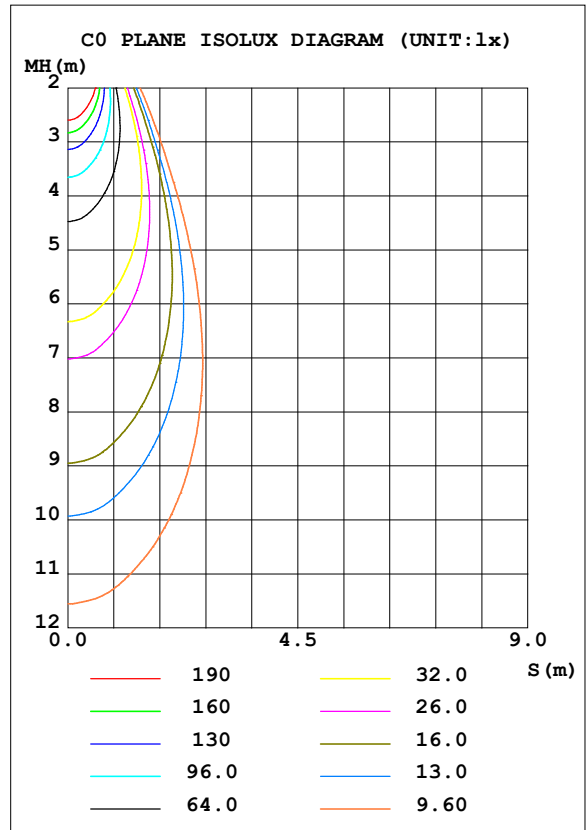
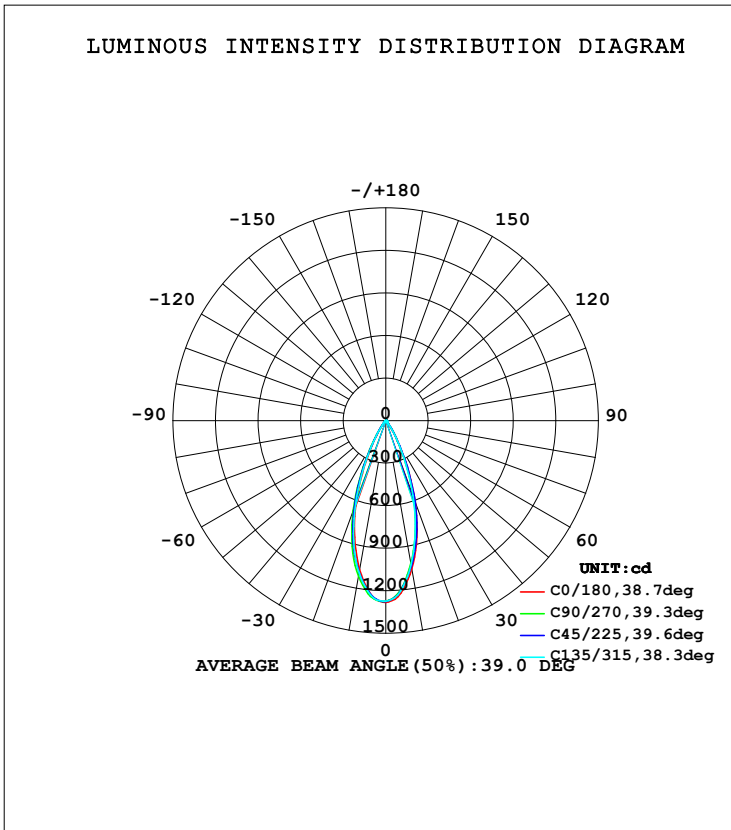


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:230.6V I:0.0359A P:7.791W PF:0.9414 Lamp Flux:593.486x1 lm		
NAME: F6085 MW	TYPE:	WEIGHT:
SPEC.:3000K Ra80	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 76.17 lm/W			
MODEL		I <sub>max</sub> (cd)	1282	S/MH (C0/180)	0.63
NOMINAL POWER (W)	8	LOR (%)	100.0	S/MH (C90/270)	0.65
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	593.49	η UP, DN (C0-180)	0.0, 48.2
NOMINAL FLUX (lm)	593.486	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	220.0	η down (%)	100.0	CIBSE SHR MAX	0.65



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2015-09-09

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity: 65%  
 Test Distance: 3.460m [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	1061	1042	1023	1032	1066	1086	1113	1090	0- 10	111.4	111.4	18.8,18.8
20	606.9	607.3	570.2	563.6	610.7	651.5	674.1	625.4	10- 20	234.0	345.4	58.2,58.2
30	168.3	175.3	166.7	163.0	171.5	189.2	204.2	180.6	20- 30	168.4	513.8	86.6,86.6
40	31.81	34.09	30.15	26.81	31.30	36.41	35.89	28.78	30- 40	52.72	566.5	95.5,95.5
50	12.09	11.82	11.03	10.44	11.42	12.29	12.33	11.69	40- 50	14.04	580.6	97.8,97.8
60	7.032	6.223	5.087	5.813	6.254	5.911	5.713	6.668	50- 60	7.820	588.4	99.1,99.1
70	2.883	1.866	1.464	1.671	2.138	1.412	1.704	2.055	60- 70	3.640	592.0	99.8,99.8
80	1.288	0.5736	0.0942	0.5071	0.8968	0.3675	0.1335	0.4911	70- 80	1.316	593.3	100,100
90	0.0160	0.0107	0.0115	0.0107	0.0089	0.0071	0.0027	0.0053	80- 90	0.1559	593.5	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

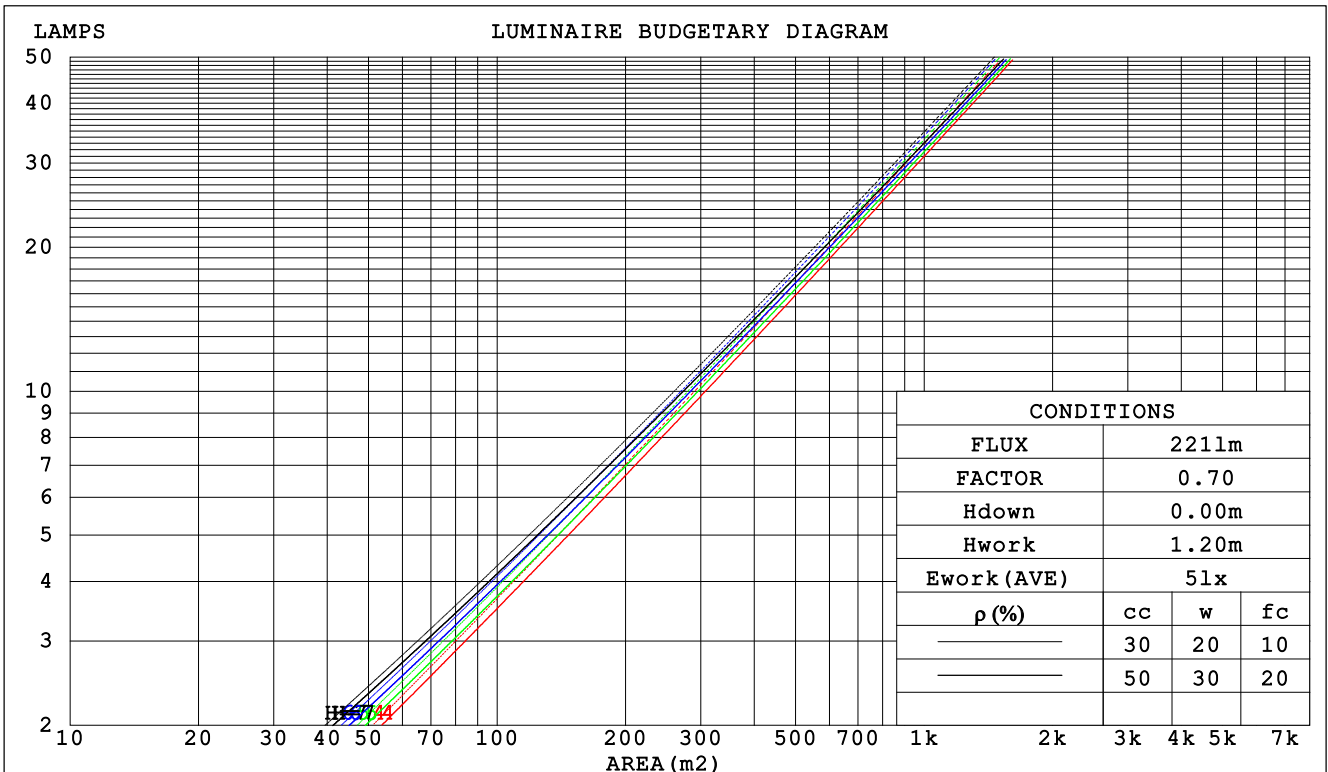
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2015-09-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity:65%  
 Test Distance:3.460m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:230.6V I:0.0359A P:7.791W PF:0.9414 Lamp Flux:593.486x1 lm		
NAME: F6085 MW	TYPE:	WEIGHT:
SPEC.:3000K Ra80	DIM.:	SERIAL No.:1
MFR.:	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															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	1.12	1.09	1.07	1.10	1.08	1.06	1.06	1.04	1.02	1.02	1.01	.99	.98	.97	.97	.95														
2.0	1.05	1.01	.98	1.03	1.00	.97	1.00	.98	.95	.97	.95	.93	.95	.93	.91	.90														
3.0	.99	.95	.91	.98	.94	.91	.95	.92	.89	.93	.90	.88	.91	.88	.86	.85														
4.0	.94	.89	.85	.93	.88	.85	.91	.87	.84	.89	.86	.83	.87	.84	.82	.81														
5.0	.89	.84	.80	.88	.84	.80	.87	.82	.79	.85	.81	.79	.84	.80	.78	.77														
6.0	.85	.80	.76	.84	.79	.76	.83	.78	.75	.81	.78	.75	.80	.77	.74	.73														
7.0	.81	.76	.72	.80	.75	.72	.79	.75	.72	.78	.74	.71	.77	.74	.71	.70														
8.0	.77	.72	.69	.77	.72	.69	.76	.71	.68	.75	.71	.68	.74	.70	.68	.67														
9.0	.74	.69	.66	.74	.69	.66	.73	.68	.65	.72	.68	.65	.71	.68	.65	.64														
10.0	.71	.66	.63	.71	.66	.63	.70	.66	.63	.69	.65	.62	.69	.65	.62	.61														



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2015-09-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity:65%  
 Test Distance:3.460m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:230.6V I:0.0359A P:7.791W PF:0.9414 Lamp Flux:593.486x1 lm		
NAME: F6085 MW	TYPE:	WEIGHT:
SPEC.:3000K Ra80	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.160	.091	.029	.154	.088	.028	.141	.081	.026	.130	.075	.024	.119	.069	.022	
2.0	.152	.083	.025	.146	.080	.025	.136	.075	.023	.126	.071	.022	.117	.066	.021	
3.0	.143	.076	.023	.138	.074	.022	.130	.070	.021	.121	.067	.020	.114	.063	.020	
4.0	.135	.070	.021	.131	.069	.020	.124	.066	.020	.117	.063	.019	.110	.060	.018	
5.0	.128	.065	.019	.125	.064	.019	.118	.062	.018	.112	.059	.018	.107	.057	.017	
6.0	.122	.061	.018	.119	.060	.017	.113	.058	.017	.108	.056	.017	.103	.054	.016	
7.0	.116	.058	.016	.114	.057	.016	.109	.055	.016	.104	.053	.016	.100	.052	.015	
8.0	.111	.054	.015	.109	.054	.015	.105	.052	.015	.100	.051	.015	.097	.050	.014	
9.0	.107	.052	.014	.105	.051	.014	.101	.050	.014	.097	.049	.014	.093	.047	.014	
10.0	.102	.049	.014	.101	.049	.014	.097	.048	.013	.094	.046	.013	.090	.046	.013	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.140	.113	.092	.120	.098	.080	.082	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.119	.087	.062	.102	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.111	.077	.052	.096	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.104	.069	.044	.090	.060	.039	.062	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.098	.063	.038	.085	.054	.033	.059	.038	.024	.034	.023	.014	.011	.007	.005	
9.0	.093	.057	.033	.080	.050	.029	.056	.035	.021	.032	.021	.012	.010	.007	.004	
10.0	.088	.053	.029	.076	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2015-09-09

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity:65%  
 Test Distance:3.460m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:230.6V I:0.0359A P:7.791W PF:0.9414 Lamp Flux:593.486x1 lm										
NAME: F6085 MW					TYPE:			WEIGHT:		
SPEC.:3000K Ra80					DIM.:			SERIAL No.:1		
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	10.3	11.1	10.5	11.2	11.4	10.0	10.8	10.2	11.0	11.2
3H	10.4	11.1	10.6	11.3	11.5	10.0	10.7	10.2	10.9	11.1
4H	10.4	11.1	10.7	11.3	11.6	9.9	10.7	10.2	10.9	11.1
6H	10.4	11.1	10.7	11.4	11.6	9.9	10.6	10.2	10.8	11.0
8H	10.4	11.1	10.7	11.3	11.6	9.8	10.5	10.1	10.7	11.0
12H	10.4	11.1	10.7	11.3	11.6	9.8	10.4	10.1	10.7	10.9
4H 2H	10.2	10.9	10.5	11.1	11.3	10.0	10.7	10.2	10.9	11.1
3H	10.4	11.0	10.7	11.2	11.5	10.0	10.6	10.3	10.8	11.1
4H	10.4	11.0	10.8	11.3	11.6	9.9	10.5	10.3	10.8	11.1
6H	10.5	11.0	10.9	11.3	11.7	9.9	10.4	10.3	10.7	11.1
8H	10.5	11.0	10.9	11.3	11.7	9.8	10.3	10.2	10.6	11.0
12H	10.5	10.9	10.9	11.3	11.7	9.8	10.2	10.2	10.6	11.0
8H 4H	10.3	10.8	10.7	11.1	11.5	9.9	10.3	10.3	10.7	11.0
6H	10.4	10.8	10.9	11.2	11.6	9.8	10.2	10.2	10.6	11.0
8H	10.5	10.8	10.9	11.2	11.7	9.7	10.1	10.2	10.5	10.9
12H	10.5	10.8	10.9	11.2	11.7	9.7	10.0	10.2	10.4	10.9
12H 4H	10.3	10.7	10.7	11.1	11.5	9.8	10.2	10.2	10.6	11.0
6H	10.4	10.7	10.8	11.1	11.6	9.8	10.1	10.2	10.5	11.0
8H	10.4	10.7	10.9	11.1	11.6	9.7	10.0	10.2	10.4	10.9
Variations with the observer position at spacings:										
S = 1.0H	+ 1.8 / - 2.0					+ 2.4 / - 3.1				
1.5H	+ 3.3 / - 1.4					+ 4.0 / - 2.0				
2.0H	+ 1.4 / - 1.5					+ 1.8 / - 1.9				

CIE Pub.117 Corrected 593.5 lm Total Lamp Luminous Flux.(8log(F/F0) = -1.8)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2015-09-09

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity:65%  
 Test Distance:3.460m [K=1.0000]  
 Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:230.6V I:0.0359A P:7.791W PF:0.9414 Lamp Flux:593.486x1 lm		
NAME: F6085 MW	TYPE:	WEIGHT:
SPEC.:3000K Ra80	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:

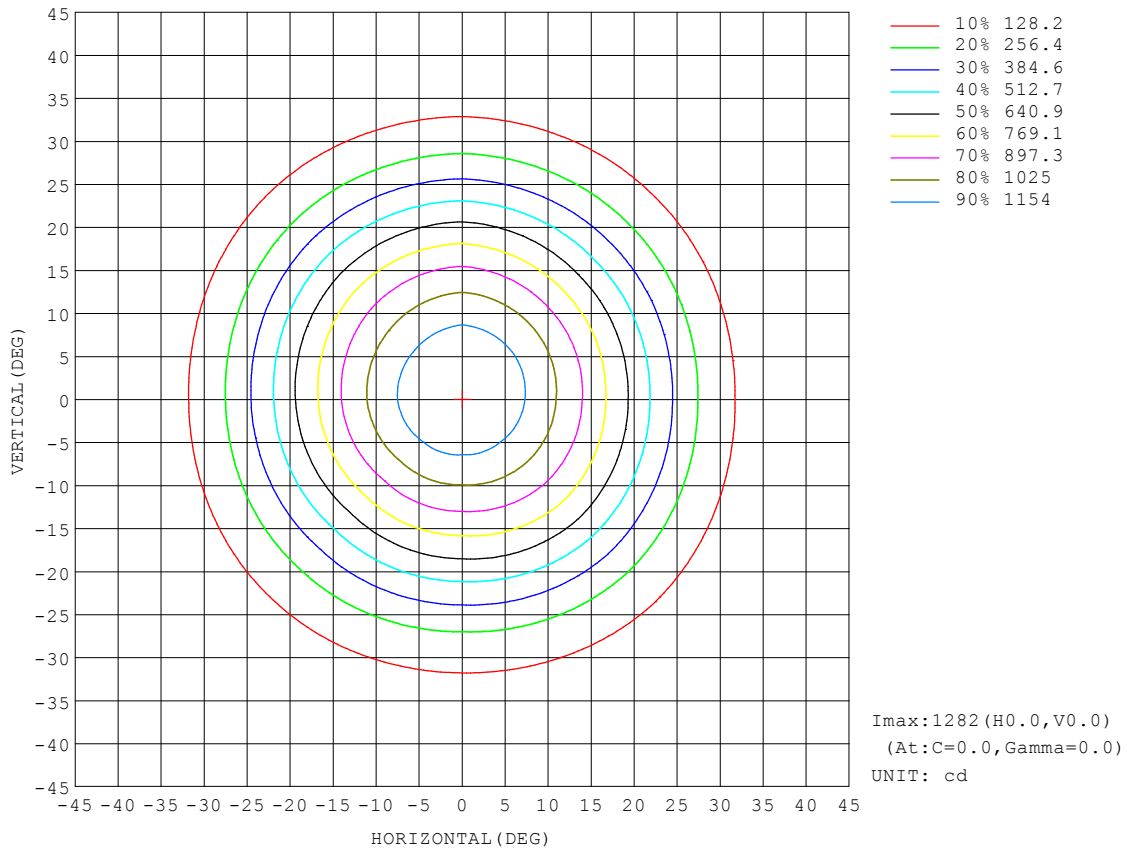
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	89	83	79	88	82	79	87	82	79	75
0.80	96	90	87	95	90	87	94	89	86	83
1.00	100	95	91	99	94	91	98	94	90	87
1.25	104	99	96	103	98	95	101	97	94	90
1.50	107	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
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:25DEG  
 Operators:  
 Test Date:2015-09-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity:65%  
 Test Distance:3.460m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:230.6V I:0.0359A P:7.791W PF:0.9414 Lamp Flux:593.486x1 lm		
NAME: F6085 MW	TYPE:	WEIGHT:
SPEC.:3000K Ra80	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:

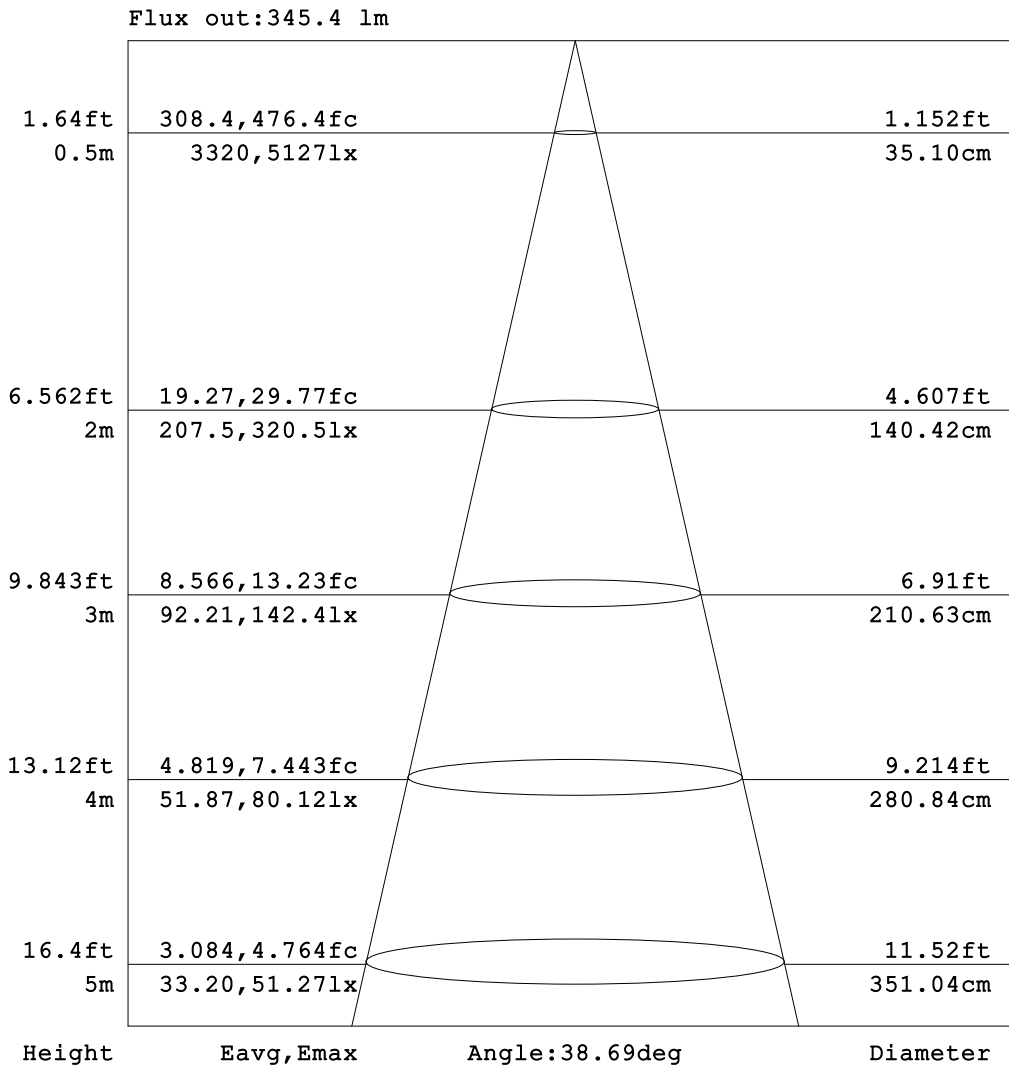


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2015-09-09

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity:65%  
 Test Distance:3.460m [K=1.0000]  
 Remarks:

**AAI Figure**

Test:U:230.6V I:0.0359A P:7.791W PF:0.9414 Lamp Flux:593.486x1 lm		
NAME: F6085 MW	TYPE:	WEIGHT:
SPEC.:3000K Ra80	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:



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

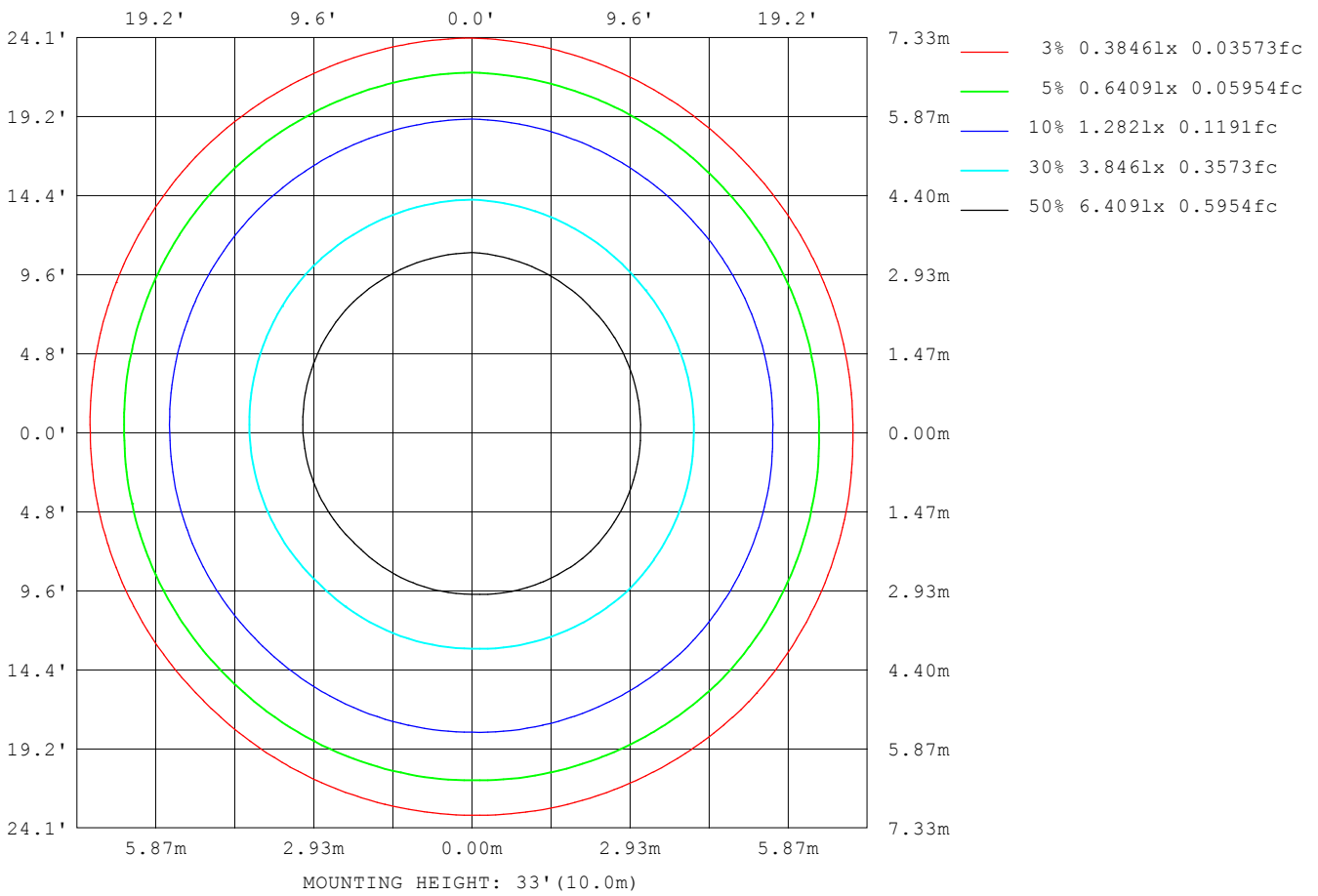
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2015-09-09

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity:65%  
 Test Distance:3.460m [K=1.0000]  
 Remarks:



**ISOLUX DIAGRAM**

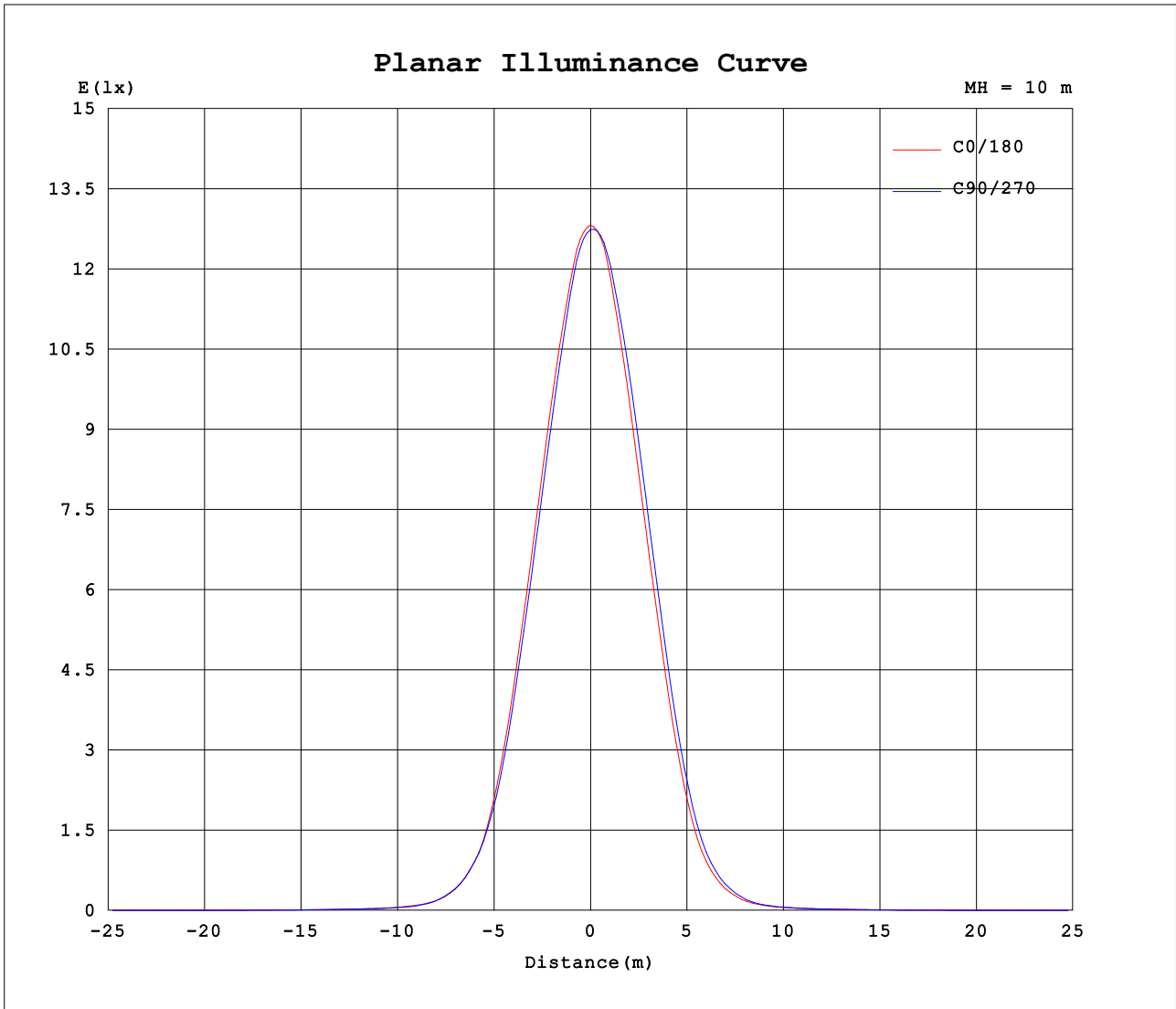
Test:U:230.6V I:0.0359A P:7.791W PF:0.9414 Lamp Flux:593.486x1 lm		
NAME: F6085 MW	TYPE:	WEIGHT:
SPEC.:3000K Ra80	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2015-09-09

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity:65%  
 Test Distance:3.460m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2015-09-09

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity: 65%  
 Test Distance: 3.460m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.6V I:0.0359A P:7.791W PF:0.9414 Lamp Flux:593.486x1 lm		
NAME: F6085 MW	TYPE:	WEIGHT:
SPEC.:3000K Ra80	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	45	90	135	180	225	270	315											
0	1282	1276	1273	1272	1282	1276	1273	1272											
5	1221	1204	1199	1207	1229	1229	1244	1236											
10	1061	1042	1023	1032	1066	1086	1113	1090											
15	850	842	808	808	852	892	918	877											
20	607	607	570	564	611	652	674	625											
25	359	363	335	334	363	397	414	378											
30	168	175	167	163	172	189	204	181											
35	73.5	79.4	75.4	71.9	74.3	83.7	90.1	78.0											
40	31.8	34.1	30.2	26.8	31.3	36.4	35.9	28.8											
45	17.2	17.7	15.7	14.1	16.4	18.7	18.2	15.8											
50	12.1	11.8	11.0	10.4	11.4	12.3	12.3	11.7											
55	9.29	8.81	8.07	8.02	8.64	8.97	8.79	9.07											
60	7.03	6.22	5.09	5.81	6.25	5.91	5.71	6.67											
65	4.47	3.71	2.60	3.56	3.81	3.31	3.00	4.12											
70	2.88	1.87	1.46	1.67	2.14	1.41	1.70	2.05											
75	1.76	1.33	1.05	1.12	1.21	1.02	1.25	1.42											
80	1.29	0.57	0.09	0.51	0.90	0.37	0.13	0.49											
85	0.46	0.02	0.03	0.02	0.24	0.02	0.02	0.02											
90	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.01											

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2015-09-09

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.285  
 Humidity:65%  
 Test Distance:3.460m [K=1.0000]  
 Remarks: