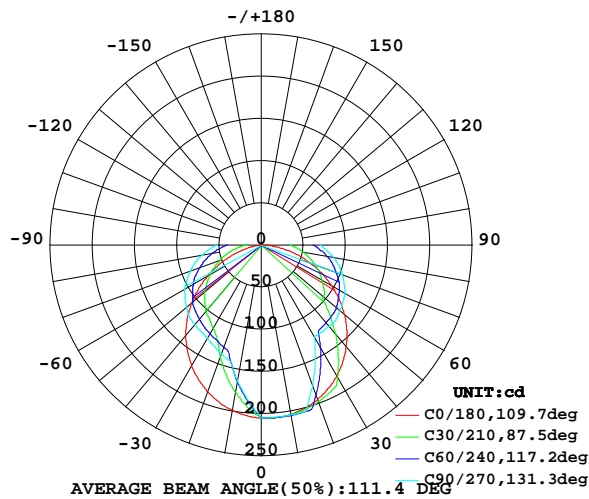


## LUMINAIRE PHOTOMETRIC TEST REPORT

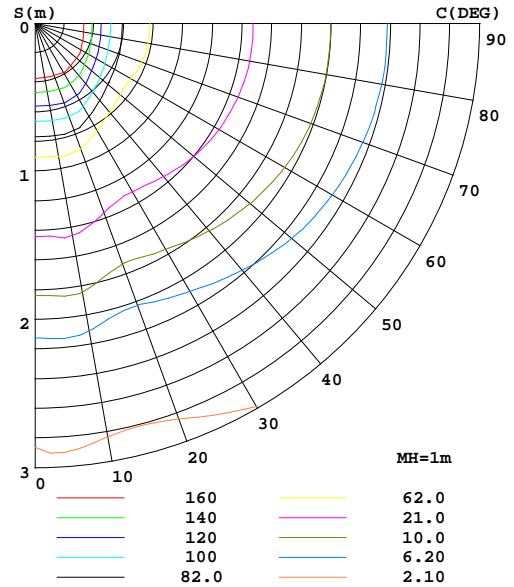
NAME: E41309	TYPE:LED WALL LIGHT	WEIGHT:
DIM.: 120*200*63mm	SPEC.:	SERIAL No.:120908010
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	CITIZEN	I <sub>max</sub> (cd)	205.6	S/MH(C0/180)	1.30
NOMINAL POWER(W)	2.7	LOR(%)	111.4	S/MH(C90/270)	1.01
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	601.42	h UP,DN(C0-180)	0.0,59.0
NOMINAL FLUX(lm)	270	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,52.4
LAMPS INSIDE	2	h up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230	h down(%)	111.4	CIBSE SHR MAX	1.15

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM(UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:30DEG  
Operators:QLY  
Test Date:2012-09-08

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:65.0%  
Test Distance:6.120m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
5	205.4	205.4	204.9	203.6	203.0	188.5	184.4	191.6	0- 5	4.793	4.793	0.80,0.89
10	203.9	204.7	204.6	201.2	199.0	169.4	163.6	178.8	5- 10	13.85	18.65	3.1,3.45
15	200.4	203.1	204.3	197.8	193.1	149.3	142.8	166.9	10- 15	21.99	40.64	6.76,7.53
20	195.2	200.7	178.2	193.6	185.5	127.2	137.7	155.6	15- 20	28.94	69.58	11.6,12.9
25	188.1	181.1	152.1	173.3	176.2	119.5	132.6	147.9	20- 25	34.34	103.9	17.3,19.2
30	179.3	157.8	126.0	150.1	165.3	115.4	127.4	138.3	25- 30	38.18	142.1	23.6,26.3
35	168.9	134.0	125.8	126.9	152.9	112.9	125.3	126.5	30- 35	40.84	182.9	30.4,33.9
40	157.0	113.1	125.6	106.9	139.4	107.6	123.1	114.5	35- 40	43.12	226.1	37.6,41.9
45	143.7	109.7	125.4	102.9	124.3	102.0	121.0	109.6	40- 45	44.73	270.8	45,50.1
50	129.0	106.2	122.0	98.74	108.1	96.22	115.7	104.6	45- 50	45.52	316.3	52.6,58.6
55	113.2	102.6	118.5	94.38	90.97	90.39	110.4	99.39	50- 55	45.27	361.6	60.1,67
60	96.34	96.29	115.0	87.80	73.28	82.36	105.1	91.65	55- 60	44.15	405.7	67.5,75.1
65	78.87	90.21	108.6	81.47	55.36	74.61	97.16	84.12	60- 65	42.11	447.9	74.5,82.9
70	60.94	83.34	102.2	74.35	37.63	66.15	89.22	75.85	65- 70	39.07	486.9	81,90.2
75	43.00	75.48	95.87	66.19	21.27	56.76	81.28	66.63	70- 75	35.35	522.3	86.8,96.7
80	25.29	67.77	87.21	58.29	6.358	47.75	71.53	57.60	75- 80	31.07	553.3	92,102
85	9.789	58.51	78.54	49.25	0.3336	38.29	61.78	47.43	80- 85	26.35	579.7	96.4,107
90	0.3312	49.73	69.87	40.77	0.4487	29.32	52.03	37.66	85- 90	21.73	601.4	100,111
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		

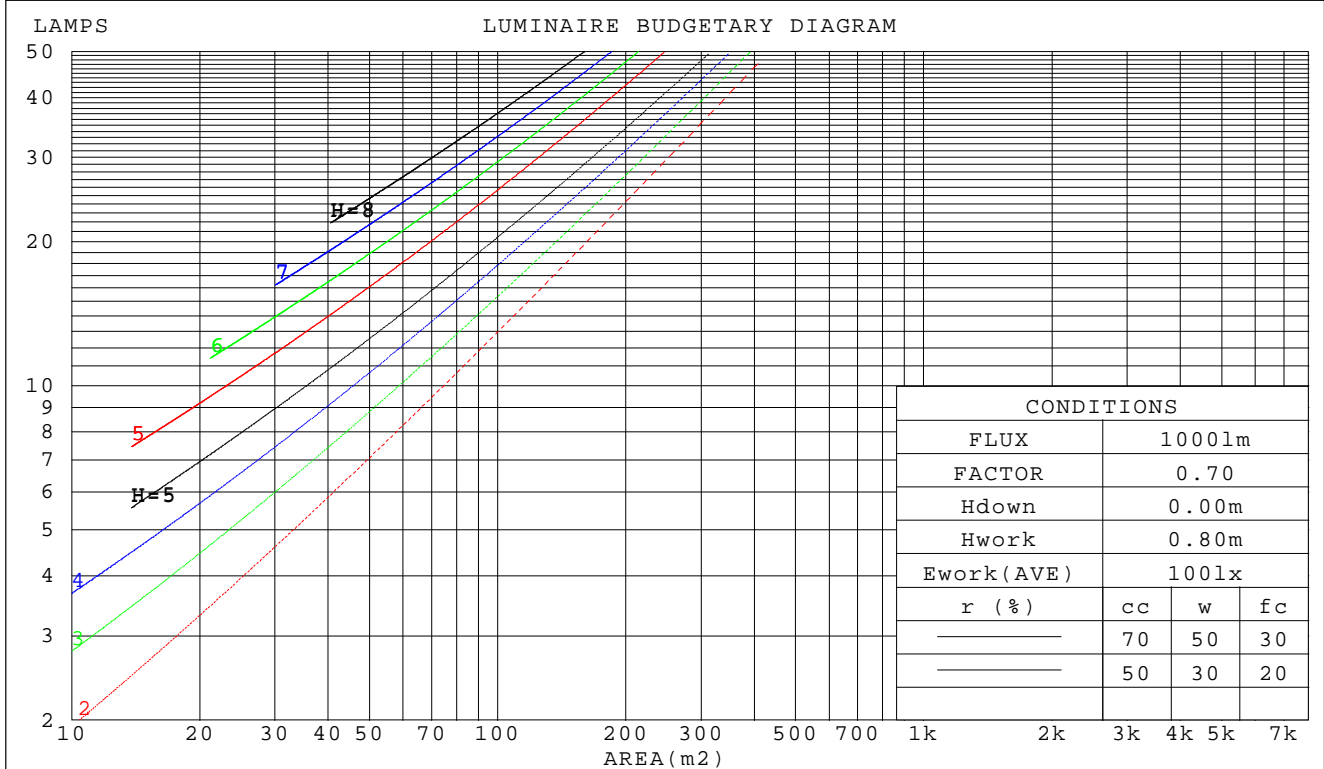
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:30DEG  
 Operators:QLY  
 Test Date:2012-09-08

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
 Humidity:65.0%  
 Test Distance:6.120m [K=1.0000]  
 Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: E41309	TYPE:LED WALL LIGHT	WEIGHT:
DIM.: 120*200*63mm	SPEC.:	SERIAL No.:120908010
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															



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:30DEG  
 Operators:QLY  
 Test Date:2012-09-08

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
 Humidity:65.0%  
 Test Distance:6.120m [K=1.0000]  
 Remarks:

## WEC AND CCEC

NAME: E41309	TYPE:LED WALL LIGHT	WEIGHT:
DIM.: 120*200*63mm	SPEC.:	SERIAL No.:120908010
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	.441 .251 .079	.433 .247 .078	.417 .239 .076	.403 .233 .075	.390 .226 .073	
2.0	.382 .209 .064	.375 .206 .064	.361 .201 .062	.349 .196 .061	.337 .191 .060	
3.0	.339 .180 .054	.333 .178 .054	.321 .174 .053	.310 .170 .052	.299 .166 .051	
4.0	.305 .158 .047	.299 .157 .046	.289 .153 .046	.279 .150 .045	.270 .146 .045	
5.0	.277 .141 .041	.272 .139 .041	.262 .137 .040	.254 .134 .040	.245 .131 .039	
6.0	.253 .127 .036	.249 .126 .036	.240 .123 .036	.233 .121 .036	.225 .119 .035	
7.0	.233 .115 .033	.229 .114 .033	.222 .112 .032	.215 .110 .032	.209 .108 .032	
8.0	.216 .106 .030	.213 .105 .030	.206 .103 .029	.200 .101 .029	.194 .100 .029	
9.0	.201 .097 .027	.198 .097 .027	.192 .095 .027	.187 .094 .027	.182 .092 .027	
10.0	.188 .090 .025	.186 .090 .025	.180 .088 .025	.175 .087 .025	.171 .086 .025	

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	.212 .212 .212	.181 .181 .181	.124 .124 .124	.071 .071 .071	.023 .023 .023	
1.0	.207 .173 .142	.177 .149 .122	.121 .102 .085	.070 .059 .049	.022 .019 .016	
2.0	.199 .147 .102	.171 .126 .088	.117 .087 .062	.068 .051 .036	.022 .016 .012	
3.0	.191 .128 .077	.163 .110 .067	.112 .076 .047	.065 .045 .028	.021 .014 .009	
4.0	.181 .113 .061	.156 .098 .053	.107 .068 .037	.062 .040 .022	.020 .013 .007	
5.0	.172 .102 .050	.148 .088 .043	.102 .061 .030	.059 .036 .018	.019 .012 .006	
6.0	.164 .092 .041	.141 .080 .036	.097 .056 .025	.056 .033 .015	.018 .011 .005	
7.0	.155 .085 .035	.134 .073 .031	.092 .052 .022	.054 .030 .013	.017 .010 .004	
8.0	.148 .078 .031	.127 .068 .027	.088 .048 .019	.051 .028 .011	.017 .009 .004	
9.0	.140 .073 .027	.121 .063 .024	.084 .044 .017	.049 .026 .010	.016 .009 .003	
10.0	.133 .068 .024	.115 .059 .021	.080 .041 .015	.047 .025 .009	.015 .008 .003	

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:30DEG  
Operators:QLY  
Test Date:2012-09-08

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:65.0%  
Test Distance:6.120m [K=1.0000]  
Remarks:

## Uncorrected UGR Table

NAME: E41309						TYPE:LED WALL LIGHT					WEIGHT:			
DIM.: 120*200*63mm						SPEC.:					SERIAL No.:120908010			
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	18.9	20.6	19.2	20.8	21.0	20.0	21.6	20.2	21.8	22.0				
3H	20.6	22.2	21.0	22.4	22.7	22.8	24.4	23.2	24.6	24.9				
4H	21.4	22.8	21.7	23.1	23.4	24.4	25.9	24.7	26.1	26.4				
6H	21.9	23.3	22.3	23.6	23.9	26.1	27.5	26.4	27.8	28.1				
8H	22.1	23.4	22.4	23.7	24.0	27.0	28.3	27.3	28.6	28.9				
12H	22.2	23.5	22.5	23.8	24.1	28.0	29.3	28.4	29.6	29.9				
4H 2H	19.9	21.3	20.2	21.6	21.9	20.7	22.1	21.0	22.4	22.7				
3H	21.8	23.1	22.2	23.4	23.8	23.8	25.1	24.2	25.4	25.7				
4H	22.7	23.9	23.1	24.3	24.6	25.6	26.8	26.0	27.1	27.5				
6H	23.4	24.5	23.9	24.9	25.3	27.5	28.6	27.9	28.9	29.3				
8H	23.7	24.7	24.1	25.1	25.5	28.5	29.5	28.9	29.9	30.3				
12H	23.9	24.8	24.3	25.2	25.6	29.7	30.6	30.1	31.0	31.4				
8H 4H	23.8	24.8	24.2	25.2	25.5	26.0	27.0	26.4	27.4	27.8				
6H	24.9	25.7	25.3	26.2	26.6	28.2	29.1	28.7	29.5	30.0				
8H	25.3	26.1	25.8	26.6	27.0	29.5	30.3	30.0	30.7	31.2				
12H	25.7	26.4	26.2	26.9	27.3	30.9	31.6	31.4	32.1	32.6				
12H 4H	24.1	25.0	24.5	25.4	25.8	26.1	27.0	26.5	27.4	27.8				
6H	25.4	26.2	25.9	26.7	27.1	28.4	29.2	28.9	29.6	30.1				
8H	26.1	26.8	26.6	27.3	27.7	29.8	30.5	30.3	30.9	31.4				
Variations with the observer position at spacings:														
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1								
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3								
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.4								

CIE Pub.117 Corrected 540.0 lm Total Lamp Luminous Flux.(8log(F/F0) = -2.1)

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:30DEG  
 Operators:QLY  
 Test Date:2012-09-08

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
 Humidity:65.0%  
 Test Distance:6.120m [K=1.0000]  
 Remarks:

## UTILIZATION FACTORS TABLE

NAME: E41309	TYPE:LED WALL LIGHT	WEIGHT:
DIM.: 120*200*63mm	SPEC.:	SERIAL No.:120908010
MFR.:	SUR.:	PROTECTION ANGLE:

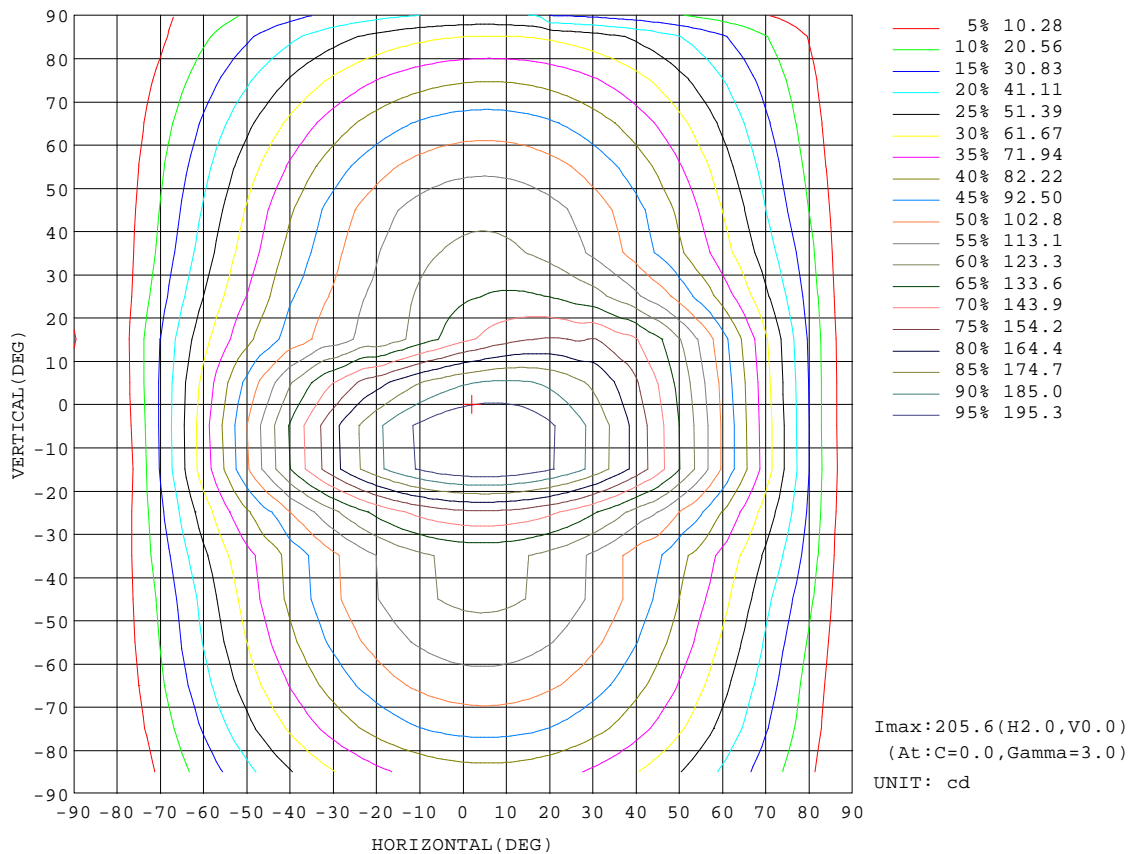
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT)    k(RI) x RCR = 5									
k = 0.60	60	47	38	59	46	38	58	46	38	30
0.80	71	57	48	69	56	48	67	55	47	39
1.00	79	66	57	78	65	56	75	67	56	47
1.25	87	74	65	85	73	64	82	71	63	54
1.50	93	80	71	91	79	70	87	77	69	60
2.00	100	89	81	98	88	80	94	85	78	68
2.50	105	95	87	103	93	86	98	90	84	73
3.00	109	100	92	107	98	91	102	95	89	78
4.00	114	106	100	111	104	98	106	100	95	84
5.00	117	110	105	114	108	103	109	104	99	88
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:30DEG  
 Operators:QLY  
 Test Date:2012-09-08

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
 Humidity:65.0%  
 Test Distance:6.120m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

NAME: E41309	TYPE:LED WALL LIGHT	WEIGHT:
DIM.: 120*200*63mm	SPEC.:	SERIAL No.:120908010
MFR.:	SUR.:	PROTECTION ANGLE:

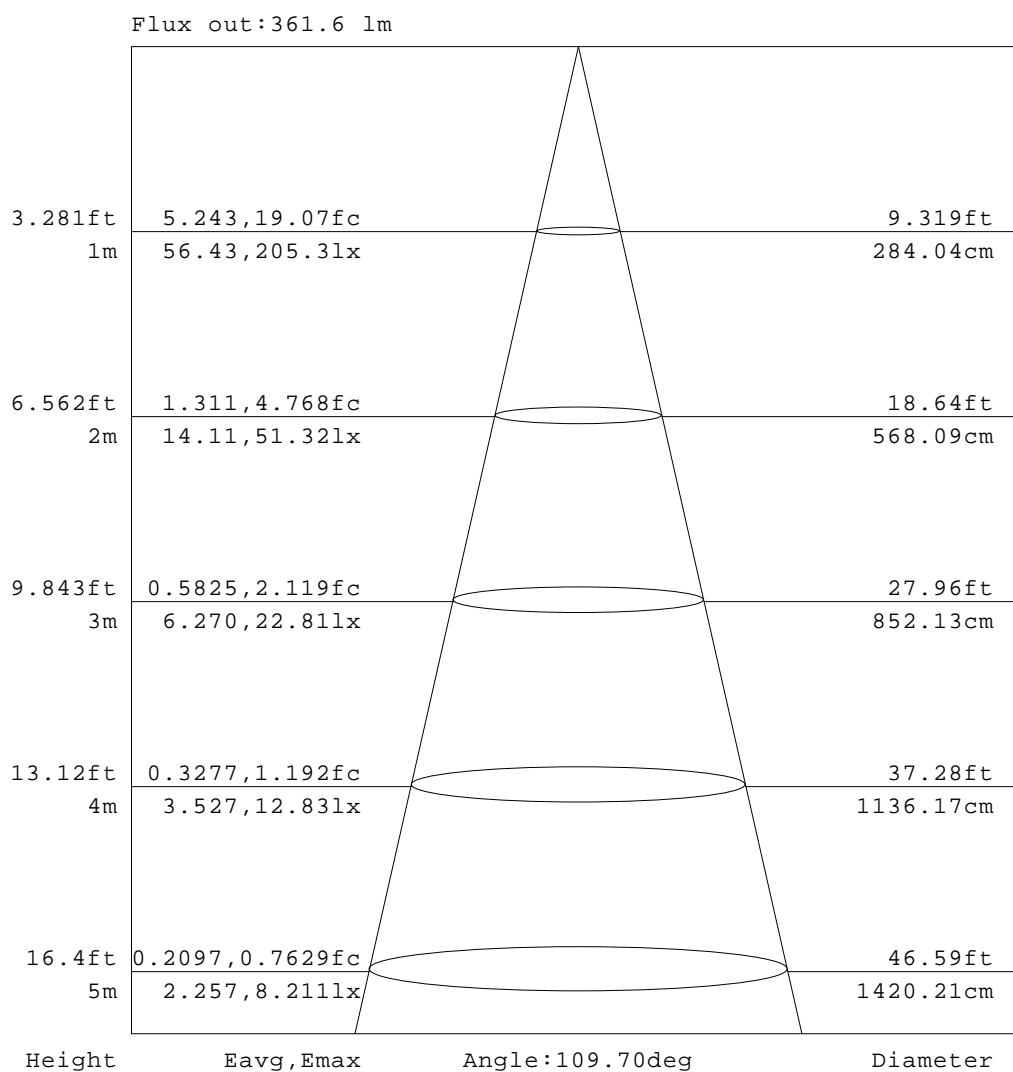


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:30DEG  
Operators:QLY  
Test Date:2012-09-08

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:65.0%  
Test Distance:6.120m [K=1.0000]  
Remarks:

## AAI Figure

NAME: E41309	TYPE:LED WALL LIGHT	WEIGHT:
DIM.: 120*200*63mm	SPEC.:	SERIAL No.:120908010
MFR.:	SUR.:	PROTECTION ANGLE:



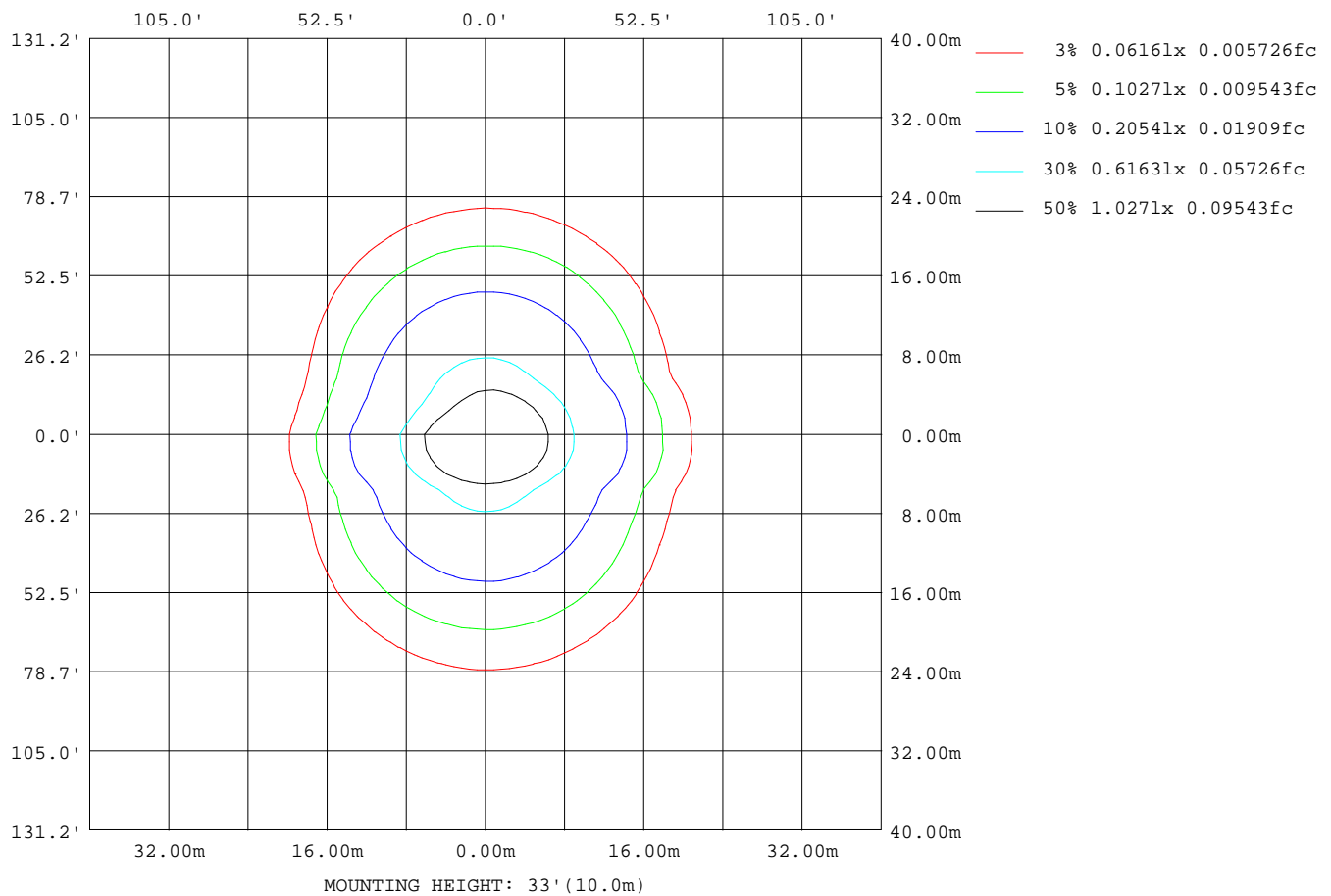
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:30DEG  
Operators:QLY  
Test Date:2012-09-08

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:65.0%  
Test Distance:6.120m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

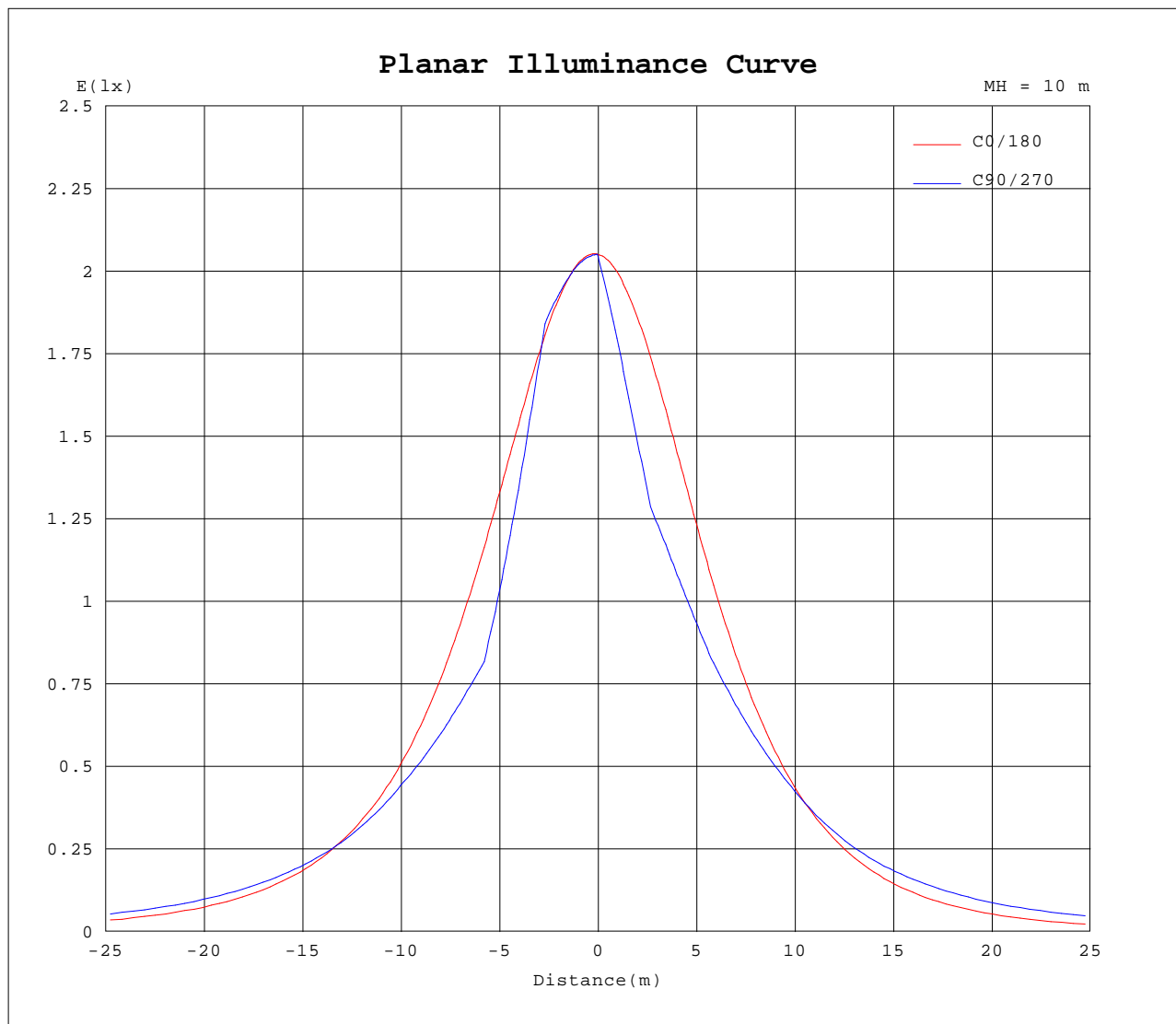
NAME: E41309	TYPE:LED WALL LIGHT	WEIGHT:
DIM.: 120*200*63mm	SPEC.:	SERIAL No.:120908010
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:30DEG  
Operators:QLY  
Test Date:2012-09-08

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:65.0%  
Test Distance:6.120m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 30DEG  
Operators: QLY  
Test Date: 2012-09-08

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity: 65.0%  
Test Distance: 6.120m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: E41309	TYPE:LED WALL LIGHT	WEIGHT:
DIM.: 120*200*63mm	SPEC.:	SERIAL No.:120908010
MFR.:	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:30DEG  
Operators:QLY  
Test Date:2012-09-08

```
g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:65.0%
Test Distance:6.120m [K=1.0000]
Remarks:
```



## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: E41309	TYPE:LED WALL LIGHT	WEIGHT:
DIM.: 120*200*63mm	SPEC.:	SERIAL No.:120908010
MFR.:	SUR.:	PROTECTION ANGLE:

Table--3

UNIT: cd

[illegible]

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 30DEG  
Operators: QLY  
Test Date: 2012-09-08

```
g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:65.0%
Test Distance:6.120m [K=1.0000]
Remarks:
```

