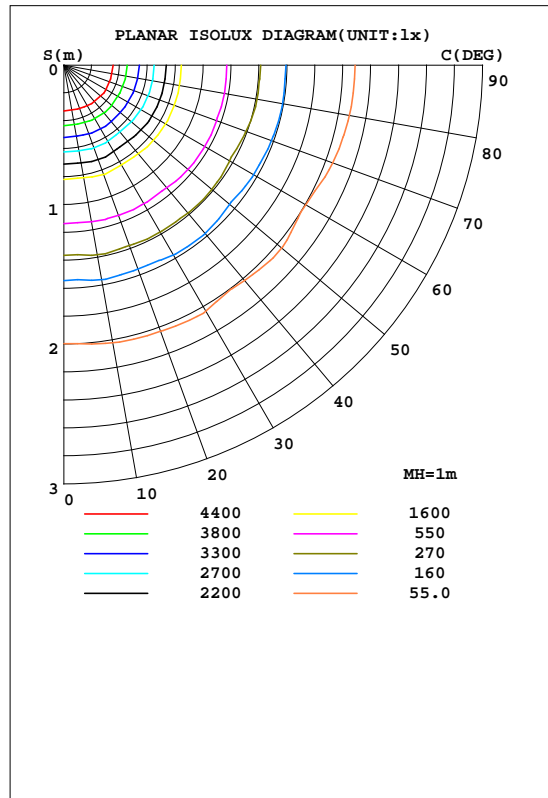
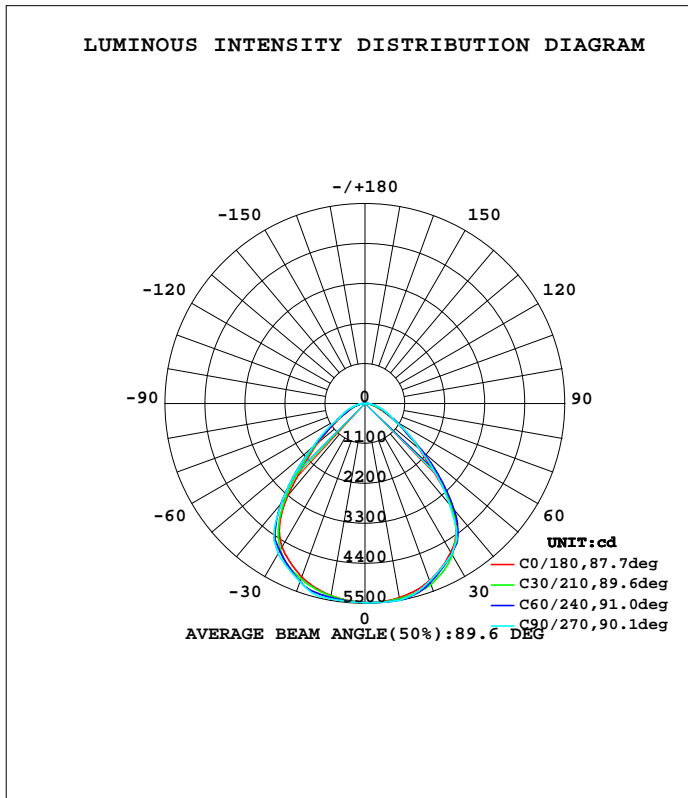


LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|---|-----------------------|---------------------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | |
| NAME: LED Highbay Light | TYPE:YHL-ID-100-HB-VD | WEIGHT:6.5Kg |
| SPEC.:PMMA90 | DIM.: | SERIAL No.:20150714 |
| MFR.: | SUR.: | PROTECTION ANGLE: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 114.27 lm/W | | | |
|------------------|----------------------|-----------------------------------|--------|--------------------|-----------|
| MODEL | Nichia757-5000K-Ra70 | I _{max} (cd) | 5500 | S/MH(C0/180) | 1.28 |
| NOMINAL POWER(W) | 102 | LOR(%) | 100.0 | S/MH(C90/270) | 1.27 |
| RATED VOLTAGE(V) | 222 | TOTAL FLUX(lm) | 11488 | h UP, DN(C0-180) | 0.0, 49.5 |
| NOMINAL FLUX(lm) | 11487.7 | CIE CLASS | DIRECT | h UP, DN(C180-360) | 0.0, 50.5 |
| LAMPS INSIDE | 1 | h up(%) | 0.0 | CIBSE SHR NOM | 1.25 |
| TEST VOLTAGE(V) | 221.1 | h down(%) | 100.0 | CIBSE SHR MAX | 1.35 |



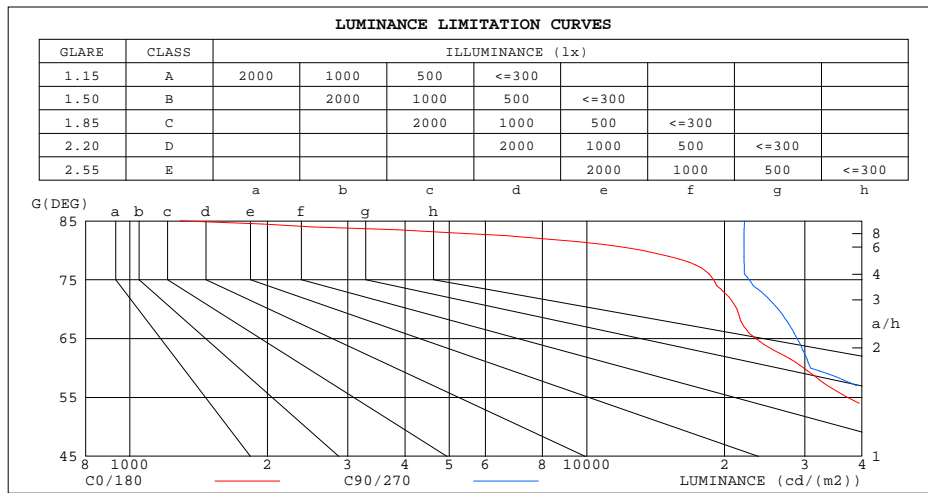
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

