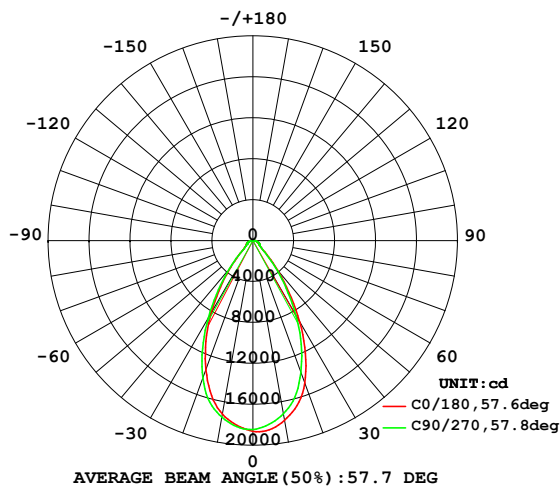


LUMINAIRE PHOTOMETRIC TEST REPORT

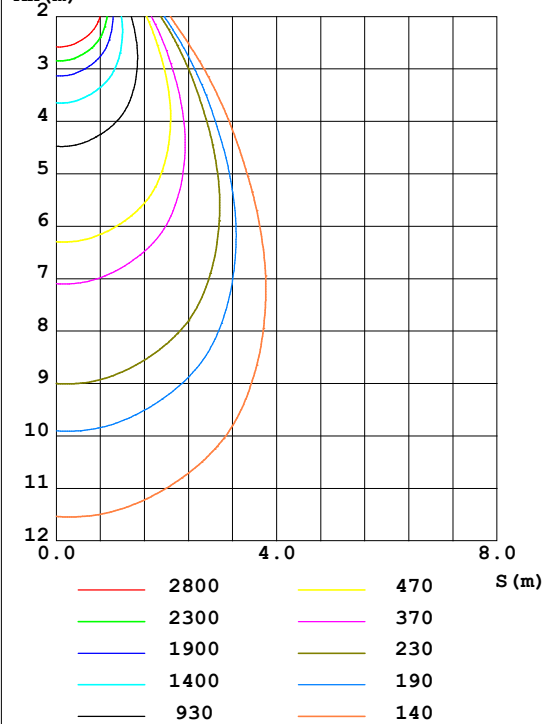
Test:U:220.9V I:0.9312A P:199.9W PF:0.9720 Lamp Flux:18683.9x1 lm		
NAME: BT-LON-200W	TYPE:LENS	WEIGHT:5kg
SPEC.:5000k R80 84LEDs 60D	DIM.: D260*H206mm	SERIAL No.:
MFR.: EVERFINE	SUR.:163*163mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 93.45 lm/W
MODEL	SMD3535	I _{max} (cd)	18681	S/MH(C0/180)	0.85	
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH(C90/270)	0.88	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	18684	η UP,DN(C0-180)	0.3,50.4	
NOMINAL FLUX(lm)	18683.9	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.2,49.1	
LAMPS INSIDE	1	η up(%)	0.6	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	220	η down(%)	99.4	CIBSE SHR MAX	0.90	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:
 Test Date:2015-06-06

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	1783	1718	1722	1751					0- 10	1715	1715	9.18,9.18
20	1482	1373	1344	1431					10- 20	4484	6199	33.2,33.2
30	918.3	842.9	815.2	873.2					20- 30	5214	11413	61.1,61.1
40	376.4	349.2	339.3	358.0					30- 40	3653	15066	80.6,80.6
50	104.7	104.5	104.7	99.56					40- 50	1505	16572	88.7,88.7
60	69.28	72.62	73.60	69.63					50- 60	740.9	17313	92.7,92.7
70	51.84	56.18	55.69	53.76					60- 70	631.6	17944	96,96
80	26.88	28.67	28.49	27.69					70- 80	439.4	18384	98.4,98.4
90	6.841	8.010	6.963	7.857					80- 90	196.4	18580	99.4,99.4
100	0.1876	0.1749	0.1312	0.1381					90-100	28.06	18608	99.6,99.6
110	0.4063	0.4294	0.3337	0.3329					100-110	2.321	18611	99.6,99.6
120	0.6543	0.6859	0.4704	0.4397					110-120	4.853	18615	99.6,99.6
130	1.164	1.218	0.8290	0.7777					120-130	6.605	18622	99.7,99.7
140	2.168	2.289	1.681	1.576					130-140	10.95	18633	99.7,99.7
150	3.442	3.607	2.757	2.603					140-150	15.64	18649	99.8,99.8
160	4.641	4.768	3.866	3.685					150-160	16.86	18665	99.9,99.9
170	5.523	5.592	4.878	4.710					160-170	13.25	18679	100,100
180	5.918	5.891	5.959	5.856					170-180	5.217	18684	100,100
DEG	LUMINOUS INTENSITY:×10cd MAX (Ii - Iavg)/Iavg (0-135) = 349.5 %									UNIT:lm		

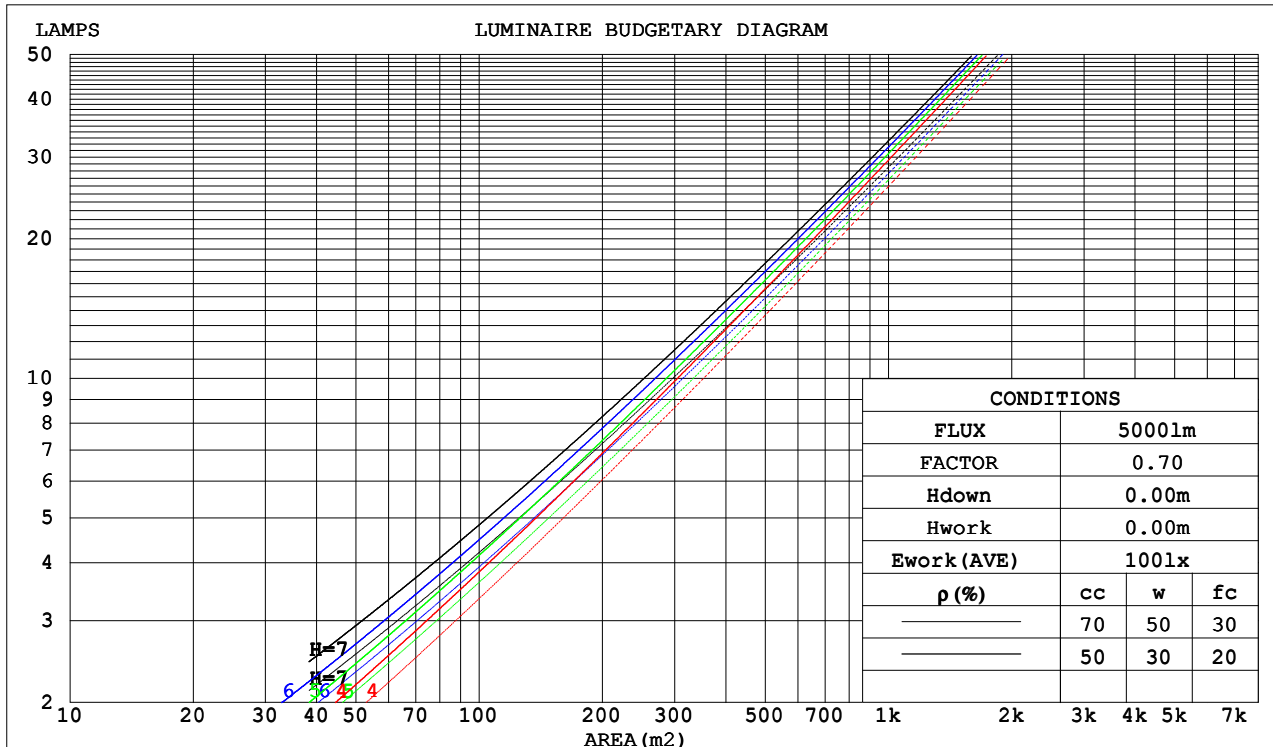
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-06-06

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:220.9V I:0.9312A P:199.9W PF:0.9720 Lamp Flux:18683.9x1 lm		
NAME: BT-LON-200W	TYPE:LENS	WEIGHT:5kg
SPEC.:5000k R80 84LEDs 60D	DIM.: D260*H206mm	SERIAL No.:
MFR.: EVERFINE	SUR.:163*163mm	PROTECTION ANGLE:

pcc	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						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	.99
1.0	1.09	1.06	1.03	1.06	1.04	1.01	1.02	.90	.98	.98	.96	.95	.95	.93	.92	.90
2.0	.99	.95	.91	.98	.93	.90	.94	.91	.87	.91	.88	.86	.88	.86	.84	.82
3.0	.92	.86	.81	.90	.85	.80	.87	.83	.79	.85	.81	.78	.82	.79	.76	.75
4.0	.85	.78	.74	.84	.78	.73	.81	.76	.72	.79	.75	.71	.77	.73	.70	.69
5.0	.79	.72	.67	.78	.72	.67	.76	.70	.66	.74	.69	.66	.72	.68	.65	.63
6.0	.73	.67	.62	.73	.66	.62	.71	.65	.61	.69	.64	.61	.68	.64	.60	.59
7.0	.69	.62	.57	.68	.62	.57	.66	.61	.57	.65	.60	.56	.64	.59	.56	.54
8.0	.64	.58	.53	.64	.57	.53	.63	.57	.53	.61	.56	.53	.60	.56	.52	.51
9.0	.61	.54	.50	.60	.54	.50	.59	.53	.49	.58	.53	.49	.57	.52	.49	.48
10.0	.57	.51	.47	.57	.51	.47	.56	.50	.46	.55	.50	.46	.54	.49	.46	.45



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:
 Test Date:2015-06-06

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:220.9V I:0.9312A P:199.9W PF:0.9720 Lamp Flux:18683.9x1 lm														
NAME: BT-LON-200W					TYPE:LENS					WEIGHT:5kg				
SPEC.:5000k R80 84LEDs 60D					DIM.: D260*H206mm					SERIAL No.:				
MFR.: EVERFINE					SUR.:163*163mm					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	.217	.124	.039	.210	.120	.038	.197	.113	.036	.185	.107	.034	.174	.101	.033		
2.0	.204	.112	.034	.198	.109	.034	.187	.104	.032	.176	.099	.031	.167	.094	.030		
3.0	.191	.101	.030	.185	.099	.030	.176	.095	.029	.167	.091	.028	.159	.088	.027		
4.0	.179	.093	.027	.174	.091	.027	.166	.088	.026	.158	.085	.026	.151	.082	.025		
5.0	.168	.086	.025	.164	.084	.025	.157	.082	.024	.150	.079	.024	.144	.077	.023		
6.0	.159	.080	.023	.155	.078	.023	.149	.076	.022	.143	.074	.022	.137	.072	.021		
7.0	.150	.074	.021	.147	.073	.021	.141	.071	.021	.136	.070	.020	.131	.068	.020		
8.0	.143	.070	.020	.140	.069	.019	.135	.067	.019	.130	.066	.019	.125	.064	.019		
9.0	.136	.066	.018	.133	.065	.018	.128	.064	.018	.124	.062	.018	.120	.061	.018		
10.0	.129	.062	.017	.127	.061	.017	.123	.060	.017	.119	.059	.017	.115	.058	.017		

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	.195	.195	.195	.166	.166	.166	.114	.114	.114	.065	.065	.065	.021	.021	.021	
1.0	.178	.161	.146	.152	.138	.126	.104	.095	.087	.060	.055	.051	.019	.018	.016	
2.0	.165	.137	.113	.141	.118	.098	.097	.081	.068	.056	.047	.040	.018	.015	.013	
3.0	.154	.118	.090	.132	.102	.078	.090	.071	.055	.052	.041	.032	.017	.013	.011	
4.0	.144	.104	.073	.123	.090	.064	.085	.062	.045	.049	.037	.026	.016	.012	.009	
5.0	.135	.092	.061	.116	.080	.053	.080	.056	.037	.046	.033	.022	.015	.011	.007	
6.0	.128	.083	.051	.110	.072	.045	.076	.051	.032	.044	.030	.019	.014	.010	.006	
7.0	.121	.076	.044	.104	.066	.039	.072	.046	.027	.042	.027	.016	.014	.009	.005	
8.0	.116	.070	.039	.099	.061	.034	.069	.043	.024	.040	.025	.014	.013	.008	.005	
9.0	.110	.065	.034	.095	.056	.030	.066	.040	.021	.038	.023	.013	.012	.008	.004	
10.0	.105	.060	.031	.091	.052	.027	.063	.037	.019	.037	.022	.011	.012	.007	.004	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-06-06

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:220.9V I:0.9312A P:199.9W PF:0.9720 Lamp Flux:18683.9x1 lm										
NAME: BT-LON-200W					TYPE:LENS			WEIGHT:5kg		
SPEC.:5000k R80 84LEDs 60D					DIM.: D260*H206mm			SERIAL No.:		
MFR.: EVERFINE					SUR.:163*163mm			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	26.1	27.1	26.3	27.3	27.5	25.9	27.0	26.2	27.2	27.4
3H	26.9	27.9	27.2	28.1	28.4	26.9	27.9	27.2	28.1	28.4
4H	27.4	28.4	27.7	28.6	28.8	27.5	28.5	27.8	28.7	28.9
6H	27.9	28.8	28.2	29.0	29.3	28.0	28.9	28.3	29.2	29.4
8H	28.1	28.9	28.4	29.2	29.5	28.2	29.1	28.5	29.3	29.6
12H	28.3	29.2	28.7	29.5	29.7	28.4	29.2	28.8	29.5	29.8
4H 2H	26.3	27.2	26.6	27.4	27.7	26.1	27.1	26.4	27.3	27.6
3H	27.4	28.3	27.8	28.5	28.8	27.5	28.3	27.8	28.6	28.9
4H	28.1	28.9	28.5	29.2	29.5	28.2	29.0	28.6	29.3	29.6
6H	28.7	29.4	29.1	29.7	30.1	28.9	29.5	29.3	29.9	30.3
8H	29.0	29.6	29.4	30.0	30.4	29.2	29.8	29.6	30.1	30.5
12H	29.4	30.0	29.8	30.3	30.7	29.5	30.0	29.9	30.4	30.8
8H 4H	28.4	29.0	28.8	29.4	29.7	28.5	29.1	28.9	29.4	29.8
6H	29.2	29.7	29.6	30.1	30.5	29.3	29.8	29.7	30.2	30.6
8H	29.6	30.0	30.0	30.4	30.9	29.7	30.1	30.2	30.6	31.0
12H	30.1	30.5	30.6	31.0	31.4	30.2	30.5	30.6	31.0	31.5
12H 4H	28.4	29.0	28.8	29.3	29.8	28.5	29.0	28.9	29.4	29.8
6H	29.2	29.7	29.7	30.1	30.6	29.4	29.8	29.8	30.3	30.7
8H	29.7	30.1	30.2	30.5	31.0	29.8	30.2	30.3	30.7	31.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.7 / - 0.8					+ 0.6 / - 0.7				
1.5H	+ 1.6 / - 0.7					+ 1.4 / - 0.6				
2.0H	+ 0.7 / - 0.3					+ 0.5 / - 0.2				

CIE Pub.117 Corrected 18684 lm Total Lamp Luminous Flux. (8log(F/F0) = 10.2)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-06-06

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:220.9V I:0.9312A P:199.9W PF:0.9720 Lamp Flux:18683.9x1 lm		
NAME: BT-LON-200W	TYPE:LENS	WEIGHT:5kg
SPEC.:5000k R80 84LEDs 60D	DIM.: D260*H206mm	SERIAL No.:
MFR.: EVERFINE	SUR.:163*163mm	PROTECTION ANGLE:

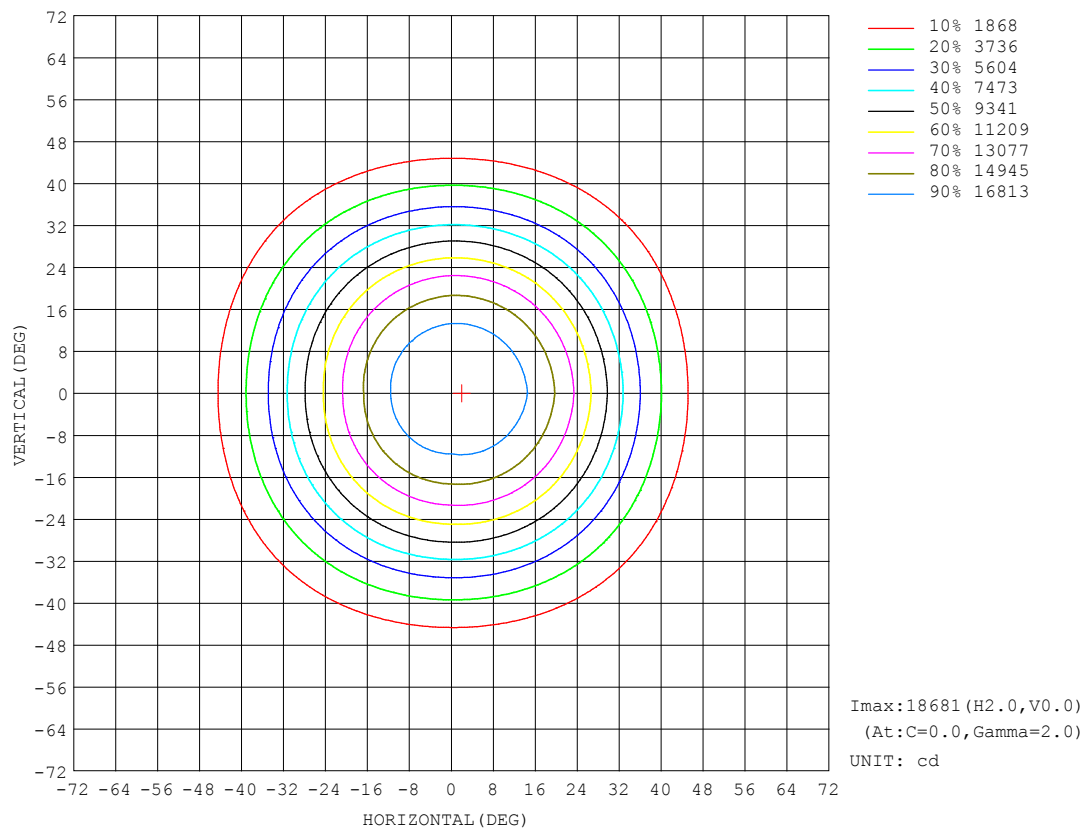
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	80	72	67	79	72	67	78	71	67	63
0.80	88	80	76	87	80	76	86	79	75	71
1.00	93	86	81	92	86	81	90	86	81	76
1.25	98	91	87	97	91	86	94	89	85	80
1.50	101	95	91	100	94	90	97	92	89	84
2.00	105	99	95	103	98	94	100	96	93	87
2.50	107	102	98	105	101	97	102	98	95	89
3.00	109	105	101	107	103	100	103	100	98	91
4.00	111	108	105	109	106	103	105	103	101	93
5.00	113	110	108	111	108	106	107	105	103	95
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:
 Test Date:2015-06-06

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:220.9V I:0.9312A P:199.9W PF:0.9720 Lamp Flux:18683.9x1 lm		
NAME: BT-LON-200W	TYPE:LENS	WEIGHT:5kg
SPEC.:5000k R80 84LEDs 60D	DIM.: D260*H206mm	SERIAL No.:
MFR.: EVERFINE	SUR.:163*163mm	PROTECTION ANGLE:

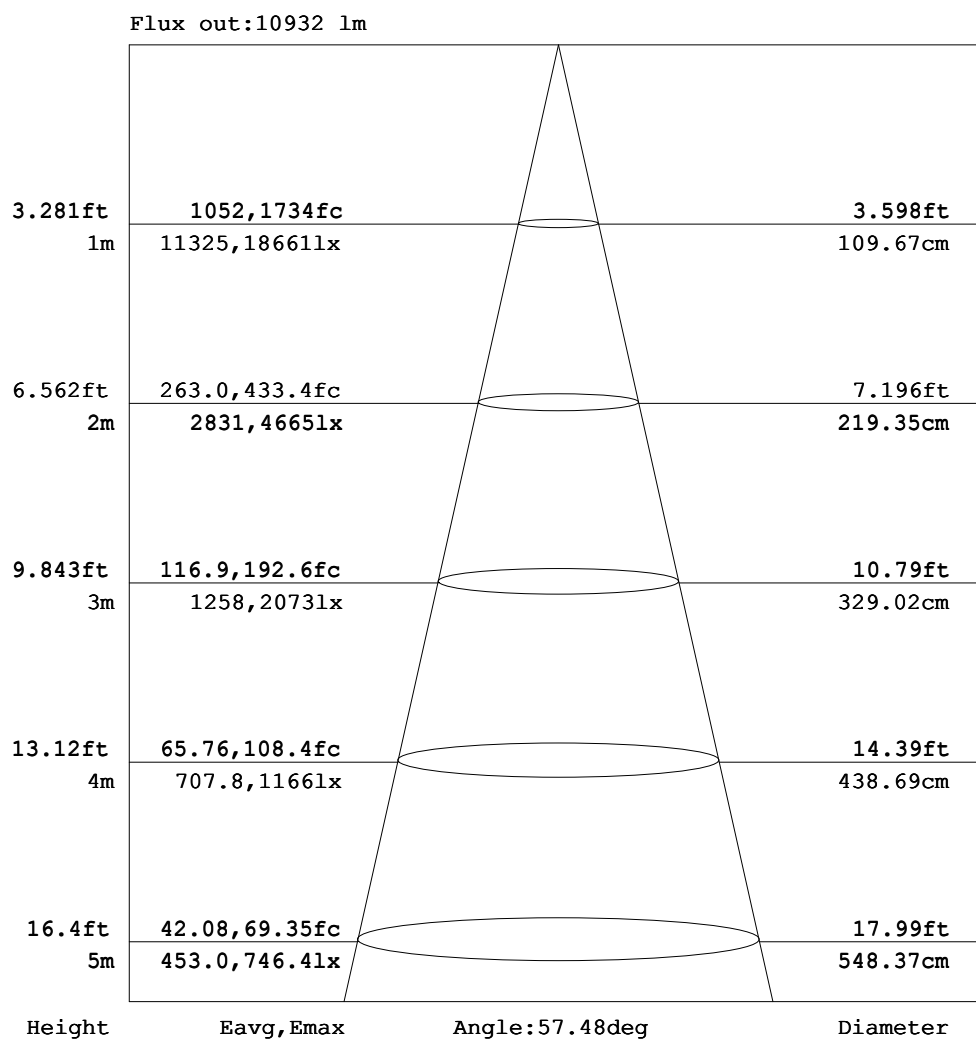


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:
 Test Date:2015-06-06

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:220.9V I:0.9312A P:199.9W PF:0.9720 Lamp Flux:18683.9x1 lm		
NAME: BT-LON-200W	TYPE:LENS	WEIGHT:5kg
SPEC.:5000k R80 84LEDs 60D	DIM.: D260*H206mm	SERIAL No.:
MFR.: EVERFINE	SUR.:163*163mm	PROTECTION ANGLE:



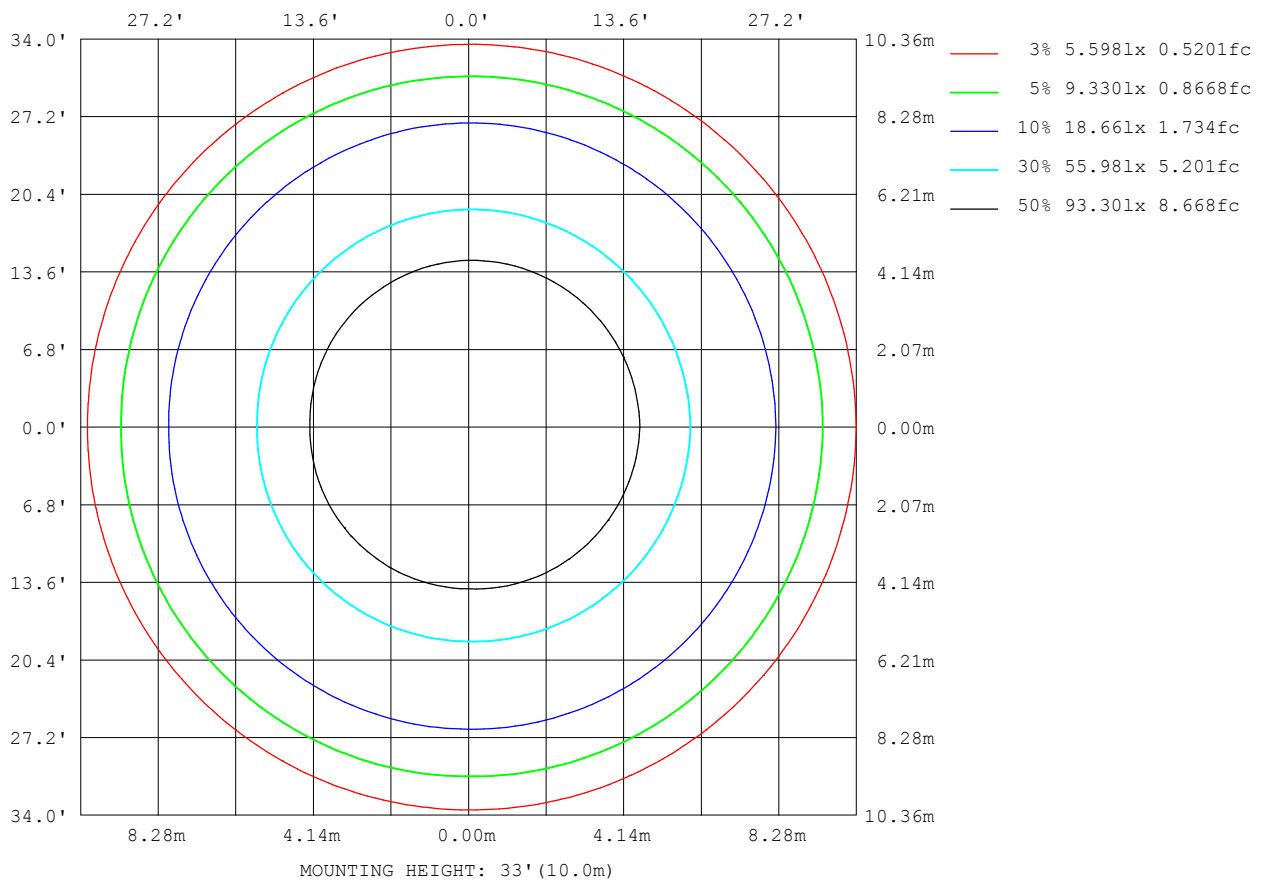
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-06-06

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

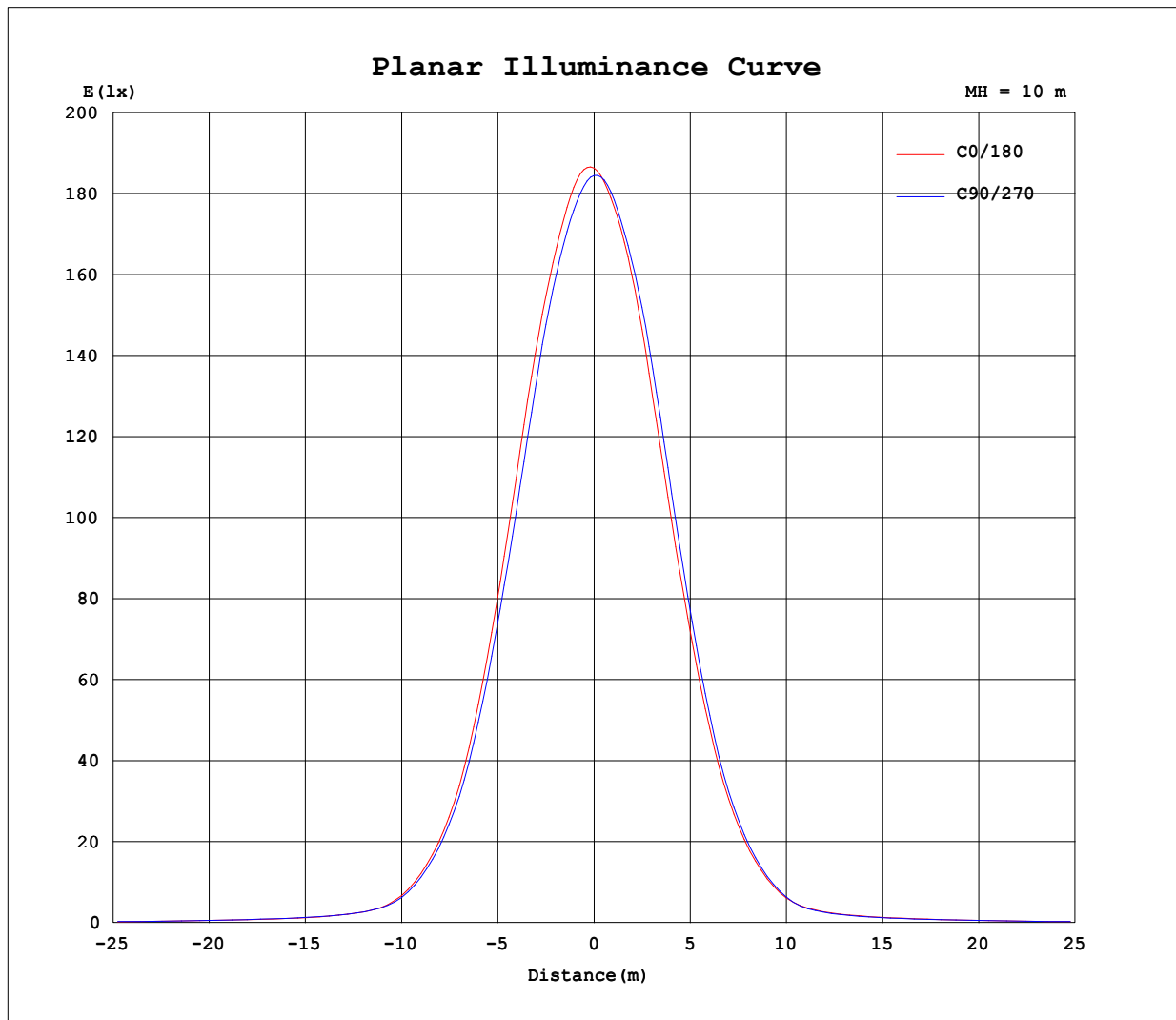
Test:U:220.9V I:0.9312A P:199.9W PF:0.9720 Lamp Flux:18683.9x1 lm		
NAME: BT-LON-200W	TYPE: LENS	WEIGHT: 5kg
SPEC.: 5000k R80 84LEDs 60D	DIM.: D260*H206mm	SERIAL No.:
MFR.: EVERFINE	SUR.: 163*163mm	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 30DEG
Operators:
Test Date: 2015-06-06

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:

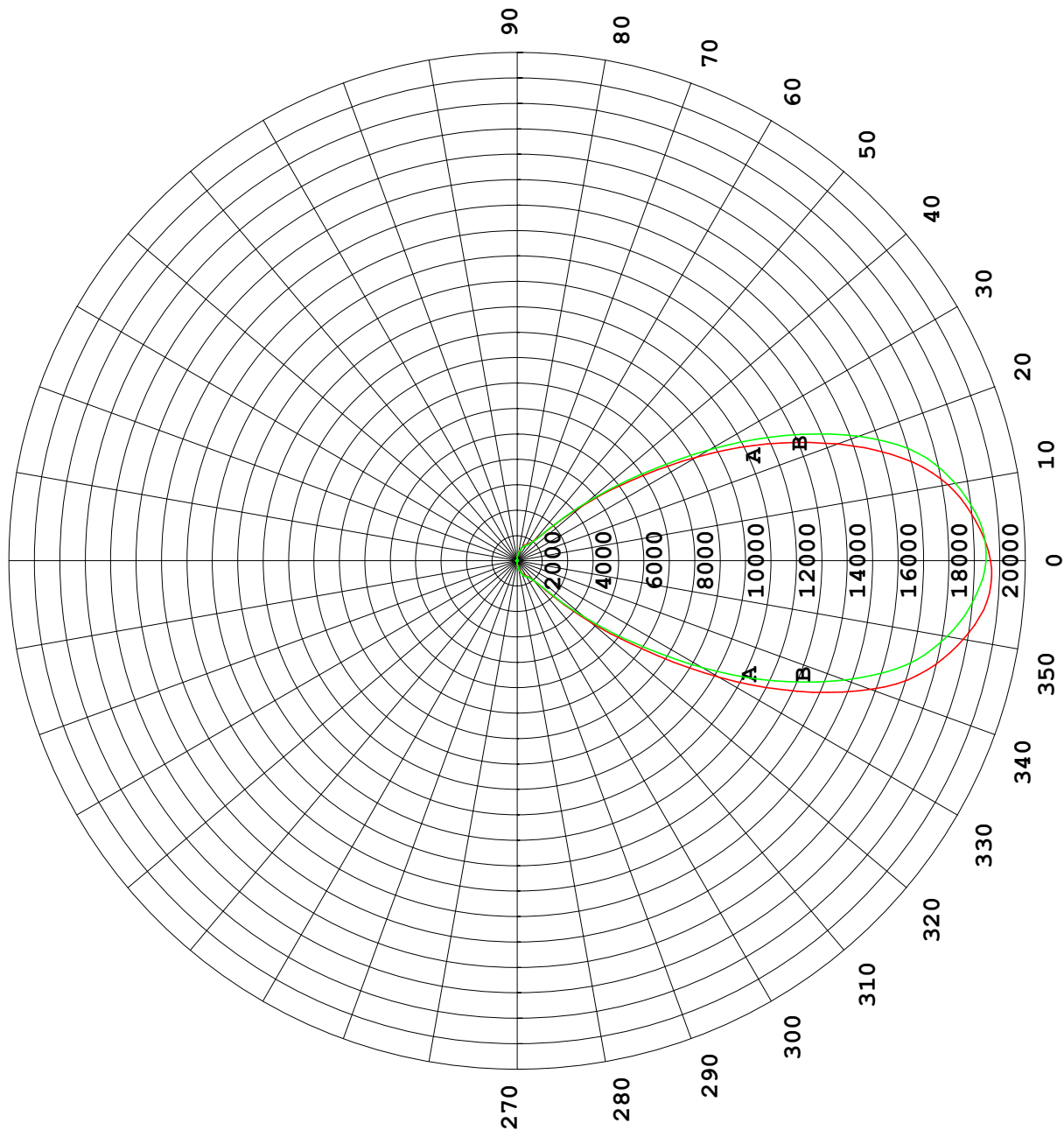
Planar Illuminance Curve



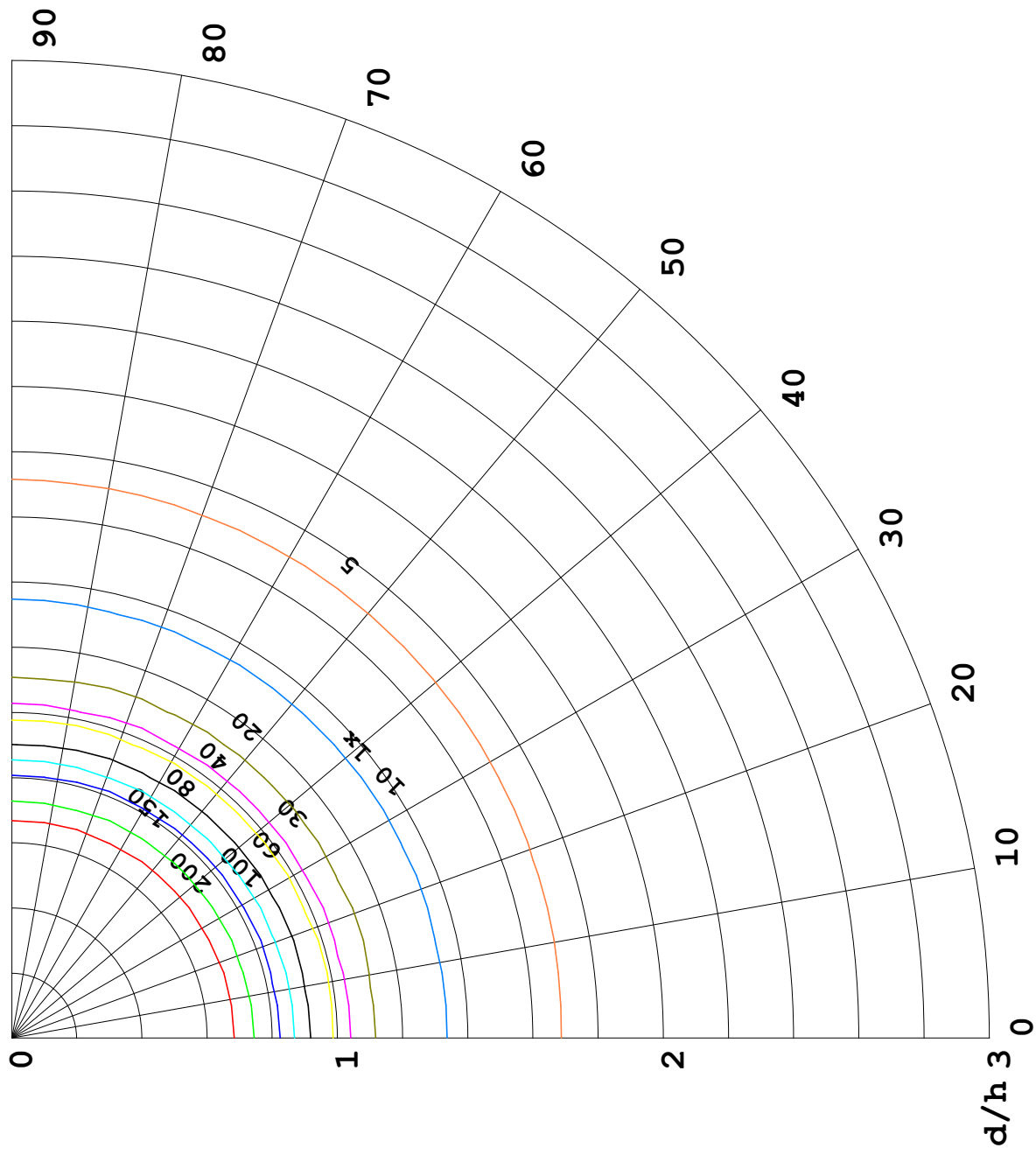
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 30DEG
Operators:
Test Date: 2015-06-06

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)



1000 lm $\kappa = 1$



	Pcc	Pw	Pfc
————	70	50	30
————	50	30	20

