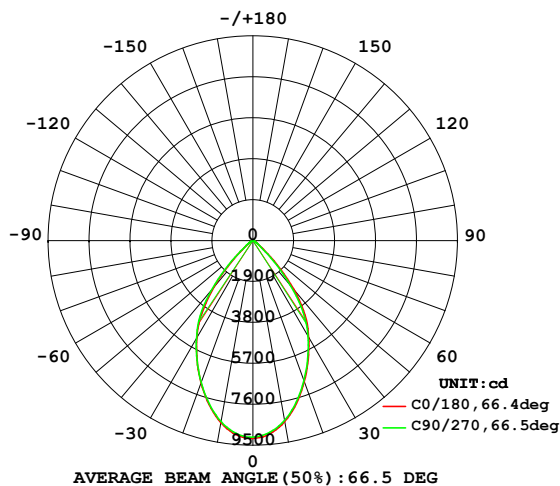


LUMINAIRE PHOTOMETRIC TEST REPORT

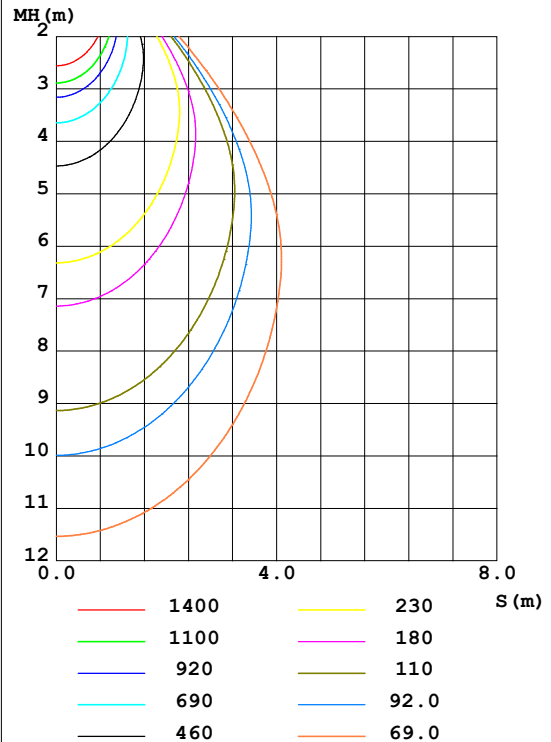
Test:U:231.2V I:0.4583A P:101.8W PF:0.9610 Lamp Flux:10027x1 lm					
NAME: BT-AS100W-12		TYPE:AL reflector		WEIGHT:	
SPEC.:5000k COB 60D		DIM.: 270*197mm		SERIAL No.:	
MFR.: EVERFINE		SUR.:280*280mm		PROTECTION ANGLE:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 98.46 lm/W
MODEL	COB	I _{max} (cd)	9182	S/MH(C0/180)	0.93	
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	0.94	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	10027	η UP,DN(C0-180)	0.2,49.5	
NOMINAL FLUX(lm)	10027	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.2,50.1	
LAMPS INSIDE	1	η up(%)	0.4	CIBSE SHR NOM	1.00	
TEST VOLTAGE(V)	230	η down(%)	99.6	CIBSE SHR MAX	1.05	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:
 Test Date:2015-08-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity:65.0%
 Test Distance:9.390m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	8531	8469	8581	8530					0- 10	843.4	843.4	8.41,8.41
20	6976	6926	7043	7020					10- 20	2189	3032	30.2,30.2
30	5179	5121	5218	5245					20- 30	2795	5828	58.1,58.1
40	2958	2716	2797	2986					30- 40	2563	8391	83.7,83.7
50	644.9	537.4	543.6	631.9					40- 50	1200	9591	95.7,95.7
60	192.5	179.1	176.4	191.3					50- 60	289.0	9880	98.5,98.5
70	45.53	36.19	40.39	46.39					60- 70	100.5	9981	99.5,99.5
80	0.7245	0.8932	0.9714	0.7700					70- 80	5.664	9986	99.6,99.6
90	0.4435	0.9003	0.9589	0.5032					80- 90	0.8004	9987	99.6,99.6
100	0.7886	1.351	1.344	0.7432					90-100	0.9286	9988	99.6,99.6
110	1.166	1.566	1.454	0.7502					100-110	1.249	9989	99.6,99.6
120	3.323	3.635	2.246	1.948					110-120	1.770	9991	99.6,99.6
130	7.390	7.733	5.274	4.921					120-130	3.937	9995	99.7,99.7
140	12.66	12.92	9.488	9.139					130-140	6.642	10002	99.7,99.7
150	17.38	17.61	13.97	13.47					140-150	8.335	10010	99.8,99.8
160	21.96	22.01	18.93	18.47					150-160	8.242	10018	99.9,99.9
170	24.86	24.89	23.12	22.72					160-170	6.257	10024	100,100
180	25.83	25.73	25.96	25.64					170-180	2.348	10027	100,100
DEG	LUMINOUS INTENSITY:cd MAX (Ii - Iavg)/Iavg (0-135) = 323.9 %									UNIT:lm		

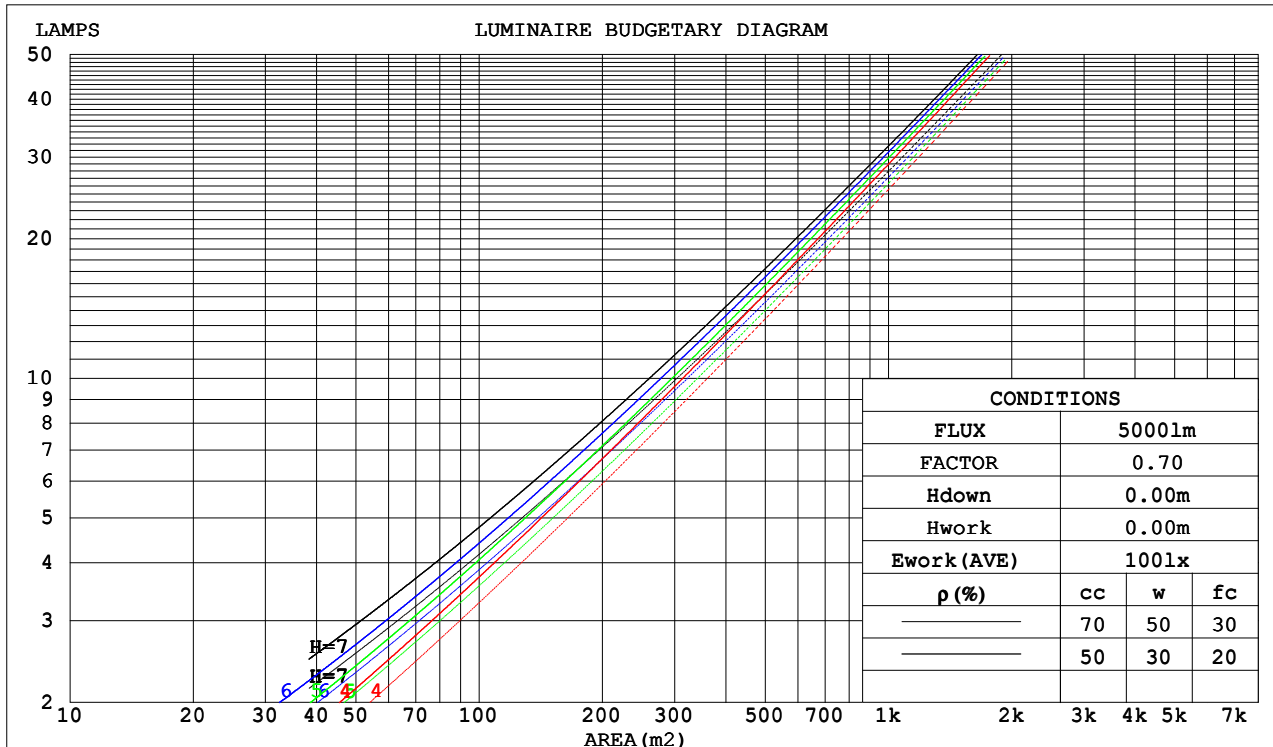
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:
 Test Date:2015-08-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity:65.0%
 Test Distance:9.390m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:231.2V I:0.4583A P:101.8W PF:0.9610 Lamp Flux:10027x1 lm		
NAME: BT-AS100W-12	TYPE:AL reflector	WEIGHT:
SPEC.:5000k COB 60D	DIM.: 270*197mm	SERIAL No.:
MFR.: EVERFINE	SUR.:280*280mm	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						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	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.97	.93	.00	.96	.92	.96	.93	.90	.93	.90	.88	.90	.88	.86	.84
3.0	.93	.88	.84	.92	.87	.83	.89	.85	.82	.87	.83	.80	.84	.81	.79	.77
4.0	.86	.80	.76	.85	.80	.75	.83	.78	.74	.81	.77	.73	.79	.75	.72	.71
5.0	.80	.74	.69	.79	.73	.69	.77	.72	.68	.75	.71	.67	.74	.70	.67	.65
6.0	.74	.68	.63	.74	.67	.63	.72	.67	.62	.70	.66	.62	.69	.65	.62	.60
7.0	.69	.63	.58	.69	.62	.58	.67	.62	.58	.66	.61	.57	.65	.60	.57	.55
8.0	.65	.58	.54	.64	.58	.54	.63	.57	.53	.62	.57	.53	.61	.56	.53	.51
9.0	.61	.54	.50	.60	.54	.50	.59	.54	.50	.58	.53	.49	.57	.53	.49	.48
10.0	.57	.51	.46	.56	.50	.46	.56	.50	.46	.55	.50	.46	.54	.49	.46	.44



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:
 Test Date:2015-08-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity:65.0%
 Test Distance:9.390m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:231.2V I:0.4583A P:101.8W PF:0.9610 Lamp Flux:10027x1 lm					
NAME: BT-AS100W-12			TYPE:AL reflector		WEIGHT:
SPEC.:5000k COB 60D			DIM.: 270*197mm		SERIAL No.:
MFR.: EVERFINE			SUR.:280*280mm		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	.192	.109	.035	.186	.106	.034	.173	.099	.032	.161	.093	.030	.150	.087	.028		
2.0	.187	.102	.031	.181	.100	.031	.170	.094	.029	.160	.090	.028	.150	.085	.027		
3.0	.179	.095	.029	.174	.093	.028	.164	.089	.027	.156	.085	.026	.148	.082	.025		
4.0	.171	.089	.026	.166	.087	.026	.158	.084	.025	.151	.081	.024	.143	.078	.024		
5.0	.163	.083	.024	.159	.082	.024	.152	.079	.023	.145	.077	.023	.139	.074	.022		
6.0	.155	.078	.022	.152	.077	.022	.146	.075	.022	.140	.073	.021	.134	.071	.021		
7.0	.148	.073	.021	.145	.072	.021	.140	.071	.020	.134	.069	.020	.129	.067	.020		
8.0	.142	.069	.019	.139	.068	.019	.134	.067	.019	.129	.065	.019	.125	.064	.019		
9.0	.135	.066	.018	.133	.065	.018	.128	.063	.018	.124	.062	.018	.120	.061	.018		
10.0	.130	.062	.017	.127	.062	.017	.123	.060	.017	.119	.059	.017	.116	.058	.017		

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	.193	.193	.193	.165	.165	.165	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.175	.160	.147	.150	.138	.126	.103	.095	.087	.059	.055	.051	.019	.018	.016	
2.0	.161	.135	.114	.138	.117	.098	.095	.081	.069	.055	.047	.040	.018	.015	.013	
3.0	.150	.117	.090	.129	.101	.078	.088	.070	.055	.051	.041	.032	.016	.013	.011	
4.0	.141	.102	.073	.121	.088	.063	.083	.062	.045	.048	.036	.026	.015	.012	.009	
5.0	.133	.091	.060	.114	.079	.052	.078	.055	.037	.045	.032	.022	.015	.011	.007	
6.0	.126	.082	.051	.108	.071	.044	.075	.050	.031	.043	.029	.019	.014	.010	.006	
7.0	.119	.075	.043	.103	.065	.038	.071	.045	.027	.041	.027	.016	.013	.009	.005	
8.0	.114	.069	.037	.098	.059	.033	.068	.042	.023	.039	.025	.014	.013	.008	.005	
9.0	.109	.064	.033	.094	.055	.029	.065	.039	.020	.038	.023	.012	.012	.008	.004	
10.0	.104	.059	.029	.090	.051	.026	.062	.036	.018	.036	.021	.011	.012	.007	.004	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:231.2V I:0.4583A P:101.8W PF:0.9610 Lamp Flux:10027x1 lm										
NAME: BT-AS100W-12					TYPE:AL reflector			WEIGHT:		
SPEC.:5000k COB 60D					DIM.: 270*197mm			SERIAL No.:		
MFR.: EVERFINE					SUR.:280*280mm			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	27.9	29.0	28.2	29.2	29.3	27.6	28.7	27.9	28.9	29.1
3H	27.8	28.7	28.0	28.9	29.2	27.5	28.4	27.8	28.7	28.9
4H	27.7	28.6	28.0	28.8	29.1	27.4	28.3	27.7	28.5	28.8
6H	27.6	28.4	27.9	28.7	29.0	27.3	28.1	27.6	28.4	28.7
8H	27.5	28.4	27.9	28.6	28.9	27.2	28.1	27.6	28.3	28.6
12H	27.5	28.3	27.8	28.6	28.8	27.2	28.0	27.5	28.3	28.6
4H 2H	27.7	28.6	28.0	28.8	29.1	27.4	28.3	27.7	28.6	28.8
3H	27.6	28.3	27.9	28.6	28.9	27.3	28.1	27.6	28.3	28.6
4H	27.5	28.2	27.8	28.5	28.8	27.2	27.9	27.5	28.2	28.5
6H	27.4	28.0	27.7	28.3	28.7	27.1	27.7	27.5	28.0	28.4
8H	27.3	27.9	27.7	28.2	28.6	27.0	27.6	27.4	28.0	28.3
12H	27.3	27.8	27.7	28.2	28.6	27.0	27.5	27.4	27.9	28.3
8H 4H	27.3	27.9	27.7	28.2	28.6	27.0	27.6	27.4	28.0	28.3
6H	27.2	27.7	27.7	28.1	28.5	26.9	27.4	27.4	27.8	28.2
8H	27.2	27.6	27.6	28.0	28.4	26.9	27.3	27.3	27.7	28.2
12H	27.1	27.5	27.6	27.9	28.4	26.8	27.2	27.3	27.6	28.1
12H 4H	27.3	27.8	27.7	28.2	28.6	27.0	27.5	27.4	27.9	28.3
6H	27.2	27.6	27.6	28.0	28.4	26.9	27.3	27.3	27.7	28.2
8H	27.1	27.5	27.6	27.9	28.4	26.8	27.2	27.3	27.6	28.1
Variations with the observer position at spacings:										
S = 1.0H	+ 2.4 / - 8.2					+ 2.4 / - 8.3				
1.5H	+ 4.1 / - 7.0					+ 4.1 / - 6.9				
2.0H	+ 6.3 / - 6.0					+ 5.9 / - 5.6				

CIE Pub.117 Corrected 10027 lm Total Lamp Luminous Flux. (8log(F/F0) = 8.0)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:231.2V I:0.4583A P:101.8W PF:0.9610 Lamp Flux:10027x1 lm		
NAME: BT-AS100W-12	TYPE:AL reflector	WEIGHT:
SPEC.:5000k COB 60D	DIM.: 270*197mm	SERIAL No.:
MFR.: EVERFINE	SUR.:280*280mm	PROTECTION ANGLE:

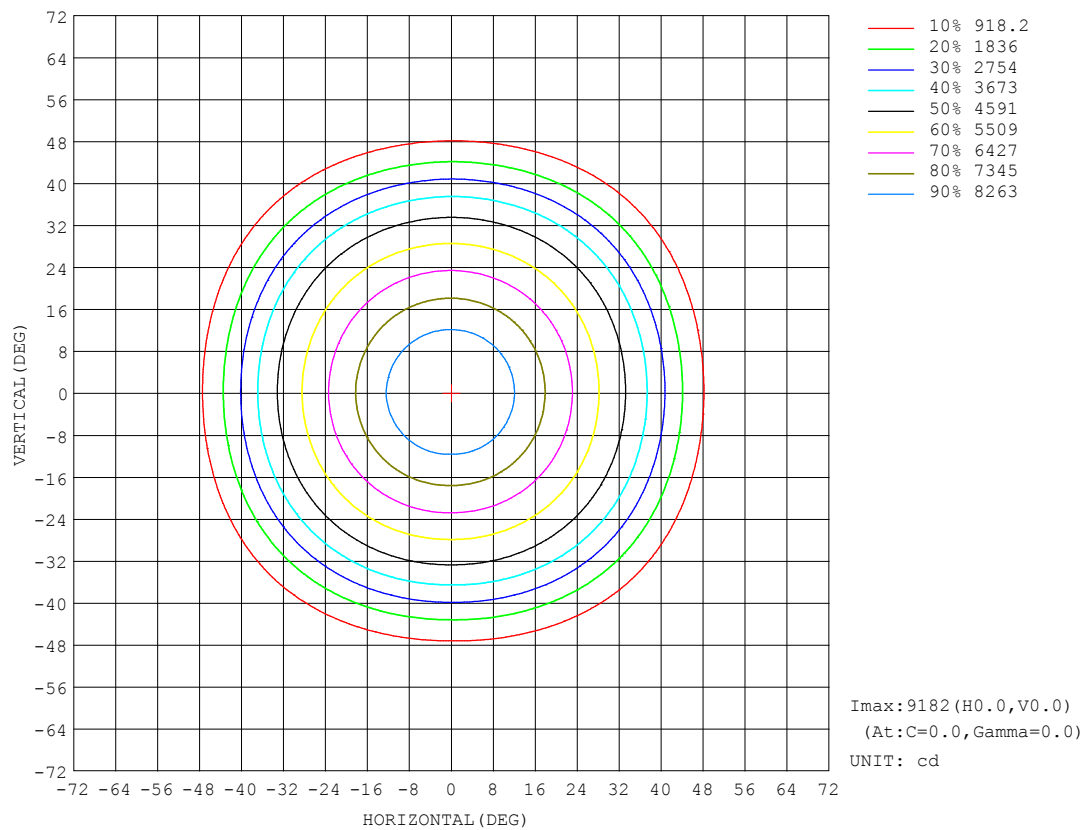
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	81	74	69	81	74	69	80	73	69	65
0.80	90	83	78	89	82	78	88	82	78	73
1.00	95	89	85	94	88	84	93	88	84	79
1.25	100	94	90	99	94	90	97	92	89	84
1.50	103	98	94	102	97	94	100	96	92	87
2.00	107	102	99	105	101	98	102	99	96	91
2.50	109	104	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	103	105	102	100	94
4.00	113	110	107	111	108	106	107	105	103	95
5.00	114	111	109	112	110	108	108	106	104	97
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:231.2V I:0.4583A P:101.8W PF:0.9610 Lamp Flux:10027x1 lm		
NAME: BT-AS100W-12	TYPE:AL reflector	WEIGHT:
SPEC.:5000k COB 60D	DIM.: 270*197mm	SERIAL No.:
MFR.: EVERFINE	SUR.:280*280mm	PROTECTION ANGLE:

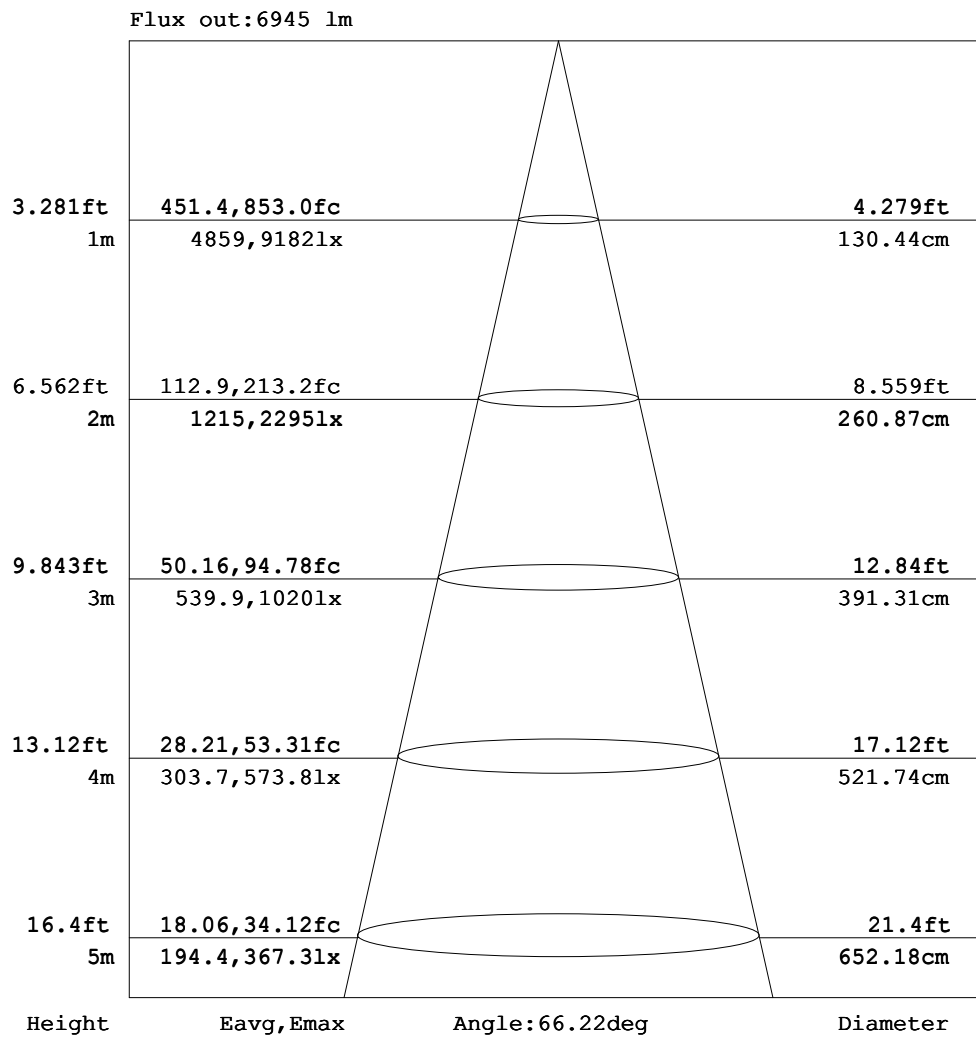


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0000]
Remarks:

AAI Figure

Test:U:231.2V I:0.4583A P:101.8W PF:0.9610 Lamp Flux:10027x1 lm		
NAME: BT-AS100W-12	TYPE:AL reflector	WEIGHT:
SPEC.:5000k COB 60D	DIM.: 270*197mm	SERIAL No.:
MFR.: EVERFINE	SUR.:280*280mm	PROTECTION ANGLE:



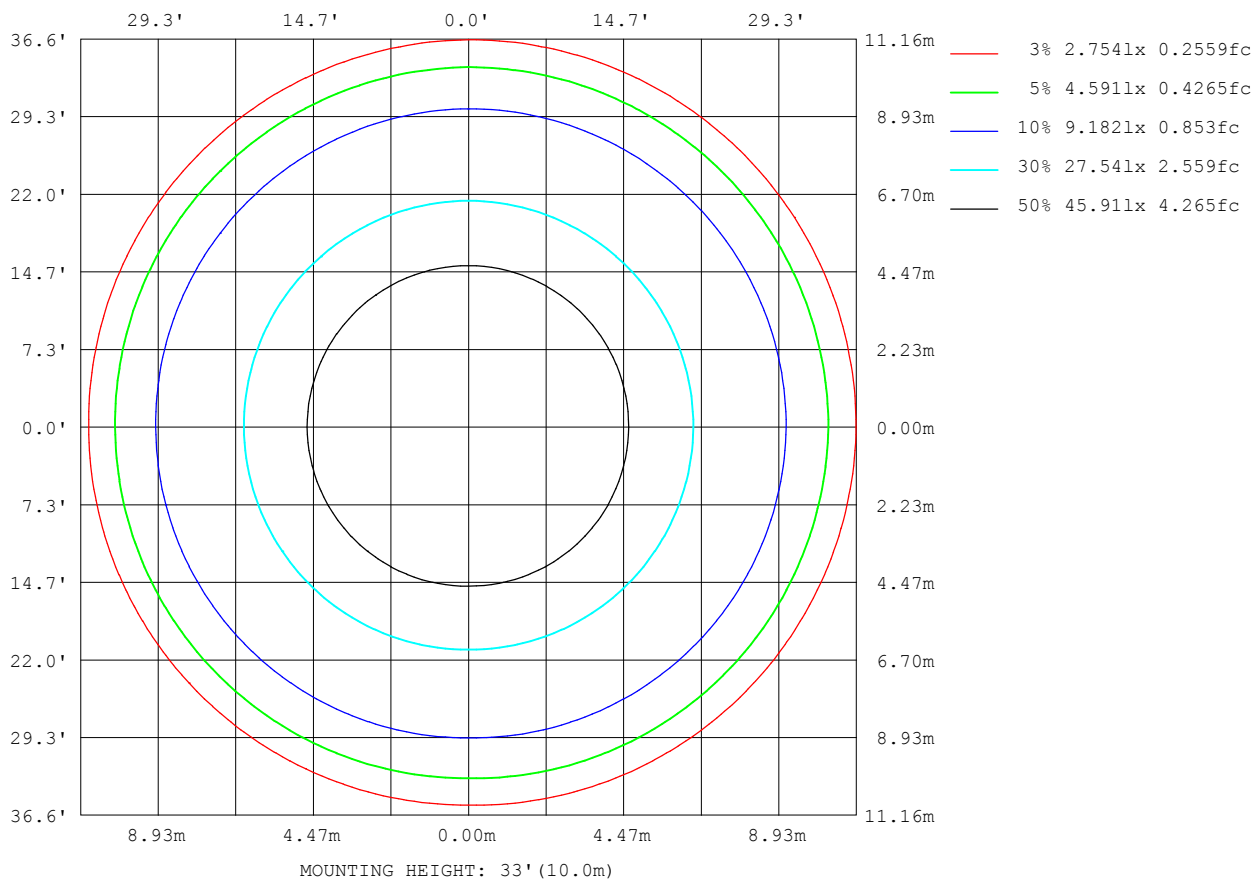
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

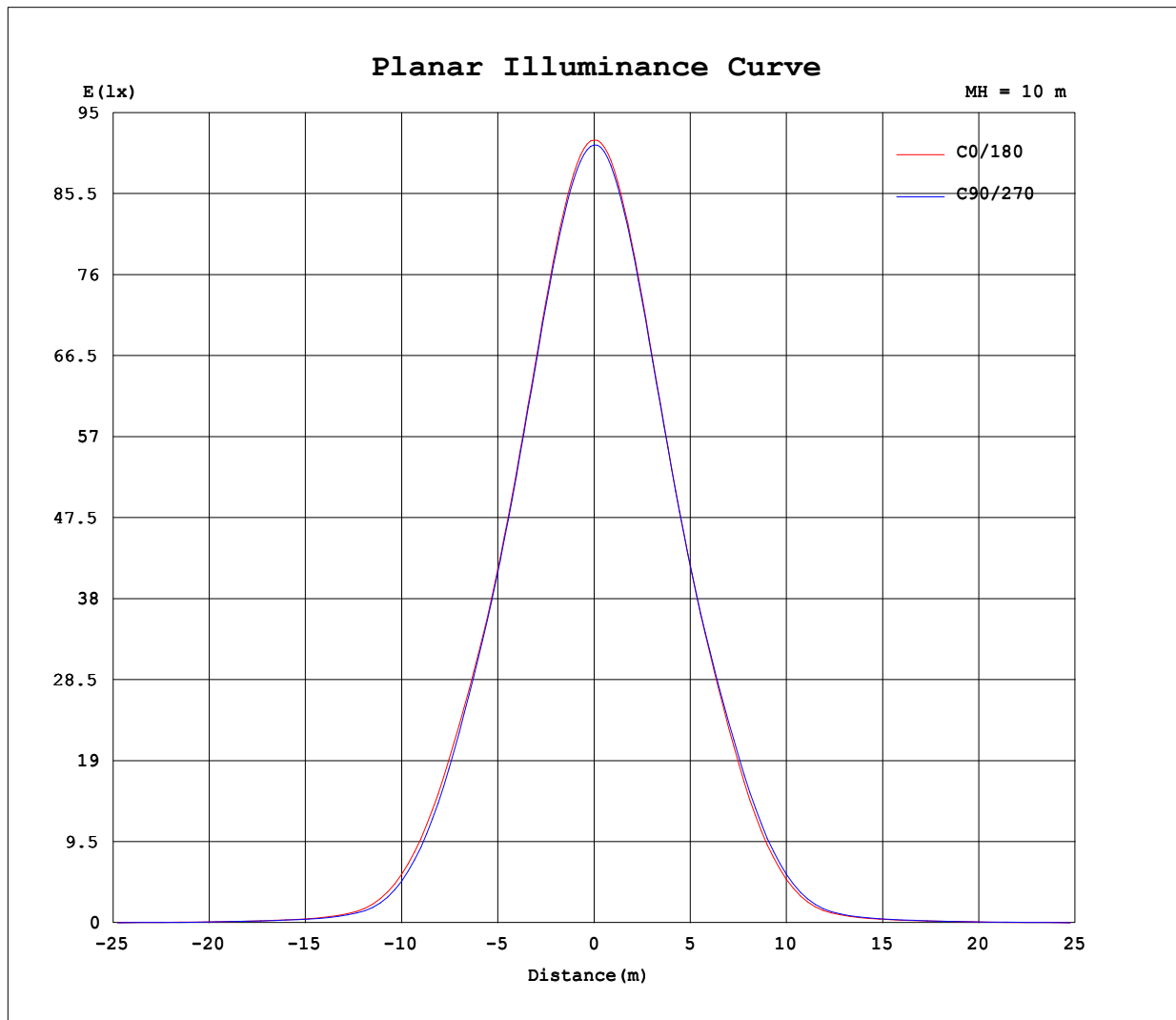
Test:U:231.2V I:0.4583A P:101.8W PF:0.9610 Lamp Flux:10027x1 lm		
NAME: BT-AS100W-12	TYPE:AL reflector	WEIGHT:
SPEC.:5000k COB 60D	DIM.: 270*197mm	SERIAL No.:
MFR.: EVERFINE	SUR.:280*280mm	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0000]
Remarks:

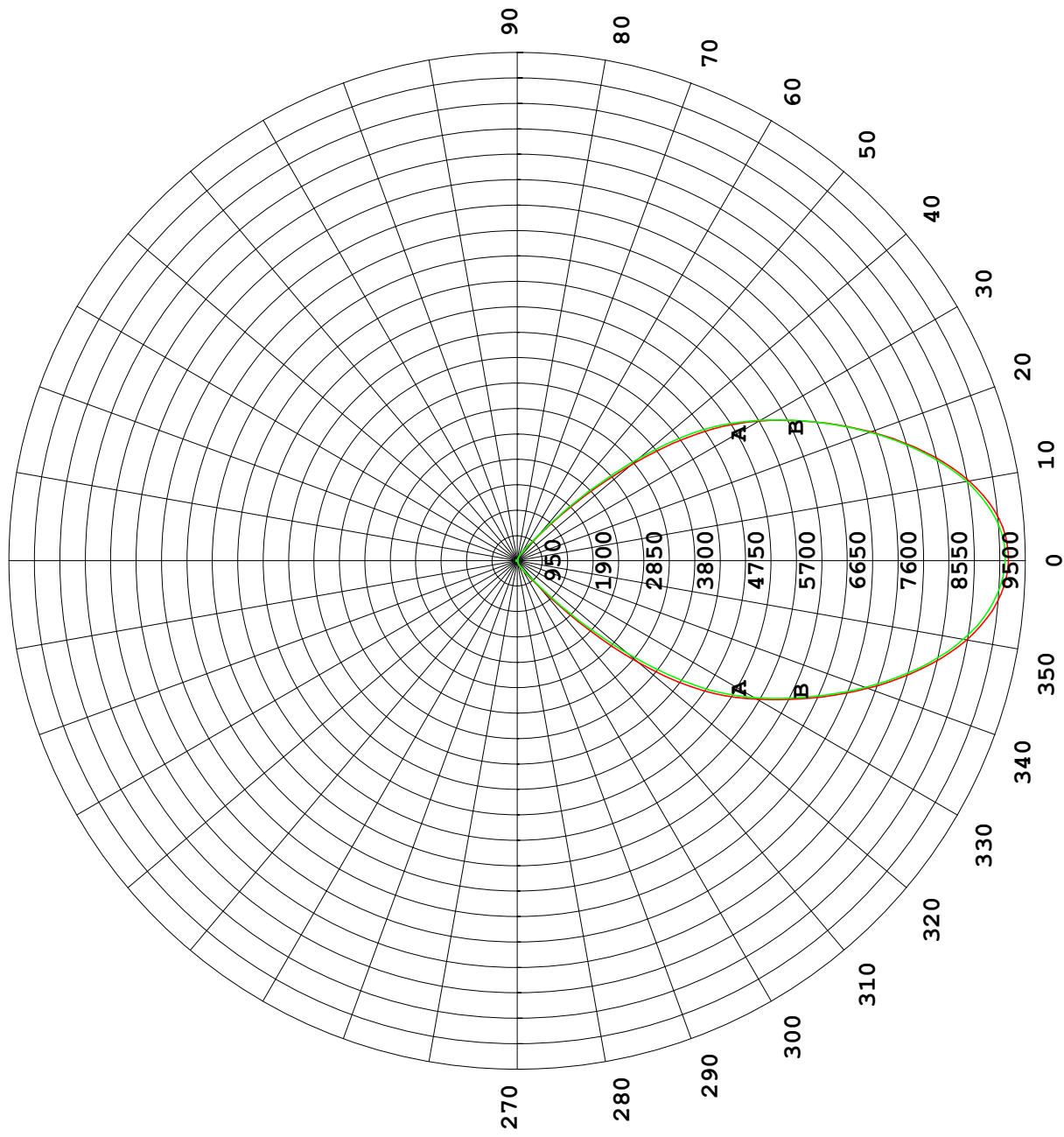
Planar Illuminance Curve

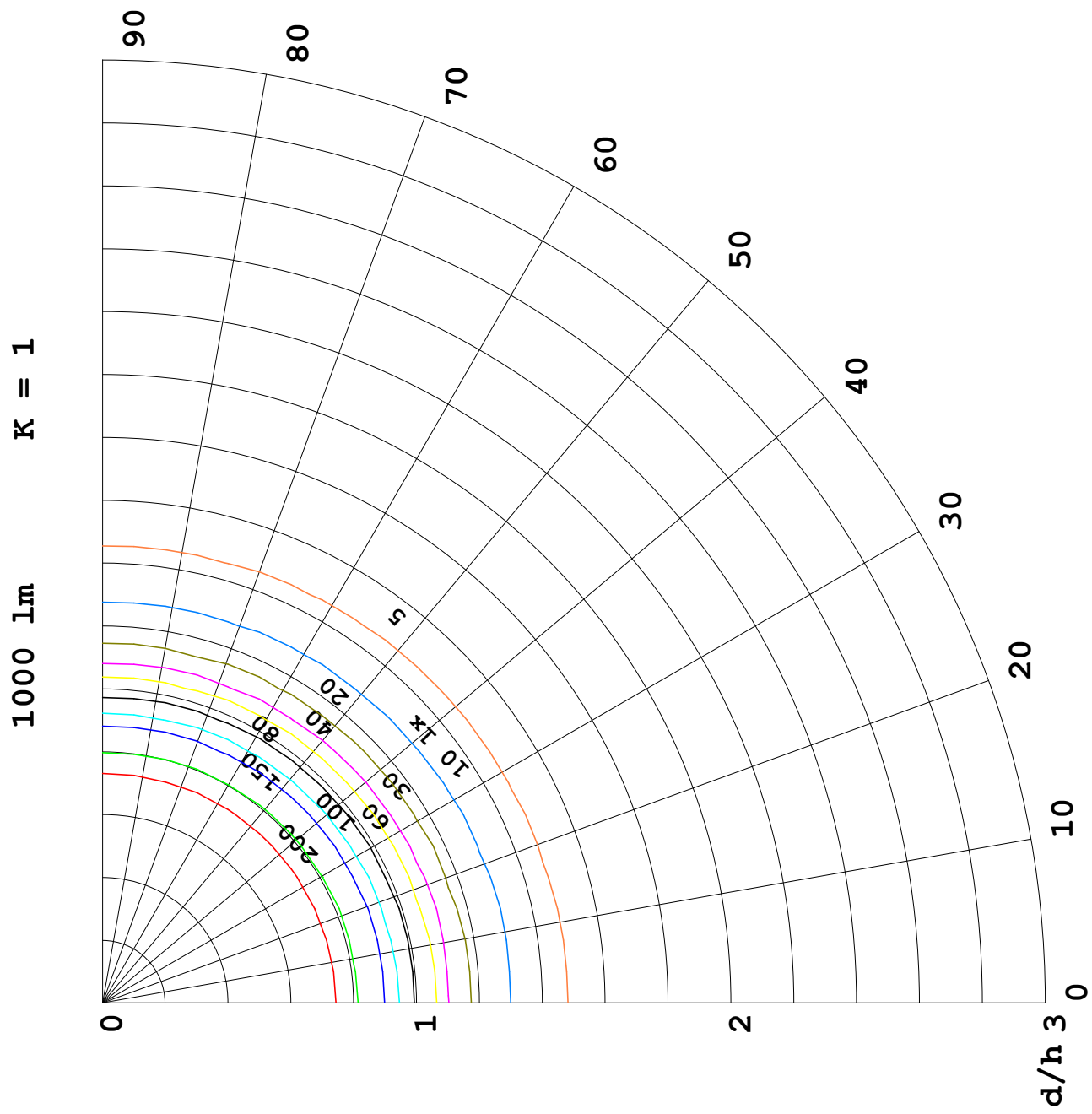


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 30DEG
Operators:
Test Date: 2015-08-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity: 65.0%
Test Distance: 9.390m [K=1.0000]
Remarks:

I (cd)





F = 5000 lm
K = 0.7
Hcc = 0.0 m
Hfc = 0.0 m
Eave = 100 lx

	Pcc	Pw	Pfc
————	70	50	30
————	50	30	20