| g | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | g | F zone | F total | %lum,lamp |
|-----|-----------------------|-------|-------|-------|--------|-------|-------|-------|---------|---------|---------|-----------|
| 5 | 5441 | 5446 | 5465 | 5467 | 5471 | 5485 | 5486 | 5463 | 0- 5 | 130.8 | 130.8 | 1.14,1.14 |
| 10 | 5366 | 5393 | 5455 | 5435 | 5425 | 5471 | 5497 | 5431 | 5- 10 | 389.9 | 520.7 | 4.53,4.53 |
| 15 | 5252 | 5324 | 5423 | 5391 | 5337 | 5426 | 5399 | 5374 | 10- 15 | 640.9 | 1162 | 10.1,10.1 |
| 20 | 5081 | 5214 | 5224 | 5313 | 5190 | 5280 | 5200 | 5218 | 15- 20 | 872.2 | 2034 | 17.7,17.7 |
| 25 | 4845 | 4963 | 5005 | 5092 | 4983 | 5049 | 4989 | 4967 | 20- 25 | 1070 | 3104 | 27.27 |
| 30 | 4565 | 4616 | 4785 | 4800 | 4726 | 4752 | 4777 | 4657 | 25- 30 | 1231 | 4335 | 37.7,37.7 |
| 35 | 4107 | 4178 | 4371 | 4448 | 4376 | 4378 | 4401 | 4290 | 30- 35 | 1342 | 5677 | 49.4,49.4 |
| 40 | 3302 | 3556 | 3570 | 3965 | 3736 | 3851 | 3623 | 3777 | 35- 40 | 1349 | 7025 | 61.2,61.2 |
| 45 | 2361 | 2570 | 2722 | 3012 | 2722 | 2889 | 2795 | 2751 | 40- 45 | 1198 | 8223 | 71.6,71.6 |
| 50 | 1711 | 1847 | 1873 | 2154 | 1965 | 2110 | 1967 | 1964 | 45- 50 | 954.8 | 9178 | 79.9,79.9 |
| 55 | 1152 | 1259 | 1353 | 1483 | 1402 | 1467 | 1444 | 1375 | 50- 55 | 719.7 | 9897 | 86.2,86.2 |
| 60 | 806.1 | 827.6 | 833.5 | 973.1 | 929.2 | 954.0 | 921.0 | 933.3 | 55- 60 | 523.7 | 10421 | 90.7,90.7 |
| 65 | 534.6 | 576.4 | 658.9 | 672.0 | 618.5 | 668.6 | 734.0 | 653.4 | 60- 65 | 372.6 | 10794 | 94,94 |
| 70 | 393.8 | 385.8 | 484.3 | 468.1 | 411.5 | 458.6 | 547.0 | 468.8 | 65- 70 | 276.8 | 11070 | 96.4,96.4 |
| 75 | 264.7 | 261.2 | 316.8 | 316.9 | 263.2 | 330.9 | 366.7 | 333.8 | 70- 75 | 201.6 | 11272 | 98.1,98.1 |
| 80 | 123.8 | 144.3 | 206.9 | 174.9 | 123.0 | 211.0 | 240.4 | 205.2 | 75- 80 | 130.0 | 11402 | 99.3,99.3 |
| 85 | 6.066 | 72.09 | 104.2 | 86.70 | 5.868 | 105.0 | 120.8 | 103.0 | 80- 85 | 65.86 | 11468 | 99.8,99.8 |
| 90 | 0.8942 | 2.164 | 1.494 | 1.593 | 0.5323 | 2.021 | 1.258 | 3.258 | 85- 90 | 19.77 | 11488 | 100,100 |
| 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 | | | |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G(DEG) | C0/180 | C90/270 |
| 85 | 1289 | 22143 |
| 80 | 13207 | 22068 |
| 75 | 18940 | 22670 |
| 70 | 21323 | 26220 |
| 65 | 23424 | 28871 |
| 60 | 29856 | 30870 |
| 55 | 37207 | 43686 |
| 50 | 49297 | 53952 |
| 45 | 61841 | 71276 |

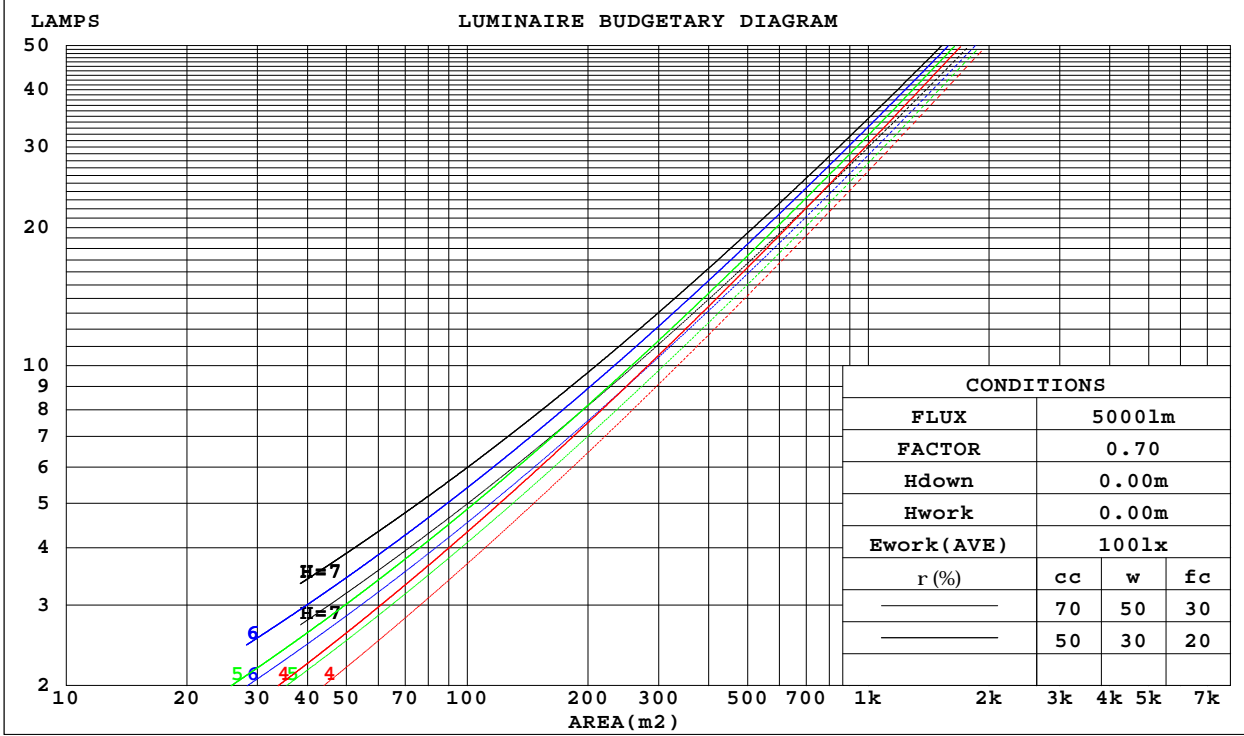
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Ryan Chan
Test Date:2015-07-14

