

## Photometric Testing Report

## Light efficiency:

94 Lumen/Watt

## Light quality:

CRI: 83.2 CQS: 82.3

## Color temperature:

3033 K

Output: 1853 lm

Peak: 1643 cd

Power: 19.7 W

PF: 0.98

Voltage: 120 V

Current: 0.168 A

Frequency: 60 Hz

THD Current: 17.37%

THD Voltage: 0.72%



Product Name:

ALR8-2630W-HC

Driver used:

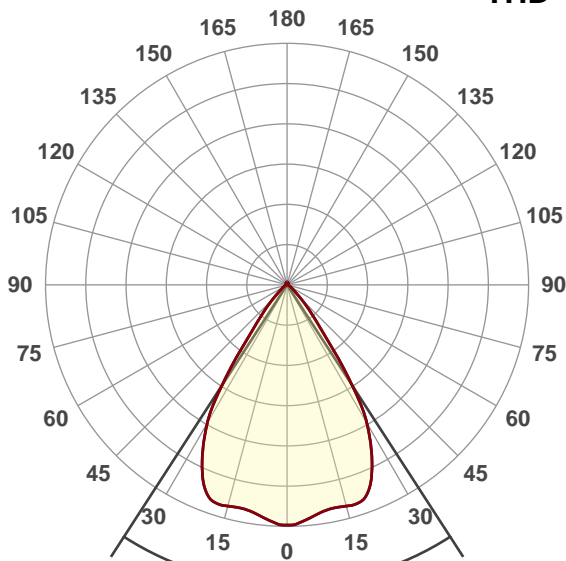
Date:

2/9/2018

Beam angle: 65.9°

Field angle: 87.8°

Cut-Off angle: 110.9°



65.9°

## Beam details

\*measured at  
center of beam

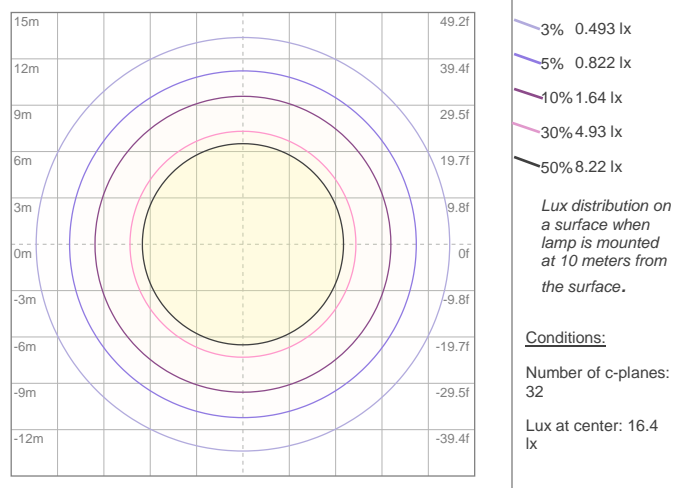
| Mounting Height<br>(feet)\(meter) | Lux*    | Footcandles* | Beam width<br>(feet) / (meter) |
|-----------------------------------|---------|--------------|--------------------------------|
| 4 ft / 1.2 m                      | 1106 lx | 103 fcd      | 5.2 ft / 1.6 m                 |
| 8 ft / 2.4 m                      | 276 lx  | 26 fcd       | 10.4 ft / 3.2 m                |
| 12 ft / 3.7 m                     | 123 lx  | 11 fcd       | 15.5 ft / 4.7 m                |
| 16 ft / 4.9 m                     | 69 lx   | 6 fcd        | 20.7 ft / 6.3 m                |
| 20 ft / 6.1 m                     | 44 lx   | 4 fcd        | 25.9 ft / 7.9 m                |

Beam center

# Light planning Photometric Testing Report

## ISO lux diagram

### Zonal Lumen Summary



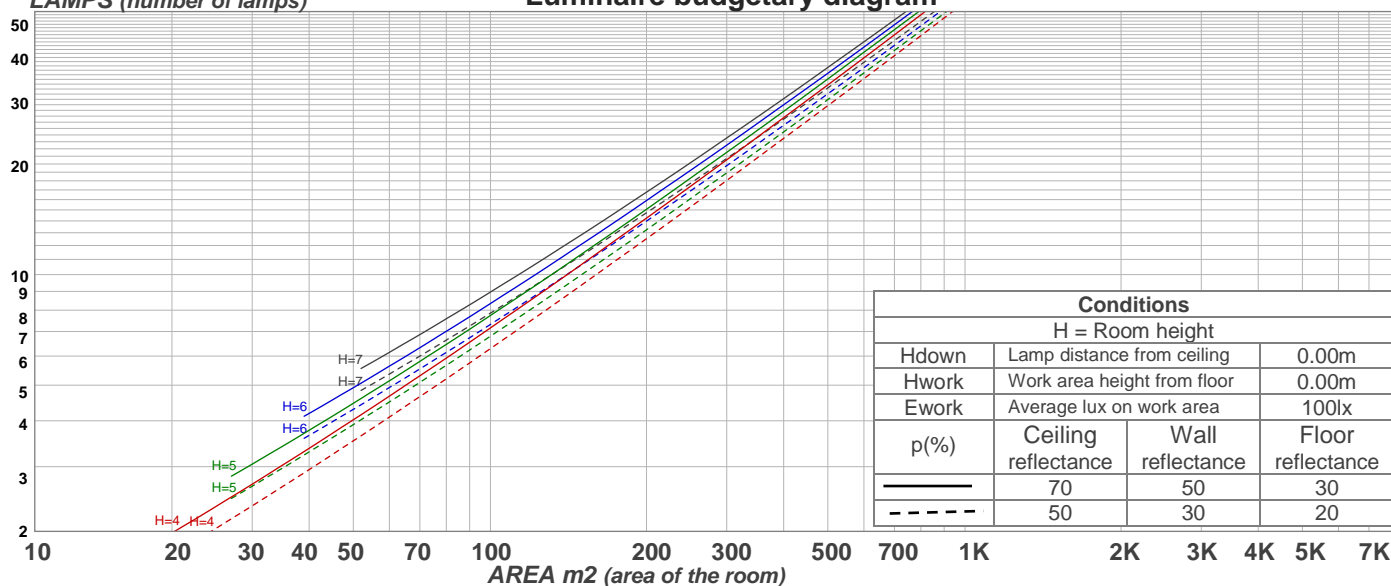
Mounting height: 10 meters (33 feet)

### Coefficients of Utilization

| Ceiling reflectance | 80   |     |     |     | 70  |     |     |     | 50  |     |     | 30  |     |     | 10 |    |    | 0  |
|---------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|
| Wall reflectance    | 70   | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50 | 30 | 10 | 0  |
| Floor reflectance   | 20   | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20 | 20 | 20 | 0  |
| RCR                 | (RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumens delivered to the task surface |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |
| 0                   | 118  | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 97 |
| 1                   | 112  | 109 | 106 | 104 | 109 | 107 | 104 | 102 | 102 | 100 | 98  | 98  | 96  | 95  | 94 | 93 | 92 | 90 |
| 2                   | 106  | 101 | 97  | 93  | 104 | 99  | 95  | 92  | 95  | 92  | 89  | 92  | 89  | 87  | 88 | 86 | 84 | 83 |
| 3                   | 100  | 93  | 88  | 84  | 98  | 92  | 87  | 83  | 89  | 85  | 81  | 86  | 82  | 80  | 83 | 80 | 78 | 76 |
| 4                   | 95   | 87  | 81  | 76  | 93  | 85  | 80  | 76  | 83  | 78  | 75  | 80  | 77  | 73  | 78 | 75 | 72 | 70 |
| 5                   | 90   | 81  | 75  | 70  | 88  | 80  | 74  | 70  | 78  | 73  | 69  | 75  | 71  | 68  | 74 | 70 | 67 | 65 |
| 6                   | 85   | 76  | 69  | 65  | 83  | 75  | 69  | 64  | 73  | 67  | 64  | 71  | 66  | 63  | 69 | 65 | 62 | 61 |
| 7                   | 80   | 71  | 64  | 60  | 79  | 70  | 64  | 60  | 68  | 63  | 59  | 67  | 62  | 59  | 65 | 61 | 58 | 56 |
| 8                   | 76   | 66  | 60  | 56  | 75  | 66  | 60  | 55  | 64  | 59  | 55  | 63  | 58  | 55  | 62 | 57 | 54 | 53 |
| 9                   | 72   | 62  | 56  | 52  | 71  | 62  | 56  | 52  | 60  | 55  | 51  | 59  | 55  | 51  | 58 | 54 | 51 | 49 |
| 10                  | 69   | 59  | 53  | 49  | 68  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 48  | 55 | 51 | 48 | 46 |

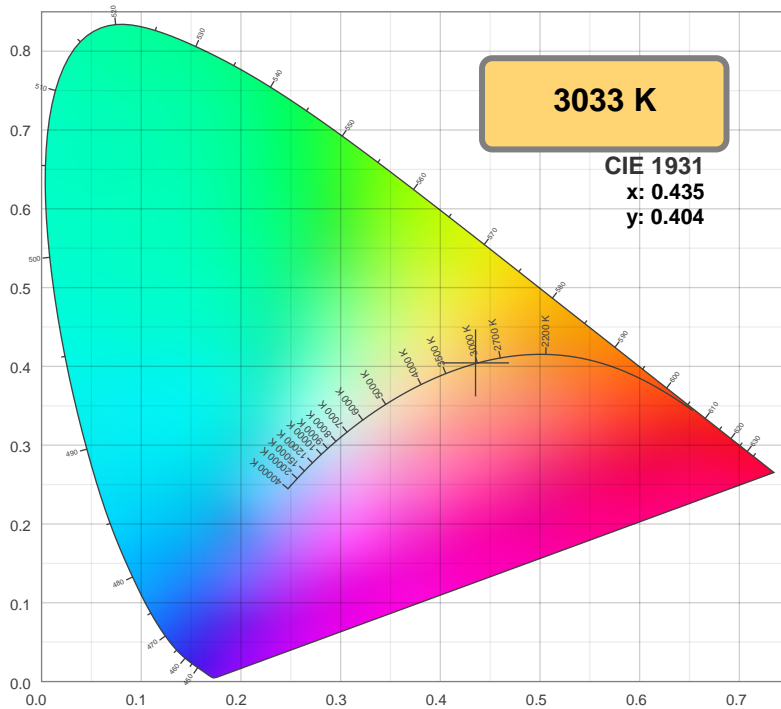
LAMPS (number of lamps)

### Luminaire budgetary diagram

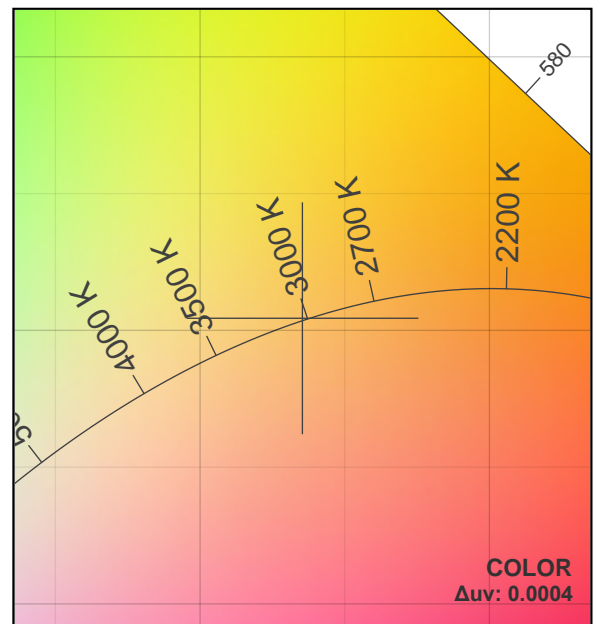


## Photometric Testing Report

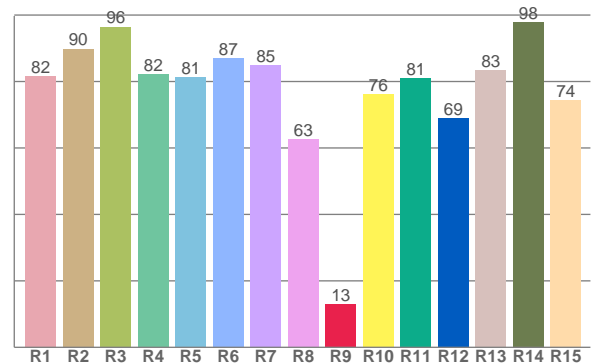
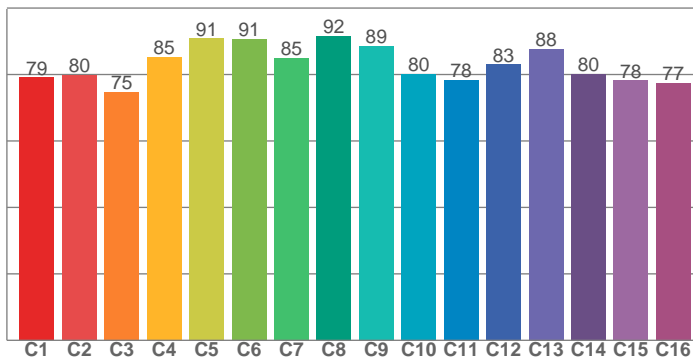
## Color details



TM30: 83.1



CRI: 83.2 (R1-R8)



CQS: 82.3

CRI R values, only R1-R8 are used to calculate final CRI value

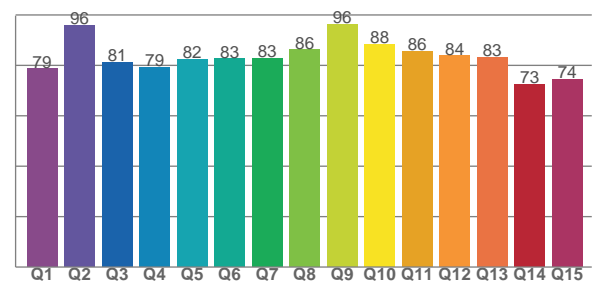
| R1   | R2   | R3   | R4   | R5   | R6   | R7   | R8   | R9   | R10  | R11  | R12  | R13  | R14  | R15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 81.6 | 89.8 | 96.5 | 82.1 | 81.2 | 87.1 | 84.9 | 62.6 | 12.9 | 76.1 | 81.0 | 69.0 | 83.4 | 97.9 | 74.4 |

TM30 C values, 16 binned values out of total of 99 C values

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 79.1 | 79.9 | 74.8 | 85.2 | 90.9 | 90.7 | 85.0 | 91.7 | 88.6 | 80.1 | 78.4 | 83.0 | 87.6 | 80.2 | 78.3 | 77.5 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 78.6 | 96.0 | 81.3 | 79.3 | 82.5 | 82.6 | 82.8 | 86.2 | 96.3 | 88.3 | 85.6 | 83.8 | 83.2 | 72.6 | 74.5 |



## Photometric Testing Report

## UGR

## Glare Evaluation According to UGR

|   |     |   |      |      |      |      |   |      |      |      |      |
|---|-----|---|------|------|------|------|---|------|------|------|------|
| p Ceiling   |     | 70  | 70   | 50   | 50   | 30   | 70                                      | 70   | 50   | 50   | 30   |
| p Walls   |     | 50  | 30   | 50   | 30   | 30   | 50                                      | 30   | 50   | 30   | 30   |
| p Floor   |     | 20  | 20   | 20   | 20   | 20   | 20                                      | 20   | 20   | 20   | 20   |
| Room size<br>X      Y   |     | Viewing direction at right angles to<br>lamp axis |      |      |      |      | Viewing direction parallel to lamp axis |      |      |      |      |
| 2H  | 2H  | 15.2  | 16.0 | 15.5 | 16.2 | 16.5 | 15.2                                    | 16.0 | 15.5 | 16.2 | 16.5 |
|   | 3H  | 15.2  | 15.9 | 15.6 | 16.2 | 16.5 | 15.2                                    | 15.9 | 15.6 | 16.2 | 16.5 |
|   | 4H  | 15.2  | 15.9 | 15.6 | 16.2 | 16.5 | 15.2                                    | 15.9 | 15.6 | 16.2 | 16.5 |
|   | 6H  | 15.2  | 15.8 | 15.6 | 16.1 | 16.5 | 15.2                                    | 15.8 | 15.6 | 16.1 | 16.5 |
|   | 8H  | 15.3  | 15.8 | 15.6 | 16.1 | 16.5 | 15.3                                    | 15.8 | 15.6 | 16.1 | 16.5 |
|   | 12H | 15.3  | 15.8 | 15.7 | 16.2 | 16.5 | 15.3                                    | 15.8 | 15.7 | 16.2 | 16.5 |
| 4H  | 2H  | 15.1  | 15.7 | 15.5 | 16.0 | 16.4 | 15.1                                    | 15.7 | 15.5 | 16.0 | 16.4 |
|   | 3H  | 15.1  | 15.7 | 15.6 | 16.0 | 16.4 | 15.1                                    | 15.7 | 15.6 | 16.0 | 16.4 |
|   | 4H  | 15.2  | 15.6 | 15.6 | 16.0 | 16.4 | 15.2                                    | 15.6 | 15.6 | 16.0 | 16.4 |
|   | 6H  | 15.3  | 15.6 | 15.7 | 16.0 | 16.5 | 15.3                                    | 15.6 | 15.7 | 16.0 | 16.5 |
|   | 8H  | 15.3  | 15.6 | 15.8 | 16.1 | 16.5 | 15.3                                    | 15.6 | 15.8 | 16.1 | 16.5 |
|   | 12H | 15.4  | 15.7 | 15.9 | 16.2 | 16.6 | 15.4                                    | 15.7 | 15.9 | 16.2 | 16.6 |
| 8H  | 4H  | 15.1  | 15.5 | 15.6 | 15.9 | 16.4 | 15.1                                    | 15.5 | 15.6 | 15.9 | 16.4 |
|   | 6H  | 15.3  | 15.5 | 15.8 | 16.0 | 16.5 | 15.3                                    | 15.5 | 15.8 | 16.0 | 16.5 |
|   | 8H  | 15.4  | 15.6 | 15.9 | 16.1 | 16.6 | 15.4                                    | 15.6 | 15.9 | 16.1 | 16.6 |
|   | 12H | 15.5  | 15.7 | 16.1 | 16.2 | 16.8 | 15.5                                    | 15.7 | 16.1 | 16.2 | 16.8 |
| 12H   | 4H  | 15.1  | 15.4 | 15.6 | 15.9 | 16.3 | 15.1                                    | 15.4 | 15.6 | 15.9 | 16.3 |
|   | 6H  | 15.2  | 15.5 | 15.8 | 16.0 | 16.5 | 15.2                                    | 15.5 | 15.8 | 16.0 | 16.5 |
|   | 8H  | 15.4  | 15.5 | 15.9 | 16.1 | 16.6 | 15.4                                    | 15.5 | 15.9 | 16.1 | 16.6 |
| Variation of the observer position for the luminaire distance S |     |   |      |      |      |      |   |      |      |      |      |
| S = 1.0H  |     | +4.1 / -3.6                                       |      |      |      |      | +4.1 / -3.6                             |      |      |      |      |
| S = 1.5H  |     | +6.7 / -4.2                                       |      |      |      |      | +6.7 / -4.2                             |      |      |      |      |
| S = 2.0H  |     | +8.6 / -4.9                                       |      |      |      |      | +8.6 / -4.9                             |      |      |      |      |
| Standard table  |     | BK01  |      |      |      |      | BK01                                    |      |      |      |      |
| Correction<br>summand   |     | -2.6  |      |      |      |      | -2.6                                    |      |      |      |      |
| Corrected glare indices referring to 1853lm total luminous flux |     |   |      |      |      |      |   |      |      |      |      |