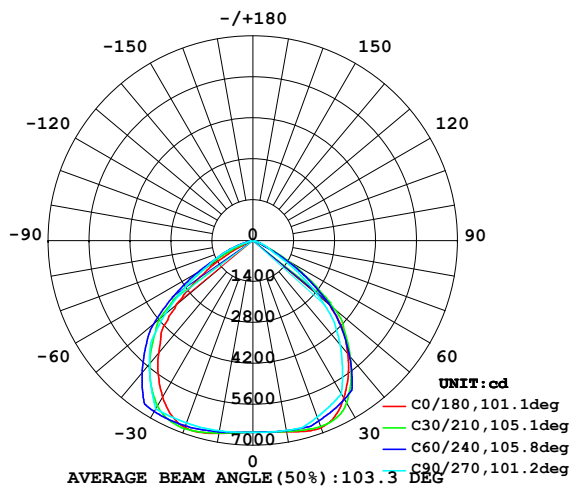


LUMINAIRE PHOTOMETRIC TEST REPORT

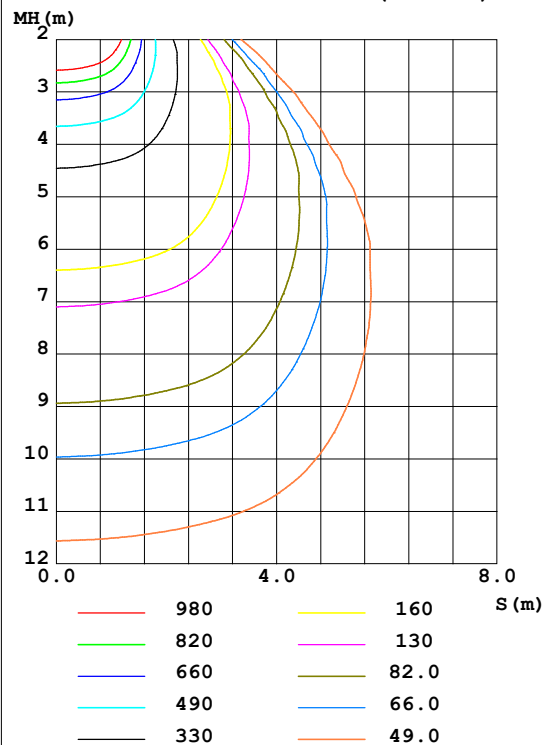
Test:U:231.3V I:0.6726A P:150.3W PF:0.9662 Lamp Flux:16057.7x1 lm		
NAME: BT-FL150W	TYPE:glass+AL reflector	WEIGHT:6.033kg
SPEC.:5000K 182LEDs R80 120D	DIM.: L326*W390*H195.5mm	SERIAL No.:
MFR.: EVERFINE	SUR.:200*200mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 106.82 lm/W			
MODEL	phipis3030	Imax(cd)	6852	S/MH(C0/180)	1.35
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	1.42
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	16058	η UP,DN(C0-180)	0.0,46.8
NOMINAL FLUX(lm)	16057.7	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,53.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:DEG
Operators:
Test Date:2016-01-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0160]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	6566	6570	6573	6588	6597	6595	6578	6572	0- 5	157.0	157.0	0.98,0.98
10	6640	6613	6592	6638	6689	6660	6604	6617	5- 10	472.7	629.7	3.92,3.92
15	6755	6664	6612	6697	6794	6741	6630	6674	10- 15	790.8	1421	8.85,8.85
20	6811	6720	6426	6747	6803	6823	6635	6739	15- 20	1105	2526	15.7,15.7
25	6635	6613	6240	6604	6591	6815	6640	6765	20- 25	1398	3924	24.4,24.4
30	6218	6374	6054	6336	6175	6684	6645	6678	25- 30	1648	5572	34.7,34.7
35	5683	5999	5348	5940	5643	6420	6077	6451	30- 35	1822	7394	46,46
40	5054	5450	4641	5386	5016	5976	5508	6033	35- 40	1881	9275	57.8,57.8
45	4411	4509	3935	4471	4426	5136	4939	5196	40- 45	1837	11112	69.2,69.2
50	3457	3588	2890	3564	3434	4296	3911	4349	45- 50	1682	12794	79.7,79.7
55	2396	2606	1846	2668	2332	3500	2883	3538	50- 55	1373	14167	88.2,88.2
60	1274	1522	801.1	1561	1234	2268	1855	2293	55- 60	964.0	15131	94.2,94.2
65	393.8	598.1	546.4	612.8	323.1	1119	1268	1129	60- 65	539.9	15671	97.6,97.6
70	170.0	107.4	291.8	117.6	171.4	410.1	681.5	418.6	65- 70	252.6	15923	99.2,99.2
75	69.64	50.44	37.16	58.66	65.90	177.8	94.70	186.3	70- 75	105.7	16029	99.8,99.8
80	23.71	14.71	0	16.52	20.23	27.99	0	27.60	75- 80	24.94	16054	100,100
85	0.9409	0	0	0	0.7243	0	0	0	80- 85	3.546	16058	100,100
90	0.1683	0	0	0	1.682	0	0	0	85- 90	0.1752	16058	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd MAX (Ii - Iavg)/Iavg (0-135) = 100.0 %									UNIT:lm		

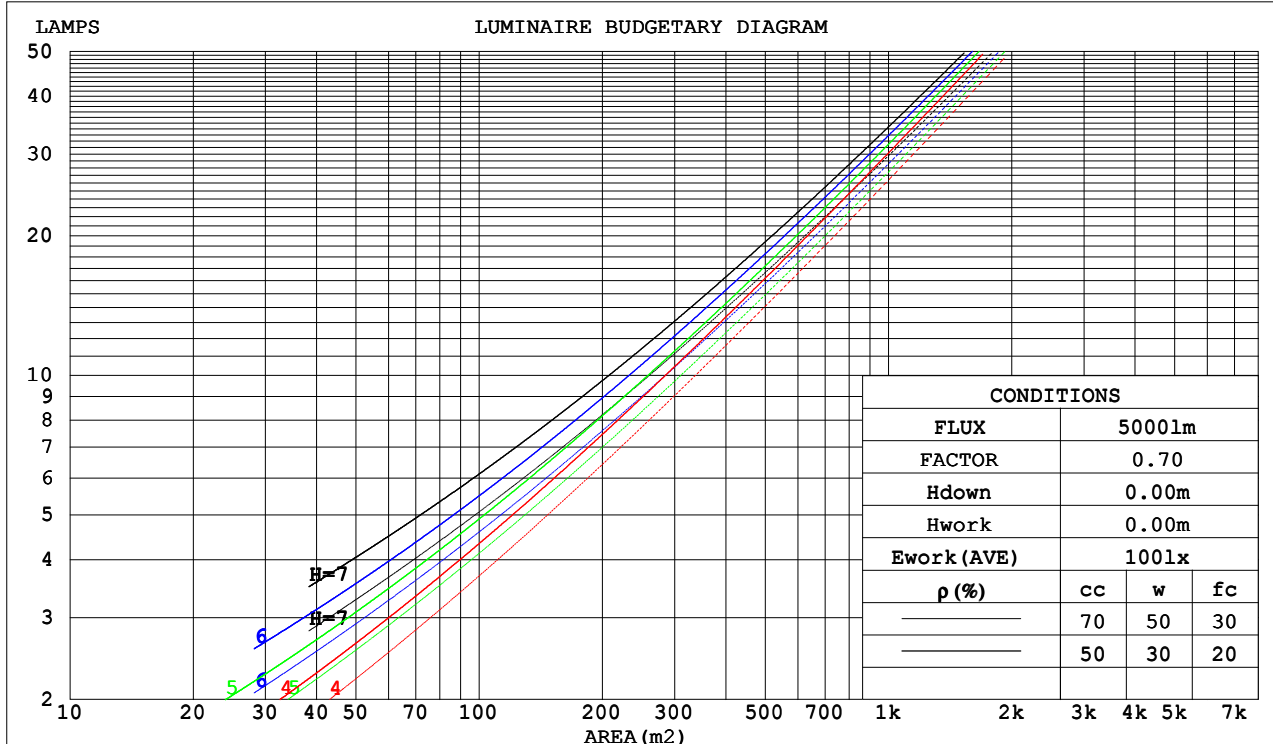
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: DEG
 Operators:
 Test Date: 2016-01-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity: 65.0%
 Test Distance: 9.390m [K=1.0160]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:231.3V I:0.6726A P:150.3W PF:0.9662 Lamp Flux:16057.7x1 lm		
NAME: BT-FL150W	TYPE:glass+AL reflector	WEIGHT:6.033kg
SPEC.:5000K 182LEDs R80 120D	DIM.: L326*W390*H195.5mm	SERIAL No.:
MFR.: EVERFINE	SUR.:200*200mm	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	1.08	1.04	1.01	1.05	1.02	.00	1.01	.99	.97	.97	.95	.94	.94	.92	.91	.89
2.0	.96	.91	.86	.95	.89	.85	.91	.87	.83	.88	.84	.81	.85	.82	.80	.78
3.0	.86	.79	.74	.85	.78	.73	.82	.77	.72	.79	.75	.71	.77	.73	.70	.68
4.0	.78	.70	.64	.76	.69	.64	.74	.68	.63	.72	.66	.62	.70	.65	.61	.59
5.0	.70	.62	.56	.69	.61	.56	.67	.60	.55	.65	.59	.55	.63	.58	.54	.52
6.0	.63	.55	.50	.62	.55	.49	.61	.54	.49	.59	.53	.49	.58	.52	.48	.46
7.0	.58	.50	.44	.57	.49	.44	.55	.49	.44	.54	.48	.43	.53	.47	.43	.41
8.0	.53	.45	.40	.52	.45	.39	.51	.44	.39	.50	.44	.39	.49	.43	.39	.37
9.0	.49	.41	.36	.48	.41	.36	.47	.40	.35	.46	.40	.35	.45	.39	.35	.33
10.0	.45	.37	.32	.44	.37	.32	.43	.37	.32	.42	.36	.32	.42	.36	.32	.30



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: DEG
Operators:
Test Date: 2016-01-22

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity: 65.0%
Test Distance: 9.390m [K=1.0160]
Remarks:

WEC AND CCEC

Test:U:231.3V I:0.6726A P:150.3W PF:0.9662 Lamp Flux:16057.7x1 lm		
NAME: BT-FL150W	TYPE:glass+AL reflector	WEIGHT:6.033kg
SPEC.:5000K 182LEDs R80 120D	DIM.: L326*W390*H195.5mm	SERIAL No.:
MFR.: EVERFINE	SUR.:200*200mm	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	.238	.135	.043	.231	.132	.042	.218	.125	.040	.206	.119	.038	.195	.113	.037		
2.0	.235	.129	.039	.229	.126	.039	.218	.121	.038	.207	.116	.036	.198	.112	.035		
3.0	.225	.120	.036	.220	.118	.035	.210	.114	.035	.201	.110	.034	.193	.107	.033		
4.0	.214	.111	.033	.210	.110	.032	.201	.107	.032	.193	.104	.031	.185	.101	.031		
5.0	.203	.103	.030	.198	.102	.030	.191	.099	.029	.184	.097	.029	.177	.095	.028		
6.0	.191	.096	.027	.188	.095	.027	.181	.093	.027	.174	.091	.027	.168	.089	.026		
7.0	.181	.089	.025	.178	.088	.025	.171	.087	.025	.166	.085	.025	.160	.083	.024		
8.0	.171	.083	.023	.168	.083	.023	.162	.081	.023	.157	.080	.023	.152	.078	.023		
9.0	.162	.078	.022	.159	.078	.022	.154	.076	.022	.149	.075	.021	.145	.074	.021		
10.0	.153	.074	.020	.151	.073	.020	.147	.072	.020	.142	.071	.020	.138	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.175	.157	.140	.150	.135	.121	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.165	.132	.105	.141	.114	.091	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.156	.114	.081	.134	.098	.070	.092	.068	.049	.053	.040	.029	.017	.013	.009	
4.0	.148	.100	.064	.127	.087	.055	.087	.060	.039	.051	.035	.023	.016	.012	.008	
5.0	.141	.089	.051	.121	.077	.045	.084	.054	.032	.048	.032	.019	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.129	.074	.036	.111	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.123	.068	.031	.106	.059	.027	.073	.042	.019	.043	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: DEG
 Operators:
 Test Date: 2016-01-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity: 65.0%
 Test Distance: 9.390m [K=1.0160]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:231.3V I:0.6726A P:150.3W PF:0.9662 Lamp Flux:16057.7x1 lm										
NAME: BT-FL150W					TYPE:glass+AL reflector			WEIGHT:6.033kg		
SPEC.:5000K 182LEDs R80 120D					DIM.: L326*W390*H195.5mm			SERIAL No.:		
MFR.: EVERFINE					SUR.:200*200mm			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	28.2	29.6	28.5	29.8	30.0	27.7	29.0	27.9	29.2	29.4
3H	28.1	29.3	28.4	29.5	29.8	27.7	28.9	28.0	29.1	29.4
4H	28.0	29.2	28.3	29.4	29.6	27.6	28.8	27.9	29.0	29.2
6H	27.9	29.0	28.2	29.2	29.5	27.5	28.6	27.8	28.8	29.1
8H	27.9	28.9	28.2	29.2	29.4	27.4	28.5	27.8	28.8	29.0
12H	27.8	28.8	28.1	29.1	29.4	27.4	28.4	27.7	28.7	29.0
4H 2H	28.3	29.4	28.6	29.7	29.9	27.8	28.9	28.1	29.1	29.4
3H	28.1	29.1	28.5	29.4	29.7	27.8	28.8	28.1	29.0	29.3
4H	28.0	28.9	28.4	29.2	29.6	27.7	28.6	28.1	28.9	29.2
6H	28.0	28.7	28.3	29.1	29.4	27.6	28.4	28.0	28.7	29.1
8H	27.9	28.6	28.3	29.0	29.4	27.6	28.3	28.0	28.6	29.0
12H	27.9	28.5	28.3	28.9	29.3	27.5	28.2	27.9	28.6	29.0
8H 4H	27.9	28.6	28.3	29.0	29.4	27.6	28.3	28.0	28.6	29.0
6H	27.8	28.4	28.3	28.8	29.2	27.5	28.1	27.9	28.5	28.9
8H	27.8	28.3	28.2	28.7	29.2	27.4	28.0	27.9	28.4	28.8
12H	27.8	28.2	28.2	28.6	29.1	27.4	27.8	27.9	28.3	28.8
12H 4H	27.9	28.5	28.3	28.9	29.3	27.5	28.2	27.9	28.6	29.0
6H	27.8	28.3	28.2	28.7	29.2	27.4	28.0	27.9	28.4	28.8
8H	27.8	28.2	28.2	28.6	29.1	27.4	27.8	27.9	28.3	28.8
Variations with the observer position at spacings:										
S = 1.0H	+ 1.2 / - 1.4					+ 1.4 / - 1.8				
1.5H	+ 0.7 / - 0.8					+ 0.7 / - 1.0				
2.0H	+ 2.4 / - 5.2					+ 2.4 / - 6.9				

CIE Pub.117 Corrected 16058 lm Total Lamp Luminous Flux. (8log(F/F0) = 9.6)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:DEG
Operators:
Test Date:2016-01-22

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0160]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:231.3V I:0.6726A P:150.3W PF:0.9662 Lamp Flux:16057.7x1 lm		
NAME: BT-FL150W	TYPE:glass+AL reflector	WEIGHT:6.033kg
SPEC.:5000K 182LEDs R80 120D	DIM.: L326*W390*H195.5mm	SERIAL No.:
MFR.: EVERFINE	SUR.:200*200mm	PROTECTION ANGLE:

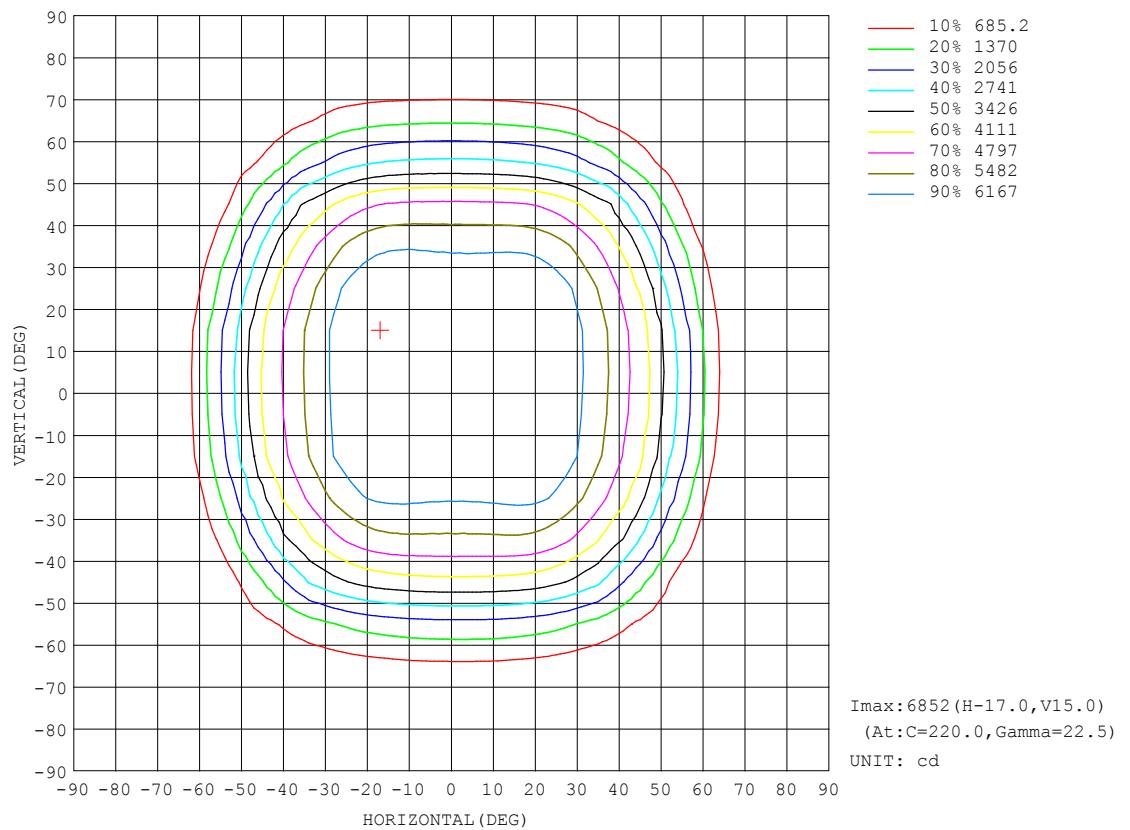
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	64	54	48	64	54	47	62	53	47	42
0.80	75	65	59	74	65	58	72	64	58	52
1.00	84	75	69	83	74	68	81	75	68	62
1.25	91	82	77	89	82	76	87	80	75	69
1.50	95	87	82	94	87	81	91	85	80	74
2.00	101	95	90	99	93	89	96	91	87	81
2.50	104	98	93	102	97	92	99	94	91	83
3.00	107	101	97	105	100	96	101	97	94	86
4.00	110	105	102	107	104	100	103	100	98	90
5.00	111	108	104	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: 5.0DEG
 Test Speed: HIGH
 Temperature: DEG
 Operators:
 Test Date: 2016-01-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity: 65.0%
 Test Distance: 9.390m [K=1.0160]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:231.3V I:0.6726A P:150.3W PF:0.9662 Lamp Flux:16057.7x1 lm		
NAME: BT-FL150W	TYPE:glass+AL reflector	WEIGHT:6.033kg
SPEC.:5000K 182LEDs R80 120D	DIM.: L326*W390*H195.5mm	SERIAL No.:
MFR.: EVERFINE	SUR.:200*200mm	PROTECTION ANGLE:

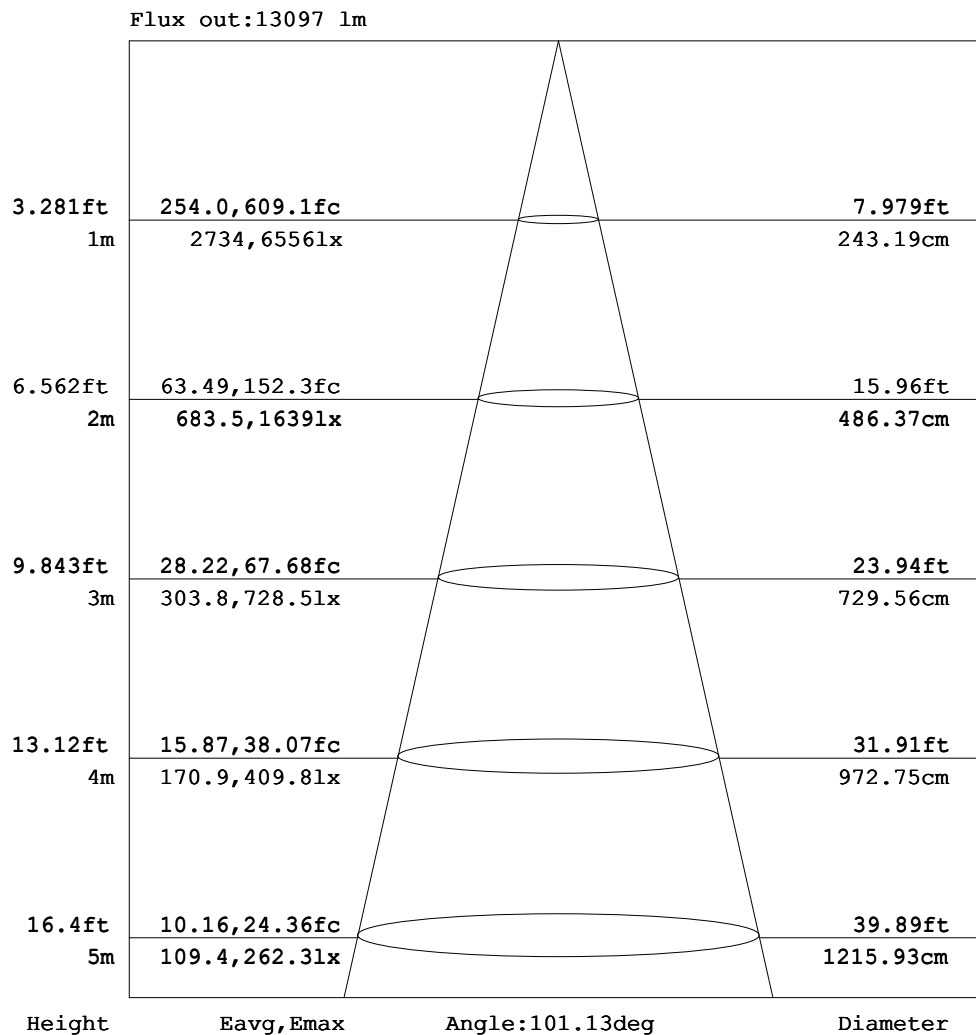


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:DEG
Operators:
Test Date:2016-01-22

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0160]
Remarks:

AAI Figure

Test:U:231.3V I:0.6726A P:150.3W PF:0.9662 Lamp Flux:16057.7x1 lm		
NAME: BT-FL150W	TYPE:glass+AL reflector	WEIGHT:6.033kg
SPEC.:5000K 182LEDs R80 120D	DIM.: L326*W390*H195.5mm	SERIAL No.:
MFR.: EVERFINE	SUR.:200*200mm	PROTECTION ANGLE:



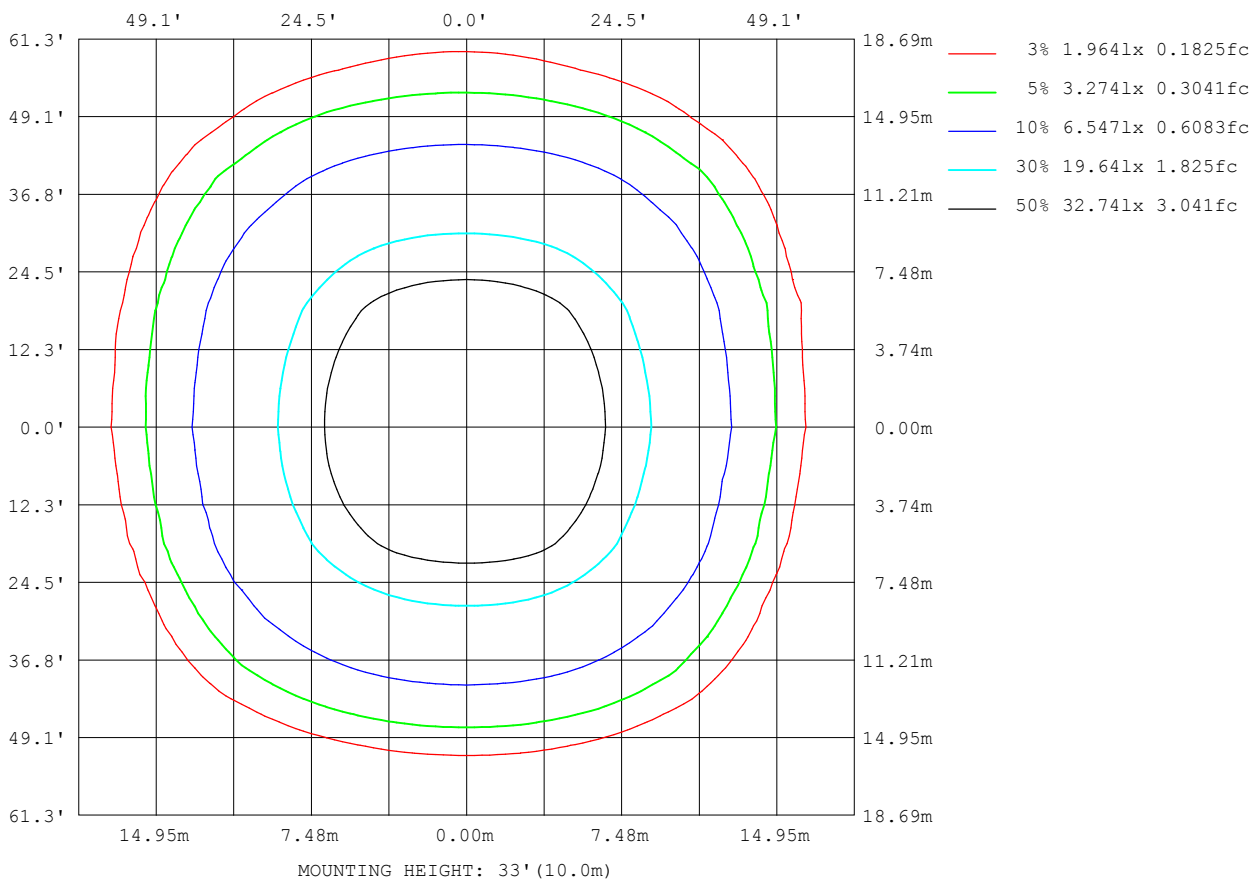
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: DEG
Operators:
Test Date: 2016-01-22

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity: 65.0%
Test Distance: 9.390m [K=1.0160]
Remarks:

ISOLUX DIAGRAM

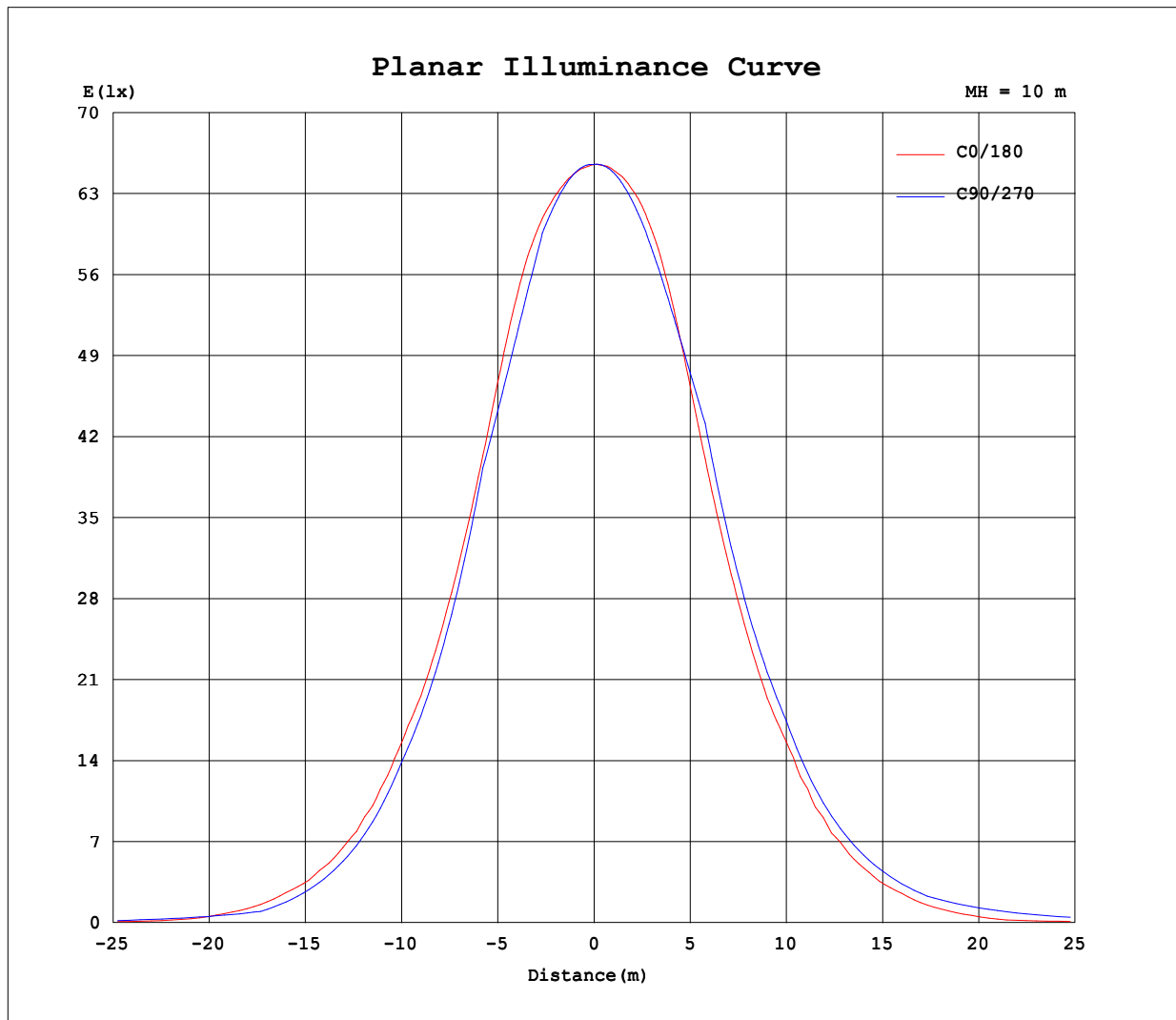
Test:U:231.3V I:0.6726A P:150.3W PF:0.9662 Lamp Flux:16057.7x1 lm		
NAME: BT-FL150W	TYPE:glass+AL reflector	WEIGHT:6.033kg
SPEC.:5000K 182LEDs R80 120D	DIM.: L326*W390*H195.5mm	SERIAL No.:
MFR.: EVERFINE	SUR.:200*200mm	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:DEG
Operators:
Test Date:2016-01-22

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0160]
Remarks:

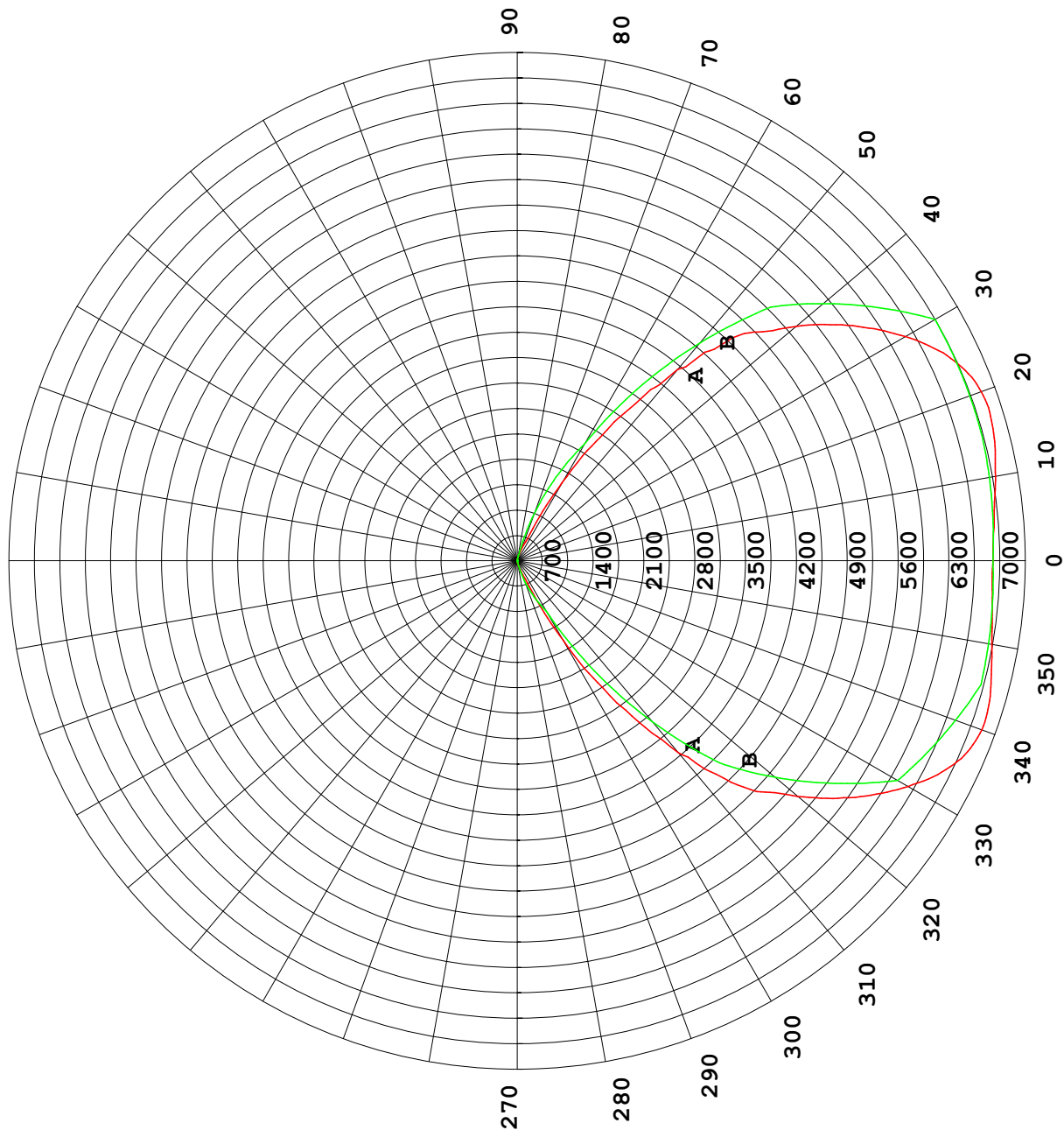
Planar Illuminance Curve

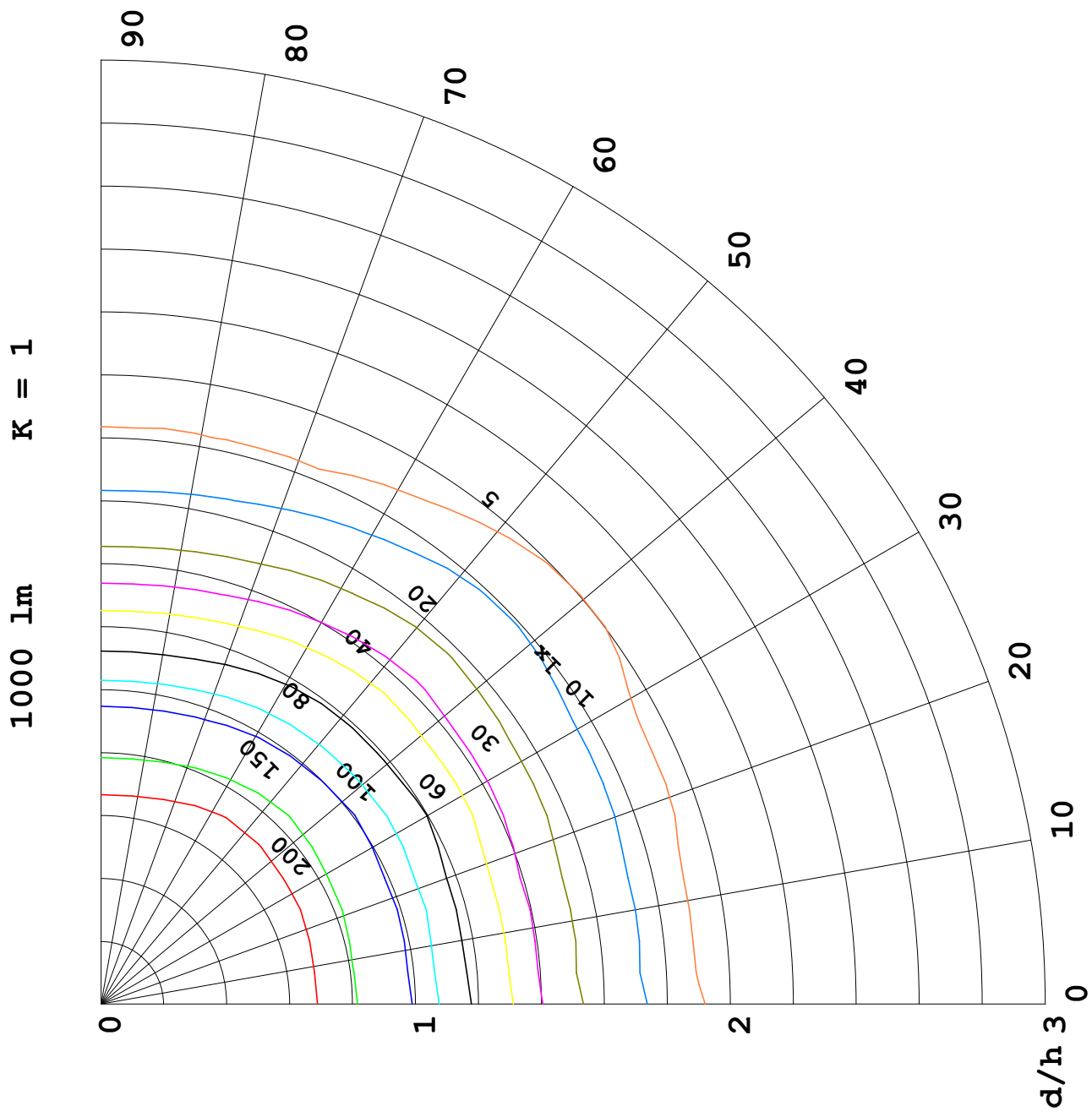


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: DEG
Operators:
Test Date: 2016-01-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity: 65.0%
Test Distance: 9.390m [K=1.0160]
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