G Range: 0 - 90DEG
Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|---|-----------------------|---------------------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | |
| NAME: LED Highbay Light | TYPE:YHL-ID-100-HB-VD | WEIGHT:6.5Kg |
| SPEC.:PMMA90 | DIM.: | SERIAL No.:20150714 |
| MFR.: | SUR.: | PROTECTION ANGLE: |

| | | | | | | | | | | | | | | | | |
|-----------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| r _{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
| r _w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| r _{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 | 1.07 | 1.04 | 1.00 | 1.05 | 1.02 | .99 | 1.01 | .98 | .96 | .97 | .95 | .93 | .93 | .92 | .90 | .88 |
| 2.0 | .96 | .90 | .85 | .94 | .89 | .84 | .91 | .86 | .82 | .87 | .84 | .81 | .84 | .81 | .79 | .77 |
| 3.0 | .86 | .79 | .74 | .84 | .78 | .73 | .82 | .76 | .72 | .79 | .74 | .70 | .77 | .73 | .69 | .67 |
| 4.0 | .78 | .70 | .64 | .76 | .69 | .64 | .74 | .68 | .63 | .72 | .66 | .62 | .70 | .65 | .61 | .59 |
| 5.0 | .70 | .62 | .57 | .69 | .62 | .56 | .67 | .61 | .56 | .65 | .60 | .55 | .64 | .59 | .55 | .53 |
| 6.0 | .64 | .56 | .50 | .63 | .56 | .50 | .61 | .55 | .50 | .60 | .54 | .49 | .58 | .53 | .49 | .47 |
| 7.0 | .59 | .51 | .45 | .58 | .50 | .45 | .56 | .50 | .45 | .55 | .49 | .44 | .54 | .48 | .44 | .42 |
| 8.0 | .54 | .46 | .41 | .53 | .46 | .41 | .52 | .45 | .41 | .51 | .45 | .40 | .50 | .44 | .40 | .38 |
| 9.0 | .50 | .42 | .37 | .49 | .42 | .37 | .48 | .41 | .37 | .47 | .41 | .37 | .46 | .41 | .37 | .35 |
| 10.0 | .46 | .39 | .34 | .46 | .39 | .34 | .45 | .38 | .34 | .44 | .38 | .34 | .43 | .37 | .33 | .32 |



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

WEC AND CCEC

| | | |
|---|-----------------------|---------------------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | |
| NAME: LED Highbay Light | TYPE:YHL-ID-100-HB-VD | WEIGHT:6.5Kg |
| SPEC.:PMMA90 | DIM.: | SERIAL No.:20150714 |
| MFR.: | SUR.: | PROTECTION ANGLE: |

| rcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|
| rw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| rfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coefficients(WEC) | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | |
| 1.0 | .250 | .142 | .045 | .243 | .139 | .044 | .230 | .132 | .042 | .218 | .126 | .040 | .207 | .120 | .039 | |
| 2.0 | .241 | .132 | .040 | .235 | .129 | .040 | .223 | .124 | .039 | .213 | .120 | .037 | .203 | .115 | .036 | |
| 3.0 | .227 | .121 | .036 | .222 | .119 | .036 | .212 | .115 | .035 | .203 | .111 | .034 | .195 | .108 | .033 | |
| 4.0 | .214 | .111 | .033 | .209 | .110 | .032 | .201 | .106 | .032 | .193 | .103 | .031 | .185 | .101 | .031 | |
| 5.0 | .201 | .102 | .030 | .197 | .101 | .029 | .189 | .099 | .029 | .182 | .096 | .029 | .175 | .094 | .028 | |
| 6.0 | .189 | .095 | .027 | .185 | .094 | .027 | .179 | .092 | .027 | .172 | .090 | .026 | .166 | .088 | .026 | |
| 7.0 | .178 | .088 | .025 | .175 | .087 | .025 | .169 | .085 | .025 | .163 | .084 | .024 | .158 | .082 | .024 | |
| 8.0 | .168 | .082 | .023 | .165 | .081 | .023 | .160 | .080 | .023 | .155 | .078 | .023 | .150 | .077 | .022 | |
| 9.0 | .159 | .077 | .021 | .157 | .076 | .021 | .152 | .075 | .021 | .147 | .074 | .021 | .143 | .072 | .021 | |
| 10.0 | .151 | .072 | .020 | .148 | .072 | .020 | .144 | .071 | .020 | .140 | .069 | .020 | .136 | .068 | .020 | |

| rcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| rw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| rfc | 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 | .176 | .157 | .139 | .151 | .134 | .120 | .103 | .093 | .083 | .059 | .054 | .048 | .019 | .017 | .016 | |
| 2.0 | .165 | .132 | .104 | .142 | .114 | .090 | .097 | .079 | .063 | .056 | .046 | .037 | .018 | .015 | .012 | |
| 3.0 | .156 | .114 | .080 | .134 | .098 | .070 | .092 | .068 | .049 | .053 | .040 | .029 | .017 | .013 | .009 | |
| 4.0 | .148 | .100 | .064 | .127 | .087 | .055 | .087 | .060 | .039 | .051 | .035 | .023 | .016 | .012 | .008 | |
| 5.0 | .141 | .089 | .052 | .121 | .077 | .045 | .083 | .054 | .032 | .048 | .032 | .019 | .016 | .010 | .006 | |
| 6.0 | .134 | .081 | .043 | .115 | .070 | .037 | .079 | .049 | .026 | .046 | .029 | .016 | .015 | .009 | .005 | |
| 7.0 | .128 | .074 | .036 | .110 | .064 | .031 | .076 | .045 | .022 | .044 | .026 | .013 | .014 | .009 | .004 | |
| 8.0 | .122 | .068 | .031 | .105 | .059 | .027 | .073 | .041 | .019 | .042 | .024 | .011 | .014 | .008 | .004 | |
| 9.0 | .116 | .063 | .027 | .100 | .055 | .024 | .069 | .038 | .017 | .040 | .023 | .010 | .013 | .007 | .003 | |
| 10.0 | .111 | .059 | .024 | .096 | .051 | .021 | .066 | .036 | .015 | .039 | .021 | .009 | .013 | .007 | .003 | |

