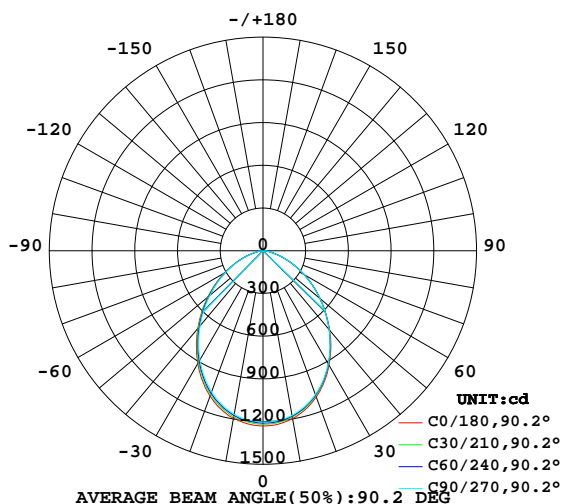


# LUMINAIRE PHOTOMETRIC TEST REPORT

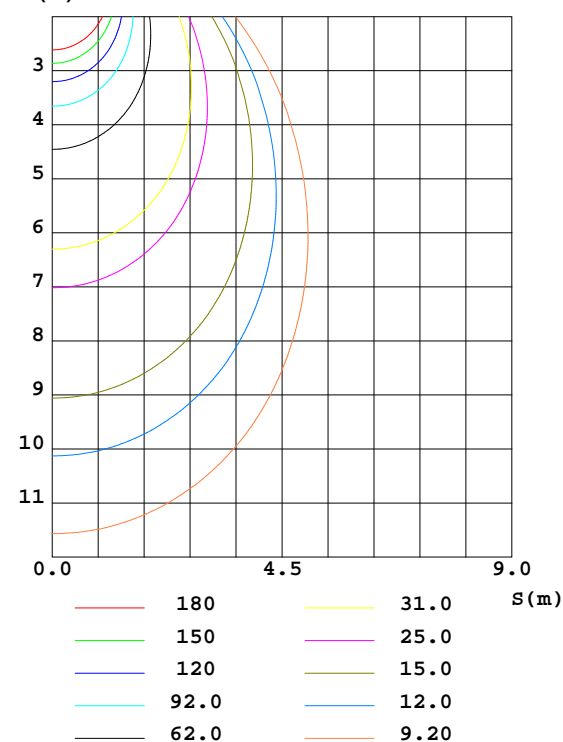
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 79.50 lm/W			
MODEL	BL182-30W-840-W-90	Imax(cd)	1231	S/MH(C0/180)	1.14
NOMINAL POWER(W)	34	LOR(%)	100.0	S/MH(C90/270)	1.15
RATED VOLTAGE(V)	228	TOTAL FLUX(lm)	2575.9	η UP,DN(C0-180)	0.0,50.8
NOMINAL FLUX(lm)	2575.88	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	227.3	η down(%)	100.0	CIBSE SHR MAX	1.25

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QiuMing  
Test Date:2014-07-09

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.050m [K=1.0000]  
Remarks: 34W

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	1196	1189	1174	1164	1194	1173	1166	1156	0- 10	113.6	113.6	4.41,4.41
20	1093	1089	1075	1063	1087	1061	1055	1050	10- 20	317.6	431.3	16.7,16.7
30	927.9	927.8	916.5	900.0	915.2	891.8	886.1	886.6	20- 30	456.0	887.2	34.4,34.4
40	729.3	731.1	723.2	704.9	712.3	692.2	687.5	692.2	30- 40	504.2	1391	54,54
50	525.5	527.0	522.3	504.3	506.1	493.0	486.8	495.8	40- 50	466.7	1858	72.1,72.1
60	333.8	334.6	333.6	316.6	314.0	304.2	300.8	309.6	50- 60	366.4	2225	86.4,86.4
70	164.2	166.3	166.0	153.4	147.6	141.9	140.2	148.1	60- 70	229.5	2454	95.3,95.3
80	48.63	49.25	49.35	43.27	40.21	39.07	38.56	42.32	70- 80	96.24	2550	99,99
90	8.509	8.639	9.505	7.244	7.806	7.704	7.660	7.526	80- 90	25.54	2576	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		

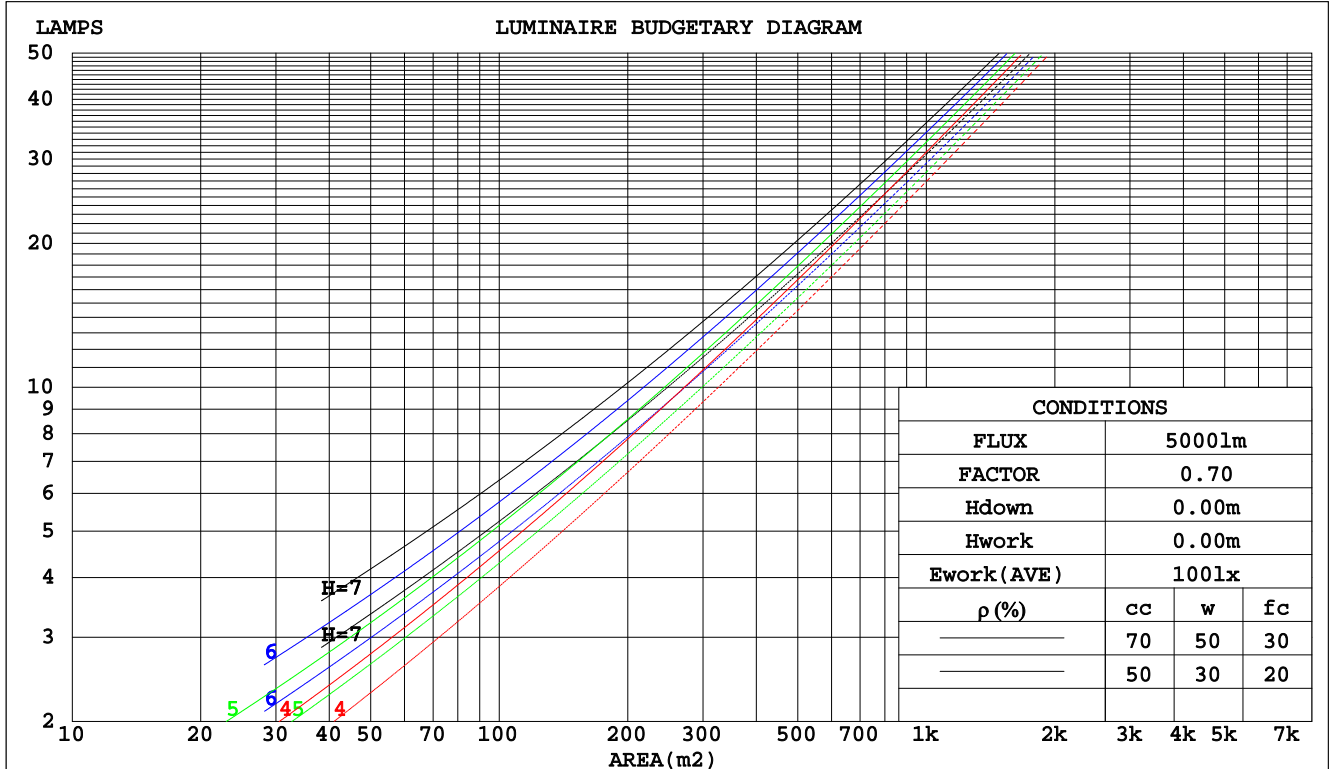
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QiuMing  
Test Date:2014-07-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.050m [K=1.0000]  
Remarks: 34W

### CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION 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															



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2014-07-09

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.050m [K=1.0000]  
Remarks: 34W

# WEC AND CCEC

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION 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	.270 .153 .049	.263 .150 .048	.249 .143 .046	.237 .137 .044	.226 .131 .042	
2.0	.258 .142 .043	.252 .139 .043	.241 .134 .042	.230 .129 .040	.221 .125 .039	
3.0	.243 .129 .039	.237 .127 .038	.227 .123 .037	.218 .120 .037	.210 .116 .036	
4.0	.227 .118 .035	.222 .116 .034	.213 .113 .034	.205 .110 .033	.198 .107 .033	
5.0	.212 .108 .031	.208 .107 .031	.200 .104 .031	.193 .102 .030	.186 .099 .030	
6.0	.198 .099 .028	.195 .098 .028	.188 .096 .028	.181 .094 .028	.175 .092 .027	
7.0	.186 .092 .026	.183 .091 .026	.176 .089 .026	.170 .087 .025	.165 .086 .025	
8.0	.175 .085 .024	.172 .085 .024	.166 .083 .024	.161 .081 .024	.156 .080 .023	
9.0	.164 .080 .022	.162 .079 .022	.157 .078 .022	.152 .076 .022	.148 .075 .022	
10.0	.155 .074 .021	.153 .074 .021	.148 .073 .020	.144 .072 .020	.140 .070 .020	

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	.178 .156 .138	.152 .134 .118	.104 .092 .082	.060 .053 .048	.019 .017 .015	
2.0	.168 .132 .102	.144 .114 .088	.098 .079 .062	.057 .046 .036	.018 .015 .012	
3.0	.159 .114 .078	.137 .098 .068	.094 .068 .048	.054 .040 .028	.017 .013 .009	
4.0	.151 .100 .062	.130 .087 .054	.089 .061 .038	.052 .035 .022	.017 .012 .007	
5.0	.144 .090 .050	.124 .078 .043	.085 .054 .031	.049 .032 .018	.016 .010 .006	
6.0	.137 .081 .041	.118 .070 .036	.081 .049 .025	.047 .029 .015	.015 .009 .005	
7.0	.131 .074 .035	.112 .064 .030	.078 .045 .022	.045 .027 .013	.015 .009 .004	
8.0	.124 .068 .030	.107 .059 .026	.074 .042 .019	.043 .025 .011	.014 .008 .004	
9.0	.119 .064 .026	.102 .055 .023	.071 .039 .016	.041 .023 .010	.013 .008 .003	
10.0	.113 .059 .023	.098 .051 .020	.068 .036 .014	.040 .021 .009	.013 .007 .003	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QiuMing  
Test Date:2014-07-09

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.050m [K=1.0000]  
Remarks: 34W

### Uncorrected UGR Table

NAME:					TYPE:					WEIGHT:				
DIM.:					SPEC.:					SERIAL No.:				
MFR.: Rayconn					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	25.8	27.2	26.1	27.4	27.6	25.8	27.2	26.1	27.4	27.6				
3H	26.8	28.1	27.1	28.3	28.5	26.8	28.1	27.1	28.3	28.5				
4H	27.0	28.2	27.3	28.5	28.7	27.0	28.3	27.3	28.5	28.8				
6H	27.1	28.3	27.5	28.5	28.8	27.2	28.3	27.5	28.6	28.8				
8H	27.2	28.3	27.5	28.5	28.8	27.2	28.3	27.5	28.6	28.8				
12H	27.2	28.2	27.5	28.5	28.8	27.2	28.3	27.5	28.5	28.8				
4H 2H	26.3	27.5	26.6	27.7	28.0	26.3	27.5	26.6	27.7	28.0				
3H	27.3	28.4	27.7	28.7	29.0	27.3	28.4	27.7	28.7	29.0				
4H	27.7	28.6	28.0	28.9	29.3	27.7	28.6	28.1	29.0	29.3				
6H	27.8	28.7	28.2	29.0	29.4	27.9	28.7	28.3	29.1	29.4				
8H	27.9	28.7	28.3	29.1	29.4	27.9	28.7	28.3	29.1	29.5				
12H	28.0	28.7	28.4	29.1	29.5	28.0	28.7	28.4	29.1	29.5				
8H 4H	27.8	28.5	28.2	28.9	29.3	27.8	28.6	28.2	28.9	29.3				
6H	28.0	28.7	28.5	29.1	29.5	28.0	28.7	28.5	29.1	29.5				
8H	28.1	28.7	28.6	29.1	29.6	28.1	28.7	28.6	29.1	29.6				
12H	28.2	28.7	28.7	29.2	29.6	28.3	28.7	28.7	29.2	29.7				
12H 4H	27.7	28.5	28.2	28.8	29.2	27.7	28.5	28.2	28.9	29.3				
6H	28.0	28.6	28.5	29.0	29.5	28.0	28.6	28.5	29.0	29.5				
8H	28.1	28.6	28.6	29.1	29.6	28.2	28.7	28.6	29.1	29.6				
Variations with the observer position at spacings:														
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4								
1.5H	+ 0.1 / - 0.3					+ 0.2 / - 0.3								
2.0H	+ 0.5 / - 0.5					+ 0.5 / - 0.5								

CIE Pub.117 Corrected 2576 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.3)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QiuMing  
Test Date:2014-07-09

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.050m [K=1.0000]  
Remarks: 34W

## UTILIZATION FACTORS TABLE

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

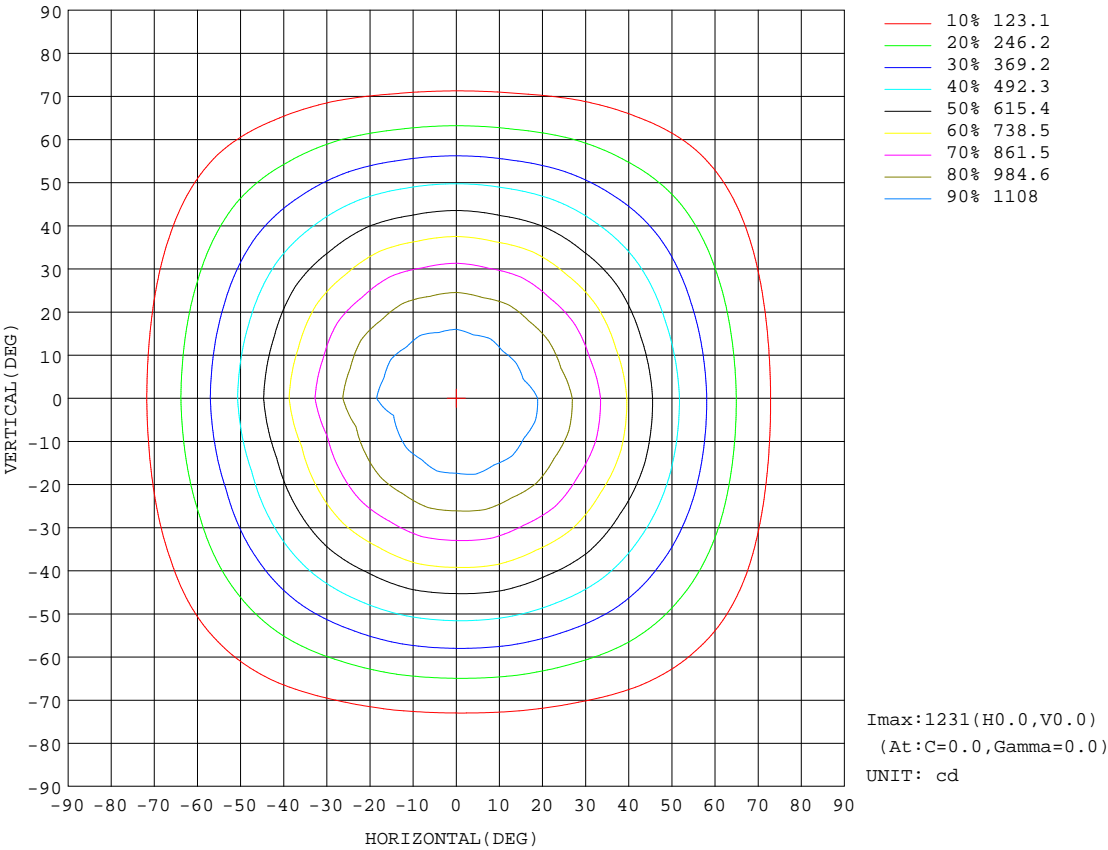
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT)    k(RI) x RCR = 5									
k = 0.60	63	52	46	62	52	46	61	51	45	40
0.80	73	62	56	72	62	56	70	61	55	49
1.00	81	71	65	80	71	64	78	72	64	57
1.25	88	79	72	86	78	72	84	76	71	64
1.50	92	84	78	91	83	77	88	81	76	69
2.00	99	91	86	97	90	85	94	88	83	76
2.50	102	95	90	100	94	89	96	91	87	79
3.00	105	99	94	103	97	93	99	95	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	104	101	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004					Suspended			SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2014-07-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.050m [K=1.0000]  
Remarks: 34W

ISOCANDELA DIAGRAM

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

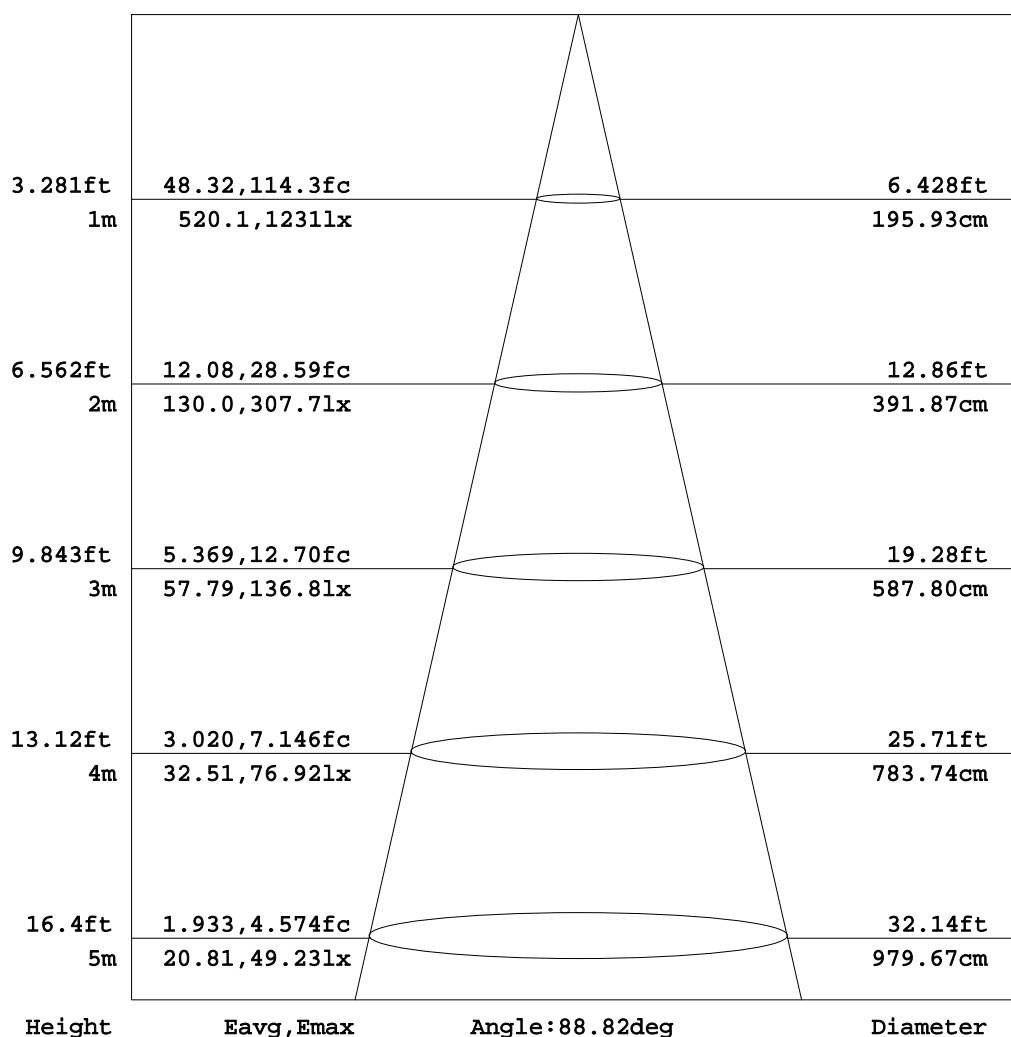


C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 15.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.265
Temperature: 25.3DEG	Humidity: 65.0%
Operators: QiuMing	Test Distance: 6.050m [K=1.0000]
Test Date: 2014-07-09	Remarks: 34W

### AAI Figure

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

Flux out:1634 lm



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

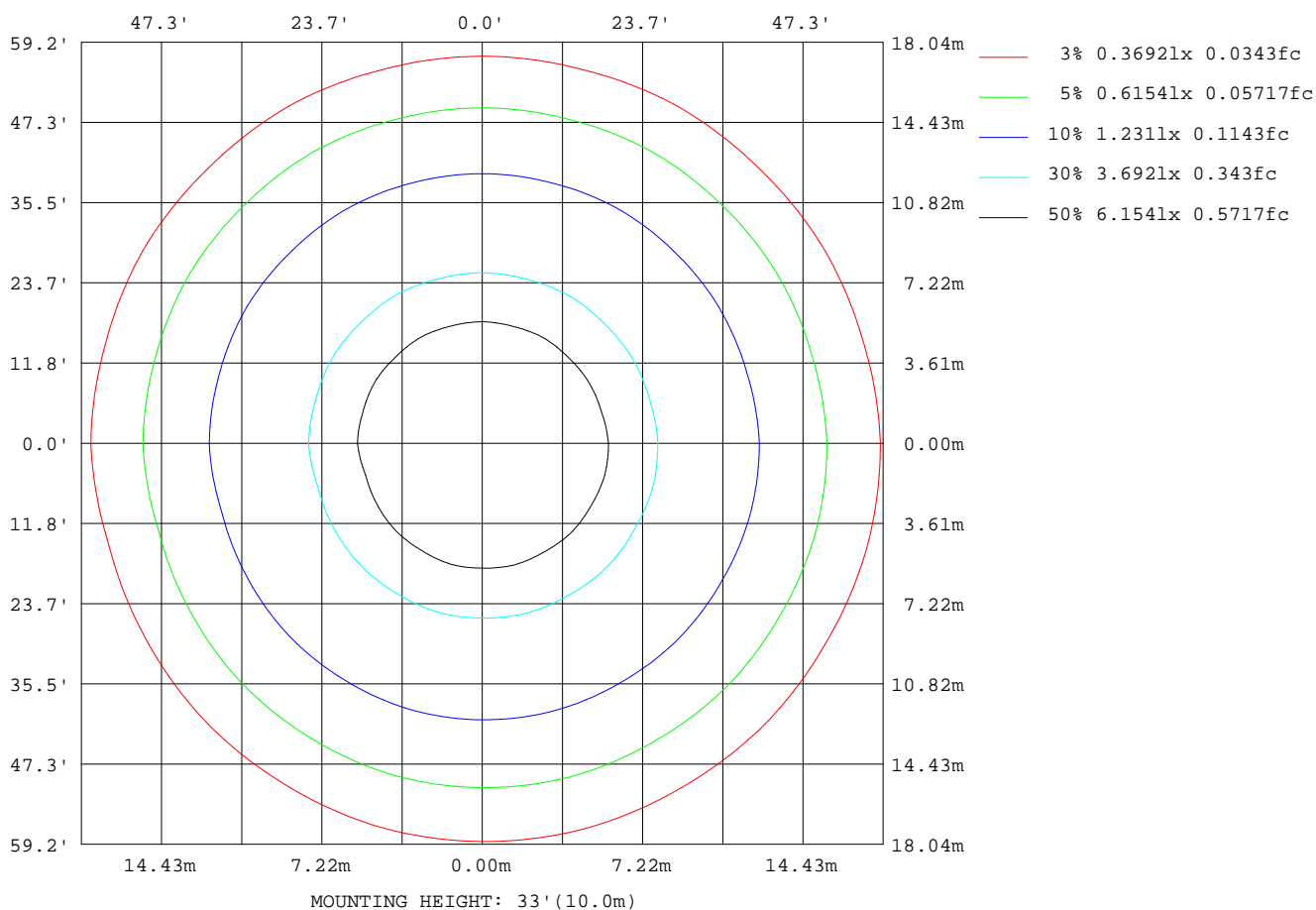
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2014-07-09

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.050m [K=1.0000]  
Remarks: 34W



## ISOLUX DIAGRAM

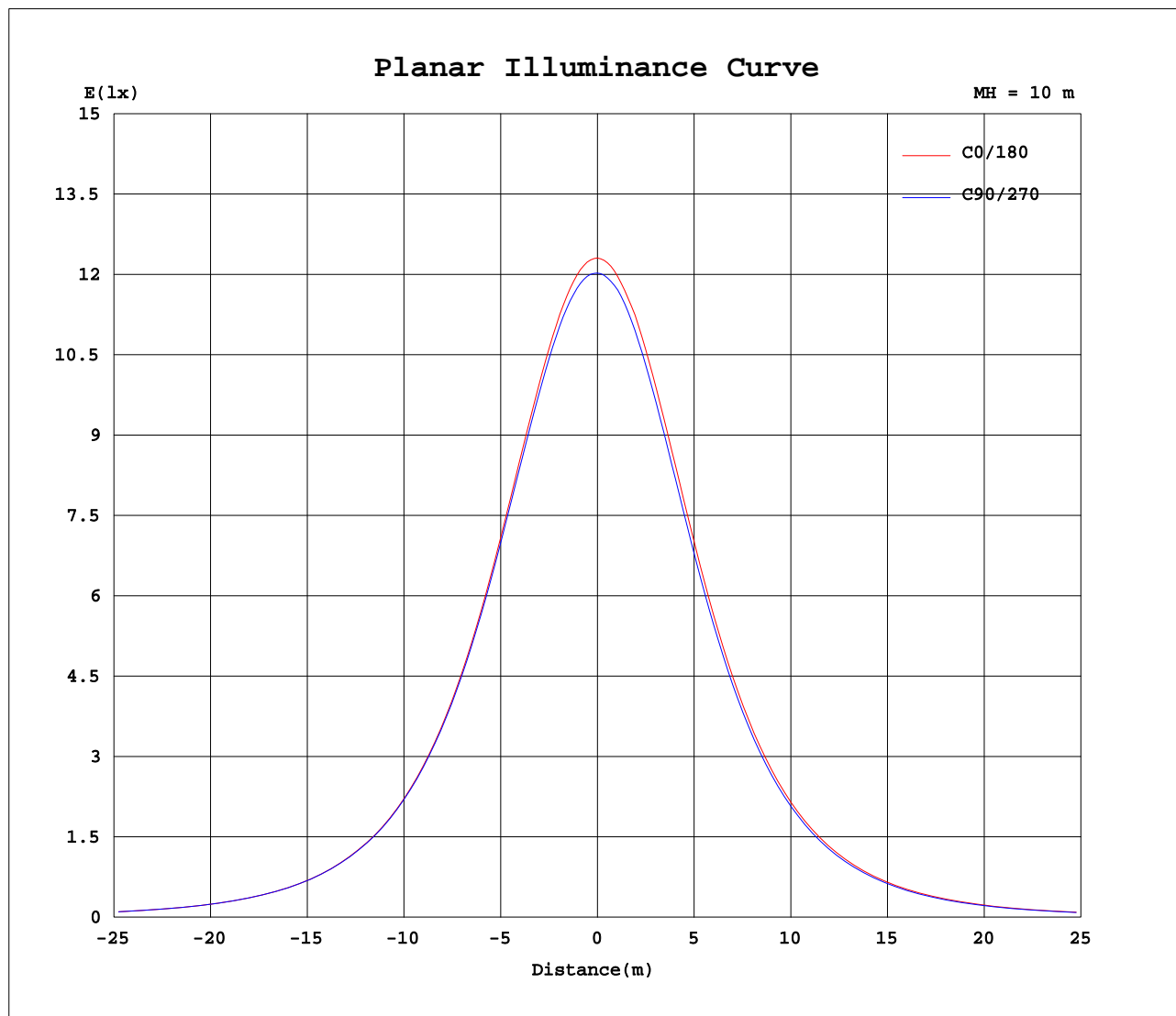
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2014-07-09

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.050m [K=1.0000]  
Remarks: 34W

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2014-07-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.050m [K=1.0000]  
Remarks: 34W

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME :	TYPE :	WEIGHT :
DIM. :	SPEC. :	SERIAL No. :
MFR. : Rayconn	SUR. :	PROTECTION ANGLE :

UNIT: cd

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:6.050m [K=1.0000]
Remarks: 34W

```

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME :	TYPE :	WEIGHT :
DIM. :	SPEC. :	SERIAL No. :
MFR. : Rayconn	SUR. :	PROTECTION ANGLE :

UNIT: cd

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:6.050m [K=1.0000]
Remarks: 34W

```