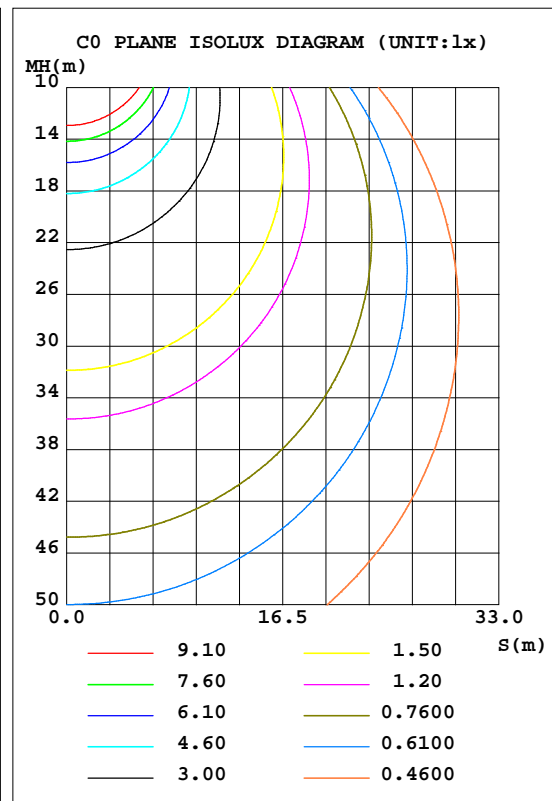
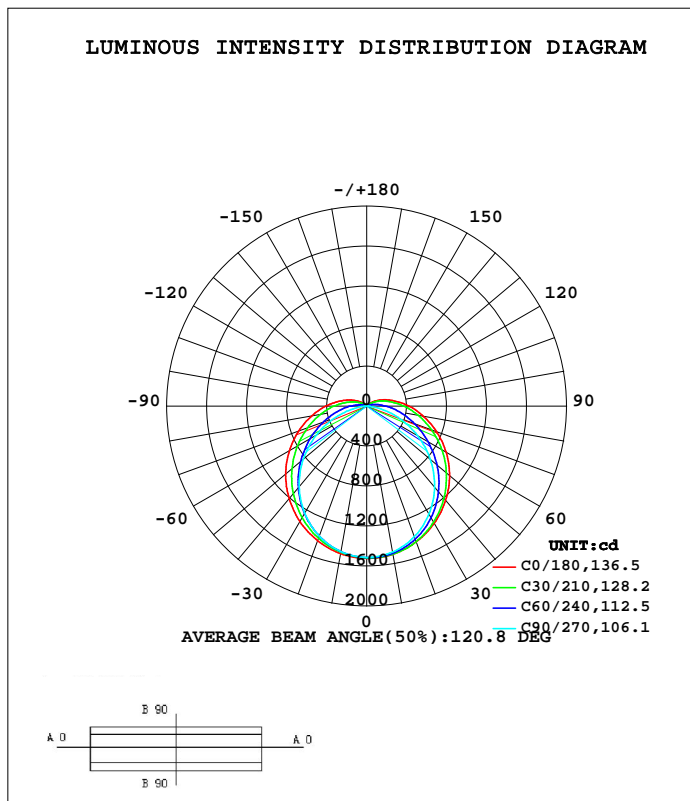


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1792A P:40.81W PF:0.9505 Freq:49.99Hz Lamp Flux:5434.85x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 133.18 lm/W			
MODEL		I <sub>max</sub> (cd)	1524	S/MH(C0/180)	1.31
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	5434.9	η UP, DN(C0-180)	4.1,45.7
NOMINAL FLUX(lm)	5434.85	CIE CLASS	DIRECT	η UP, DN(C180-360)	4.2,46.0
LAMPS INSIDE	1	η up(%)	8.2	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	91.8	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:xiaopei  
 Test Date:2018-08-15

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:13.130m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	1506	1501	1483	1473	1500	1483	1480	1498	0- 10	143.5	143.5	2.64,2.64
20	1447	1431	1392	1385	1434	1396	1386	1432	10- 20	411.3	554.8	10.2,10.2
30	1354	1315	1248	1254	1335	1267	1239	1321	20- 30	625.4	1180	21.7,21.7
40	1229	1161	1058	1089	1207	1104	1051	1171	30- 40	760.9	1941	35.7,35.7
50	1083	980.1	832.2	902.3	1059	919.8	829.0	995.6	40- 50	805.8	2747	50.5,50.5
60	917.0	786.8	585.3	710.3	893.3	727.5	583.3	805.5	50- 60	762.8	3510	64.6,64.6
70	742.4	597.8	334.5	527.5	722.1	542.0	330.1	616.9	60- 70	648.8	4158	76.5,76.5
80	574.0	425.4	108.7	365.9	556.2	377.4	103.3	446.6	70- 80	493.6	4652	85.6,85.6
90	423.9	284.1	4.156	235.4	409.7	244.6	4.867	262.7	80- 90	335.2	4987	91.8,91.8
100	294.1	176.1	2.875	137.1	283.1	145.3	4.015	180.7	90-100	215.0	5202	95.7,95.7
110	188.2	98.15	2.017	69.54	180.3	76.95	3.519	105.3	100-110	127.0	5329	98.1,98.1
120	107.0	44.43	0.9923	28.02	101.0	34.30	3.386	53.76	110-120	64.96	5394	99.3,99.3
130	47.80	15.45	1.038	7.256	43.28	12.01	3.440	19.77	120-130	26.71	5421	99.7,99.7
140	9.022	3.445	1.953	3.580	7.198	5.639	3.947	5.906	130-140	7.671	5428	99.9,99.9
150	4.659	3.490	2.730	3.422	5.412	5.120	4.308	5.249	140-150	2.813	5431	99.9,99.9
160	3.891	3.631	3.293	3.682	4.713	4.782	4.646	4.821	150-160	1.964	5433	100,100
170	3.947	3.907	3.756	4.048	4.454	4.466	4.477	4.573	160-170	1.192	5434	100,100
180	4.105	4.161	4.060	4.302	4.116	4.144	4.116	4.319	170-180	0.4020	5435	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

Conical surface Flux(90deg): 2344 lm

%lum = 43.1%  
%lamp = 43.1%

Conical surface Flux(120deg): 3509.6 lm

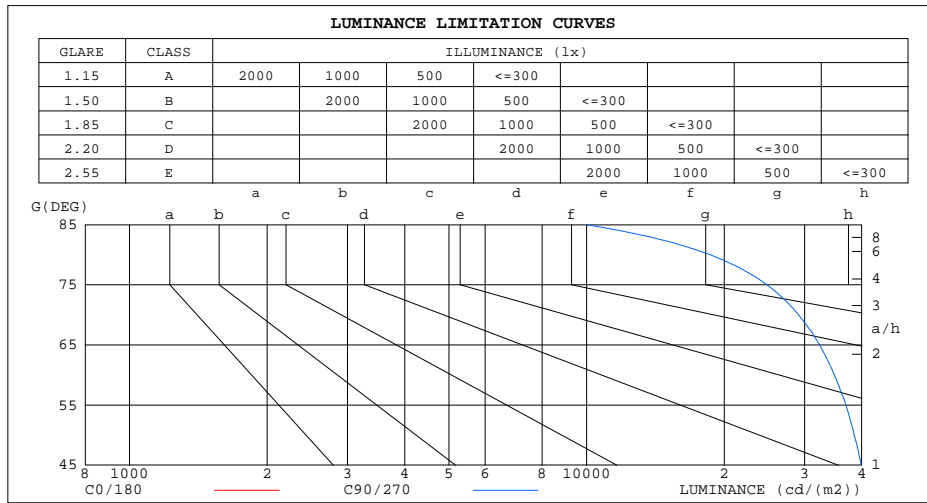
%lum = 64.6%  
%lamp = 64.6%

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:xiaopei  
Test Date:2018-08-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:13.130m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1792A P:40.81W PF:0.9505 Freq:49.99Hz Lamp Flux:5434.85x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



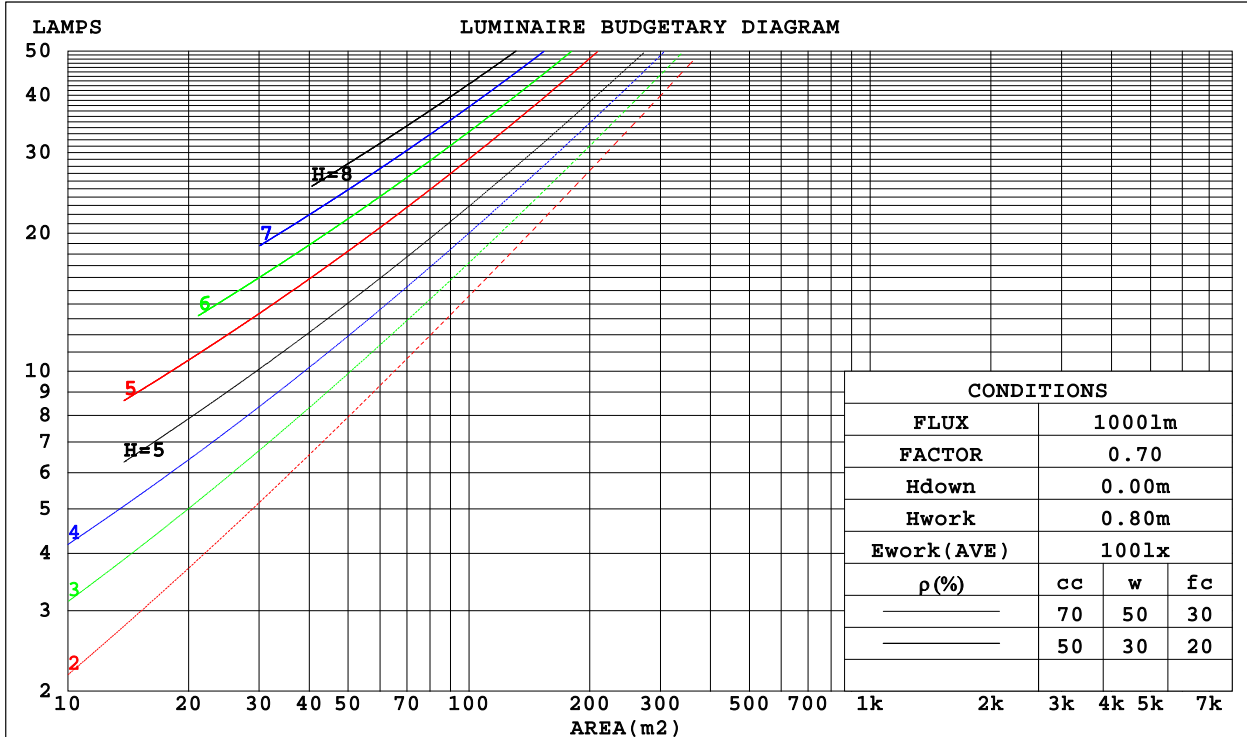
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:xiaopei  
 Test Date:2018-08-15

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:13.130m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.1792A P:40.81W PF:0.9505 Freq:49.99Hz Lamp Flux:5434.85x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.17	1.17	1.17	1.13	1.13	1.13	1.07	1.07	1.07	1.00	1.00	1.00	.94	.94	.94	.92
1.0	.99	.94	.89	.96	.91	.87	.90	.86	.83	.85	.82	.79	.80	.77	.75	.72
2.0	.85	.77	.71	.82	.75	.70	.77	.72	.67	.73	.68	.64	.69	.65	.61	.58
3.0	.74	.65	.58	.72	.64	.57	.68	.61	.55	.64	.58	.53	.60	.55	.51	.48
4.0	.65	.56	.49	.63	.55	.48	.60	.52	.46	.56	.50	.45	.53	.48	.43	.41
5.0	.58	.49	.42	.57	.48	.41	.53	.46	.40	.51	.44	.39	.48	.42	.38	.35
6.0	.52	.43	.36	.51	.42	.36	.48	.40	.35	.46	.39	.34	.43	.37	.33	.31
7.0	.47	.38	.32	.46	.37	.31	.44	.36	.31	.42	.35	.30	.39	.34	.29	.27
8.0	.43	.34	.28	.42	.34	.28	.40	.33	.27	.38	.31	.27	.36	.30	.26	.24
9.0	.39	.31	.25	.38	.30	.25	.37	.30	.24	.35	.29	.24	.33	.28	.23	.21
10.0	.36	.28	.23	.35	.28	.23	.34	.27	.22	.32	.26	.22	.31	.25	.21	.19



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:xiaopei  
 Test Date:2018-08-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:13.130m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.1792A P:40.81W PF:0.9505 Freq:49.99Hz Lamp Flux:5434.85x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	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	.367	.209	.066	.357	.204	.065	.339	.194	.062	.322	.186	.060	.307	.178	.057	
2.0	.324	.177	.054	.315	.174	.053	.299	.166	.052	.284	.159	.050	.270	.153	.048	
3.0	.291	.155	.046	.283	.151	.046	.268	.145	.044	.255	.140	.043	.242	.134	.041	
4.0	.263	.137	.040	.256	.134	.040	.243	.129	.038	.231	.124	.037	.219	.119	.036	
5.0	.240	.122	.035	.234	.120	.035	.222	.116	.034	.211	.111	.033	.201	.107	.032	
6.0	.221	.111	.032	.215	.109	.031	.205	.105	.030	.195	.101	.030	.185	.097	.029	
7.0	.204	.101	.029	.199	.099	.028	.189	.096	.028	.180	.092	.027	.172	.089	.026	
8.0	.190	.093	.026	.185	.091	.026	.176	.088	.025	.168	.085	.025	.160	.082	.024	
9.0	.177	.086	.024	.173	.084	.024	.165	.081	.023	.157	.079	.023	.150	.076	.022	
10.0	.166	.080	.022	.162	.078	.022	.155	.076	.021	.148	.073	.021	.141	.071	.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	.253	.253	.253	.216	.216	.216	.148	.148	.148	.085	.085	.085	.027	.027	.027	
1.0	.248	.219	.193	.212	.188	.166	.145	.129	.115	.083	.075	.067	.027	.024	.022	
2.0	.240	.195	.158	.206	.168	.136	.141	.116	.095	.081	.068	.056	.026	.022	.018	
3.0	.232	.178	.135	.199	.154	.117	.137	.107	.082	.079	.062	.049	.025	.020	.016	
4.0	.225	.166	.121	.193	.143	.105	.133	.100	.074	.077	.058	.044	.025	.019	.014	
5.0	.217	.156	.110	.186	.135	.096	.128	.094	.068	.074	.055	.040	.024	.018	.013	
6.0	.209	.147	.103	.180	.128	.090	.124	.089	.063	.072	.053	.038	.023	.017	.012	
7.0	.202	.141	.097	.174	.122	.085	.120	.085	.060	.070	.050	.036	.023	.016	.012	
8.0	.196	.135	.093	.168	.117	.081	.117	.082	.058	.068	.048	.034	.022	.016	.011	
9.0	.189	.130	.090	.163	.113	.078	.113	.079	.056	.066	.047	.033	.021	.015	.011	
10.0	.184	.126	.087	.158	.109	.076	.110	.077	.054	.064	.045	.032	.021	.015	.011	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:xiaopei  
 Test Date:2018-08-15

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:13.130m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.1792A P:40.81W PF:0.9505 Freq:49.99Hz Lamp Flux:5434.85x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.:			SERIAL No.:1				
MFR.:			SUR.:			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	20.6	22.0	20.9	22.4	22.8	18.9	20.3	19.3	20.7	21.1
3H	22.9	24.3	23.3	24.7	25.1	20.3	21.6	20.7	22.0	22.4
4H	24.2	25.5	24.6	25.9	26.3	20.8	22.1	21.2	22.5	22.9
6H	25.5	26.8	26.0	27.2	27.6	21.1	22.3	21.5	22.7	23.2
8H	26.3	27.5	26.7	27.9	28.4	21.2	22.4	21.6	22.8	23.3
12H	27.1	28.3	27.6	28.7	29.2	21.2	22.3	21.6	22.8	23.2
4H 2H	21.1	22.4	21.6	22.8	23.3	19.9	21.2	20.3	21.6	22.0
3H	23.7	24.9	24.2	25.3	25.8	21.5	22.7	22.0	23.1	23.6
4H	25.2	26.2	25.7	26.7	27.2	22.3	23.3	22.8	23.8	24.3
6H	26.8	27.7	27.3	28.2	28.8	22.8	23.7	23.3	24.2	24.8
8H	27.6	28.5	28.2	29.0	29.6	23.0	23.8	23.5	24.4	24.9
12H	28.6	29.4	29.2	30.0	30.6	23.0	23.9	23.6	24.4	25.0
8H 4H	25.5	26.4	26.1	26.9	27.5	23.2	24.0	23.7	24.6	25.1
6H	27.4	28.2	28.0	28.7	29.3	24.1	24.8	24.6	25.3	26.0
8H	28.5	29.2	29.1	29.7	30.4	24.4	25.1	25.0	25.7	26.3
12H	29.7	30.3	30.3	30.9	31.6	24.7	25.3	25.3	25.9	26.5
12H 4H	25.5	26.4	26.1	26.9	27.5	23.4	24.2	24.0	24.8	25.4
6H	27.5	28.2	28.1	28.8	29.4	24.5	25.2	25.1	25.8	26.4
8H	28.7	29.3	29.3	29.9	30.5	25.1	25.6	25.7	26.2	26.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 5435 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.9)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:xiaopei  
 Test Date:2018-08-15

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:13.130m [K=1.0000]  
 Remarks:

## UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.1792A P:40.81W PF:0.9505 Freq:49.99Hz Lamp Flux:5434.85x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

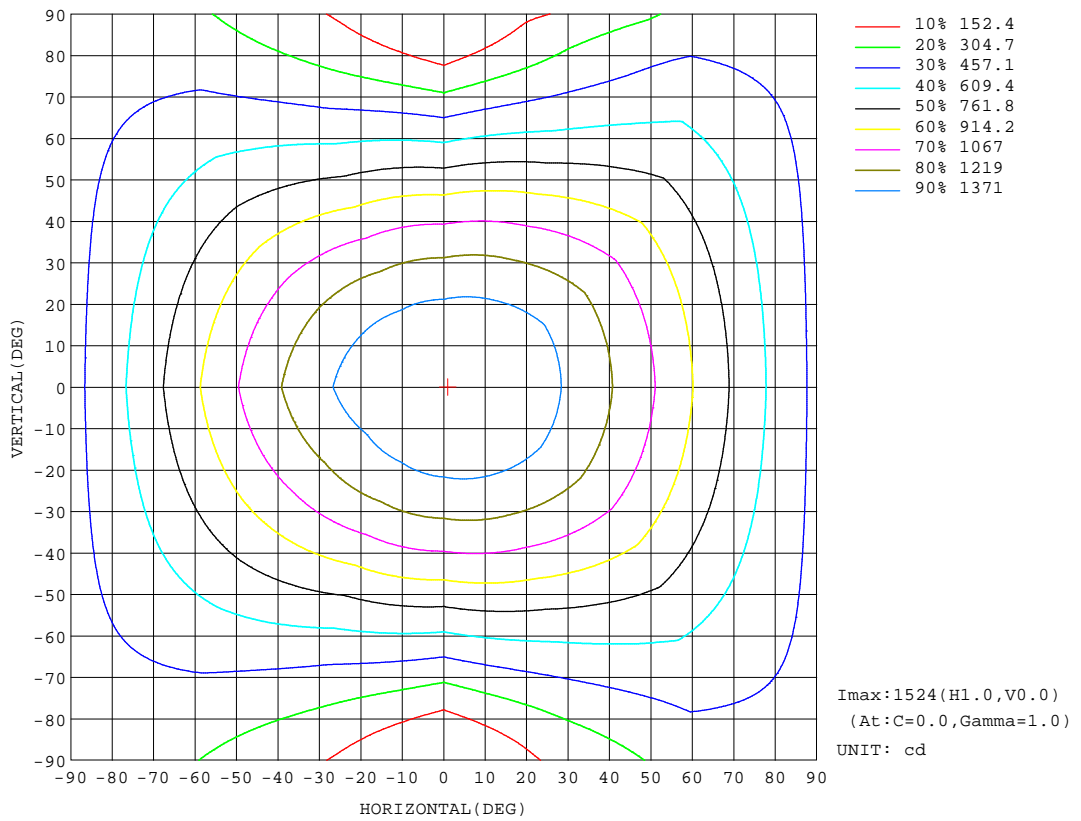
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	52	40	33	51	40	33	50	39	32	26
0.80	62	49	41	60	48	41	58	47	40	33
1.00	69	57	49	68	56	49	65	58	48	40
1.25	76	65	56	75	64	56	71	62	55	46
1.50	81	70	62	79	69	61	76	67	60	51
2.00	89	78	71	86	77	70	82	74	68	58
2.50	93	83	76	90	82	75	85	78	72	62
3.00	96	88	81	94	86	80	88	82	77	66
4.00	101	94	88	98	91	86	92	87	82	71
5.00	104	97	92	100	95	90	95	90	86	74
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:xiaopei  
 Test Date:2018-08-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:13.130m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.1792A P:40.81W PF:0.9505 Freq:49.99Hz Lamp Flux:5434.85x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:xiaopei  
 Test Date:2018-08-15

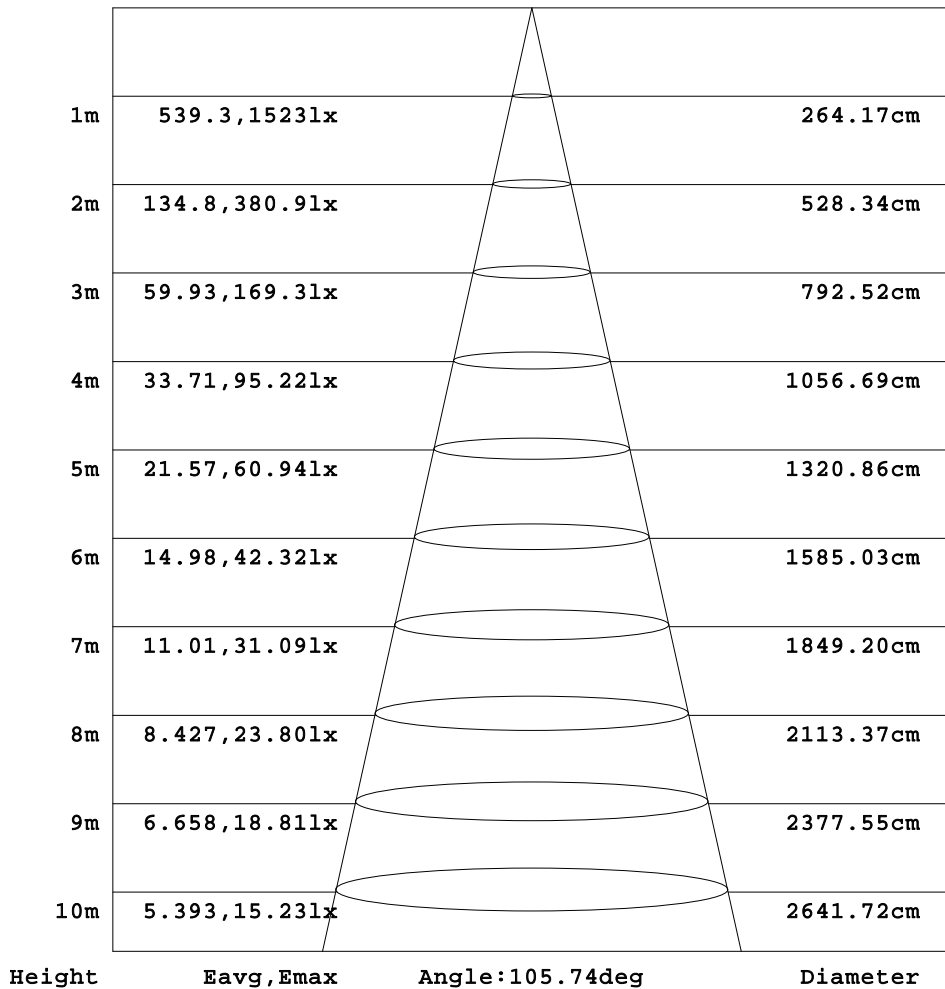
γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:13.130m [K=1.0000]  
 Remarks:



AAI Figure

Test:U:120.0V I:0.1792A P:40.81W PF:0.9505 Freq:49.99Hz Lamp Flux:5434.85x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

Flux out:2984 lm



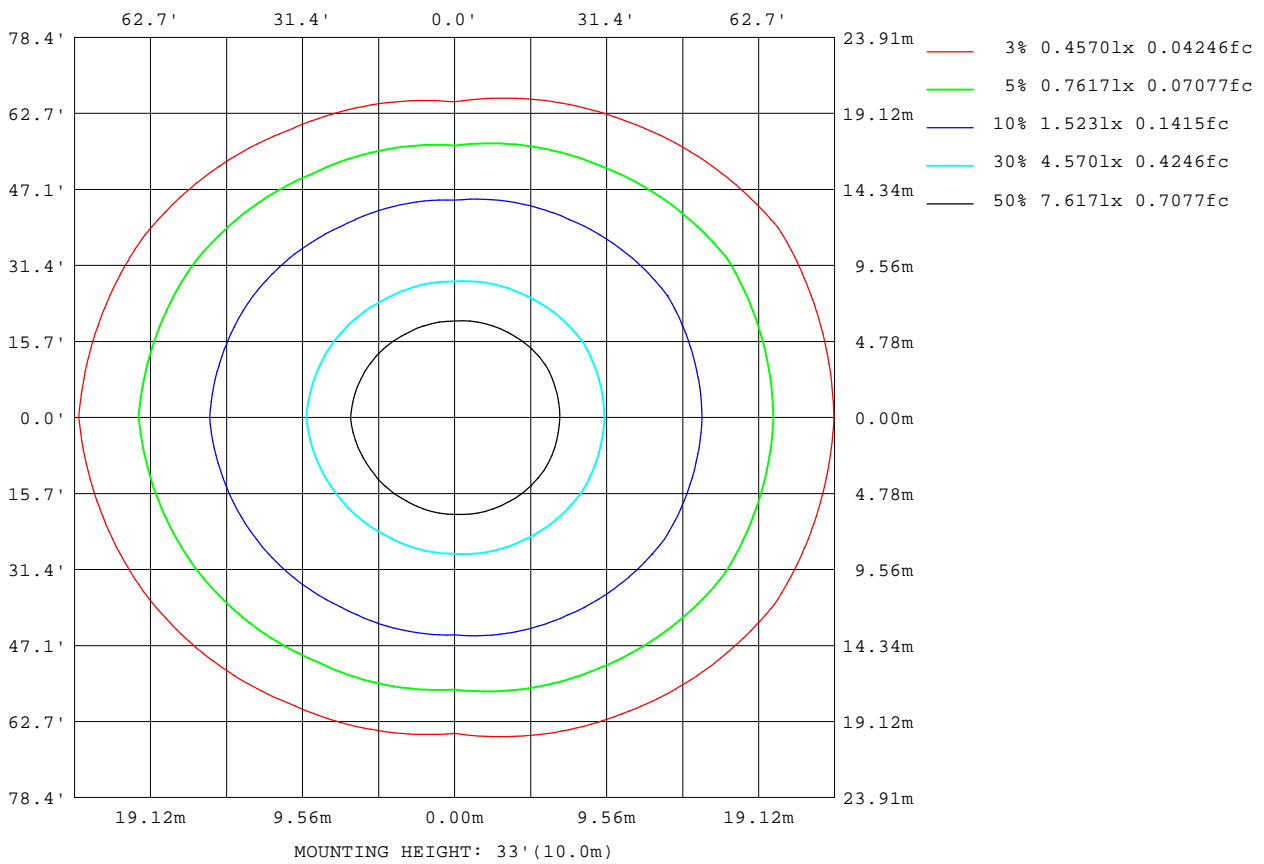
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:xiaopei  
 Test Date:2018-08-15

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:13.130m [K=1.0000]  
 Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.1792A P:40.81W PF:0.9505 Freq:49.99Hz Lamp Flux:5434.85x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: xiaopei  
 Test Date: 2018-08-15

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 13.130m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:120.0V I:0.1792A P:40.81W PF:0.9505 Freq:49.99Hz Lamp Flux:5434.85x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

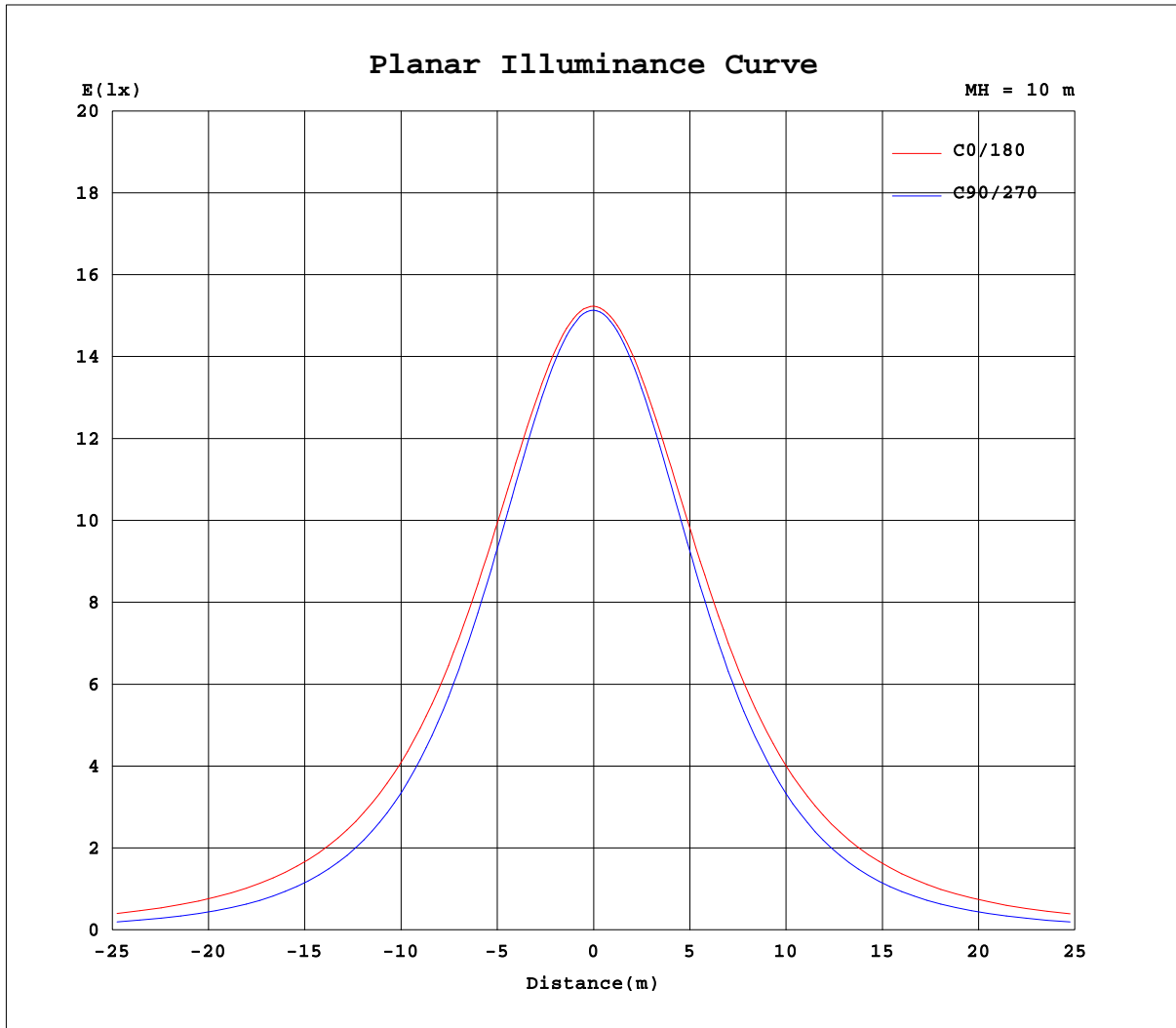
AvgL	cd/m2
L_0~180(65)av	57651
L_0~180(75)av	74338
L_0~180(85)av	166709
L_90~270(65)av	32229
L_90~270(75)av	24459
L_90~270(85)av	9412
L_45(65)av	46883
L_45(75)av	56460
L_45(85)av	115339

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:xiaopei  
 Test Date:2018-08-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:13.130m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: xiaopei  
Test Date: 2018-08-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 13.130m [K=1.0000]  
Remarks: