028.1 | η UP, DN (C0-180) | 0.0, 51.9 |
| NOMINAL FLUX (lm) | 1028.03 | CIE CLASS | DIRECT | η UP, DN (C180-360) | 0.0, 48.1 |
| LAMPS INSIDE | 1 | η up (%) | 0.0 | CIBSE SHR NOM | 1.25 |
| TEST VOLTAGE (V) | 120 | η down (%) | 100.0 | CIBSE SHR MAX | 1.35 |



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 袁冠彬
 Test Date: 2020-03-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.400m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

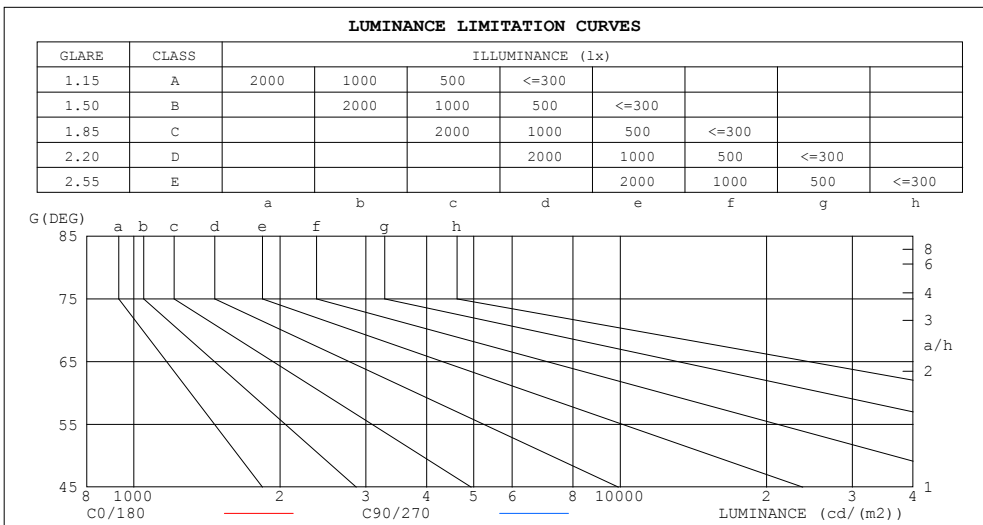
| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum,lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|--------|-------|----------|-------------|--------------|-----------|
| 10 | 417.7 | 416.4 | 404.3 | 406.6 | 408.4 | 405.6 | 407.8 | 410.8 | 0- 10 | 38.73 | 38.73 | 3.77,3.77 |
| 20 | 386.2 | 371.0 | 367.3 | 370.5 | 379.6 | 386.5 | 389.3 | 381.5 | 10- 20 | 112.7 | 151.4 | 14.7,14.7 |
| 30 | 330.7 | 322.8 | 322.2 | 322.8 | 330.5 | 329.0 | 329.0 | 328.6 | 20- 30 | 162.6 | 314.0 | 30.5,30.5 |
| 40 | 269.4 | 266.6 | 263.8 | 265.5 | 274.8 | 267.1 | 261.6 | 260.8 | 30- 40 | 185.3 | 499.3 | 48.6,48.6 |
| 50 | 208.5 | 207.0 | 206.5 | 210.5 | 214.7 | 197.6 | 181.5 | 192.0 | 40- 50 | 180.4 | 679.7 | 66.1,66.1 |
| 60 | 149.8 | 150.8 | 150.5 | 155.5 | 155.1 | 131.7 | 110.2 | 126.7 | 50- 60 | 153.1 | 832.8 | 81,81 |
| 70 | 94.77 | 97.35 | 98.10 | 103.4 | 101.6 | 73.68 | 49.15 | 69.15 | 60- 70 | 112.0 | 944.8 | 91.9,91.9 |
| 80 | 44.12 | 45.09 | 46.09 | 51.79 | 51.60 | 27.70 | 7.540 | 24.56 | 70- 80 | 64.23 | 1009 | 98.1,98.2 |
| 90 | 6.137 | 6.245 | 5.467 | 5.167 | 4.318 | 3.064 | 0.9671 | 3.642 | 80- 90 | 19.05 | 1028 | 100,100 |
| 100 | | | | | | | | | 90-100 | | | |
| 110 | | | | | | | | | 100-110 | | | |
| 120 | | | | | | | | | 110-120 | | | |
| 130 | | | | | | | | | 120-130 | | | |
| 140 | | | | | | | | | 130-140 | | | |
| 150 | | | | | | | | | 140-150 | | | |
| 160 | | | | | | | | | 150-160 | | | |
| 170 | | | | | | | | | 160-170 | | | |
| 180 | | | | | | | | | 170-180 | | | |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2020-03-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.400m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

| | | |
|--|-----------------------|-----------------------|
| Test:U:120.3V I:0.1540A P:18.36W PF:0.9909 Freq:59.98Hz Lamp Flux:1028.03x1 lm | | |
| NAME: outdoor wall lighting | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.:2020031903 |
| MFR.: EVERFINE | SUR.:3.14*0.775*0.775 | Shielding Angle: |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G (DEG) | C0/180 | C90/270 |
| 85 | 118 | 123 |
| 80 | 135 | 141 |
| 75 | 141 | 148 |
| 70 | 147 | 152 |
| 65 | 153 | 156 |
| 60 | 159 | 160 |
| 55 | 165 | 164 |
| 50 | 172 | 170 |
| 45 | 179 | 176 |

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2020-03-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.400m [K=1.0000]
 Remarks:

WEC AND CCEC

| | | | | | | | | | |
|--|--|--|--|--|-----------------------|--|--|-----------------------|--|
| Test:U:120.3V I:0.1540A P:18.36W PF:0.9909 Freq:59.98Hz Lamp Flux:1028.03x1 lm | | | | | | | | | |
| NAME: outdoor wall lighting | | | | | TYPE: | | | WEIGHT: | |
| SPEC.: | | | | | DIM.: | | | SERIAL No.:2020031903 | |
| MFR.: EVERFINE | | | | | SUR.:3.14*0.775*0.775 | | | Shielding Angle: | |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|
| pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coefficients(WEC) | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | |
| 1.0 | .299 | .170 | .054 | .292 | .166 | .053 | .278 | .160 | .051 | .266 | .154 | .049 | .255 | .148 | .048 | |
| 2.0 | .281 | .154 | .047 | .275 | .151 | .047 | .263 | .146 | .045 | .253 | .142 | .044 | .243 | .137 | .043 | |
| 3.0 | .261 | .139 | .042 | .255 | .137 | .041 | .245 | .133 | .040 | .235 | .129 | .040 | .227 | .126 | .039 | |
| 4.0 | .241 | .125 | .037 | .236 | .124 | .037 | .227 | .121 | .036 | .219 | .118 | .035 | .211 | .115 | .035 | |
| 5.0 | .223 | .114 | .033 | .219 | .113 | .033 | .211 | .110 | .032 | .204 | .107 | .032 | .197 | .105 | .032 | |
| 6.0 | .208 | .104 | .030 | .204 | .103 | .030 | .197 | .101 | .029 | .190 | .099 | .029 | .184 | .097 | .029 | |
| 7.0 | .194 | .096 | .027 | .190 | .095 | .027 | .184 | .093 | .027 | .178 | .091 | .027 | .172 | .090 | .026 | |
| 8.0 | .181 | .089 | .025 | .178 | .088 | .025 | .172 | .086 | .025 | .167 | .085 | .024 | .162 | .083 | .024 | |
| 9.0 | .170 | .082 | .023 | .167 | .082 | .023 | .162 | .080 | .023 | .157 | .079 | .023 | .153 | .078 | .022 | |
| 10.0 | .160 | .077 | .021 | .158 | .076 | .021 | .153 | .075 | .021 | .149 | .074 | .021 | .145 | .073 | .021 | |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | |
| 0.0 | .190 | .190 | .190 | .163 | .163 | .163 | .111 | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 | |
| 1.0 | .180 | .156 | .135 | .154 | .134 | .116 | .105 | .092 | .081 | .060 | .053 | .047 | .019 | .017 | .015 | |
| 2.0 | .171 | .132 | .099 | .146 | .114 | .086 | .100 | .079 | .060 | .058 | .046 | .035 | .019 | .015 | .011 | |
| 3.0 | .163 | .114 | .076 | .139 | .099 | .066 | .096 | .068 | .046 | .055 | .040 | .027 | .018 | .013 | .009 | |
| 4.0 | .155 | .101 | .060 | .133 | .087 | .052 | .091 | .061 | .036 | .053 | .036 | .022 | .017 | .012 | .007 | |
| 5.0 | .147 | .090 | .048 | .127 | .078 | .042 | .087 | .055 | .030 | .051 | .032 | .018 | .016 | .010 | .006 | |
| 6.0 | .140 | .082 | .040 | .121 | .071 | .035 | .083 | .050 | .025 | .048 | .029 | .015 | .016 | .010 | .005 | |
| 7.0 | .133 | .075 | .034 | .115 | .065 | .030 | .079 | .046 | .021 | .046 | .027 | .012 | .015 | .009 | .004 | |
| 8.0 | .127 | .069 | .029 | .109 | .060 | .026 | .076 | .042 | .018 | .044 | .025 | .011 | .014 | .008 | .004 | |
| 9.0 | .121 | .064 | .026 | .104 | .056 | .022 | .072 | .039 | .016 | .042 | .023 | .009 | .014 | .008 | .003 | |
| 10.0 | .116 | .060 | .023 | .100 | .052 | .020 | .069 | .037 | .014 | .040 | .022 | .008 | .013 | .007 | .003 | |

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2020-03-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.400m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|--|------------------|------|------|------|-----------------------|----------------|------|-----------------------|------|------|
| Test:U:120.3V I:0.1540A P:18.36W PF:0.9909 Freq:59.98Hz Lamp Flux:1028.03x1 lm | | | | | | | | | | |
| NAME: outdoor wall lighting | | | | | TYPE: | | | WEIGHT: | | |
| SPEC.: | | | | | DIM.: | | | SERIAL No.:2020031903 | | |
| MFR.: EVERFINE | | | | | SUR.:3.14*0.775*0.775 | | | Shielding Angle: | | |
| 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 | 6.5 | 7.9 | 6.7 | 8.1 | 8.3 | 6.4 | 7.9 | 6.7 | 8.1 | 8.3 |
| 3H | 8.0 | 9.3 | 8.3 | 9.6 | 9.8 | 8.0 | 9.4 | 8.3 | 9.6 | 9.8 |
| 4H | 8.6 | 9.9 | 8.9 | 10.2 | 10.4 | 8.7 | 10.0 | 9.0 | 10.2 | 10.5 |
| 6H | 9.1 | 10.4 | 9.5 | 10.6 | 10.9 | 9.2 | 10.5 | 9.6 | 10.7 | 11.0 |
| 8H | 9.3 | 10.5 | 9.6 | 10.8 | 11.0 | 9.4 | 10.6 | 9.8 | 10.9 | 11.2 |
| 12H | 9.4 | 10.5 | 9.8 | 10.8 | 11.1 | 9.5 | 10.7 | 9.9 | 11.0 | 11.3 |
| 4H 2H | 7.1 | 8.4 | 7.4 | 8.6 | 8.9 | 7.0 | 8.3 | 7.4 | 8.6 | 8.8 |
| 3H | 8.8 | 9.9 | 9.1 | 10.2 | 10.5 | 8.8 | 10.0 | 9.2 | 10.2 | 10.5 |
| 4H | 9.6 | 10.6 | 10.0 | 10.9 | 11.3 | 9.6 | 10.7 | 10.0 | 11.0 | 11.3 |
| 6H | 10.2 | 11.2 | 10.6 | 11.5 | 11.9 | 10.3 | 11.2 | 10.7 | 11.6 | 12.0 |
| 8H | 10.5 | 11.3 | 10.9 | 11.7 | 12.1 | 10.6 | 11.4 | 11.0 | 11.8 | 12.2 |
| 12H | 10.6 | 11.4 | 11.0 | 11.8 | 12.2 | 10.7 | 11.5 | 11.1 | 11.9 | 12.3 |
| 8H 4H | 9.9 | 10.8 | 10.3 | 11.1 | 11.5 | 9.9 | 10.8 | 10.4 | 11.2 | 11.6 |
| 6H | 10.7 | 11.4 | 11.2 | 11.8 | 12.3 | 10.8 | 11.5 | 11.2 | 11.9 | 12.3 |
| 8H | 11.0 | 11.7 | 11.5 | 12.1 | 12.5 | 11.1 | 11.7 | 11.6 | 12.2 | 12.6 |
| 12H | 11.3 | 11.8 | 11.8 | 12.3 | 12.7 | 11.4 | 11.9 | 11.8 | 12.3 | 12.8 |
| 12H 4H | 9.9 | 10.7 | 10.4 | 11.1 | 11.5 | 10.0 | 10.8 | 10.4 | 11.1 | 11.5 |
| 6H | 10.8 | 11.4 | 11.3 | 11.9 | 12.3 | 10.9 | 11.5 | 11.3 | 11.9 | 12.4 |
| 8H | 11.2 | 11.7 | 11.6 | 12.1 | 12.6 | 11.2 | 11.8 | 11.7 | 12.2 | 12.7 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 0.2 / - 0.2 | | | | | + 0.2 / - 0.2 | | | | |
| 1.5H | + 0.2 / - 0.3 | | | | | + 0.1 / - 0.3 | | | | |
| 2.0H | + 0.2 / - 0.2 | | | | | + 0.2 / - 0.2 | | | | |

CIE Pub.117, 1028 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.1)

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2020-03-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.400m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

| | | |
|--|-----------------------|-----------------------|
| Test:U:120.3V I:0.1540A P:18.36W PF:0.9909 Freq:59.98Hz Lamp Flux:1028.03x1 lm | | |
| NAME: outdoor wall lighting | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.:2020031903 |
| MFR.: EVERFINE | SUR.:3.14*0.775*0.775 | Shielding Angle: |

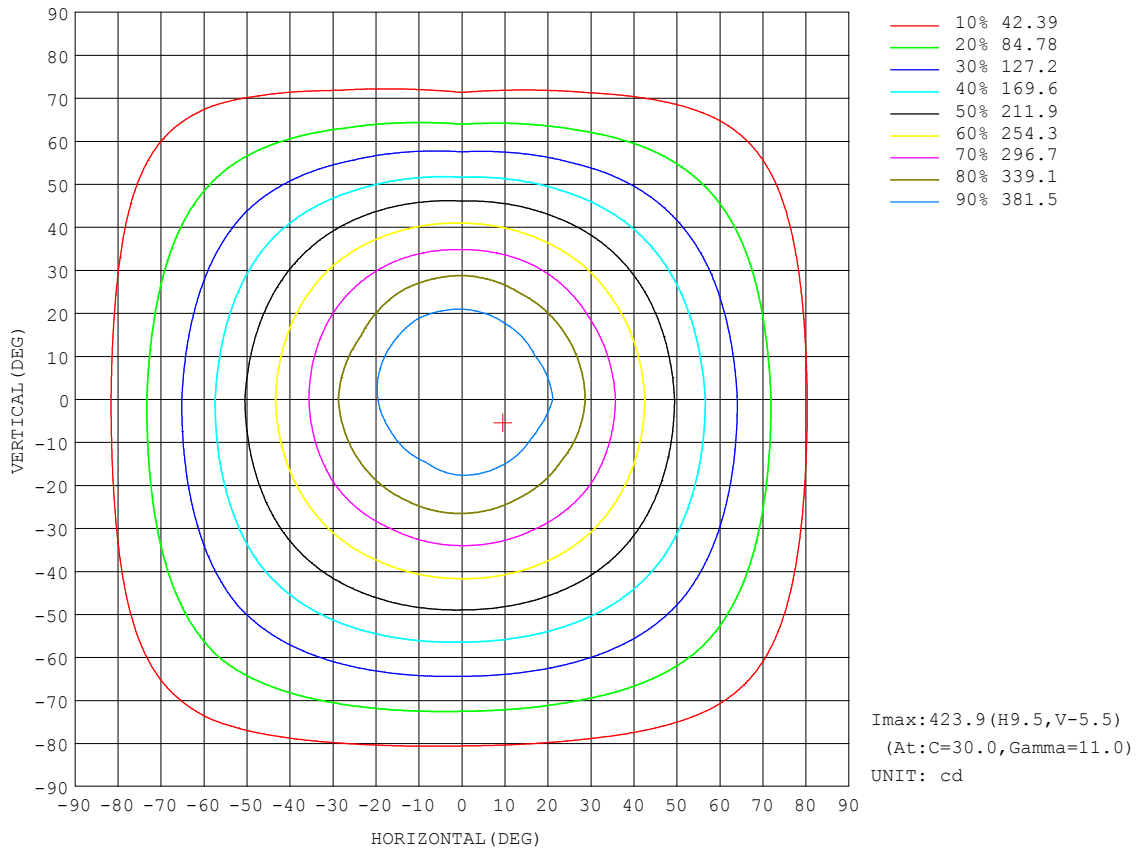
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|--|-----|-----------|-----|-----|-----|--------------|-----|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0 |
| ROOM INDEX | UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$ | | | | | | | | | |
| k = 0.60 | 60 | 49 | 42 | 59 | 48 | 42 | 58 | 48 | 42 | 35 |
| 0.80 | 70 | 59 | 52 | 69 | 58 | 51 | 67 | 57 | 51 | 44 |
| 1.00 | 78 | 67 | 60 | 77 | 67 | 60 | 75 | 68 | 60 | 53 |
| 1.25 | 85 | 75 | 68 | 83 | 74 | 68 | 81 | 73 | 67 | 60 |
| 1.50 | 90 | 80 | 74 | 88 | 79 | 73 | 85 | 78 | 72 | 65 |
| 2.00 | 96 | 88 | 82 | 94 | 87 | 81 | 91 | 85 | 80 | 72 |
| 2.50 | 100 | 92 | 87 | 98 | 91 | 86 | 94 | 88 | 84 | 76 |
| 3.00 | 103 | 96 | 91 | 101 | 95 | 90 | 97 | 92 | 88 | 80 |
| 4.00 | 107 | 101 | 97 | 105 | 100 | 96 | 100 | 96 | 93 | 84 |
| 5.00 | 109 | 105 | 101 | 107 | 103 | 99 | 102 | 99 | 96 | 87 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | Suspended | | | | SHRNM = 1.25 | | | |

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2020-03-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.400m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

| | | |
|--|-----------------------|-----------------------|
| Test:U:120.3V I:0.1540A P:18.36W PF:0.9909 Freq:59.98Hz Lamp Flux:1028.03x1 lm | | |
| NAME: outdoor wall lighting | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.:2020031903 |
| MFR.: EVERFINE | SUR.:3.14*0.775*0.775 | Shielding Angle: |

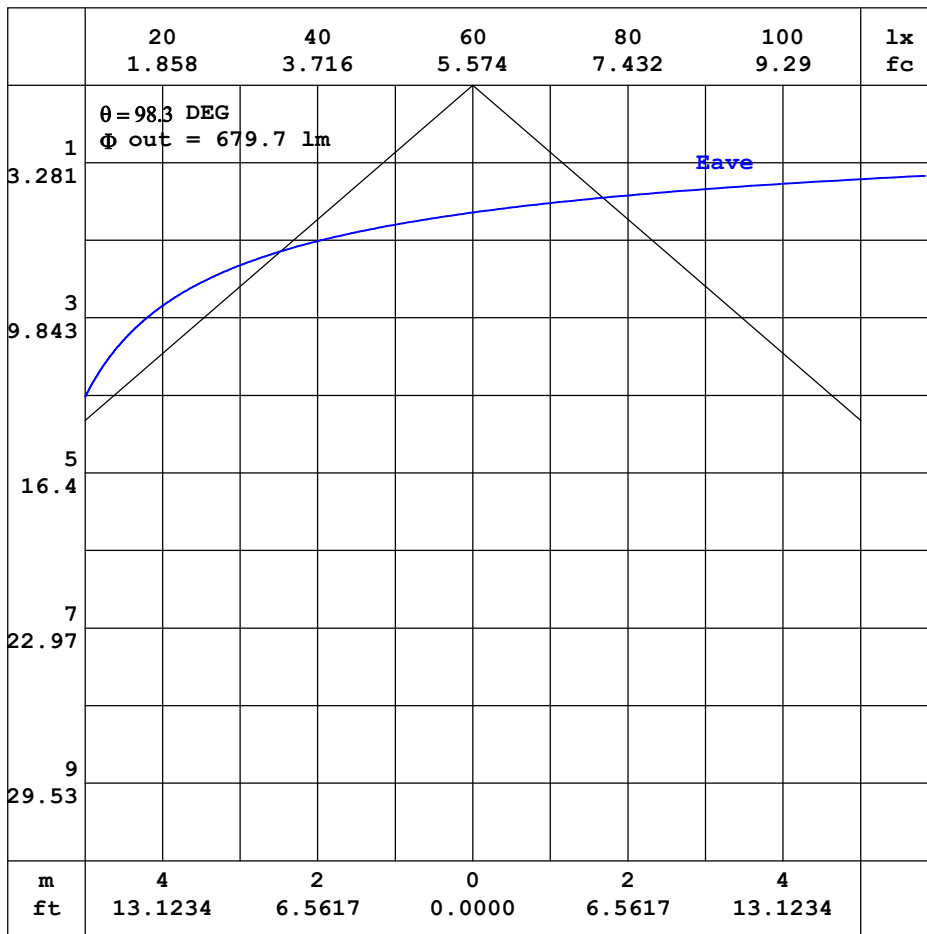


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 袁冠彬
 Test Date: 2020-03-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.400m [K=1.0000]
 Remarks:

AAI CURVES

| | | |
|--|-----------------------|-----------------------|
| Test:U:120.3V I:0.1540A P:18.36W PF:0.9909 Freq:59.98Hz Lamp Flux:1028.03x1 lm | | |
| NAME: outdoor wall lighting | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.:2020031903 |
| MFR.: EVERFINE | SUR.:3.14*0.775*0.775 | Shielding Angle: |

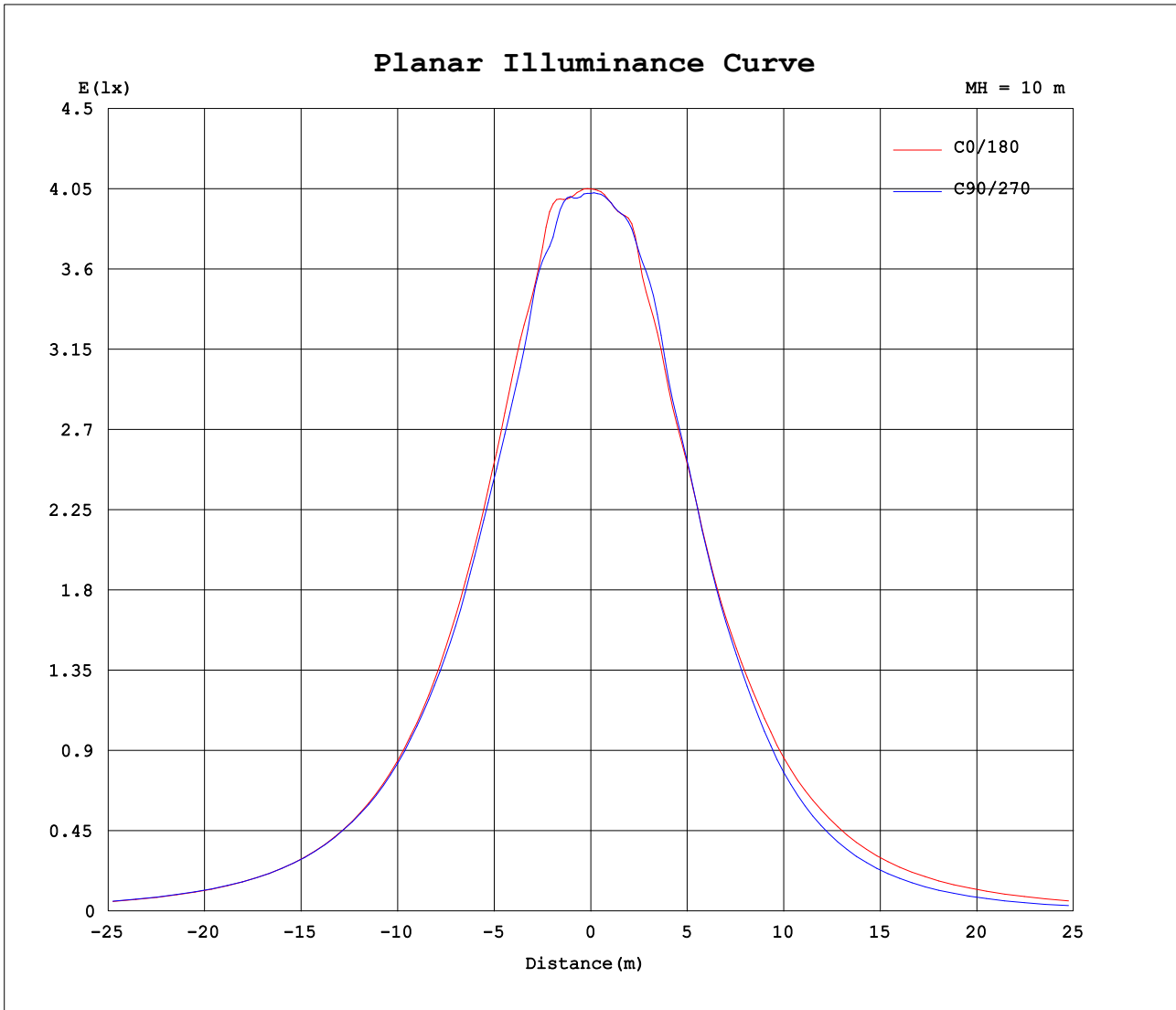


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2020-03-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.400m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 袁冠彬
 Test Date: 2020-03-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.400m [K=1.0000]
 Remarks:

