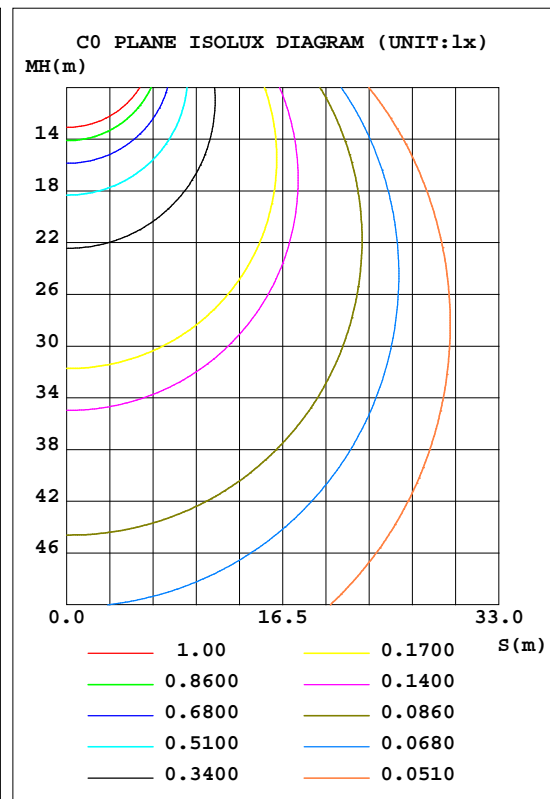
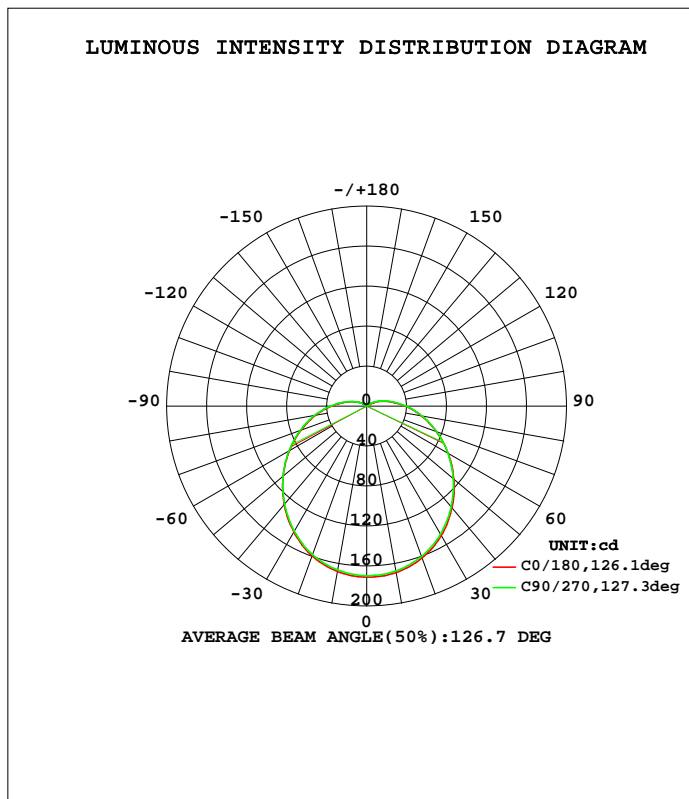


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME:12W-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 57.53 lm/W			
MODEL	12W-6000K	I _{max} (cd)	171.2	S/MH(C0/180)	1.30
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	242	TOTAL FLUX(lm)	672.25	η UP, DN(C0-180)	5.5, 45.4
NOMINAL FLUX(lm)	672.253	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	5.1, 44.0
LAMPS INSIDE	1	η up(%)	10.6	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	241.4	η down(%)	89.4	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2014-08-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.281
 Humidity: 65.0%
 Test Distance: 6.200m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum,lamp
10	169.1	168.5	167.5	166.3	168.0	166.8	166.5	166.6	0- 10	16.11	16.11	2.4,2.4
20	161.8	161.6	160.2	158.4	159.6	158.0	158.2	158.9	10- 20	46.35	62.45	9.29,9.29
30	149.4	149.1	147.8	145.1	145.7	144.5	144.7	146.3	20- 30	70.85	133.3	19.8,19.8
40	132.8	132.9	131.5	128.5	128.5	127.2	127.9	129.7	30- 40	86.77	220.1	32.7,32.7
50	113.9	114.4	113.0	110.0	109.2	108.1	109.3	111.0	40- 50	93.20	313.3	46.6,46.6
60	94.16	94.84	93.83	90.63	89.27	88.33	89.91	91.54	50- 60	90.76	404.0	60.1,60.1
70	74.06	75.38	74.33	71.40	69.72	68.67	70.78	72.00	60- 70	81.03	485.1	72.2,72.2
80	55.39	56.80	56.12	53.17	51.44	50.63	52.72	53.93	70- 80	66.35	551.4	82,82
90	38.75	40.04	39.51	36.87	35.47	34.84	36.57	37.77	80- 90	49.52	600.9	89.4,89.4
100	25.12	26.21	25.81	23.63	22.66	22.16	23.44	24.55	90-100	33.38	634.3	94.4,94.4
110	14.47	15.56	15.37	13.73	13.08	12.67	13.49	13.82	100-110	20.00	654.3	97.3,97.3
120	4.856	5.707	8.070	6.578	6.516	6.125	6.640	5.821	110-120	9.900	664.2	98.8,98.8
130	1.560	2.300	3.471	2.254	2.740	2.075	2.745	2.572	120-130	3.637	667.8	99.3,99.3
140	1.677	1.674	1.644	1.702	2.029	1.991	2.001	1.973	130-140	1.527	669.4	99.6,99.6
150	1.811	1.816	1.793	1.839	2.075	2.029	2.049	2.009	140-150	1.181	670.6	99.7,99.7
160	1.943	1.956	1.933	1.971	2.125	2.087	2.097	2.059	150-160	0.9130	671.5	99.9,99.9
170	2.057	2.072	2.044	2.087	2.158	2.133	2.135	2.107	160-170	0.5838	672.1	100,100
180	2.135	2.138	2.135	2.138	2.158	2.135	2.135	2.140	170-180	0.2021	672.3	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

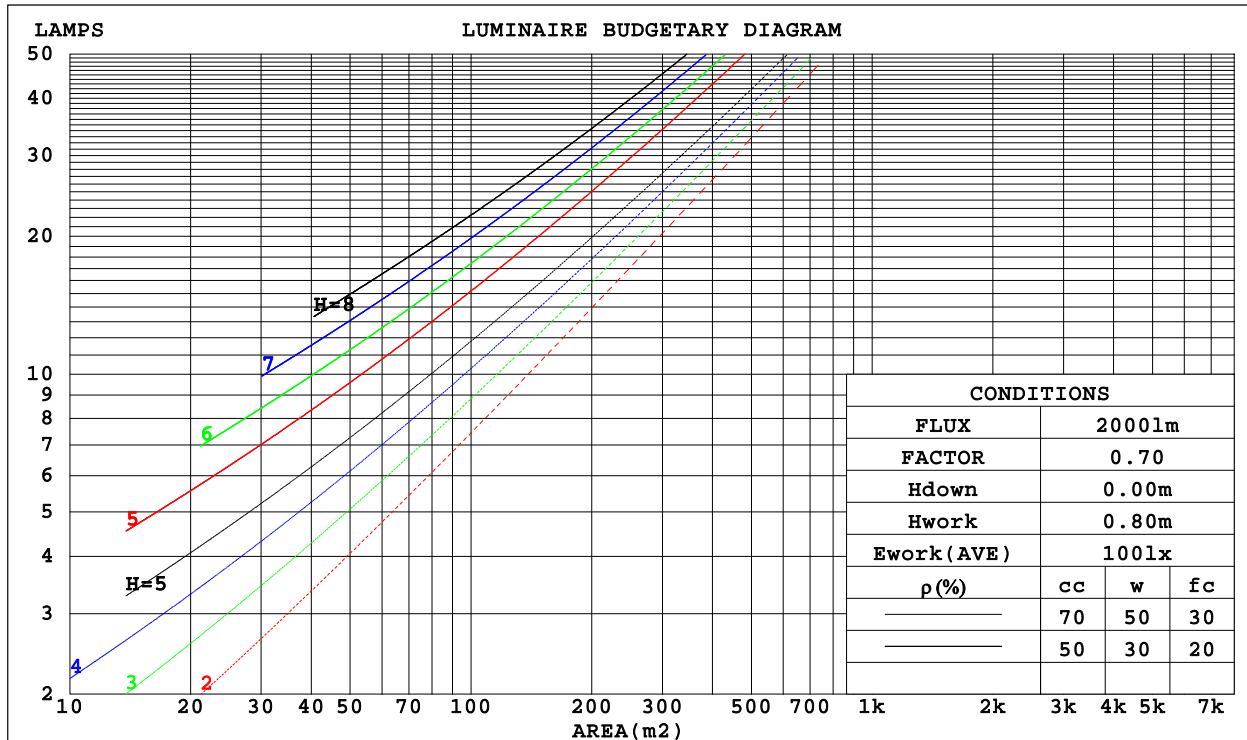
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:6.200m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME:12W-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	1.05	1.05	1.05	.98	.98	.98	.92	.92	.92	.89
1.0	.97	.92	.87	.94	.89	.85	.88	.84	.80	.82	.79	.76	.77	.74	.72	.69
2.0	.83	.76	.69	.81	.73	.67	.75	.69	.64	.70	.65	.61	.66	.62	.58	.55
3.0	.72	.63	.56	.70	.62	.55	.65	.58	.53	.61	.55	.50	.57	.52	.48	.45
4.0	.64	.54	.47	.62	.53	.46	.58	.50	.44	.54	.48	.42	.51	.45	.41	.38
5.0	.57	.47	.40	.55	.46	.39	.51	.44	.38	.48	.42	.36	.45	.40	.35	.33
6.0	.51	.41	.35	.49	.40	.34	.46	.39	.33	.44	.37	.32	.41	.35	.31	.28
7.0	.46	.37	.30	.45	.36	.30	.42	.34	.29	.40	.33	.28	.37	.32	.27	.25
8.0	.42	.33	.27	.41	.32	.26	.38	.31	.26	.36	.30	.25	.34	.28	.24	.22
9.0	.38	.30	.24	.37	.29	.24	.35	.28	.23	.33	.27	.22	.32	.26	.22	.20
10.0	.35	.27	.22	.34	.27	.21	.33	.26	.21	.31	.25	.20	.29	.24	.20	.18



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:6.200m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME:12W-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	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	.385	.219	.069	.374	.213	.068	.355	.203	.065	.337	.194	.062	.320	.185	.060	
2.0	.334	.183	.056	.325	.179	.055	.307	.171	.053	.291	.163	.051	.276	.156	.049	
3.0	.298	.158	.047	.289	.155	.047	.273	.148	.045	.259	.142	.043	.245	.136	.042	
4.0	.268	.139	.041	.261	.136	.040	.246	.131	.039	.233	.125	.038	.221	.120	.037	
5.0	.244	.124	.036	.237	.122	.035	.224	.117	.034	.212	.112	.033	.201	.107	.032	
6.0	.224	.112	.032	.217	.110	.032	.206	.105	.031	.195	.101	.030	.185	.097	.029	
7.0	.206	.102	.029	.201	.100	.028	.190	.096	.028	.180	.092	.027	.171	.089	.026	
8.0	.191	.093	.026	.186	.092	.026	.177	.088	.025	.168	.085	.024	.159	.082	.024	
9.0	.178	.086	.024	.174	.085	.024	.165	.082	.023	.157	.078	.022	.149	.076	.022	
10.0	.167	.080	.022	.163	.079	.022	.155	.076	.021	.147	.073	.021	.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	.271	.271	.271	.232	.232	.232	.158	.158	.158	.091	.091	.091	.029	.029	.029	
1.0	.267	.237	.210	.228	.203	.181	.156	.140	.125	.090	.081	.073	.029	.026	.023	
2.0	.260	.214	.175	.223	.184	.151	.153	.127	.105	.088	.074	.062	.028	.024	.020	
3.0	.252	.197	.153	.216	.170	.133	.148	.118	.093	.086	.069	.055	.028	.022	.018	
4.0	.244	.184	.138	.210	.159	.120	.144	.111	.085	.083	.065	.050	.027	.021	.016	
5.0	.237	.174	.128	.203	.151	.112	.140	.105	.079	.081	.062	.047	.026	.020	.015	
6.0	.229	.166	.121	.197	.144	.105	.136	.101	.075	.079	.059	.044	.025	.019	.015	
7.0	.222	.159	.116	.191	.138	.101	.132	.097	.071	.077	.057	.043	.025	.019	.014	
8.0	.215	.154	.112	.185	.133	.097	.128	.094	.069	.075	.055	.041	.024	.018	.014	
9.0	.209	.149	.109	.180	.129	.095	.125	.091	.067	.073	.054	.040	.024	.018	.013	
10.0	.203	.145	.106	.175	.126	.093	.121	.088	.066	.071	.052	.039	.023	.017	.013	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:6.200m [K=1.0000]
 Remarks:

Uncorrected UGR Table

NAME:12W-6000K		TYPE:					WEIGHT:				
SPEC.:		DIM.:					SERIAL No.:				
MFR.: EVERFINE		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	18.5	20.0	19.0	20.4	20.8	18.5	20.0	18.9	20.4	20.8	
3H	20.7	22.1	21.2	22.5	23.0	20.7	22.1	21.2	22.5	23.0	
4H	21.9	23.2	22.4	23.6	24.1	21.9	23.2	22.4	23.7	24.1	
6H	23.2	24.4	23.6	24.8	25.3	23.2	24.4	23.7	24.9	25.4	
8H	23.8	25.0	24.3	25.5	26.0	23.9	25.1	24.4	25.5	26.1	
12H	24.6	25.7	25.1	26.2	26.8	24.6	25.8	25.2	26.3	26.8	
4H 2H	19.3	20.6	19.8	21.0	21.5	19.3	20.6	19.8	21.0	21.5	
3H	21.7	22.9	22.2	23.4	23.9	21.7	22.9	22.2	23.4	23.9	
4H	23.1	24.1	23.6	24.6	25.2	23.1	24.1	23.6	24.6	25.2	
6H	24.5	25.4	25.0	26.0	26.6	24.5	25.5	25.1	26.0	26.6	
8H	25.3	26.2	25.8	26.7	27.3	25.3	26.2	25.9	26.8	27.4	
12H	26.2	27.0	26.7	27.6	28.2	26.2	27.0	26.8	27.6	28.2	
8H 4H	23.6	24.5	24.2	25.0	25.7	23.6	24.5	24.2	25.0	25.7	
6H	25.3	26.1	25.9	26.7	27.3	25.3	26.1	25.9	26.7	27.3	
8H	26.3	27.0	26.9	27.6	28.2	26.3	27.0	26.9	27.6	28.3	
12H	27.4	28.0	28.0	28.6	29.3	27.4	28.0	28.1	28.7	29.4	
12H 4H	23.7	24.5	24.3	25.1	25.7	23.7	24.5	24.3	25.1	25.8	
6H	25.5	26.2	26.2	26.8	27.5	25.5	26.2	26.2	26.8	27.5	
8H	26.6	27.2	27.3	27.8	28.5	26.6	27.3	27.3	27.9	28.6	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4					

CIE Pub.117 Corrected 672.3 lm Total Lamp Luminous Flux.(8log(F/F0) = -1.4)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:6.200m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

NAME:12W-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

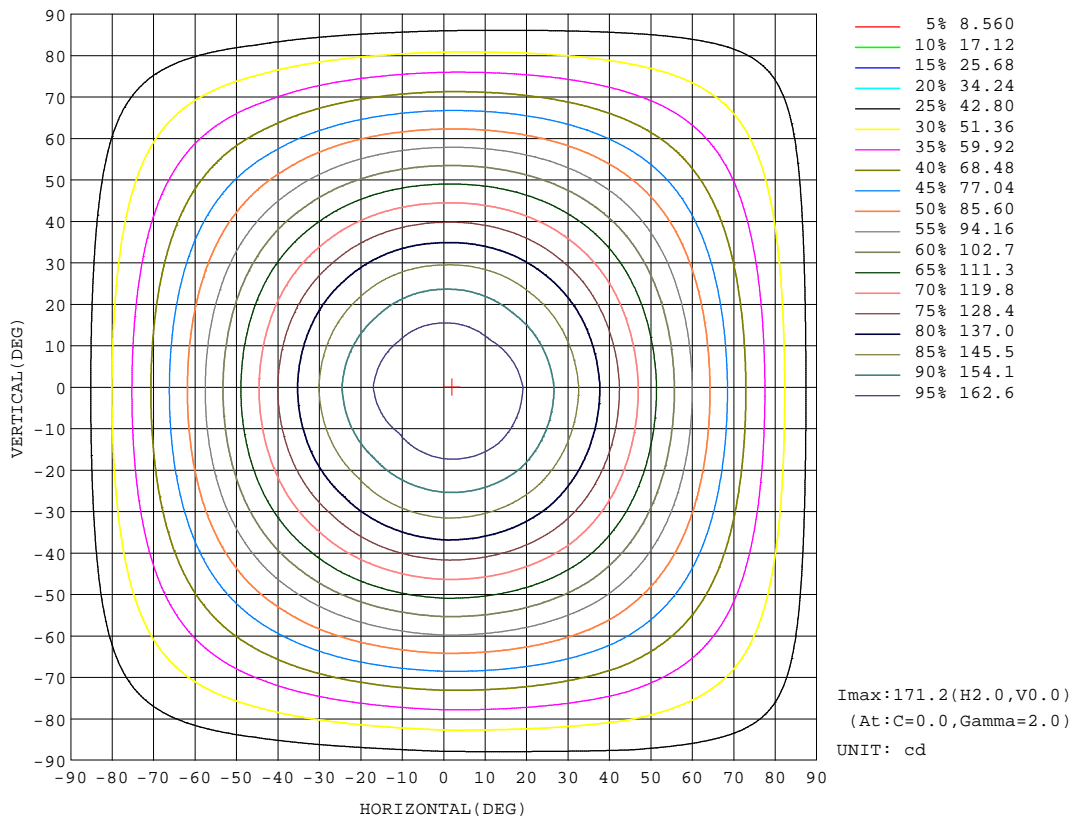
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	50	38	31	49	38	31	48	37	30	24
0.80	60	47	39	58	46	39	56	45	38	30
1.00	67	55	46	66	54	46	63	55	45	37
1.25	74	62	54	72	61	53	69	59	52	43
1.50	79	67	59	77	66	58	73	64	57	48
2.00	87	76	68	84	74	67	79	71	65	54
2.50	91	81	73	88	79	72	83	75	69	58
3.00	95	86	78	92	83	77	86	79	74	62
4.00	99	91	85	96	89	83	90	84	79	67
5.00	102	95	90	99	93	88	92	88	83	71
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:6.200m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME:12W-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



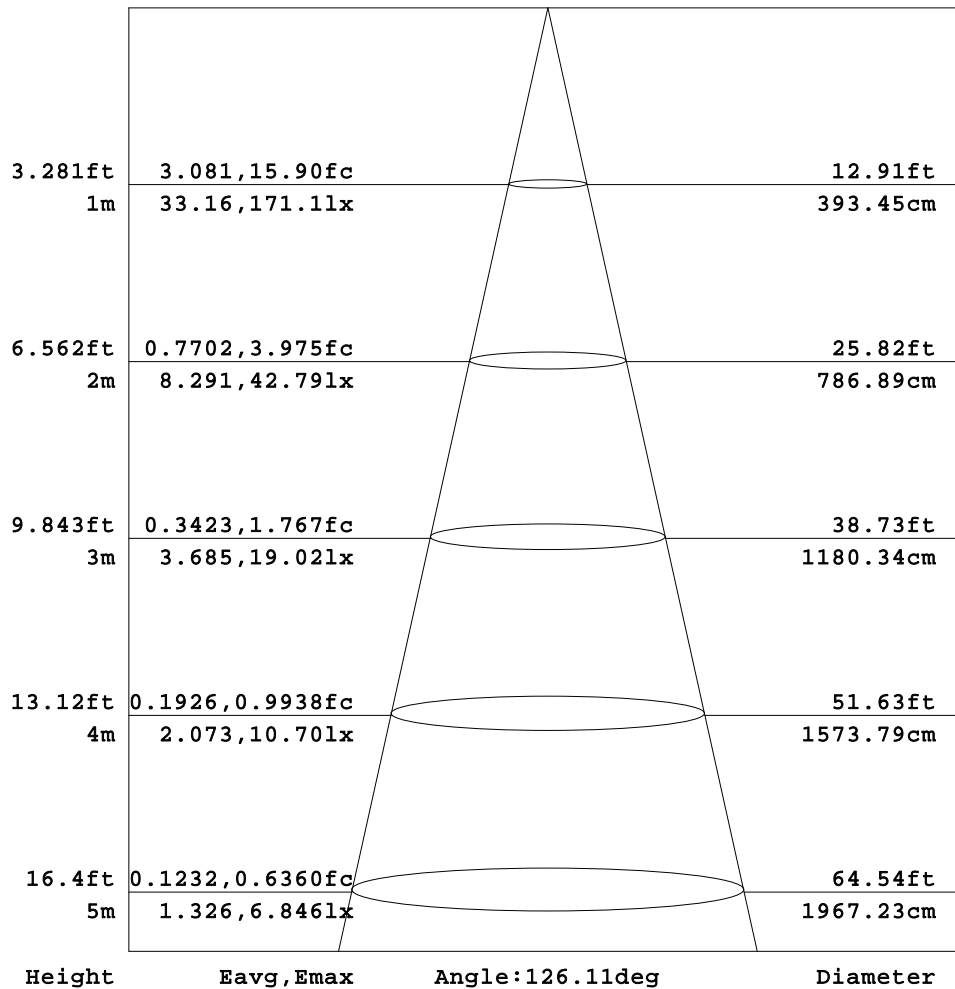
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2014-08-28

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:6.200m [K=1.0000]
Remarks:

AAI Figure

NAME:12W-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

Flux out:438.0 lm



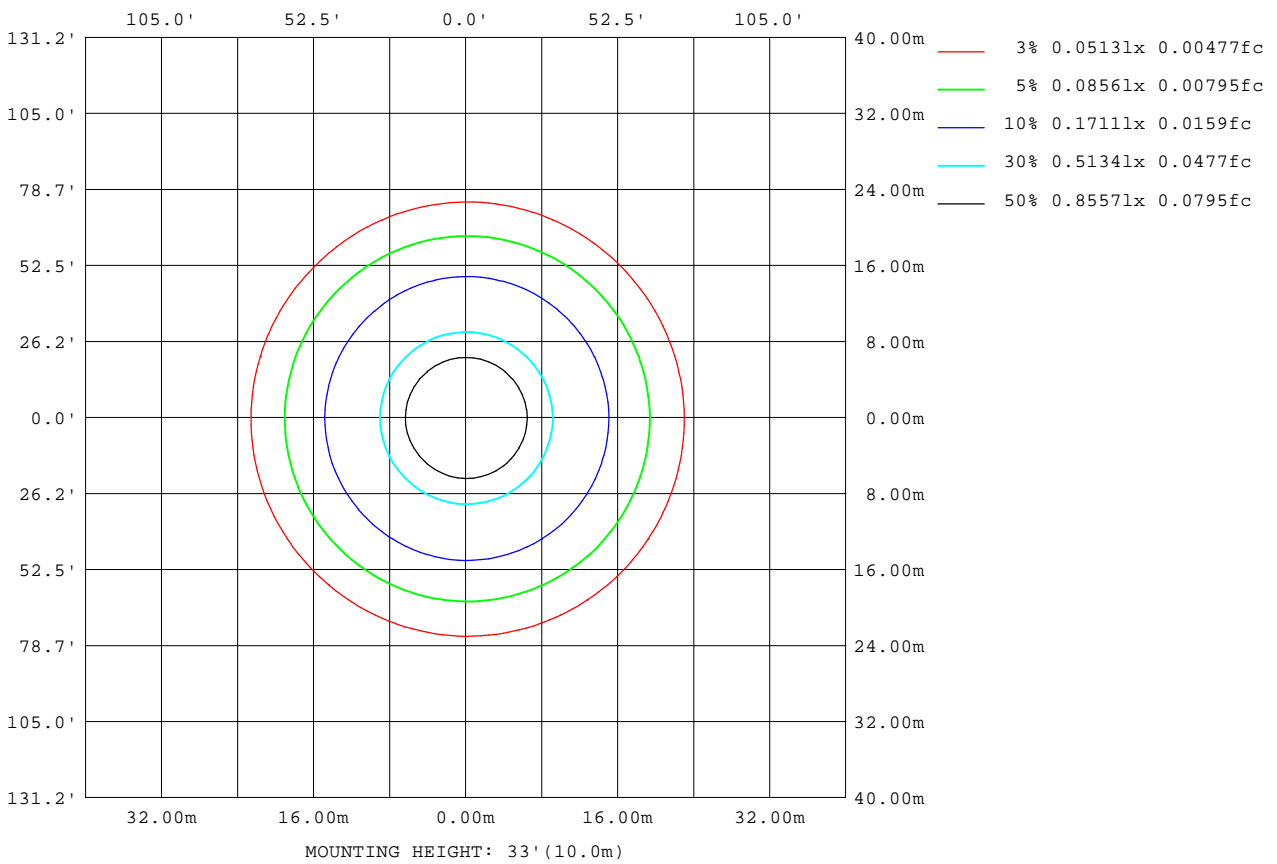
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:6.200m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

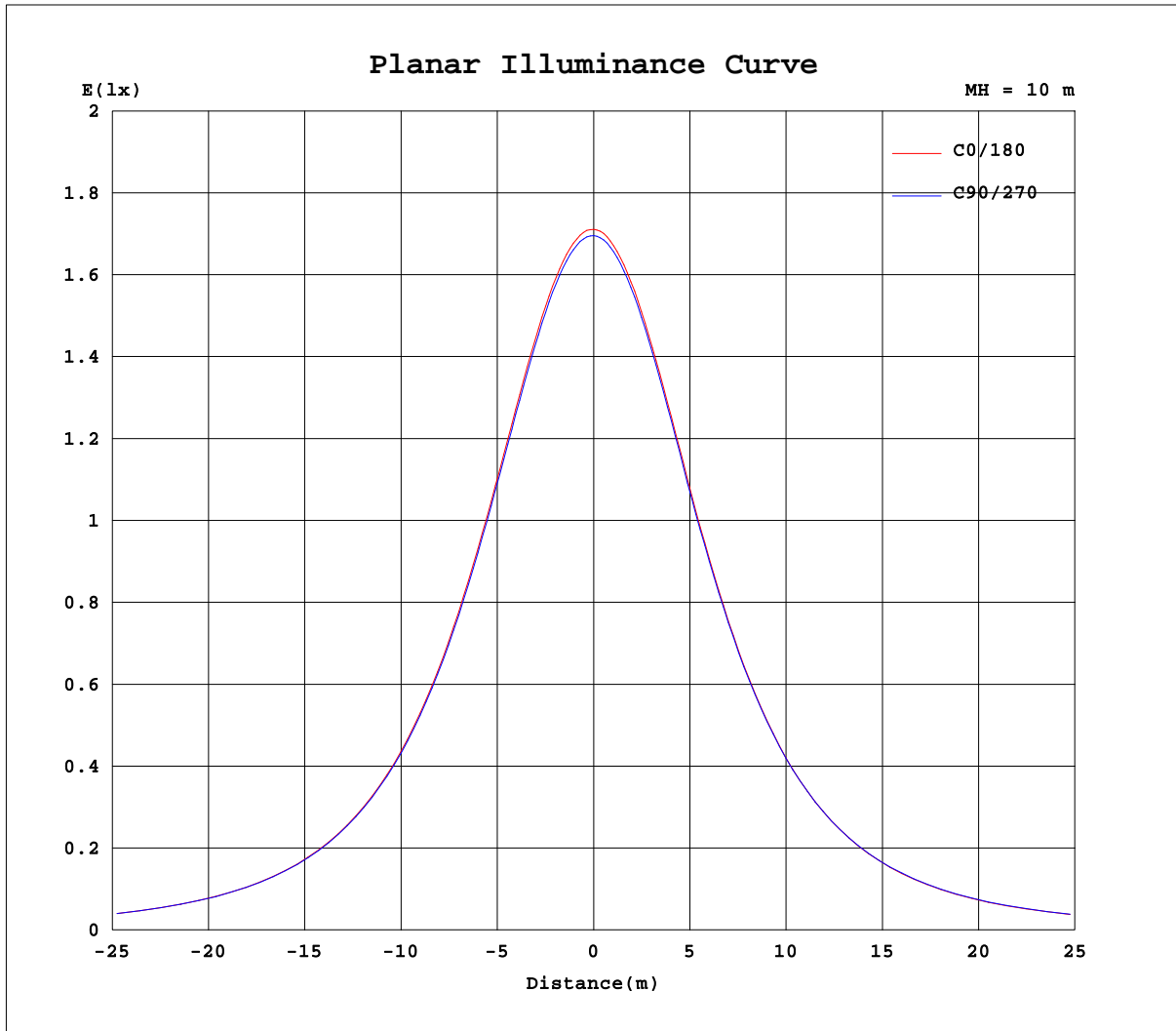
NAME: 12W-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2014-08-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.281
 Humidity: 65.0%
 Test Distance: 6.200m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2014-08-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.281
 Humidity: 65.0%
 Test Distance: 6.200m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME:12W-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	45	90	135	180	225	270	315											
0	171	170	170	169	171	170	170	169											
5	171	170	169	168	170	169	169	168											
10	169	169	168	166	168	167	167	167											
15	166	166	164	163	164	163	163	163											
20	162	162	160	158	160	158	158	159											
25	156	156	155	152	154	152	152	153											
30	149	149	148	145	146	144	145	146											
35	142	141	140	137	137	136	137	138											
40	133	133	131	129	128	127	128	130											
45	124	124	122	119	119	118	119	121											
50	114	114	113	110	109	108	109	111											
55	104	105	103	100	99.3	98.2	99.6	101											
60	94.2	94.8	93.8	90.6	89.3	88.3	89.9	91.5											
65	84.1	85.1	84.1	81.0	79.4	78.2	80.3	81.8											
70	74.1	75.4	74.3	71.4	69.7	68.7	70.8	72.0											
75	64.5	65.9	65.1	62.1	60.4	59.4	61.6	62.8											
80	55.4	56.8	56.1	53.2	51.4	50.6	52.7	53.9											
85	46.7	48.1	47.5	44.7	43.1	42.4	44.3	45.5											
90	38.7	40.0	39.5	36.9	35.5	34.8	36.6	37.8											
95	31.5	32.7	32.2	29.8	28.7	28.1	29.6	30.8											
100	25.1	26.2	25.8	23.6	22.7	22.2	23.4	24.6											
105	19.5	20.5	20.2	18.3	17.5	17.0	18.1	18.9											
110	14.5	15.6	15.4	13.7	13.1	12.7	13.5	13.8											
115	9.60	10.3	11.3	9.97	9.44	9.10	9.69	8.99											
120	4.86	5.71	8.07	6.58	6.52	6.13	6.64	5.82											
125	1.76	3.68	5.46	3.78	4.33	3.28	4.36	3.80											
130	1.56	2.30	3.47	2.25	2.74	2.08	2.74	2.57											
135	1.61	1.67	1.96	1.65	2.00	1.99	1.98	1.98											
140	1.68	1.67	1.64	1.70	2.03	1.99	2.00	1.97											
145	1.74	1.74	1.72	1.77	2.05	2.01	2.02	1.99											
150	1.81	1.82	1.79	1.84	2.07	2.03	2.05	2.01											
155	1.88	1.89	1.86	1.90	2.10	2.05	2.08	2.04											
160	1.94	1.96	1.93	1.97	2.13	2.09	2.10	2.06											
165	2.01	2.02	2.00	2.03	2.15	2.10	2.13	2.09											
170	2.06	2.07	2.04	2.09	2.16	2.13	2.14	2.11											
175	2.10	2.12	2.09	2.13	2.16	2.14	2.14	2.13											
180	2.14	2.14	2.14	2.14	2.16	2.14	2.14	2.14											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:6.200m [K=1.0000]
 Remarks: