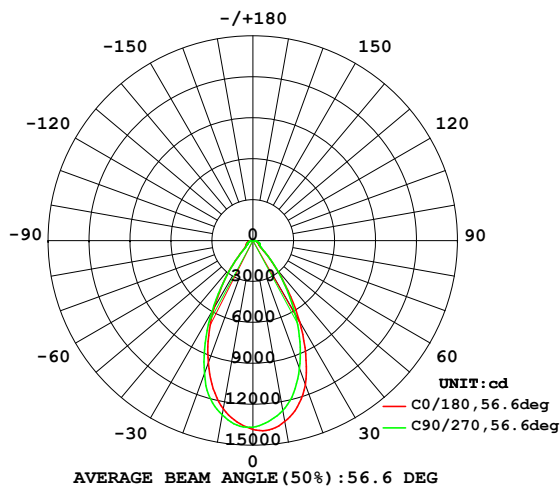


LUMINAIRE PHOTOMETRIC TEST REPORT

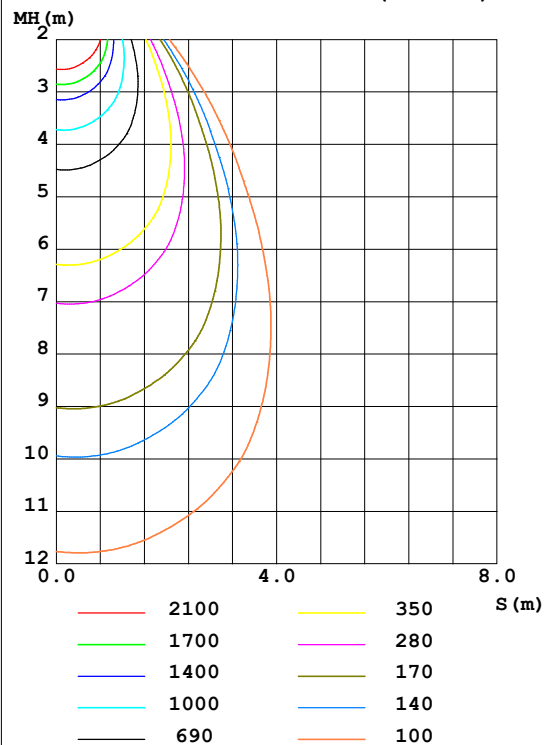
Test:U:220.9V I:0.6704A P:143.9W PF:0.9717 Lamp Flux:15000x1 lm		
NAME: BT-LON-150W	TYPE:LENS	WEIGHT:3.8kg
SPEC.:5000K R80 60LEDs 60D	DIM.: D260*H184mm	SERIAL No.:
MFR.: EVERFINE	SUR.:163*163mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 94.00 lm/W
MODEL	SMD3535	I _{max} (cd)	13941	S/MH(C0/180)	0.82	
NOMINAL POWER(W)	150	LOR(%)	90.2	S/MH(C90/270)	0.86	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	13525	η UP,DN(C0-180)	0.3,46.2	
NOMINAL FLUX(lm)	15000	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.2,43.5	
LAMPS INSIDE	1	η up(%)	0.5	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	220	η down(%)	89.7	CIBSE SHR MAX	0.90	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-05-08

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	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1347	1319	1264	1222	1253	1269	1297	1325	0- 10	1268	1268	9.38,8.46
20	1124	1092	1000	936.4	958.3	988.6	1041	1092	10- 20	3287	4556	33.7,30.4
30	684.9	692.7	619.8	586.1	569.0	574.9	599.9	651.9	20- 30	3791	8347	61.7,55.6
40	273.0	286.9	269.0	242.4	229.6	209.3	224.3	243.6	30- 40	2604	10950	81,73
50	73.24	78.96	82.00	81.68	73.17	67.63	65.84	70.65	40- 50	1048	11999	88.7,80
60	49.48	52.63	55.69	57.69	55.55	51.03	48.25	47.57	50- 60	539.0	12538	92.7,83.6
70	37.17	40.49	42.45	44.93	43.41	37.09	34.36	34.21	60- 70	460.2	12998	96.1,86.7
80	18.37	21.59	22.28	23.73	22.04	17.54	16.15	16.29	70- 80	314.8	13313	98.4,88.8
90	4.869	5.884	6.560	6.995	6.504	3.825	3.621	3.759	80- 90	142.4	13455	99.5,89.7
100	0.1254	0.1147	0.1131	0.1084	0.0862	0.0894	0.0964	0.0976	90-100	16.64	13472	99.6,89.8
110	0.2507	0.2131	0.1975	0.2100	0.1897	0.2191	0.2068	0.2165	100-110	1.473	13473	99.6,89.8
120	0.4142	0.3899	0.3857	0.4146	0.3126	0.3281	0.3157	0.3136	110-120	2.924	13476	99.6,89.8
130	0.7750	0.7445	0.7718	0.8301	0.5912	0.6263	0.5931	0.5643	120-130	4.423	13481	99.7,89.9
140	1.498	1.482	1.562	1.654	1.221	1.245	1.167	1.084	130-140	7.661	13488	99.7,89.9
150	2.425	2.437	2.543	2.657	2.036	2.030	1.912	1.793	140-150	11.17	13500	99.8,90
160	3.313	3.333	3.428	3.510	2.853	2.832	2.714	2.587	150-160	12.17	13512	99.9,90.1
170	4.025	4.034	4.062	4.110	3.606	3.574	3.489	3.391	160-170	9.644	13521	100,90.1
180	4.366	4.389	4.326	4.298	4.390	4.371	4.341	4.282	170-180	3.826	13525	100,90.2
DEG	LUMINOUS INTENSITY:×10cd MAX (Ii - Iavg)/Iavg (0-135) = 359.2 %									UNIT:lm		

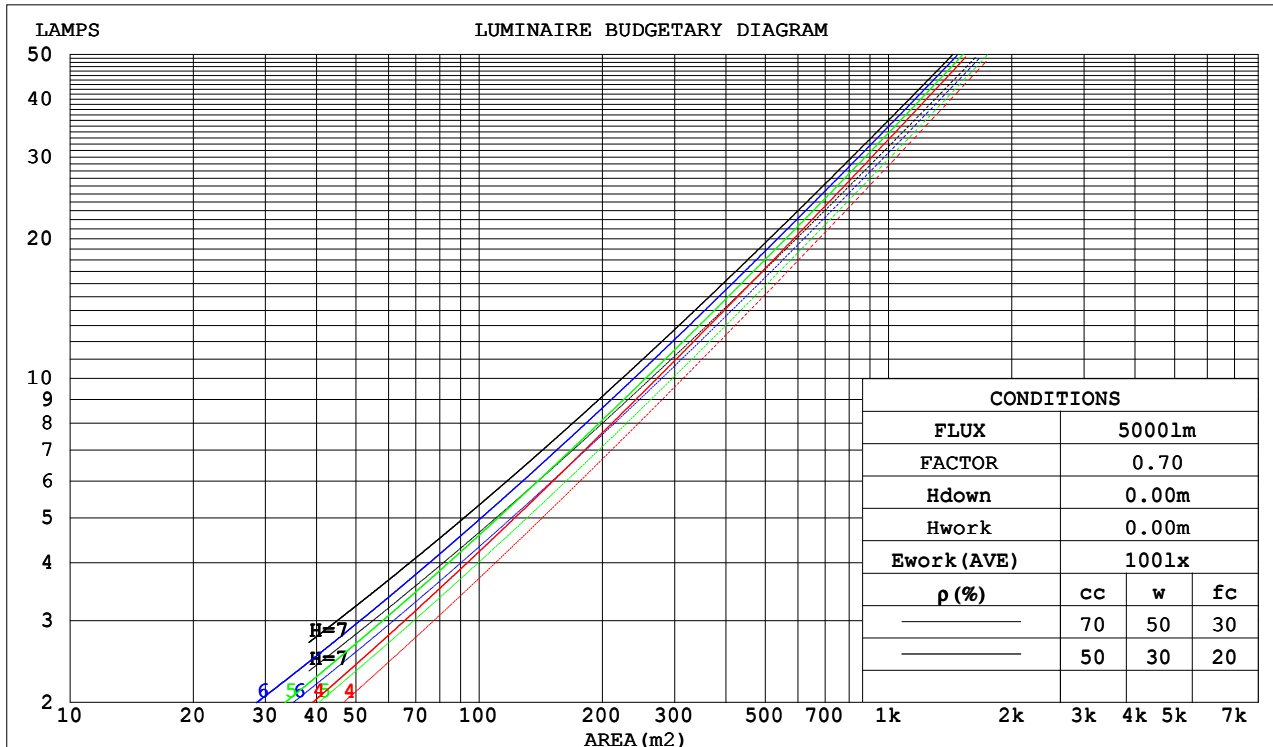
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:
 Test Date:2015-05-08

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:0.6704A P:143.9W PF:0.9717 Lamp Flux:15000x1 lm		
NAME: BT-LON-150W	TYPE:LENS	WEIGHT:3.8kg
SPEC.:5000K R80 60LEDs 60D	DIM.: D260*H184mm	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						Coefficients of Utilization(CU)									
0.0	1.07	1.07	1.07	1.05	1.05	1.05	.00	.00	.00	.96	.96	.96	.92	.92	.92	.90
1.0	.98	.95	.93	.96	.93	.91	.92	.90	.88	.89	.87	.86	.85	.84	.83	.81
2.0	.90	.85	.82	.88	.84	.81	.85	.82	.79	.82	.80	.77	.80	.77	.76	.74
3.0	.83	.77	.73	.81	.77	.73	.79	.75	.71	.77	.73	.70	.74	.72	.69	.68
4.0	.77	.71	.66	.75	.70	.66	.73	.69	.65	.71	.68	.64	.70	.66	.64	.62
5.0	.71	.65	.61	.70	.65	.61	.68	.64	.60	.67	.63	.59	.65	.62	.59	.57
6.0	.66	.60	.56	.66	.60	.56	.64	.59	.55	.63	.58	.55	.61	.58	.55	.53
7.0	.62	.56	.52	.61	.56	.52	.60	.55	.51	.59	.54	.51	.58	.54	.51	.49
8.0	.58	.52	.48	.58	.52	.48	.57	.52	.48	.56	.51	.48	.55	.51	.47	.46
9.0	.55	.49	.45	.54	.49	.45	.53	.48	.45	.53	.48	.45	.52	.48	.44	.43
10.0	.52	.46	.42	.51	.46	.42	.50	.46	.42	.50	.45	.42	.49	.45	.42	.41



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators:
 Test Date: 2015-05-08

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:0.6704A P:143.9W PF:0.9717 Lamp Flux:15000x1 lm					
NAME: BT-LON-150W			TYPE:LENS		WEIGHT:3.8kg
SPEC.:5000K R80 60LEDs 60D			DIM.: D260*H184mm		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	.195	.111	.035	.189	.108	.034	.177	.102	.032	.166	.096	.031	.156	.091	.029			
2.0	.183	.100	.031	.178	.098	.030	.168	.093	.029	.158	.089	.028	.150	.085	.027			
3.0	.171	.091	.027	.167	.089	.027	.158	.086	.026	.150	.082	.025	.142	.079	.024			
4.0	.161	.083	.025	.157	.082	.024	.149	.079	.024	.142	.076	.023	.135	.074	.022			
5.0	.151	.077	.022	.148	.076	.022	.141	.073	.022	.135	.071	.021	.129	.069	.021			
6.0	.143	.071	.020	.139	.070	.020	.134	.068	.020	.128	.067	.020	.123	.065	.019			
7.0	.135	.067	.019	.132	.066	.019	.127	.064	.018	.122	.063	.018	.117	.061	.018			
8.0	.128	.063	.018	.126	.062	.017	.121	.060	.017	.117	.059	.017	.112	.058	.017			
9.0	.122	.059	.016	.120	.058	.016	.115	.057	.016	.111	.056	.016	.108	.055	.016			
10.0	.116	.056	.015	.114	.055	.015	.110	.054	.015	.107	.053	.015	.103	.052	.015			

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	.175	.175	.175	.150	.150	.150	.102	.102	.102	.059	.059	.059	.019	.019	.019	
1.0	.160	.145	.131	.137	.125	.113	.094	.086	.078	.054	.050	.045	.017	.016	.015	
2.0	.148	.123	.102	.127	.106	.088	.087	.073	.061	.050	.043	.036	.016	.014	.012	
3.0	.138	.106	.081	.118	.092	.070	.081	.064	.049	.047	.037	.029	.015	.012	.009	
4.0	.129	.093	.066	.111	.081	.057	.076	.056	.040	.044	.033	.024	.014	.011	.008	
5.0	.122	.083	.055	.104	.072	.048	.072	.050	.034	.042	.029	.020	.013	.010	.007	
6.0	.115	.075	.046	.099	.065	.040	.068	.045	.028	.040	.027	.017	.013	.009	.006	
7.0	.109	.068	.040	.094	.059	.035	.065	.041	.024	.038	.024	.015	.012	.008	.005	
8.0	.104	.063	.035	.089	.054	.030	.062	.038	.021	.036	.023	.013	.012	.007	.004	
9.0	.099	.058	.031	.085	.050	.027	.059	.035	.019	.034	.021	.011	.011	.007	.004	
10.0	.095	.054	.027	.081	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:
 Test Date:2015-05-08

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:0.6704A P:143.9W PF:0.9717 Lamp Flux:15000x1 lm										
NAME: BT-LON-150W					TYPE:LENS			WEIGHT:3.8kg		
SPEC.:5000K R80 60LEDs 60D					DIM.: D260*H184mm			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	25.0	26.1	25.2	26.3	26.5	25.1	26.2	25.3	26.3	26.5
3H	25.8	26.8	26.1	27.0	27.3	26.1	27.1	26.3	27.3	27.5
4H	26.3	27.2	26.6	27.5	27.7	26.6	27.6	26.9	27.8	28.0
6H	26.7	27.6	27.0	27.8	28.1	27.1	28.0	27.5	28.3	28.5
8H	26.9	27.7	27.2	28.0	28.3	27.3	28.2	27.7	28.5	28.7
12H	27.0	27.8	27.4	28.1	28.4	27.6	28.4	28.0	28.7	29.0
4H 2H	25.2	26.1	25.5	26.4	26.6	25.3	26.2	25.6	26.5	26.7
3H	26.3	27.1	26.7	27.4	27.7	26.6	27.4	26.9	27.7	28.0
4H	27.0	27.7	27.3	28.0	28.4	27.3	28.1	27.7	28.4	28.7
6H	27.5	28.2	27.9	28.6	28.9	28.0	28.7	28.4	29.0	29.4
8H	27.8	28.4	28.2	28.8	29.1	28.3	28.9	28.7	29.2	29.6
12H	28.0	28.6	28.4	29.0	29.4	28.7	29.2	29.1	29.6	30.0
8H 4H	27.3	27.9	27.7	28.2	28.6	27.6	28.2	28.0	28.5	28.9
6H	28.0	28.5	28.5	28.9	29.4	28.4	28.9	28.9	29.3	29.8
8H	28.4	28.8	28.8	29.2	29.7	28.8	29.3	29.3	29.7	30.1
12H	28.7	29.1	29.2	29.6	30.1	29.4	29.8	29.8	30.2	30.7
12H 4H	27.3	27.9	27.7	28.2	28.6	27.6	28.1	28.0	28.5	28.9
6H	28.1	28.6	28.6	29.0	29.4	28.5	28.9	28.9	29.4	29.8
8H	28.5	28.9	29.0	29.3	29.8	28.9	29.3	29.4	29.8	30.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.7 / - 0.8					+ 0.6 / - 0.7				
1.5H	+ 1.6 / - 0.8					+ 1.3 / - 0.7				
2.0H	+ 0.7 / - 0.3					+ 0.7 / - 0.3				

CIE Pub.117 Corrected 15000 lm Total Lamp Luminous Flux. (8log(F/F0) = 9.4)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-05-08

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:0.6704A P:143.9W PF:0.9717 Lamp Flux:15000x1 lm		
NAME: BT-LON-150W	TYPE:LENS	WEIGHT:3.8kg
SPEC.:5000K R80 60LEDs 60D	DIM.: D260*H184mm	SERIAL No.:
MFR.: EVERFINE	SUR.:163*163mm	PROTECTION ANGLE:

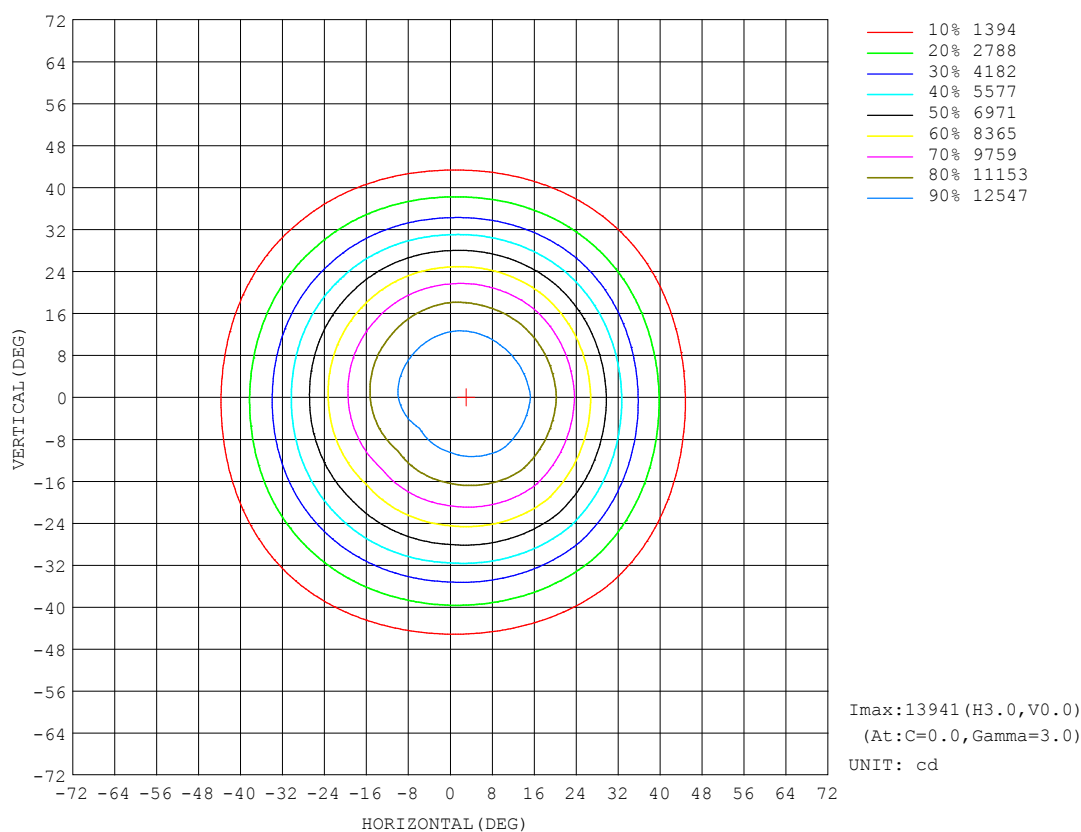
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	72	65	61	72	65	61	71	65	61	57
0.80	79	73	69	79	72	68	77	72	68	64
1.00	84	78	74	83	77	73	82	77	73	69
1.25	88	82	78	87	82	78	85	81	77	73
1.50	91	86	82	90	85	81	88	83	80	76
2.00	94	90	86	93	89	85	90	87	84	78
2.50	96	92	89	95	91	88	92	89	86	80
3.00	98	94	91	97	93	90	93	90	88	82
4.00	101	97	95	99	96	93	95	93	91	84
5.00	102	99	97	100	98	96	96	94	93	85
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:30DEG
Operators:
Test Date:2015-05-08

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:0.6704A P:143.9W PF:0.9717 Lamp Flux:15000x1 lm		
NAME: BT-LON-150W	TYPE:LENS	WEIGHT:3.8kg
SPEC.:5000K R80 60LEDs 60D	DIM.: D260*H184mm	SERIAL No.:
MFR.: EVERFINE	SUR.:163*163mm	PROTECTION ANGLE:

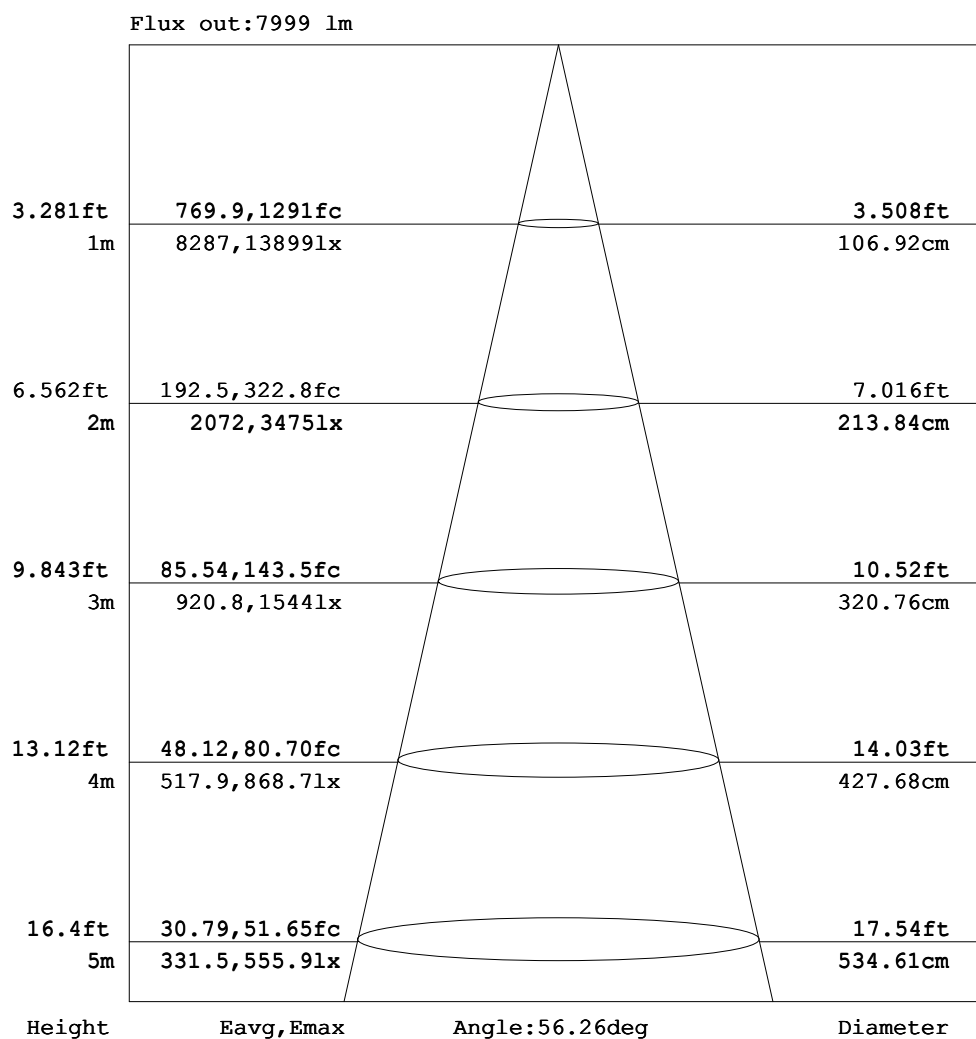


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-05-08

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:0.6704A P:143.9W PF:0.9717 Lamp Flux:15000x1 lm		
NAME: BT-LON-150W	TYPE:LENS	WEIGHT:3.8kg
SPEC.:5000K R80 60LEDs 60D	DIM.: D260*H184mm	SERIAL No.:
MFR.: EVERFINE	SUR.:163*163mm	PROTECTION ANGLE:



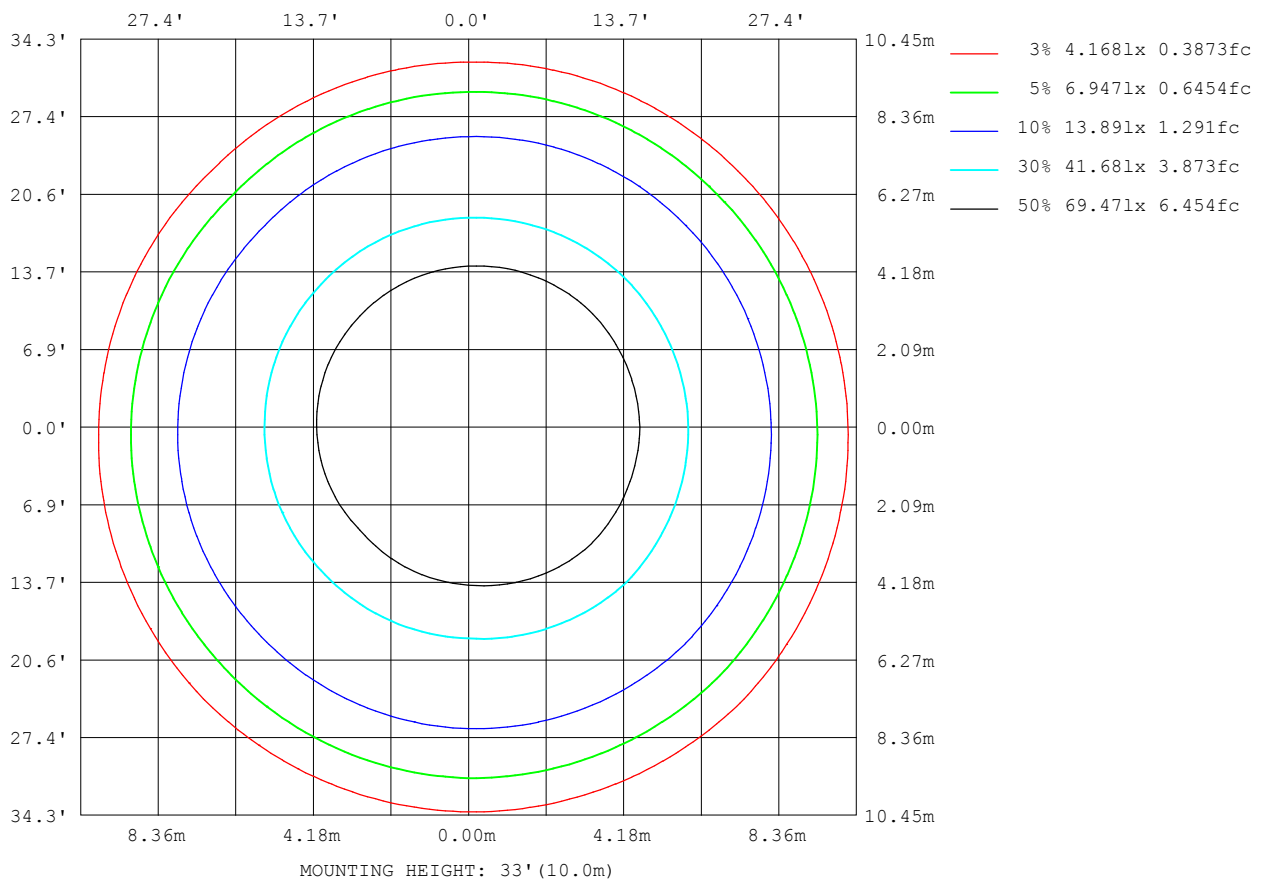
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-05-08

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

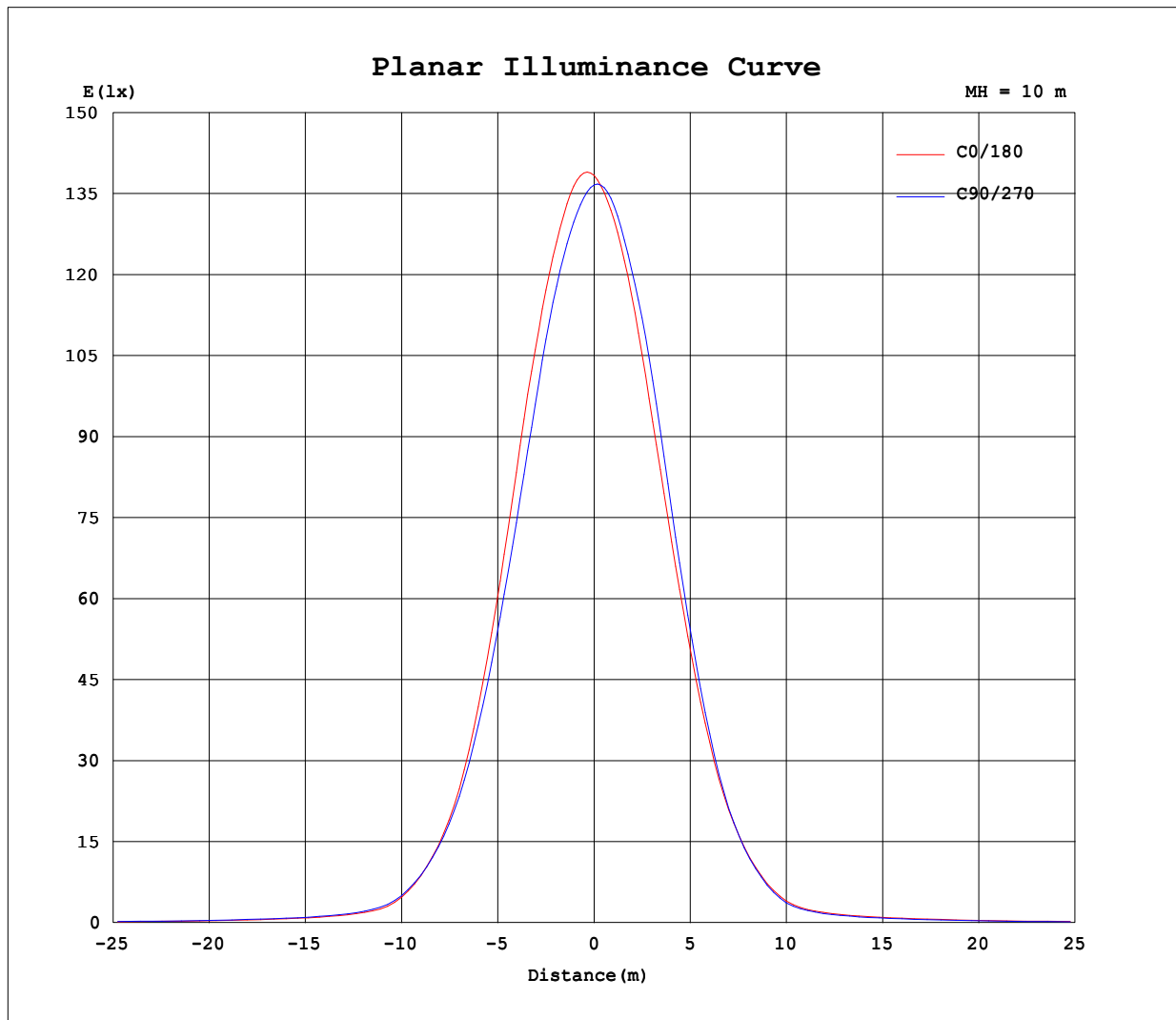
Test:U:220.9V I:0.6704A P:143.9W PF:0.9717 Lamp Flux:15000x1 lm		
NAME: BT-LON-150W	TYPE: LENS	WEIGHT: 3.8kg
SPEC.: 5000K R80 60LEDs 60D	DIM.: D260*H184mm	SERIAL No.:
MFR.: EVERFINE	SUR.: 163*163mm	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators:
 Test Date: 2015-05-08

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:

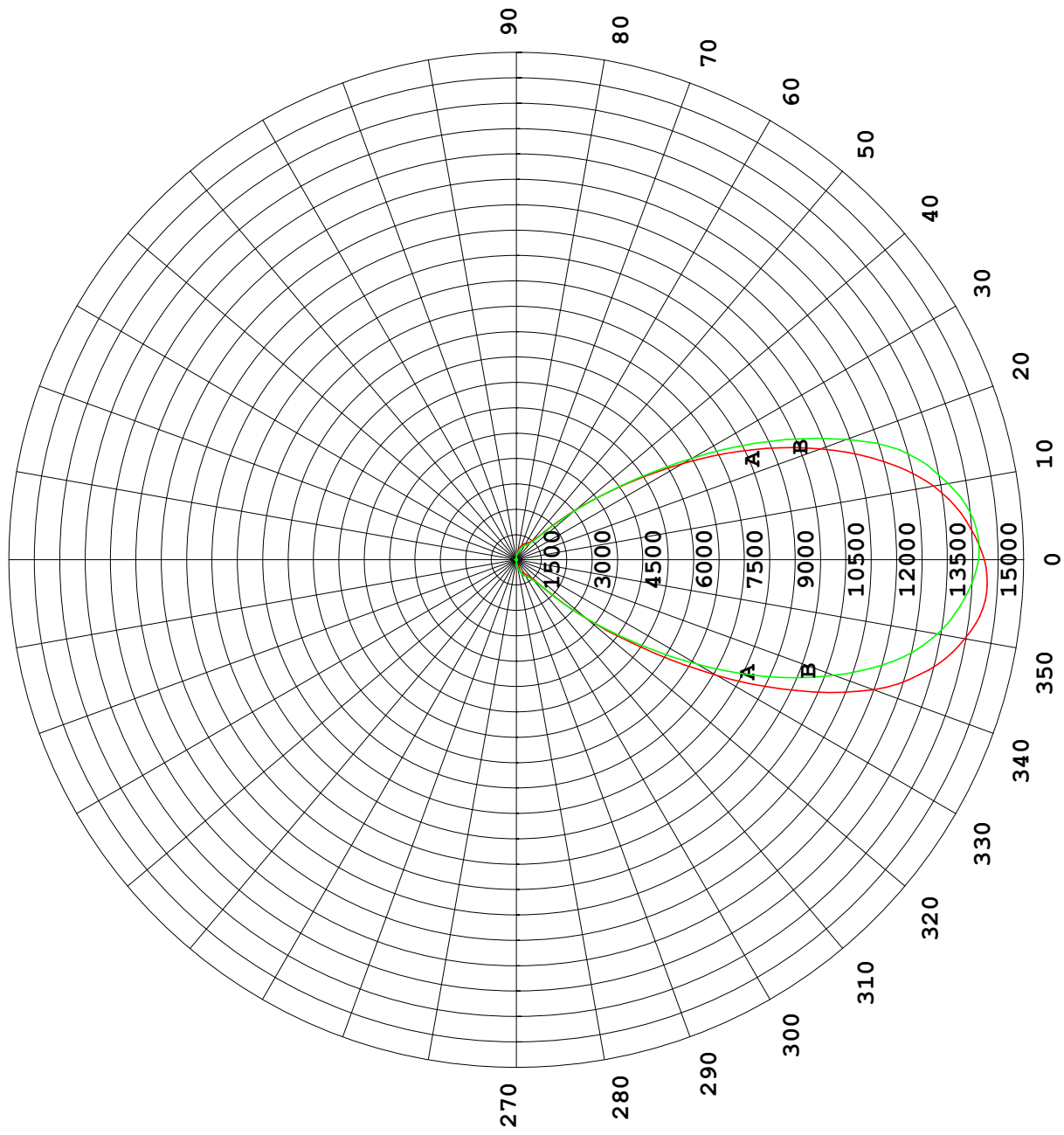
Planar Illuminance Curve



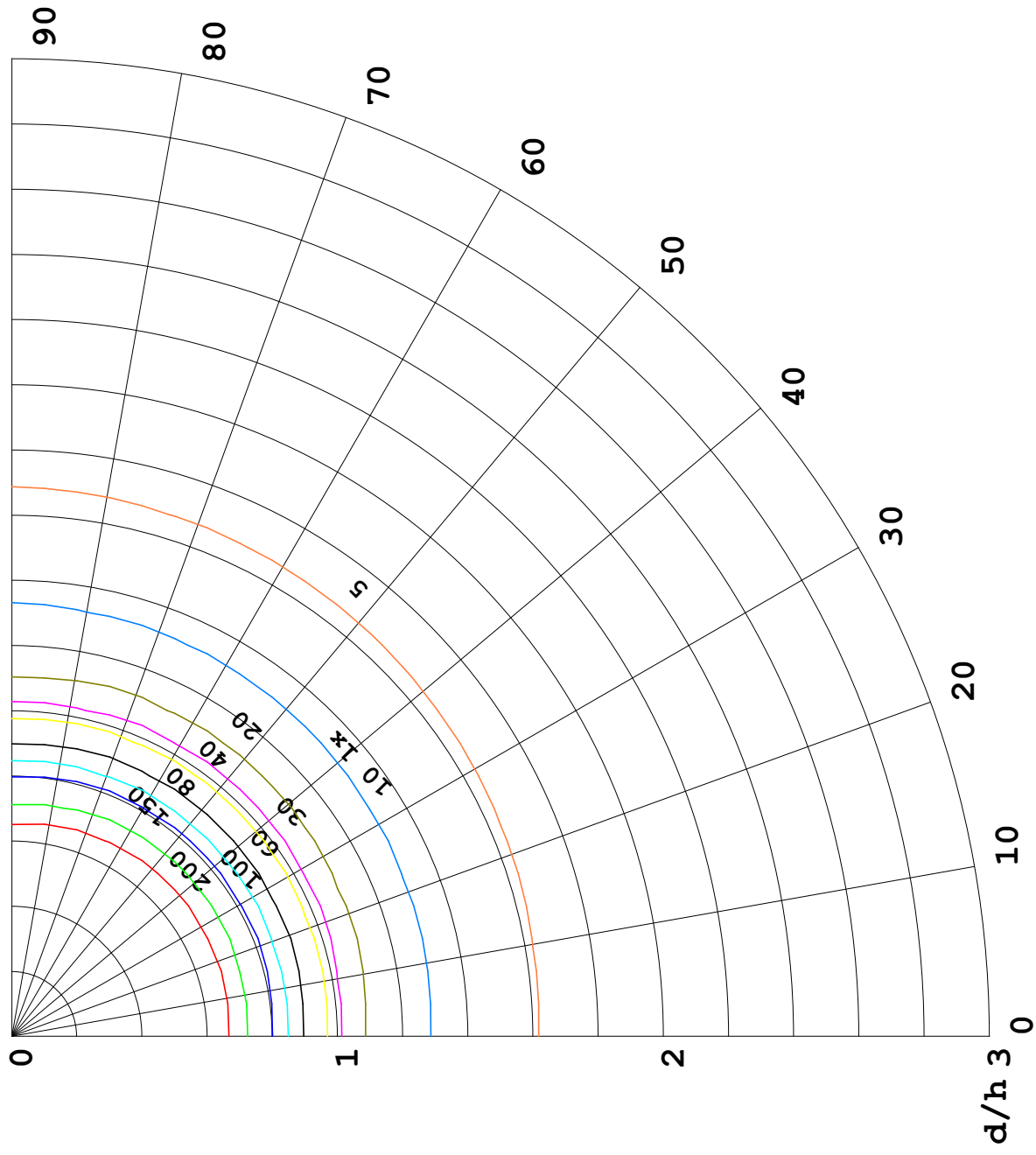
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 30DEG
Operators:
Test Date: 2015-05-08

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 $\kappa = 1$



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