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

g Range: 0 - 90DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|---|------------------|------|------|------|-----------------------|----------------|------|---------------------|------|------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | | | | | | | | | |
| NAME: LED Highbay Light | | | | | TYPE:YHL-ID-100-HB-VD | | | WEIGHT:6.5Kg | | |
| SPEC.:PMMA90 | | | | | DIM.: | | | SERIAL No.:20150714 | | |
| MFR.: | | | | | SUR.: | | | PROTECTION 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 | 24.7 | 26.0 | 25.0 | 26.2 | 26.4 | 25.1 | 26.4 | 25.4 | 26.6 | 26.8 |
| 3H | 25.2 | 26.4 | 25.5 | 26.6 | 26.8 | 25.7 | 26.9 | 26.0 | 27.1 | 27.3 |
| 4H | 25.4 | 26.5 | 25.7 | 26.8 | 27.0 | 25.9 | 27.1 | 26.2 | 27.3 | 27.6 |
| 6H | 25.5 | 26.6 | 25.8 | 26.8 | 27.1 | 26.1 | 27.2 | 26.4 | 27.5 | 27.7 |
| 8H | 25.4 | 26.5 | 25.8 | 26.8 | 27.0 | 26.2 | 27.2 | 26.5 | 27.5 | 27.8 |
| 12H | 25.4 | 26.4 | 25.7 | 26.7 | 27.0 | 26.3 | 27.3 | 26.6 | 27.6 | 27.8 |
| 4H 2H | 24.9 | 26.0 | 25.2 | 26.2 | 26.5 | 25.2 | 26.3 | 25.5 | 26.6 | 26.8 |
| 3H | 25.5 | 26.5 | 25.8 | 26.8 | 27.1 | 25.9 | 26.9 | 26.3 | 27.2 | 27.5 |
| 4H | 25.8 | 26.7 | 26.2 | 27.0 | 27.3 | 26.3 | 27.2 | 26.7 | 27.5 | 27.8 |
| 6H | 26.0 | 26.8 | 26.4 | 27.1 | 27.5 | 26.6 | 27.4 | 27.0 | 27.8 | 28.1 |
| 8H | 26.0 | 26.7 | 26.4 | 27.1 | 27.4 | 26.8 | 27.5 | 27.2 | 27.9 | 28.2 |
| 12H | 25.9 | 26.6 | 26.3 | 27.0 | 27.4 | 26.9 | 27.6 | 27.3 | 27.9 | 28.3 |
| 8H 4H | 25.9 | 26.6 | 26.3 | 27.0 | 27.4 | 26.3 | 27.1 | 26.7 | 27.4 | 27.8 |
| 6H | 26.1 | 26.7 | 26.5 | 27.1 | 27.5 | 26.8 | 27.4 | 27.2 | 27.8 | 28.2 |
| 8H | 26.1 | 26.6 | 26.5 | 27.0 | 27.5 | 27.0 | 27.5 | 27.5 | 28.0 | 28.4 |
| 12H | 26.1 | 26.5 | 26.5 | 27.0 | 27.4 | 27.2 | 27.7 | 27.7 | 28.1 | 28.6 |
| 12H 4H | 25.9 | 26.5 | 26.3 | 26.9 | 27.3 | 26.3 | 27.0 | 26.7 | 27.4 | 27.8 |
| 6H | 26.1 | 26.6 | 26.6 | 27.1 | 27.5 | 26.8 | 27.3 | 27.2 | 27.7 | 28.2 |
| 8H | 26.1 | 26.6 | 26.6 | 27.0 | 27.5 | 27.0 | 27.5 | 27.5 | 27.9 | 28.4 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 0.8 / - 1.1 | | | | | + 0.7 / - 0.8 | | | | |
| 1.5H | + 0.8 / - 0.7 | | | | | + 0.6 / - 0.7 | | | | |
| 2.0H | + 1.6 / - 1.3 | | | | | + 1.7 / - 1.4 | | | | |

CIE Pub.117 Corrected 11488 lm Total Lamp Luminous Flux.(8log(F/F0) = 8.5)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

g Range: 0 - 90DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

| | | |
|---|-----------------------|---------------------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | |
| NAME: LED Highbay Light | TYPE:YHL-ID-100-HB-VD | WEIGHT:6.5Kg |
| SPEC.:PMMA90 | DIM.: | SERIAL No.:20150714 |
| MFR.: | SUR.: | PROTECTION 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) x RCR = 5 | | | | | | | | | |
| k = 0.60 | 67 | 57 | 51 | 66 | 57 | 51 | 65 | 57 | 51 | 45 |
| 0.80 | 77 | 67 | 61 | 76 | 67 | 61 | 74 | 66 | 61 | 55 |
| 1.00 | 85 | 76 | 70 | 84 | 75 | 70 | 82 | 76 | 69 | 63 |
| 1.25 | 91 | 83 | 77 | 90 | 82 | 77 | 87 | 81 | 76 | 70 |
| 1.50 | 95 | 88 | 82 | 94 | 87 | 82 | 91 | 85 | 80 | 74 |
| 2.00 | 101 | 94 | 89 | 99 | 93 | 88 | 96 | 91 | 87 | 80 |
| 2.50 | 104 | 98 | 93 | 102 | 96 | 92 | 98 | 94 | 90 | 83 |
| 3.00 | 106 | 101 | 97 | 104 | 99 | 96 | 101 | 97 | 93 | 86 |
| 4.00 | 109 | 105 | 101 | 107 | 103 | 100 | 103 | 100 | 97 | 89 |
| 5.00 | 111 | 107 | 104 | 109 | 105 | 103 | 105 | 102 | 100 | 91 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | Suspended | | | | SHRNOM = 1.25 | | | |

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

g Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

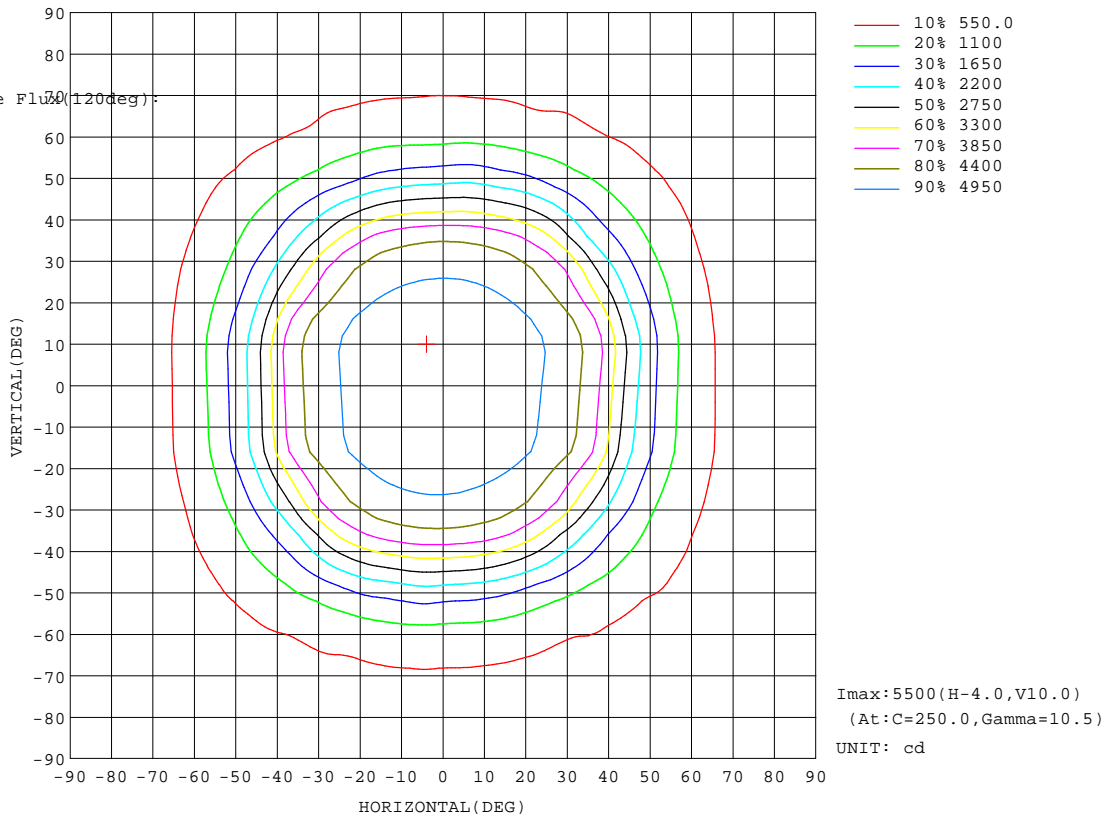
| | | |
|---|-----------------------|---------------------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | |
| NAME: LED Highbay Light | TYPE:YHL-ID-100-HB-VD | WEIGHT:6.5Kg |
| SPEC.:PMMA90 | DIM.: | SERIAL No.:20150714 |
| MFR.: | SUR.: | PROTECTION ANGLE: |

Conical surface Flux(90deg):

8222.9 lm
 %lum = 71.6%
 %lamp = 71.6%

Conical surface Flux(120deg):

10421 lm
 %lum = 90.7%
 %lamp = 90.7%



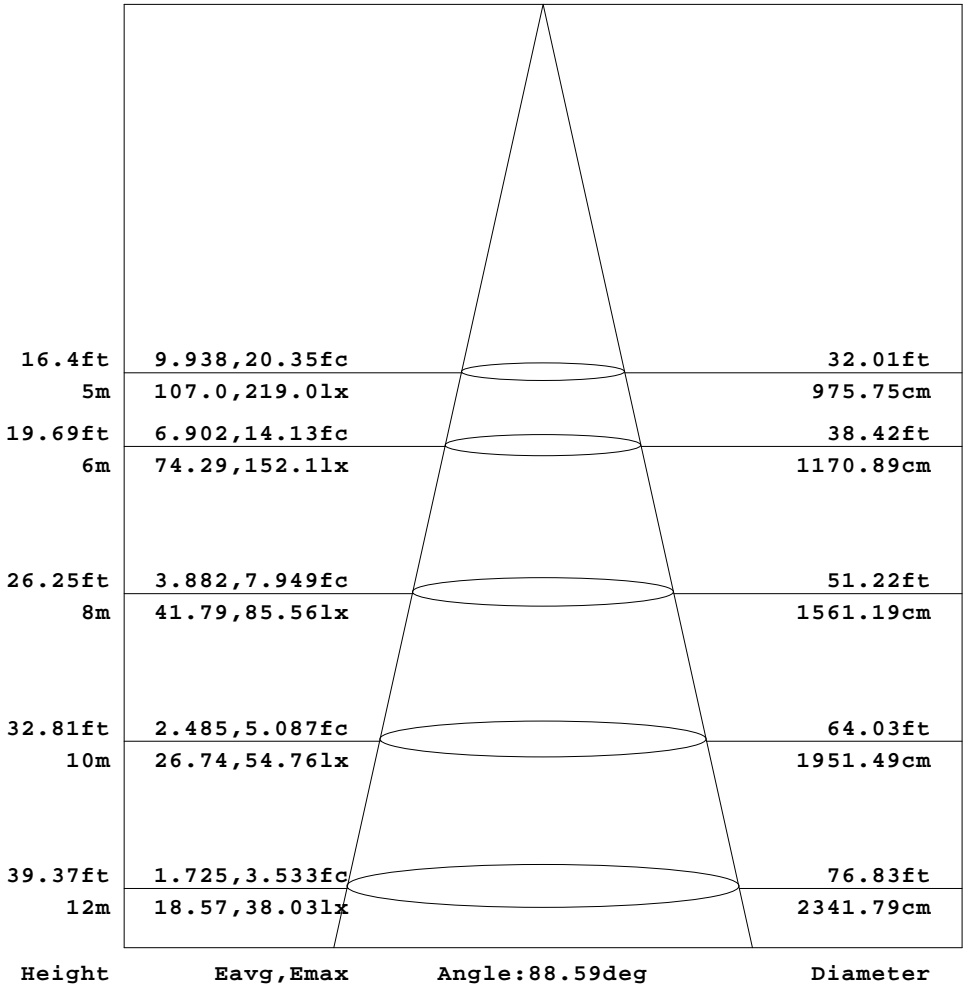
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

AAI Figure

| | | |
|---|-----------------------|---------------------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | |
| NAME: LED Highbay Light | TYPE:YHL-ID-100-HB-VD | WEIGHT:6.5Kg |
| SPEC.:PMMA90 | DIM.: | SERIAL No.:20150714 |
| MFR.: | SUR.: | PROTECTION ANGLE: |

Flux out:8114 lm



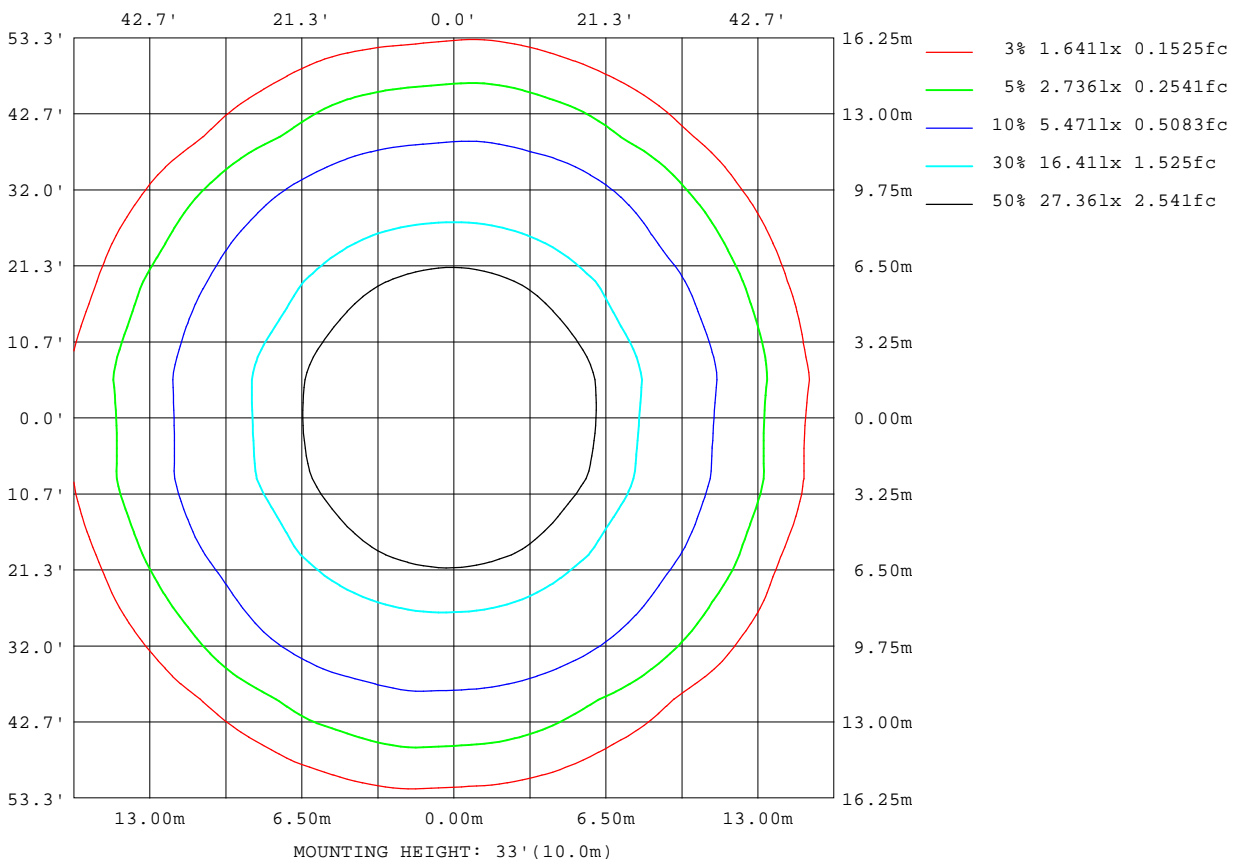
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

g Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

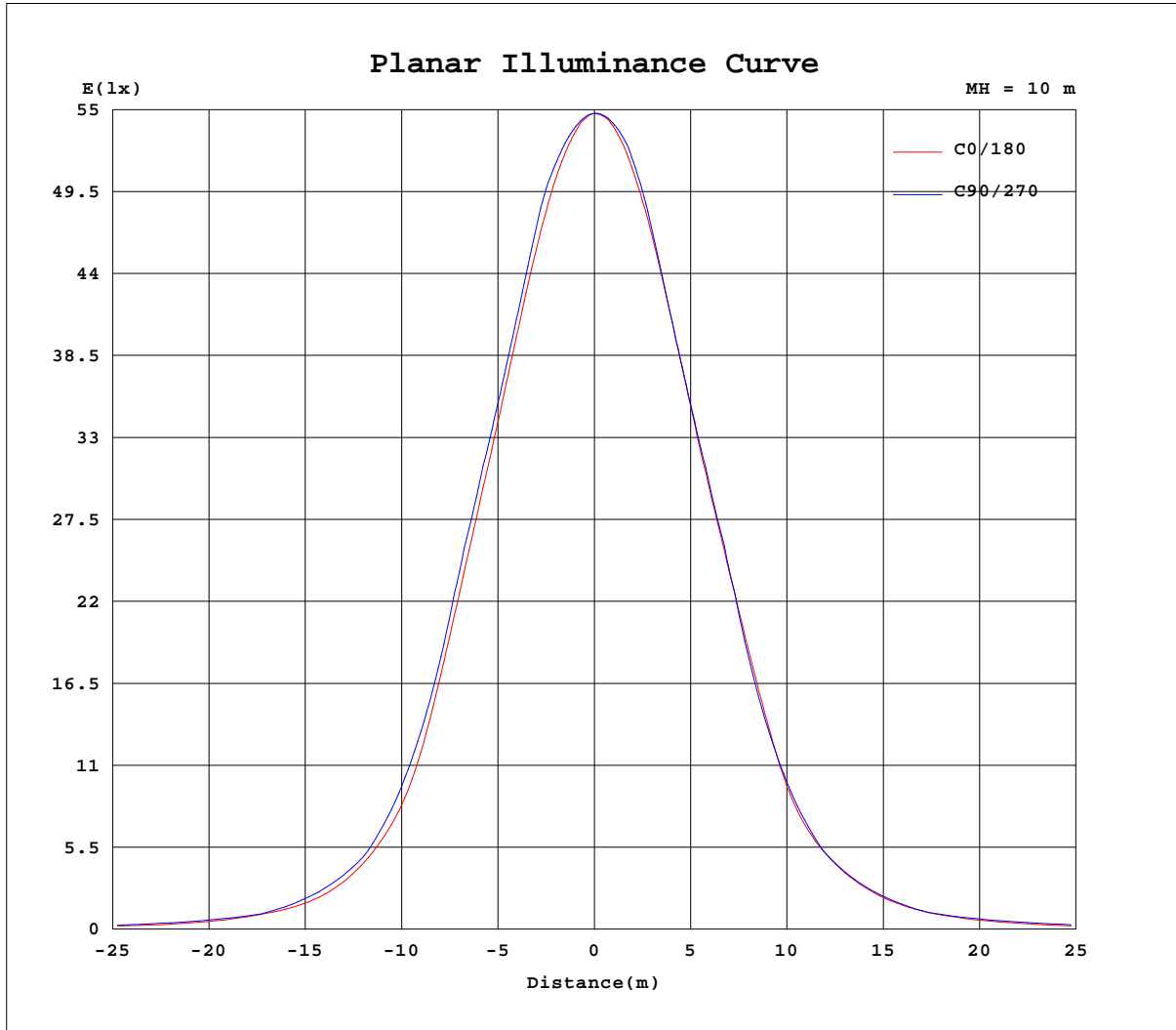
| | | |
|---|-----------------------|---------------------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | |
| NAME: LED Highbay Light | TYPE:YHL-ID-100-HB-VD | WEIGHT:6.5Kg |
| SPEC.:PMMA90 | DIM.: | SERIAL No.:20150714 |
| MFR.: | SUR.: | PROTECTION ANGLE: |



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators: Ryan Chan
 Test Date: 2015-07-14

Page Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity: 65.0%
 Test Distance: 10.000m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|-----------------------|---------------------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | |
| NAME: LED Highbay Light | TYPE:YHL-ID-100-HB-VD | WEIGHT:6.5Kg |
| SPEC.:PMMA90 | DIM.: | SERIAL No.:20150714 |
| MFR.: | SUR.: | PROTECTION ANGLE: |

Table--1

UNIT: cd

| C(DEG) g (DEG) | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 |
| 5 | 5441 | 5440 | 5439 | 5440 | 5440 | 5441 | 5442 | 5444 | 5445 | 5446 | 5448 | 5450 | 5452 | 5454 | 5456 | 5459 | 5461 | 5463 | 5465 |
| 10 | 5366 | 5364 | 5364 | 5364 | 5366 | 5369 | 5373 | 5379 | 5386 | 5393 | 5402 | 5411 | 5420 | 5428 | 5434 | 5439 | 5444 | 5450 | 5455 |
| 15 | 5252 | 5248 | 5248 | 5250 | 5256 | 5265 | 5278 | 5293 | 5309 | 5324 | 5338 | 5353 | 5371 | 5389 | 5403 | 5408 | 5410 | 5415 | 5423 |
| 20 | 5081 | 5075 | 5076 | 5082 | 5096 | 5116 | 5140 | 5169 | 5195 | 5214 | 5223 | 5222 | 5213 | 5207 | 5208 | 5210 | 5215 | 5216 | 5224 |
| 25 | 4845 | 4837 | 4840 | 4853 | 4879 | 4913 | 4953 | 4975 | 4973 | 4963 | 4959 | 4957 | 4959 | 4963 | 4970 | 4979 | 4989 | 4997 | 5005 |
| 30 | 4565 | 4556 | 4563 | 4585 | 4621 | 4664 | 4662 | 4616 | 4607 | 4616 | 4638 | 4664 | 4689 | 4708 | 4725 | 4747 | 4757 | 4778 | 4785 |
| 35 | 4107 | 4091 | 4113 | 4170 | 4256 | 4242 | 4153 | 4113 | 4126 | 4178 | 4252 | 4326 | 4311 | 4311 | 4325 | 4351 | 4351 | 4357 | 4371 |
| 40 | 3302 | 3268 | 3310 | 3428 | 3532 | 3463 | 3404 | 3397 | 3478 | 3556 | 3525 | 3557 | 3592 | 3597 | 3587 | 3580 | 3565 | 3559 | 3570 |
| 45 | 2361 | 2336 | 2371 | 2469 | 2499 | 2522 | 2548 | 2564 | 2561 | 2570 | 2607 | 2683 | 2718 | 2729 | 2726 | 2725 | 2717 | 2711 | 2722 |
| 50 | 1711 | 1710 | 1761 | 1792 | 1770 | 1788 | 1792 | 1758 | 1794 | 1847 | 1877 | 1897 | 1893 | 1877 | 1873 | 1874 | 1872 | 1864 | 1873 |
| 55 | 1152 | 1162 | 1233 | 1226 | 1211 | 1231 | 1247 | 1245 | 1261 | 1259 | 1242 | 1213 | 1216 | 1241 | 1285 | 1320 | 1340 | 1342 | 1353 |
| 60 | 806 | 803 | 823 | 825 | 817 | 814 | 842 | 848 | 844 | 828 | 836 | 840 | 847 | 853 | 857 | 852 | 843 | 830 | 833 |
| 65 | 535 | 554 | 568 | 574 | 576 | 588 | 595 | 552 | 563 | 576 | 592 | 553 | 562 | 593 | 617 | 636 | 647 | 655 | 659 |
| 70 | 394 | 403 | 428 | 435 | 412 | 412 | 412 | 404 | 405 | 386 | 425 | 422 | 425 | 445 | 457 | 471 | 478 | 486 | 484 |
| 75 | 265 | 270 | 283 | 278 | 278 | 276 | 282 | 254 | 270 | 261 | 289 | 288 | 287 | 308 | 300 | 309 | 315 | 324 | 317 |
| 80 | 124 | 122 | 118 | 111 | 116 | 121 | 119 | 117 | 130 | 144 | 173 | 177 | 177 | 200 | 193 | 200 | 205 | 212 | 207 |
| 85 | 6.07 | 7.44 | 7.28 | 14.6 | 7.02 | 11.2 | 26.6 | 45.1 | 59.5 | 72.1 | 85.1 | 90.1 | 88.6 | 101 | 97.5 | 101 | 104 | 107 | 104 |
| 90 | 0.89 | 2.26 | 2.21 | 1.94 | 1.97 | 2.10 | 2.23 | 2.24 | 2.18 | 2.16 | 2.10 | 2.00 | 1.93 | 1.87 | 1.77 | 1.72 | 1.64 | 1.57 | 1.49 |

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

g Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table with 3 columns: NAME, TYPE, WEIGHT, SPEC., DIM., SERIAL No., MFR., SUR., PROTECTION ANGLE. Contains test parameters for LED Highbay Light.

Table--2: Luminous Distribution Intensity Data table. Columns: C (DEG), g (DEG), and intensity values in cd. Rows range from 0 to 90 degrees in C and 95 to 185 degrees in g.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25DEG
Operators: Ryan Chan
Test Date: 2015-07-14

g Range: 0 - 90DEG
Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.266
Humidity: 65.0%
Test Distance: 10.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|-----------------------|---------------------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | |
| NAME: LED Highbay Light | TYPE:YHL-ID-100-HB-VD | WEIGHT:6.5Kg |
| SPEC.:PMMA90 | DIM.: | SERIAL No.:20150714 |
| MFR.: | SUR.: | PROTECTION ANGLE: |

Table--3

UNIT: cd

| C(DEG) g (DEG) | 190 | 195 | 200 | 205 | 210 | 215 | 220 | 225 | 230 | 235 | 240 | 245 | 250 | 255 | 260 | 265 | 270 | 275 | 280 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 |
| 5 | 5474 | 5475 | 5477 | 5479 | 5481 | 5483 | 5484 | 5485 | 5485 | 5486 | 5486 | 5487 | 5487 | 5487 | 5486 | 5486 | 5486 | 5485 | 5483 |
| 10 | 5432 | 5437 | 5443 | 5450 | 5455 | 5461 | 5466 | 5471 | 5479 | 5486 | 5492 | 5498 | 5499 | 5499 | 5499 | 5498 | 5497 | 5495 | 5492 |
| 15 | 5349 | 5357 | 5368 | 5380 | 5393 | 5407 | 5424 | 5426 | 5426 | 5422 | 5417 | 5416 | 5418 | 5412 | 5407 | 5404 | 5399 | 5395 | 5392 |
| 20 | 5210 | 5227 | 5249 | 5278 | 5301 | 5294 | 5287 | 5280 | 5269 | 5261 | 5249 | 5233 | 5221 | 5216 | 5207 | 5205 | 5200 | 5195 | 5196 |
| 25 | 5012 | 5038 | 5071 | 5092 | 5097 | 5084 | 5063 | 5049 | 5032 | 5020 | 5014 | 5008 | 4999 | 4998 | 4991 | 4991 | 4989 | 4983 | 4983 |
| 30 | 4767 | 4806 | 4830 | 4830 | 4809 | 4766 | 4754 | 4752 | 4757 | 4767 | 4767 | 4774 | 4774 | 4774 | 4775 | 4775 | 4777 | 4772 | 4768 |
| 35 | 4454 | 4518 | 4509 | 4452 | 4367 | 4336 | 4346 | 4378 | 4428 | 4477 | 4452 | 4437 | 4436 | 4436 | 4421 | 4409 | 4401 | 4398 | 4404 |
| 40 | 3903 | 3944 | 3914 | 3782 | 3710 | 3721 | 3796 | 3851 | 3821 | 3829 | 3826 | 3789 | 3743 | 3692 | 3654 | 3628 | 3623 | 3638 | 3659 |
| 45 | 2953 | 2946 | 2929 | 2902 | 2870 | 2888 | 2897 | 2889 | 2940 | 2970 | 2959 | 2935 | 2900 | 2855 | 2817 | 2790 | 2795 | 2828 | 2850 |
| 50 | 2064 | 2045 | 2036 | 2039 | 2038 | 2057 | 2095 | 2110 | 2133 | 2138 | 2102 | 2080 | 2056 | 2018 | 1981 | 1952 | 1967 | 2019 | 2038 |
| 55 | 1494 | 1446 | 1436 | 1456 | 1431 | 1446 | 1475 | 1467 | 1439 | 1394 | 1373 | 1414 | 1455 | 1456 | 1444 | 1427 | 1444 | 1484 | 1486 |
| 60 | 972 | 956 | 945 | 965 | 998 | 1001 | 986 | 954 | 960 | 983 | 994 | 993 | 993 | 971 | 937 | 910 | 921 | 953 | 964 |
| 65 | 661 | 651 | 662 | 671 | 662 | 650 | 668 | 669 | 643 | 629 | 686 | 708 | 725 | 734 | 726 | 725 | 734 | 743 | 735 |
| 70 | 442 | 460 | 466 | 463 | 472 | 474 | 444 | 459 | 475 | 486 | 523 | 525 | 539 | 546 | 539 | 546 | 547 | 538 | 530 |
| 75 | 292 | 309 | 313 | 316 | 317 | 331 | 327 | 331 | 340 | 355 | 373 | 346 | 358 | 360 | 358 | 372 | 367 | 342 | 334 |
| 80 | 138 | 146 | 161 | 167 | 176 | 193 | 210 | 211 | 217 | 230 | 245 | 220 | 231 | 233 | 233 | 244 | 240 | 222 | 216 |
| 85 | 18.8 | 24.1 | 24.1 | 48.3 | 71.5 | 88.3 | 105 | 105 | 110 | 115 | 124 | 111 | 116 | 117 | 117 | 123 | 121 | 112 | 109 |
| 90 | 1.44 | 1.59 | 1.66 | 1.66 | 1.74 | 1.92 | 2.00 | 2.02 | 1.95 | 1.87 | 1.78 | 1.69 | 1.57 | 1.46 | 1.35 | 1.26 | 1.26 | 1.50 | 1.80 |

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

g Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|-----------------------|---------------------|
| Test:U:221.1V I:0.4611A P:100.5W PF:0.9859 Lamp Flux:11487.7x1 lm | | |
| NAME: LED Highbay Light | TYPE:YHL-ID-100-HB-VD | WEIGHT:6.5Kg |
| SPEC.:PMMA90 | DIM.: | SERIAL No.:20150714 |
| MFR.: | SUR.: | PROTECTION ANGLE: |

Table--4

UNIT: cd

| C(DEG) g (DEG) | 285 | 290 | 295 | 300 | 305 | 310 | 315 | 320 | 325 | 330 | 335 | 340 | 345 | 350 | 355 | | | | |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|
| 0 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | 5476 | | | | |
| 5 | 5481 | 5479 | 5476 | 5473 | 5469 | 5466 | 5463 | 5460 | 5458 | 5454 | 5451 | 5448 | 5446 | 5444 | 5442 | | | | |
| 10 | 5485 | 5478 | 5471 | 5462 | 5450 | 5440 | 5431 | 5422 | 5413 | 5403 | 5395 | 5387 | 5380 | 5374 | 5370 | | | | |
| 15 | 5394 | 5392 | 5387 | 5382 | 5376 | 5373 | 5374 | 5375 | 5356 | 5334 | 5314 | 5296 | 5281 | 5268 | 5259 | | | | |
| 20 | 5196 | 5198 | 5197 | 5200 | 5206 | 5212 | 5218 | 5215 | 5213 | 5215 | 5192 | 5161 | 5134 | 5111 | 5093 | | | | |
| 25 | 4977 | 4974 | 4970 | 4964 | 4964 | 4963 | 4967 | 4975 | 4984 | 4983 | 4985 | 4971 | 4927 | 4890 | 4862 | | | | |
| 30 | 4761 | 4750 | 4733 | 4716 | 4700 | 4677 | 4657 | 4644 | 4659 | 4692 | 4708 | 4714 | 4684 | 4629 | 4589 | | | | |
| 35 | 4416 | 4402 | 4385 | 4391 | 4402 | 4339 | 4290 | 4255 | 4234 | 4239 | 4288 | 4323 | 4329 | 4236 | 4157 | | | | |
| 40 | 3683 | 3705 | 3738 | 3780 | 3771 | 3754 | 3777 | 3705 | 3587 | 3529 | 3551 | 3635 | 3645 | 3571 | 3405 | | | | |
| 45 | 2860 | 2880 | 2920 | 2941 | 2936 | 2873 | 2751 | 2722 | 2697 | 2648 | 2653 | 2630 | 2623 | 2628 | 2456 | | | | |
| 50 | 2035 | 2065 | 2106 | 2116 | 2104 | 2050 | 1964 | 1868 | 1865 | 1891 | 1860 | 1842 | 1867 | 1868 | 1777 | | | | |
| 55 | 1464 | 1455 | 1435 | 1386 | 1363 | 1388 | 1375 | 1358 | 1335 | 1302 | 1289 | 1263 | 1262 | 1257 | 1204 | | | | |
| 60 | 962 | 953 | 957 | 979 | 975 | 954 | 933 | 902 | 911 | 905 | 891 | 873 | 845 | 837 | 852 | | | | |
| 65 | 717 | 680 | 657 | 681 | 651 | 649 | 653 | 631 | 614 | 626 | 621 | 595 | 573 | 564 | 553 | | | | |
| 70 | 531 | 507 | 491 | 515 | 492 | 476 | 469 | 454 | 450 | 433 | 412 | 422 | 434 | 411 | 400 | | | | |
| 75 | 354 | 337 | 325 | 357 | 344 | 342 | 334 | 316 | 310 | 307 | 295 | 298 | 277 | 276 | 277 | | | | |
| 80 | 231 | 216 | 207 | 228 | 218 | 217 | 205 | 188 | 176 | 164 | 158 | 154 | 152 | 136 | 132 | | | | |
| 85 | 116 | 109 | 105 | 116 | 110 | 109 | 103 | 92.3 | 80.4 | 63.8 | 40.5 | 17.9 | 22.7 | 12.2 | 9.09 | | | | |
| 90 | 2.04 | 2.32 | 2.54 | 2.81 | 3.07 | 3.30 | 3.26 | 3.02 | 2.63 | 2.26 | 1.91 | 1.67 | 1.37 | 1.27 | 0.98 | | | | |

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Ryan Chan
 Test Date:2015-07-14

g Range: 0 - 90DEG
 Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks: