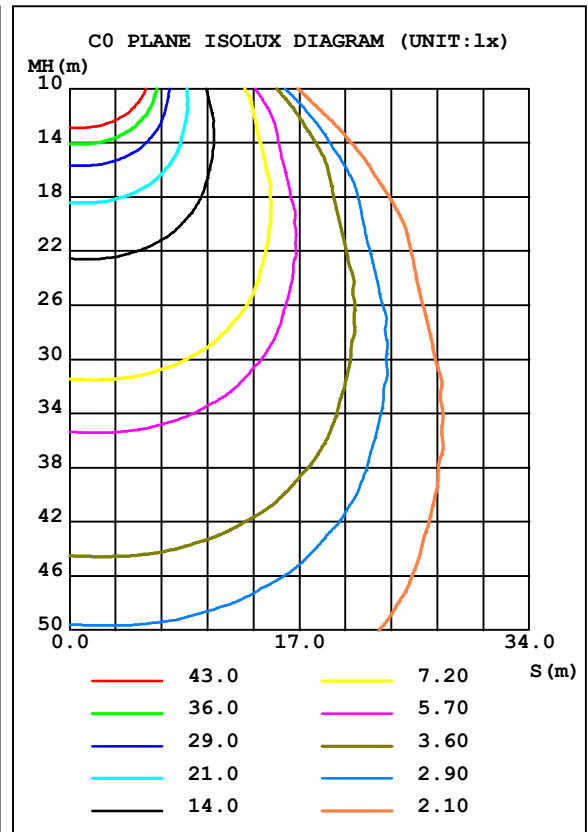
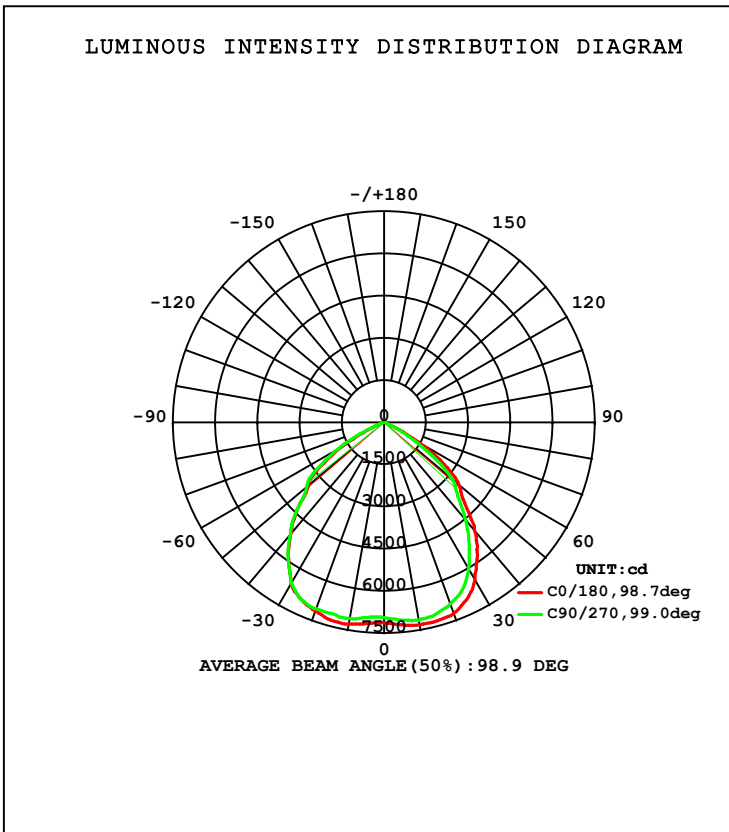


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: YYF-035	TYPE:LED	WEIGHT:
SPEC.:2002/1000WHQI	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 103.55 lm/W			
MODEL	High bay-150W-NW	I <sub>max</sub> (cd)	7325	S/MH (C0/180)	1.32
NOMINAL POWER (W)	150	LOR (%)	100.0	S/MH (C90/270)	1.35
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	15616	η UP, DN (C0-180)	0.5, 47.1
NOMINAL FLUX (lm)	15616	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.5, 51.9
LAMPS INSIDE	1	η up (%)	1.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	99.0	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2017-10-30

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity: 65.0%  
 Test Distance: 5.300m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	7302	7219	7133	7049	7288	7165	7075	7018	0- 10	677.7	677.7	4.34,4.34
20	7241	7050	6880	6847	7157	7171	7055	7037	10- 20	2020	2698	17.3,17.3
30	6471	6168	6005	6150	6596	6618	6597	6453	20- 30	3136	5834	37.4,37.4
40	4989	4720	4514	4699	5196	5217	5191	5093	30- 40	3555	9389	60.1,60.1
50	3493	3318	3153	3309	3508	3603	3602	3559	40- 50	3187	12576	80.5,80.5
60	1422	1102	972.2	1276	1757	1846	1841	1678	50- 60	2286	14862	95.2,95.2
70	21.53	21.38	21.11	20.24	26.56	70.26	32.41	26.26	60- 70	563.2	15425	98.8,98.8
80	15.48	14.97	14.74	14.27	17.56	18.04	18.47	16.47	70- 80	20.81	15446	98.9,98.9
90	11.41	11.04	11.07	10.86	12.70	12.64	12.95	11.68	80- 90	15.05	15461	99,99
100	13.01	13.00	12.81	12.26	13.45	12.73	12.74	12.45	90-100	12.95	15474	99.1,99.1
110	16.88	17.04	16.79	16.25	20.09	18.73	18.14	18.76	100-110	15.93	15490	99.2,99.2
120	21.26	21.07	21.19	20.29	25.94	24.53	24.23	24.35	110-120	20.23	15510	99.3,99.3
130	27.39	26.67	26.84	25.81	31.22	29.10	29.31	28.92	120-130	22.86	15533	99.5,99.5
140	31.99	30.86	31.67	30.11	35.95	33.39	33.94	33.19	130-140	23.52	15557	99.6,99.6
150	36.99	35.62	36.78	34.31	41.73	38.63	39.40	38.54	140-150	21.97	15579	99.8,99.8
160	42.84	41.42	41.90	39.66	47.87	44.54	45.25	44.22	150-160	18.66	15597	99.9,99.9
170	52.12	51.33	51.13	49.99	54.90	52.35	52.10	51.43	160-170	13.32	15611	100,100
180	59.07	59.21	57.18	57.56	59.91	58.62	57.59	57.28	170-180	5.221	15616	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

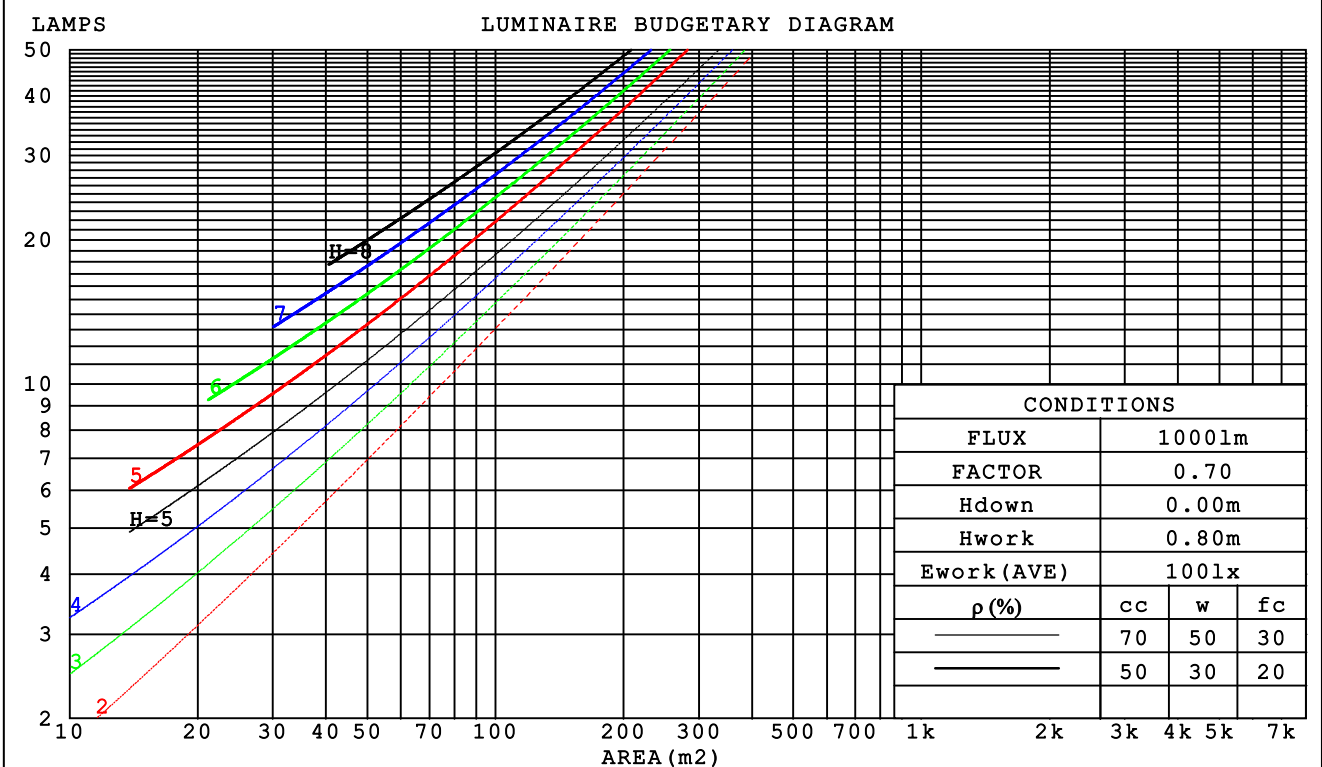
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2017-10-30

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:5.300m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: YYF-035	TYPE:LED	WEIGHT:
SPEC.:2002/1000WHQI	DIM.:	SERIAL No.:1
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						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	1.01	1.01	1.01	.99
1.0	1.08	1.05	1.02	1.05	1.03	.90	1.01	.99	.97	.97	.95	.94	.94	.92	.91	.89
2.0	.97	.92	.87	.95	.90	.86	.92	.87	.84	.88	.85	.82	.85	.82	.80	.78
3.0	.87	.81	.75	.86	.79	.75	.83	.77	.73	.80	.76	.72	.77	.74	.71	.69
4.0	.79	.71	.66	.77	.70	.65	.75	.69	.64	.72	.67	.63	.70	.66	.62	.60
5.0	.71	.63	.58	.70	.63	.57	.68	.62	.57	.66	.60	.56	.64	.59	.55	.53
6.0	.65	.57	.51	.64	.56	.51	.62	.55	.50	.60	.54	.50	.59	.53	.49	.48
7.0	.59	.51	.46	.58	.51	.45	.57	.50	.45	.55	.49	.45	.54	.48	.44	.43
8.0	.54	.46	.41	.53	.46	.41	.52	.45	.41	.51	.45	.40	.50	.44	.40	.38
9.0	.50	.42	.37	.49	.42	.37	.48	.42	.37	.47	.41	.37	.46	.40	.36	.35
10.0	.46	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.43	.37	.33	.32



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2017-10-30

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:5.300m [K=1.0000]  
 Remarks:

WEC AND CCEC

NAME: YYF-035	TYPE:LED	WEIGHT:
SPEC.:2002/1000WHQI	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION 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						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.230	.131	.041	.223	.127	.040	.210	.120	.038	.197	.114	.037	.186	.108	.035	
2.0	.227	.124	.038	.221	.122	.037	.209	.116	.036	.199	.111	.035	.189	.107	.034	
3.0	.218	.116	.035	.213	.114	.034	.203	.110	.033	.193	.106	.032	.185	.102	.032	
4.0	.208	.108	.032	.203	.106	.031	.194	.103	.031	.186	.100	.030	.178	.097	.029	
5.0	.197	.100	.029	.193	.099	.029	.185	.096	.028	.177	.094	.028	.170	.091	.027	
6.0	.187	.094	.027	.183	.092	.027	.176	.090	.026	.169	.088	.026	.163	.086	.025	
7.0	.177	.087	.025	.173	.086	.025	.167	.084	.024	.161	.082	.024	.155	.081	.024	
8.0	.167	.082	.023	.164	.081	.023	.158	.079	.023	.153	.077	.022	.148	.076	.022	
9.0	.158	.077	.021	.156	.076	.021	.150	.074	.021	.145	.073	.021	.141	.072	.021	
10.0	.150	.072	.020	.148	.071	.020	.143	.070	.020	.139	.069	.020	.134	.068	.019	

$\rho_{cc}$	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						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.198	.198	.198	.169	.169	.169	.116	.116	.116	.066	.066	.066	.021	.021	.021	
1.0	.182	.164	.148	.156	.141	.128	.107	.097	.088	.061	.056	.051	.020	.018	.017	
2.0	.171	.140	.113	.147	.120	.098	.101	.083	.068	.058	.048	.040	.019	.016	.013	
3.0	.162	.122	.089	.139	.105	.077	.095	.073	.054	.055	.043	.032	.018	.014	.010	
4.0	.154	.108	.072	.133	.093	.063	.091	.065	.044	.053	.038	.026	.017	.012	.009	
5.0	.147	.097	.060	.127	.084	.052	.087	.059	.037	.051	.034	.022	.016	.011	.007	
6.0	.141	.088	.051	.121	.077	.044	.084	.054	.031	.048	.032	.019	.016	.010	.006	
7.0	.135	.081	.044	.116	.071	.038	.080	.049	.027	.047	.029	.016	.015	.010	.005	
8.0	.129	.076	.039	.111	.066	.034	.077	.046	.024	.045	.027	.014	.014	.009	.005	
9.0	.124	.071	.035	.107	.061	.030	.074	.043	.022	.043	.025	.013	.014	.008	.004	
10.0	.119	.066	.032	.102	.058	.028	.071	.041	.020	.041	.024	.012	.013	.008	.004	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2017-10-30

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:5.300m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

NAME: YYF-035		TYPE:LED					WEIGHT:				
SPEC.:2002/1000WHQI		DIM.:					SERIAL No.:1				
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	25.0	26.3	25.3	26.5	26.8	24.4	25.7	24.7	25.9	26.1	
3H	24.9	26.0	25.2	26.3	26.5	24.2	25.4	24.5	25.6	25.9	
4H	24.8	25.9	25.1	26.1	26.4	24.1	25.2	24.4	25.5	25.7	
6H	24.7	25.7	25.0	26.0	26.3	24.0	25.0	24.3	25.3	25.6	
8H	24.6	25.6	25.0	25.9	26.2	23.9	24.9	24.3	25.2	25.5	
12H	24.6	25.5	24.9	25.8	26.1	23.9	24.8	24.2	25.1	25.5	
4H 2H	24.9	26.1	25.3	26.3	26.6	24.3	25.5	24.7	25.7	26.0	
3H	24.8	25.7	25.1	26.0	26.3	24.1	25.1	24.5	25.4	25.7	
4H	24.7	25.5	25.0	25.9	26.2	24.0	24.9	24.4	25.2	25.6	
6H	24.6	25.3	25.0	25.7	26.1	24.0	24.7	24.4	25.1	25.4	
8H	24.5	25.2	24.9	25.6	26.0	23.9	24.6	24.3	25.0	25.4	
12H	24.5	25.1	24.9	25.5	25.9	23.9	24.5	24.3	24.9	25.3	
8H 4H	24.5	25.2	24.9	25.6	26.0	23.9	24.6	24.3	25.0	25.4	
6H	24.4	25.0	24.9	25.4	25.9	23.8	24.4	24.3	24.8	25.2	
8H	24.4	24.9	24.9	25.3	25.8	23.8	24.3	24.2	24.7	25.2	
12H	24.4	24.8	24.8	25.2	25.7	23.7	24.2	24.2	24.6	25.1	
12H 4H	24.5	25.1	24.9	25.5	25.9	23.9	24.5	24.3	24.9	25.3	
6H	24.4	24.9	24.9	25.3	25.8	23.8	24.3	24.2	24.7	25.2	
8H	24.3	24.8	24.8	25.2	25.7	23.7	24.2	24.2	24.6	25.1	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.8 / - 1.1					+ 1.1 / - 1.8					
1.5H	+ 0.6 / - 1.2					+ 0.5 / - 0.8					
2.0H	+ 2.3 / - 7.4					+ 2.3 / - 8.3					

CIE Pub.117 Corrected 15616 lm Total Lamp Luminous Flux. (8log(F/F0) = 9.5)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2017-10-30

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:5.300m [K=1.0000]  
 Remarks:

**UTILIZATION FACTORS TABLE**

NAME: YYF-035	TYPE:LED	WEIGHT:
SPEC.:2002/1000WHQI	DIM.:	SERIAL No.:1
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) $k(RI) \times RCR = 5$									
k = 0.60	65	55	49	65	55	49	64	55	49	43
0.80	76	66	60	75	66	60	74	65	60	54
1.00	85	76	70	84	75	70	82	76	69	63
1.25	92	83	78	90	83	77	88	81	77	71
1.50	96	89	83	95	88	83	92	86	81	75
2.00	102	95	91	100	94	90	97	92	88	81
2.50	104	99	94	102	97	93	99	95	91	84
3.00	107	102	98	105	100	97	101	97	94	87
4.00	110	105	102	107	104	101	103	100	98	89
5.00	111	108	105	109	106	103	105	102	100	91
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:2017-10-30

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:5.300m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

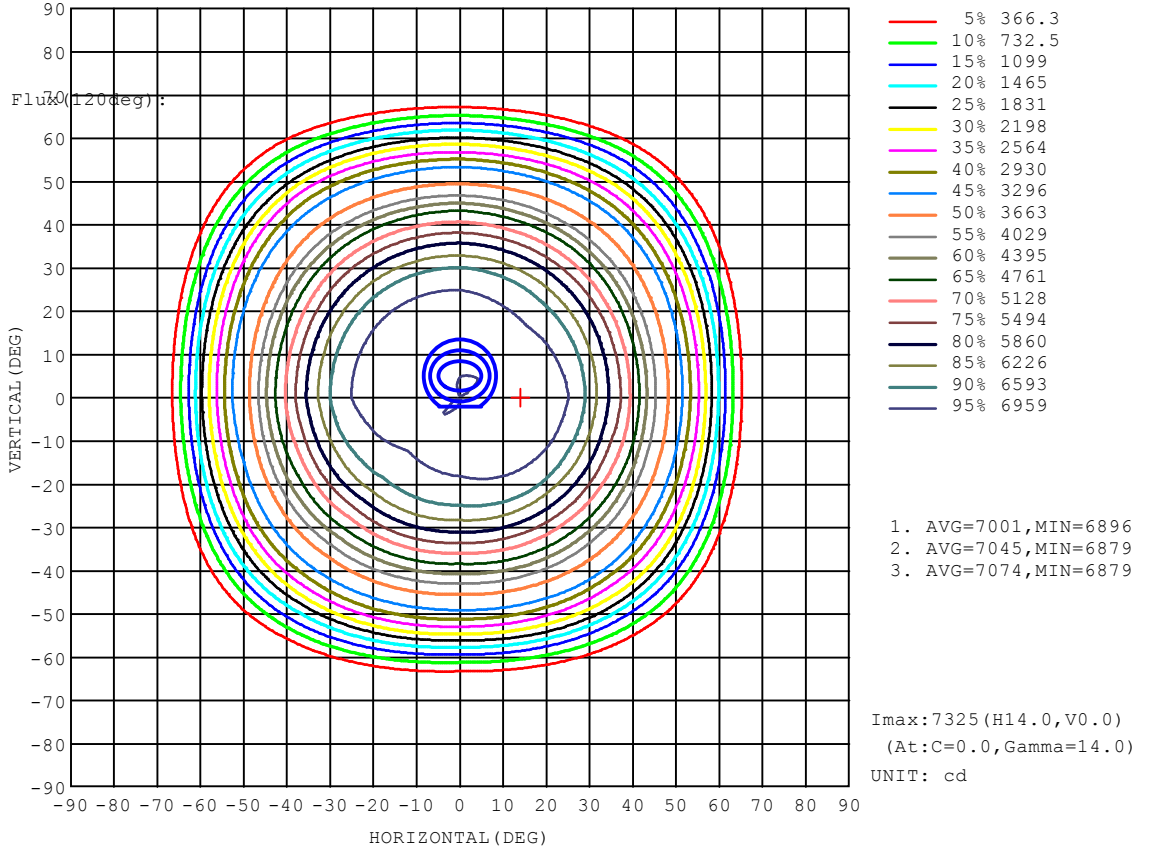
NAME: YYF-035	TYPE:LED	WEIGHT:
SPEC.:2002/1000WHQI	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

Conical surface Flux(90deg):

11067 lm  
 %lum = 70.9%  
 %lamp = 70.9%

Conical surface Flux(120deg):

14862 lm  
 %lum = 95.2%  
 %lamp = 95.2%

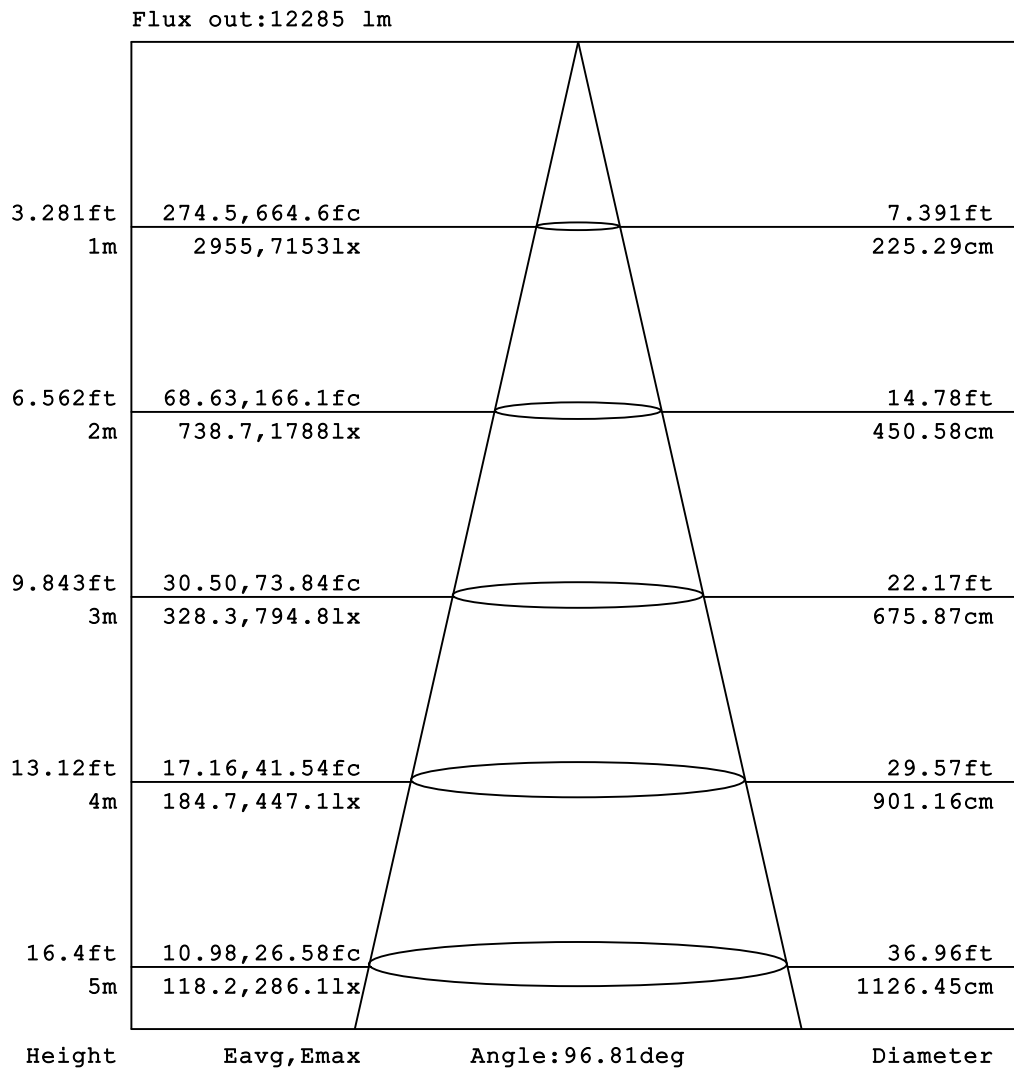


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2017-10-30

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:5.300m [K=1.0000]  
 Remarks:

**AAI Figure**

NAME: YYF-035	TYPE:LED	WEIGHT:
SPEC.:2002/1000WHQI	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



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

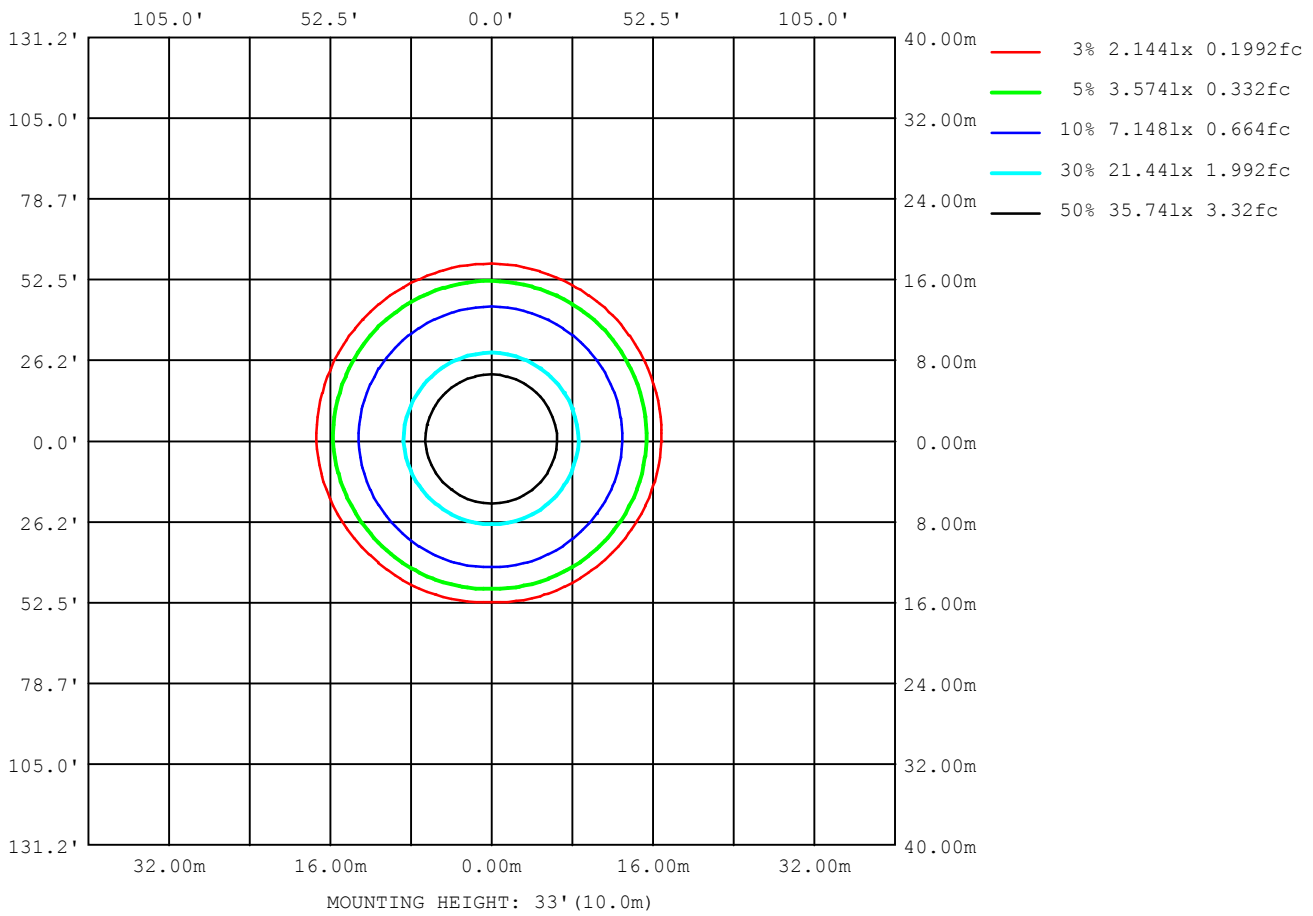
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2017-10-30

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:5.300m [K=1.0000]  
 Remarks:



**ISOLUX DIAGRAM**

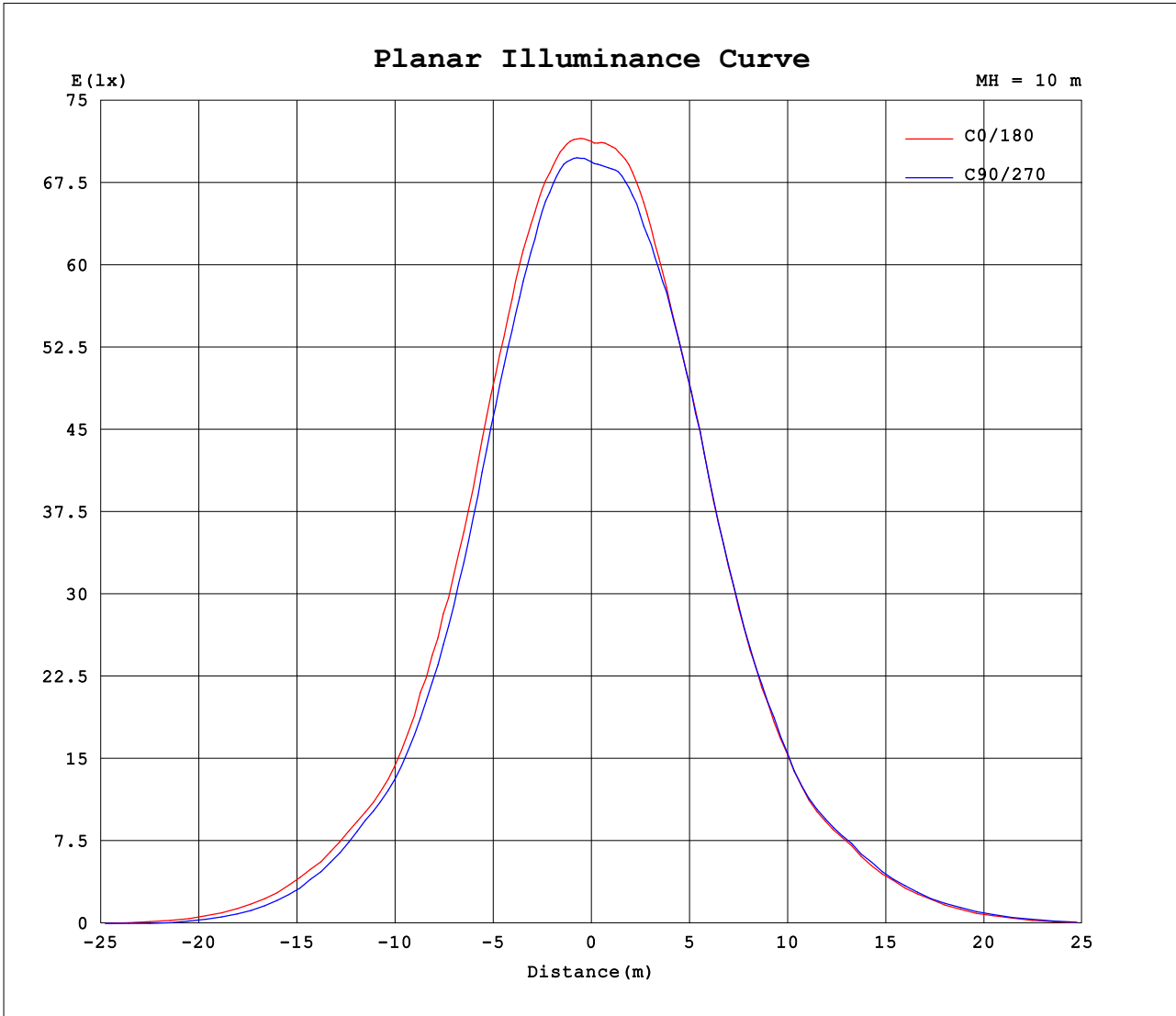
NAME: YYF-035	TYPE:LED	WEIGHT:
SPEC.:2002/1000WHQI	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2017-10-30

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:5.300m [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: 2017-10-30

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity: 65.0%  
 Test Distance: 5.300m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: YYF-035	TYPE:LED	WEIGHT:
SPEC.:2002/1000WHQI	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	45	90	135	180	225	270	315										
0	7128	7017	6941	6879	7128	7017	6941	6879										
5	7227	7156	7055	6947	7179	7048	6964	6931										
10	7302	7219	7133	7049	7288	7165	7075	7018										
15	7317	7165	7074	7020	7293	7225	7054	7032										
20	7241	7050	6880	6847	7157	7171	7055	7037										
25	6967	6778	6589	6620	6963	6970	6951	6864										
30	6471	6168	6005	6150	6596	6618	6597	6453										
35	5792	5484	5276	5428	5927	5957	5957	5834										
40	4989	4720	4514	4699	5196	5217	5191	5093										
45	4075	3848	3726	3869	4350	4370	4379	4170										
50	3493	3318	3153	3309	3508	3603	3602	3559										
55	2623	2266	2136	2410	2808	2980	2953	2778										
60	1422	1102	972	1276	1757	1846	1841	1678										
65	396	215	128	281	656	756	768	634										
70	21.5	21.4	21.1	20.2	26.6	70.3	32.4	26.3										
75	17.8	17.7	17.4	16.6	20.3	21.4	21.9	19.5										
80	15.5	15.0	14.7	14.3	17.6	18.0	18.5	16.5										
85	13.2	12.6	12.3	12.1	15.0	15.2	15.5	13.9										
90	11.4	11.0	11.1	10.9	12.7	12.6	12.9	11.7										
95	11.7	11.6	11.3	10.9	12.3	11.8	12.1	11.3										
100	13.0	13.0	12.8	12.3	13.4	12.7	12.7	12.4										
105	14.9	14.9	14.7	14.1	16.2	15.0	14.6	15.0										
110	16.9	17.0	16.8	16.2	20.1	18.7	18.1	18.8										
115	19.0	19.0	18.7	18.3	23.2	22.0	21.5	21.9										
120	21.3	21.1	21.2	20.3	25.9	24.5	24.2	24.4										
125	24.1	23.8	24.0	23.0	28.7	26.9	26.9	26.7										
130	27.4	26.7	26.8	25.8	31.2	29.1	29.3	28.9										
135	29.9	29.0	29.5	28.0	33.5	31.2	31.6	31.0										
140	32.0	30.9	31.7	30.1	36.0	33.4	33.9	33.2										
145	34.2	33.0	34.1	32.1	38.7	35.9	36.5	35.8										
150	37.0	35.6	36.8	34.3	41.7	38.6	39.4	38.5										
155	40.0	38.1	39.1	36.2	44.9	41.5	42.4	41.3										
160	42.8	41.4	41.9	39.7	47.9	44.5	45.2	44.2										
165	46.7	45.7	45.9	44.3	51.2	48.3	48.5	47.7										
170	52.1	51.3	51.1	50.0	54.9	52.3	52.1	51.4										
175	56.6	57.3	55.3	55.7	58.0	56.3	55.2	55.1										
180	59.1	59.2	57.2	57.6	59.9	58.6	57.6	57.3										

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2017-10-30

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:5.300m [K=1.0000]  
 Remarks: