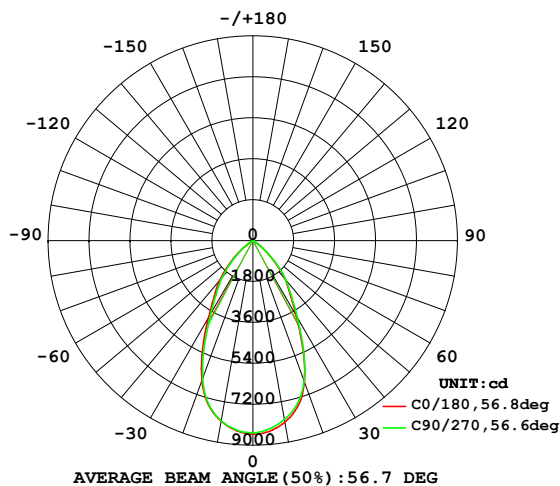


LUMINAIRE PHOTOMETRIC TEST REPORT

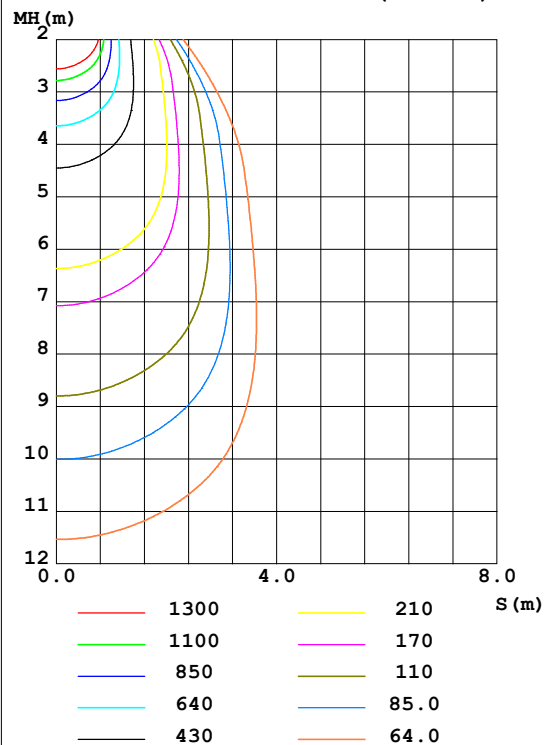
Test:U:220.7V I:0.4336A P:94.22W PF:0.9845 Lamp Flux:8588.58x1 lm		
NAME: BT-TH100W	TYPE:5000K	WEIGHT:3000g
SPEC.:60D	DIM.: 355*325mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 91.16 lm/W
MODEL	SMD3030	I _{max} (cd)	8514	S/MH(C0/180)	0.88	
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	0.86	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	8588.6	η UP,DN(C0-180)	0.4,50.0	
NOMINAL FLUX(lm)	8588.58	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.4,49.2	
LAMPS INSIDE	1	η up(%)	0.8	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	220	η down(%)	99.2	CIBSE SHR MAX	0.85	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:VISION
 Test Date:2015-6-19

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity:65.0%
 Test Distance:9.256m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	8107	7987	8061	8046					0- 10	788.6	788.6	9.18, 9.18
20	6628	6582	6571	6458					10- 20	2086	2875	33.5, 33.5
30	3808	3915	3896	3692					20- 30	2361	5236	61, 61
40	2190	2247	2259	2092					30- 40	1821	7057	82.2, 82.2
50	789.9	846.2	836.8	734.5					40- 50	1125	8182	95.3, 95.3
60	30.94	37.88	38.06	21.17					50- 60	296.3	8478	98.7, 98.7
70	15.41	13.76	16.01	12.35					60- 70	19.05	8497	98.9, 98.9
80	9.789	9.110	9.958	8.823					70- 80	12.22	8509	99.1, 99.1
90	7.370	7.535	7.833	7.623					80- 90	9.050	8518	99.2, 99.2
100	7.756	7.979	8.149	7.864					90-100	8.471	8527	99.3, 99.3
110	8.376	8.600	8.410	8.086					100-110	8.597	8535	99.4, 99.4
120	9.510	9.709	9.050	8.687					110-120	8.681	8544	99.5, 99.5
130	11.53	11.64	10.20	9.833					120-130	8.905	8553	99.6, 99.6
140	14.62	14.64	12.42	12.09					130-140	9.293	8562	99.7, 99.7
150	18.10	18.20	15.74	15.33					140-150	9.424	8572	99.8, 99.8
160	21.55	21.76	18.97	18.39					150-160	8.575	8580	99.9, 99.9
170	23.72	23.92	21.50	20.92					160-170	6.023	8586	100, 100
180	24.46	24.51	24.62	24.37					170-180	2.218	8589	100, 100
DEG	LUMINOUS INTENSITY:cd MAX (Ii - Iavg)/Iavg (0-135) = 341.9 %									UNIT:lm		

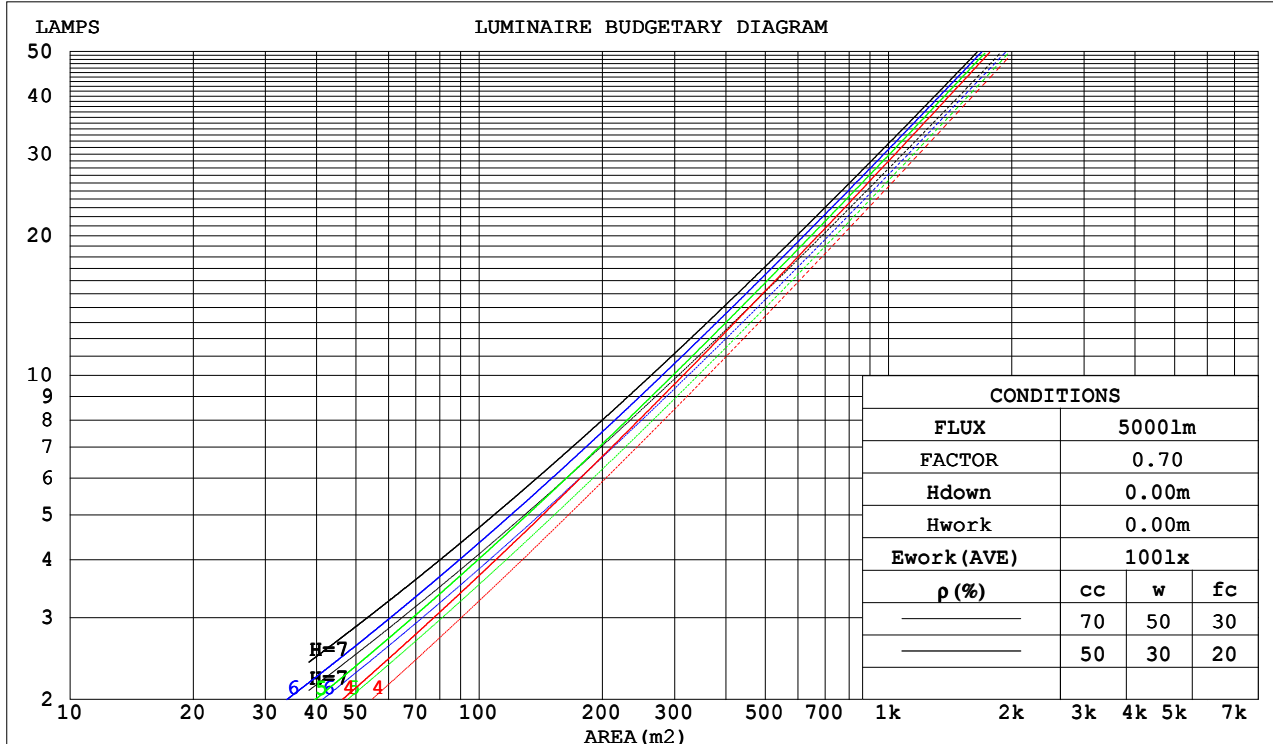
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:VISION
Test Date:2015-6-19

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.256m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.7V I:0.4336A P:94.22W PF:0.9845 Lamp Flux:8588.58x1 lm		
NAME: BT-TH100W	TYPE:5000K	WEIGHT:3000g
SPEC.:60D	DIM.: 355*325mm	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 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	1.10	1.07	1.05	1.08	1.05	1.03	1.03	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	.94	.88	.84	.92	.87	.83	.90	.85	.82	.87	.84	.81	.85	.82	.79	.78
4.0	.87	.81	.76	.86	.80	.76	.83	.79	.75	.81	.77	.74	.79	.76	.73	.71
5.0	.81	.74	.70	.80	.74	.69	.78	.73	.69	.76	.72	.68	.74	.70	.67	.66
6.0	.75	.69	.64	.74	.68	.64	.73	.67	.63	.71	.66	.63	.70	.66	.62	.61
7.0	.70	.64	.59	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.61	.58	.56
8.0	.66	.59	.55	.65	.59	.55	.64	.58	.54	.63	.58	.54	.62	.57	.54	.52
9.0	.62	.55	.51	.61	.55	.51	.60	.55	.51	.59	.54	.51	.58	.54	.50	.49
10.0	.58	.52	.48	.58	.52	.48	.57	.51	.48	.56	.51	.47	.55	.50	.47	.46



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:VISION
 Test Date:2015-6-19

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity:65.0%
 Test Distance:9.256m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.7V I:0.4336A P:94.22W PF:0.9845 Lamp Flux:8588.58x1 lm														
NAME: BT-TH100W					TYPE:5000K					WEIGHT:3000g				
SPEC.:60D					DIM.: 355*325mm					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	.191	.108	.034	.184	.105	.033	.171	.098	.031	.158	.091	.029	.147	.085	.028	
2.0	.184	.101	.031	.178	.098	.030	.167	.093	.029	.157	.088	.028	.147	.083	.026	
3.0	.176	.094	.028	.171	.092	.028	.161	.087	.027	.152	.084	.026	.144	.080	.025	
4.0	.168	.087	.026	.164	.086	.025	.155	.082	.025	.147	.079	.024	.140	.076	.023	
5.0	.160	.082	.024	.156	.080	.023	.149	.078	.023	.142	.075	.022	.136	.072	.022	
6.0	.153	.077	.022	.149	.075	.022	.143	.073	.021	.137	.071	.021	.131	.069	.020	
7.0	.146	.072	.020	.143	.071	.020	.137	.069	.020	.131	.067	.020	.126	.066	.019	
8.0	.139	.068	.019	.136	.067	.019	.131	.066	.019	.126	.064	.018	.122	.062	.018	
9.0	.133	.064	.018	.130	.064	.018	.126	.062	.018	.121	.061	.017	.117	.060	.017	
10.0	.127	.061	.017	.125	.060	.017	.121	.059	.017	.117	.058	.016	.113	.057	.016	

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	.197	.197	.197	.168	.168	.168	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.178	.163	.150	.153	.140	.129	.104	.097	.089	.060	.056	.052	.019	.018	.017	
2.0	.164	.139	.117	.141	.119	.101	.096	.083	.071	.056	.048	.041	.018	.016	.014	
3.0	.153	.120	.094	.131	.104	.081	.090	.072	.057	.052	.042	.034	.017	.014	.011	
4.0	.143	.106	.077	.123	.091	.067	.085	.064	.047	.049	.037	.028	.016	.012	.009	
5.0	.135	.094	.064	.116	.082	.056	.080	.057	.039	.046	.033	.023	.015	.011	.008	
6.0	.128	.085	.054	.110	.074	.047	.076	.052	.033	.044	.030	.020	.014	.010	.007	
7.0	.122	.078	.047	.105	.067	.041	.072	.047	.029	.042	.028	.017	.014	.009	.006	
8.0	.116	.072	.041	.100	.062	.036	.069	.044	.025	.040	.026	.015	.013	.008	.005	
9.0	.111	.067	.037	.096	.058	.032	.066	.041	.023	.039	.024	.013	.013	.008	.004	
10.0	.107	.062	.033	.092	.054	.029	.064	.038	.020	.037	.022	.012	.012	.007	.004	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:VISION
Test Date:2015-6-19

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.256m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.7V I:0.4336A P:94.22W PF:0.9845 Lamp Flux:8588.58x1 lm										
NAME: BT-TH100W					TYPE:5000K			WEIGHT:3000g		
SPEC.:60D					DIM.: 355*325mm			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	23.4	24.4	23.6	24.6	24.8	23.6	24.6	23.8	24.8	25.0
3H	23.2	24.2	23.5	24.4	24.6	23.4	24.3	23.7	24.5	24.8
4H	23.1	24.0	23.4	24.3	24.5	23.3	24.2	23.6	24.4	24.7
6H	23.0	23.9	23.4	24.1	24.4	23.2	24.0	23.5	24.3	24.6
8H	23.0	23.8	23.3	24.1	24.4	23.2	24.0	23.5	24.2	24.5
12H	23.0	23.7	23.3	24.0	24.3	23.1	23.9	23.5	24.2	24.5
4H 2H	23.2	24.0	23.4	24.3	24.5	23.3	24.2	23.6	24.4	24.7
3H	23.0	23.7	23.3	24.0	24.3	23.1	23.9	23.5	24.2	24.5
4H	22.9	23.6	23.2	23.9	24.2	23.0	23.7	23.4	24.0	24.4
6H	22.8	23.4	23.2	23.7	24.1	22.9	23.6	23.3	23.9	24.3
8H	22.7	23.3	23.2	23.7	24.1	22.9	23.5	23.3	23.8	24.2
12H	22.7	23.2	23.1	23.6	24.0	22.9	23.4	23.3	23.8	24.2
8H 4H	22.7	23.3	23.1	23.7	24.1	22.9	23.5	23.3	23.8	24.2
6H	22.6	23.1	23.1	23.5	23.9	22.8	23.3	23.2	23.7	24.1
8H	22.6	23.0	23.1	23.4	23.9	22.8	23.2	23.2	23.6	24.1
12H	22.6	22.9	23.0	23.4	23.9	22.7	23.1	23.2	23.5	24.0
12H 4H	22.7	23.2	23.1	23.6	24.0	22.8	23.4	23.3	23.7	24.2
6H	22.6	23.0	23.1	23.4	23.9	22.8	23.2	23.2	23.6	24.0
8H	22.6	22.9	23.0	23.4	23.8	22.7	23.1	23.2	23.5	24.0
Variations with the observer position at spacings:										
S = 1.0H	+ 2.4 / -10.6					+ 2.4 / -10.1				
1.5H	+ 2.6 / - 6.7					+ 2.5 / - 6.5				
2.0H	+ 5.6 / -13.7					+ 5.7 / -14.3				

CIE Pub.117 Corrected 8589 lm Total Lamp Luminous Flux. (8log(F/F0) = 7.5)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:VISION
Test Date:2015-6-19

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.256m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.7V I:0.4336A P:94.22W PF:0.9845 Lamp Flux:8588.58x1 lm		
NAME: BT-TH100W	TYPE:5000K	WEIGHT:3000g
SPEC.:60D	DIM.: 355*325mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

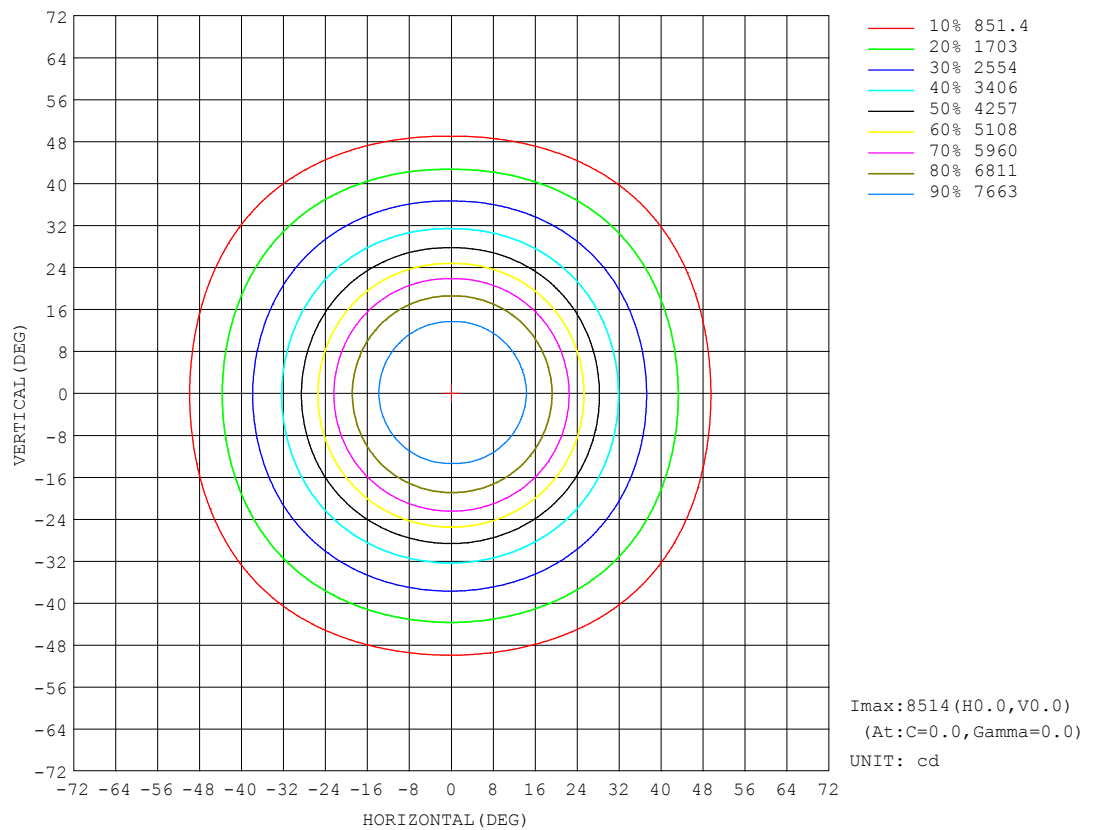
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	80	72	68	79	72	68	79	72	68	63
0.80	89	82	77	88	81	77	87	81	77	72
1.00	95	88	84	94	88	84	92	88	83	78
1.25	100	94	90	98	93	89	96	92	88	83
1.50	103	97	93	102	97	93	99	95	92	87
2.00	106	102	98	105	101	97	102	98	96	90
2.50	108	104	101	107	103	100	103	100	98	91
3.00	110	106	103	108	105	102	105	102	100	93
4.00	112	109	107	110	107	105	106	104	102	95
5.00	114	111	109	111	109	107	107	105	104	96
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:VISION
Test Date:2015-6-19

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.256m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.7V I:0.4336A P:94.22W PF:0.9845 Lamp Flux:8588.58x1 lm		
NAME: BT-TH100W	TYPE:5000K	WEIGHT:3000g
SPEC.:60D	DIM.: 355*325mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

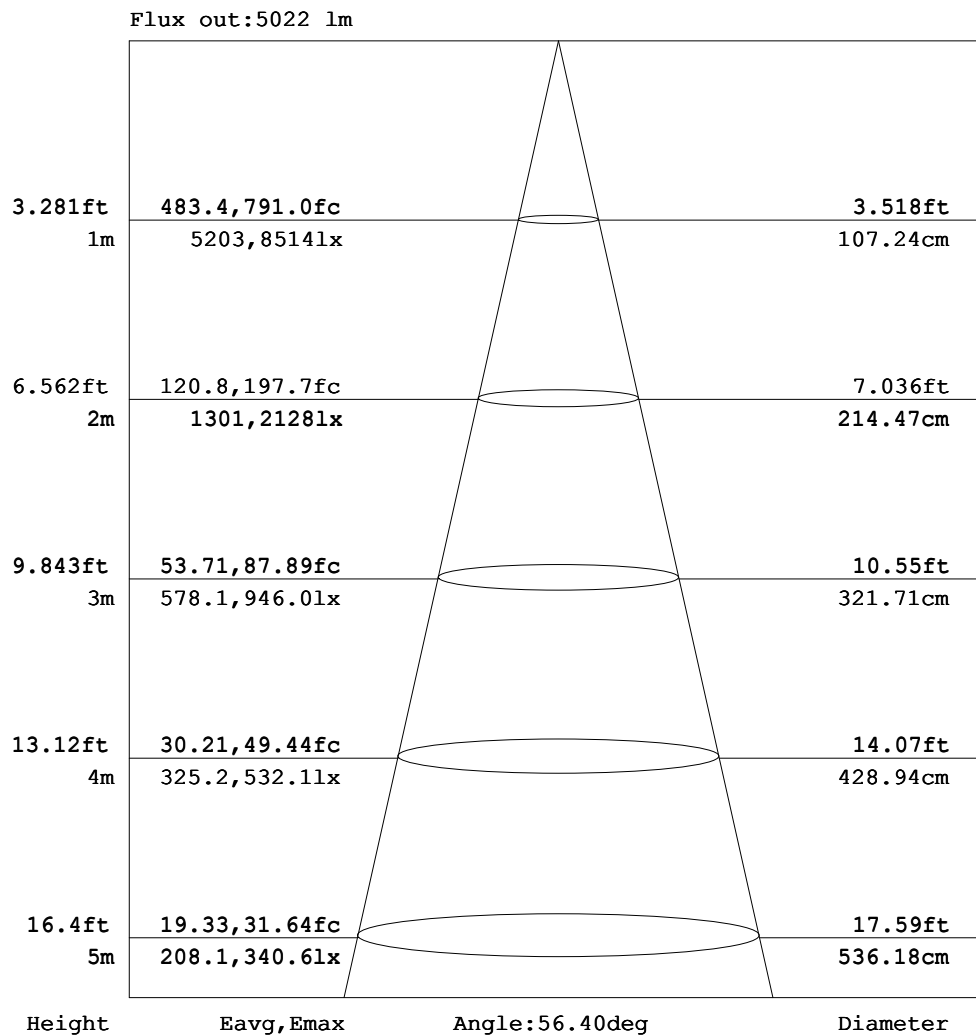


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:VISION
Test Date:2015-6-19

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.256m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.7V I:0.4336A P:94.22W PF:0.9845 Lamp Flux:8588.58x1 lm		
NAME: BT-TH100W	TYPE:5000K	WEIGHT:3000g
SPEC.:60D	DIM.: 355*325mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



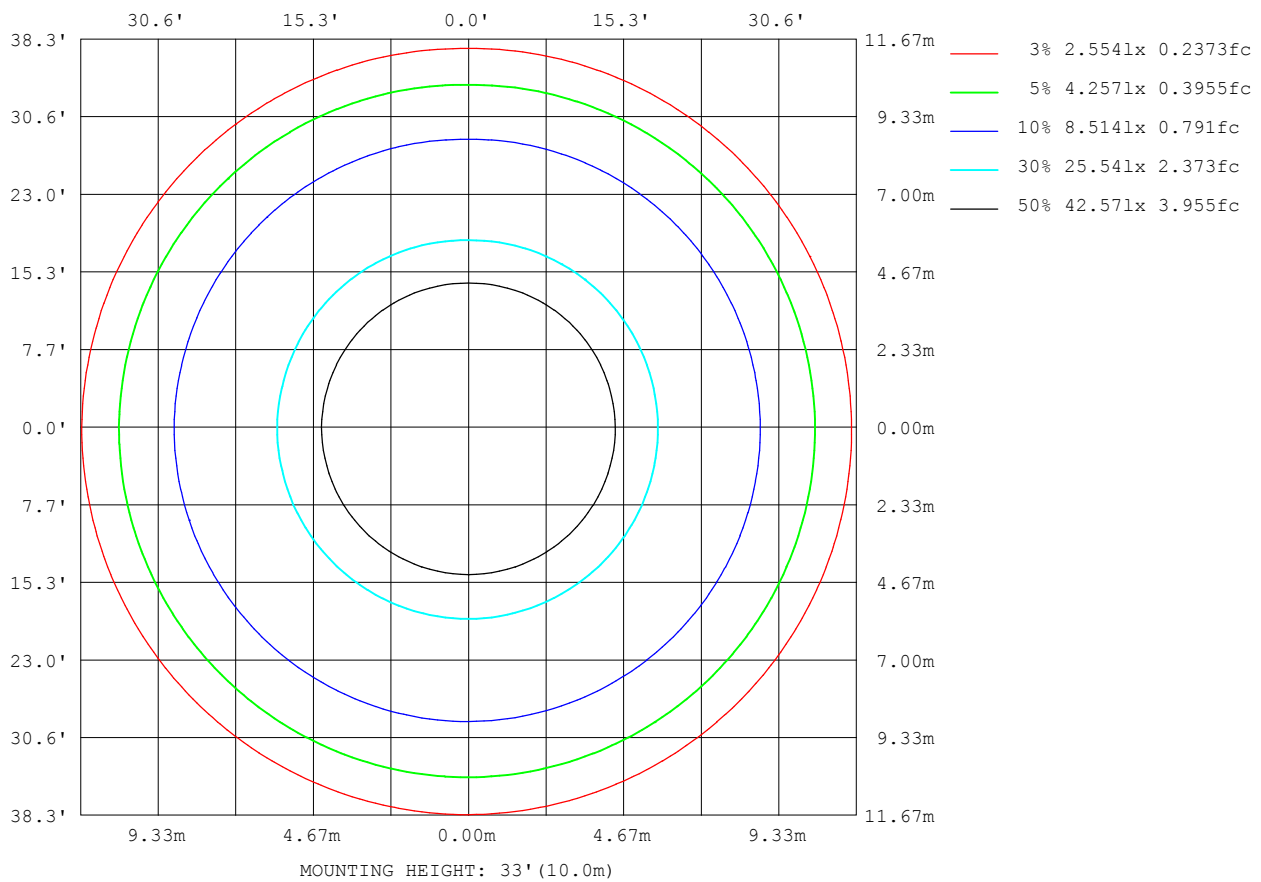
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:VISION
Test Date:2015-6-19

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.256m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

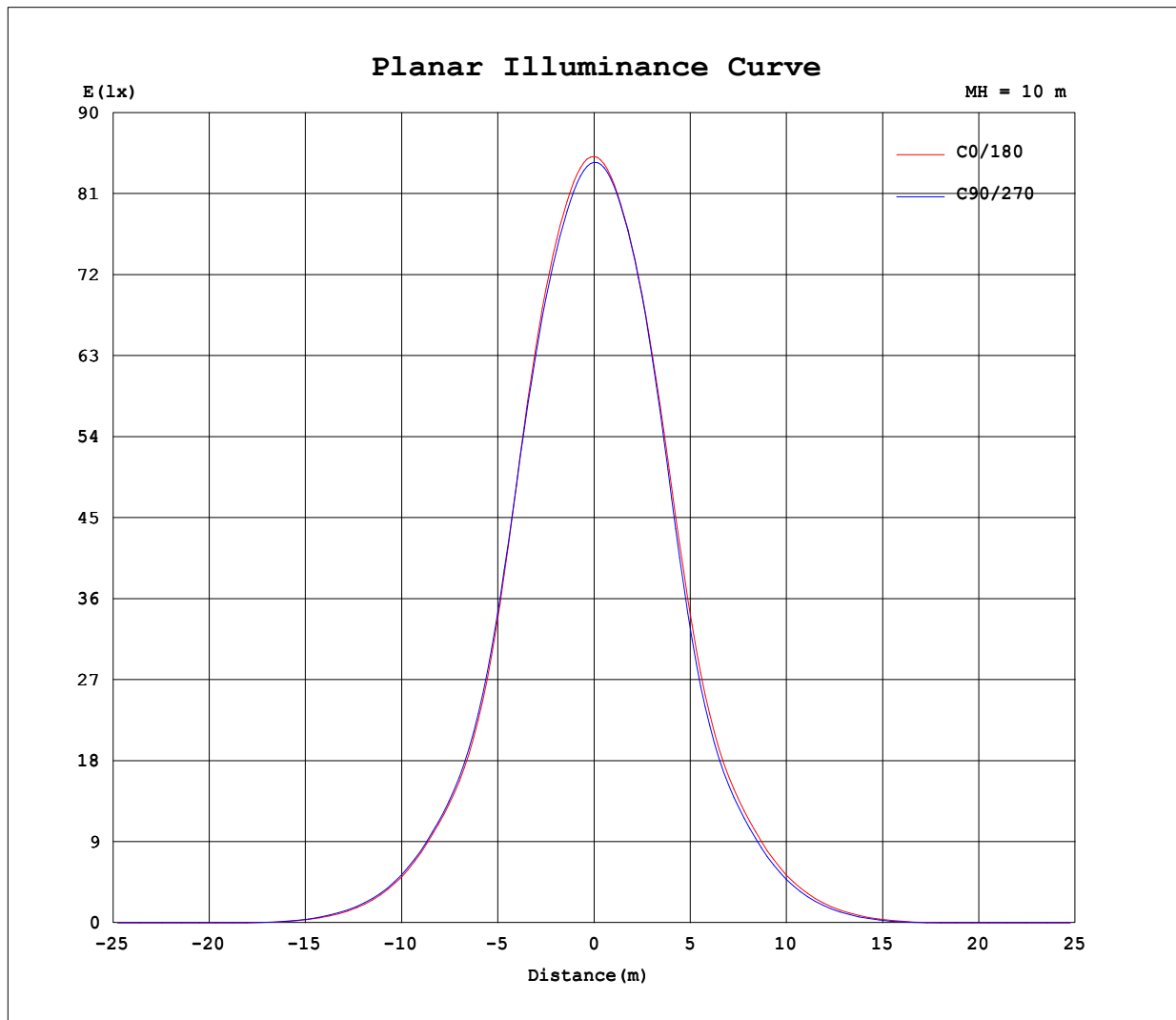
Test:U:220.7V I:0.4336A P:94.22W PF:0.9845 Lamp Flux:8588.58x1 lm		
NAME: BT-TH100W	TYPE:5000K	WEIGHT:3000g
SPEC.:60D	DIM.: 355*325mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:VISION
 Test Date:2015-6-19

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity:65.0%
 Test Distance:9.256m [K=1.0000]
 Remarks:

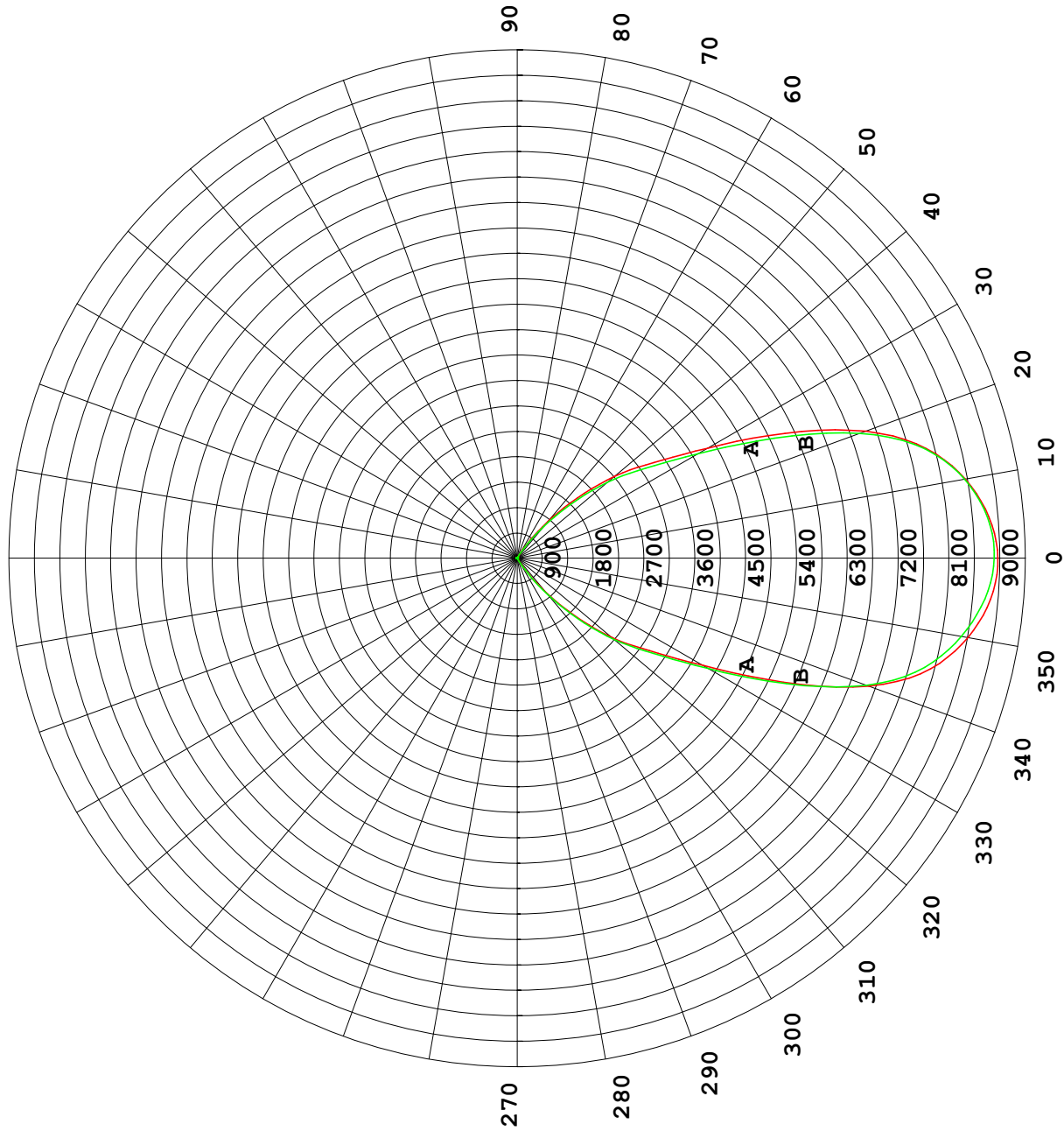
Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 30DEG
Operators: VISION
Test Date: 2015-6-19

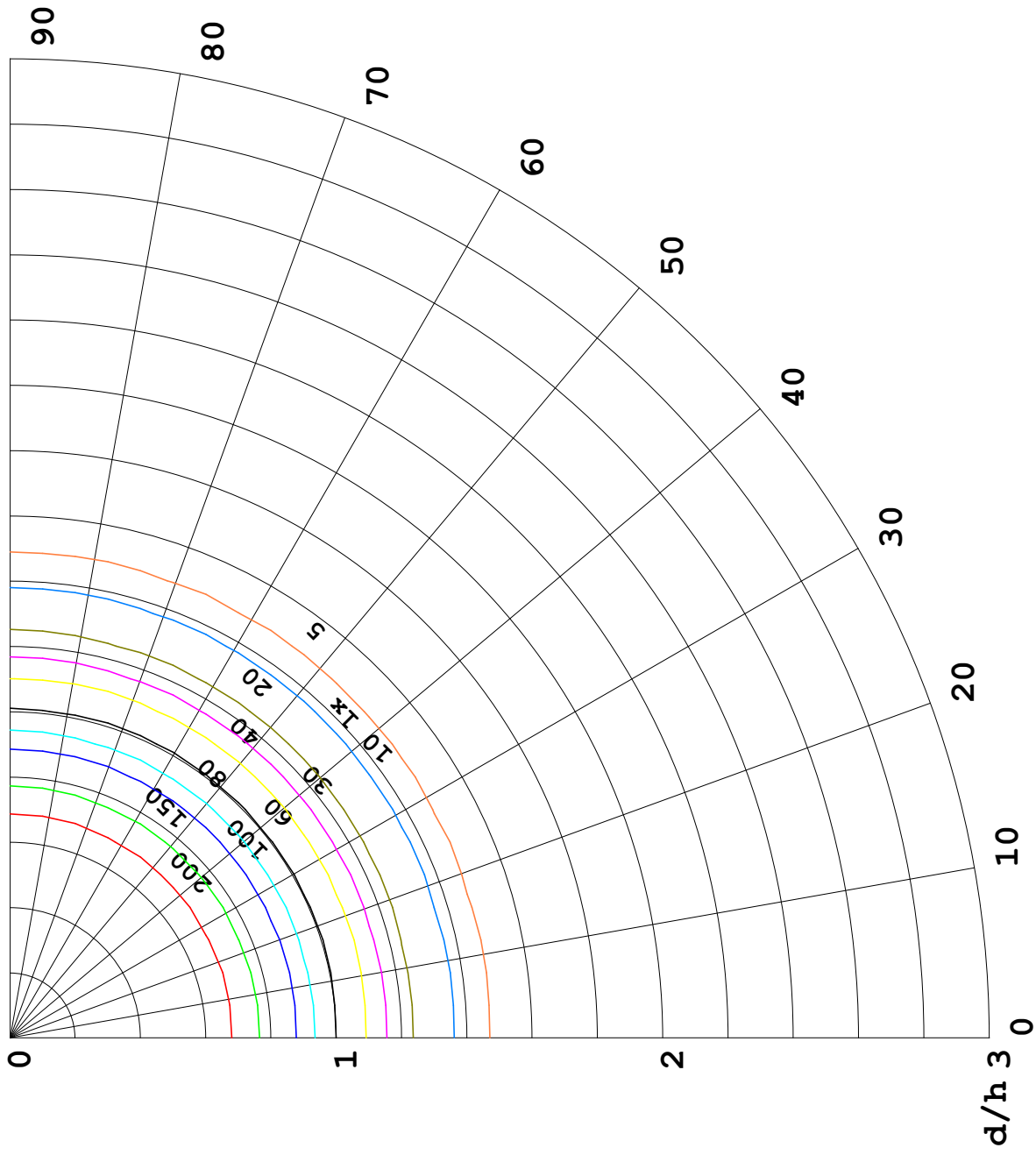
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity: 65.0%
Test Distance: 9.256m [K=1.0000]
Remarks:

I (cd)



$\kappa = 1$

1000 lm



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

