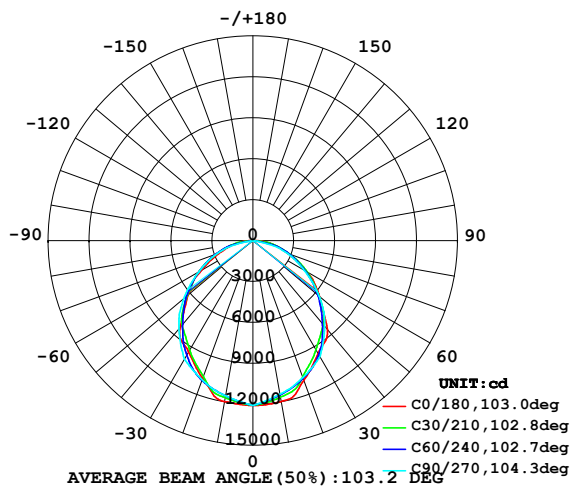


LUMINAIRE PHOTOMETRIC TEST REPORT

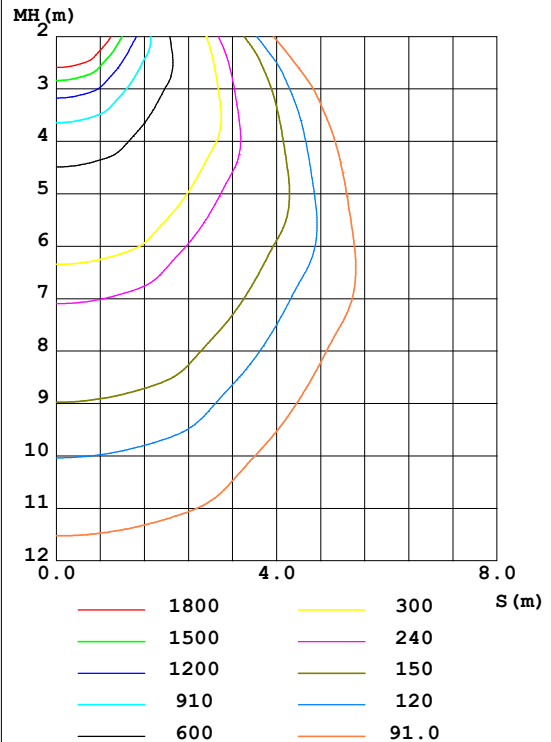
Test:U:231.1V I:1.326A P:301.6W PF:0.9846 Lamp Flux:30857.6x1 lm		
NAME: BT-MG300W	TYPE:Clear pc cover	WEIGHT:
SPEC.:5000k 288LEDs 120D	DIM.: 452*305*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:427*275mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 102.31 lm/W
MODEL	SMD3030	Imax(cd)	12085	S/MH(C0/180)	1.17	
NOMINAL POWER(W)	300	LOR(%)	100.0	S/MH(C90/270)	1.24	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	30858	η UP,DN(C0-180)	0.0,49.4	
NOMINAL FLUX(lm)	30857.6	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.6	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.35	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-17

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=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	1206	1184	1176	1183	1204	1186	1181	1188	0- 5	285.7	285.7	0.93, 0.93
10	1197	1155	1144	1154	1198	1161	1154	1162	5- 10	840.2	1126	3.65, 3.65
15	1176	1124	1112	1124	1156	1136	1127	1134	10- 15	1363	2489	8.07, 8.07
20	1091	1087	1069	1078	1076	1091	1086	1103	15- 20	1821	4310	14, 14
25	1023	1003	1027	992.7	1007	1006	1045	1021	20- 25	2191	6501	21.1, 21.1
30	957.6	930.0	984.0	918.5	943.5	933.7	1004	945.8	25- 30	2487	8987	29.1, 29.1
35	914.9	862.3	901.3	847.5	907.3	863.6	923.7	876.1	30- 35	2706	11693	37.9, 37.9
40	849.8	795.1	818.6	778.7	829.3	797.3	843.3	807.3	35- 40	2838	14531	47.1, 47.1
45	727.9	716.1	735.9	702.8	709.8	723.4	762.9	729.5	40- 45	2845	17376	56.3, 56.3
50	637.7	633.4	634.6	621.5	620.9	641.6	660.9	649.7	45- 50	2735	20111	65.2, 65.2
55	553.8	541.4	533.3	530.4	539.1	549.7	558.9	560.0	50- 55	2547	22658	73.4, 73.4
60	453.8	453.8	432.0	442.2	434.6	461.6	456.9	469.6	55- 60	2296	24954	80.9, 80.9
65	355.5	370.4	347.2	360.0	339.1	376.2	368.1	385.5	60- 65	1971	26925	87.3, 87.3
70	268.2	289.2	262.4	278.6	251.4	292.4	279.3	302.3	65- 70	1617	28542	92.5, 92.5
75	192.9	210.9	177.7	201.7	184.8	213.3	190.5	220.8	70- 75	1246	29788	96.5, 96.5
80	133.7	117.2	0	111.5	120.7	118.7	0	123.3	75- 80	787.4	30576	99.1, 99.1
85	74.97	0	0	0	65.88	0	0	0	80- 85	246.1	30822	99.9, 99.9
90	13.37	0	0	0	21.36	0	0	0	85- 90	35.66	30858	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: $\times 10\text{cd}$ MAX (Ii - Iavg) / Iavg (0-135) = 100.0 %									UNIT: lm		

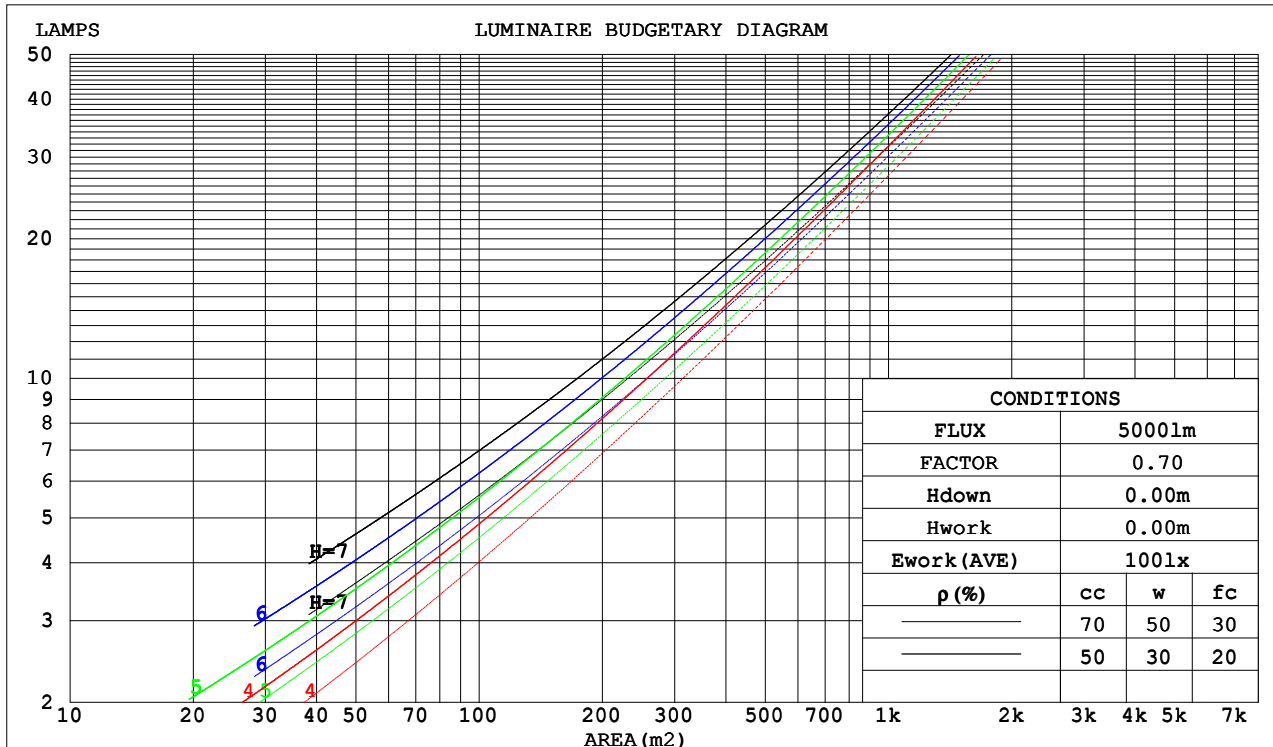
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators:
 Test Date: 2015-08-17

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=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:231.1V I:1.326A P:301.6W PF:0.9846 Lamp Flux:30857.6x1 lm		
NAME: BT-MG300W	TYPE:Clear pc cover	WEIGHT:
SPEC.:5000k 288LEDs 120D	DIM.: 452*305*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:427*275mm	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	.00
1.0	1.05	1.01	.97	1.02	.99	.95	.98	.95	.92	.94	.92	.89	.91	.89	.87	.85
2.0	.92	.85	.79	.90	.84	.78	.86	.81	.77	.83	.79	.75	.80	.76	.73	.71
3.0	.81	.73	.66	.79	.72	.66	.76	.70	.64	.73	.68	.63	.71	.66	.62	.60
4.0	.72	.63	.56	.70	.62	.56	.68	.61	.55	.65	.59	.54	.63	.58	.54	.52
5.0	.64	.55	.49	.63	.55	.48	.61	.53	.48	.59	.52	.47	.57	.51	.47	.45
6.0	.58	.49	.43	.57	.48	.42	.55	.48	.42	.53	.47	.42	.52	.46	.41	.39
7.0	.52	.44	.38	.52	.43	.38	.50	.43	.37	.49	.42	.37	.47	.41	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.33	.45	.38	.33	.44	.37	.33	.31
9.0	.44	.36	.30	.43	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:
 Test Date:2015-08-17

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=1.0000]
 Remarks:

WEC AND CCEC

Test:U:231.1V I:1.326A P:301.6W PF:0.9846 Lamp Flux:30857.6x1 lm		
NAME: BT-MG300W	TYPE:Clear pc cover	WEIGHT:
SPEC.:5000k 288LEDs 120D	DIM.: 452*305*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:427*275mm	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	.294	.167	.053	.287	.164	.052	.274	.157	.050	.262	.151	.048	.251	.145	.047				
2.0	.281	.154	.047	.275	.152	.047	.263	.147	.046	.253	.142	.044	.243	.137	.043				
3.0	.262	.140	.042	.257	.137	.041	.246	.134	.041	.237	.130	.040	.228	.126	.039				
4.0	.243	.126	.037	.238	.125	.037	.229	.121	.036	.221	.118	.036	.213	.116	.035				
5.0	.225	.115	.033	.221	.113	.033	.213	.111	.033	.205	.108	.032	.198	.106	.032				
6.0	.209	.105	.030	.206	.104	.030	.198	.102	.030	.192	.100	.029	.185	.098	.029				
7.0	.195	.097	.027	.192	.096	.027	.186	.094	.027	.180	.092	.027	.174	.090	.027				
8.0	.183	.089	.025	.180	.088	.025	.174	.087	.025	.169	.085	.025	.163	.084	.024				
9.0	.171	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023				
10.0	.161	.077	.021	.159	.077	.021	.154	.076	.021	.150	.074	.021	.146	.073	.021				

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	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.075	.140	.099	.065	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.084	.050	.024	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-17

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=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:231.1V I:1.326A P:301.6W PF:0.9846 Lamp Flux:30857.6x1 lm										
NAME: BT-MG300W					TYPE:Clear pc cover			WEIGHT:		
SPEC.:5000k 288LEDs 120D					DIM.: 452*305*185mm			SERIAL No.:		
MFR.: EVERFINE					SUR.:427*275mm			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	28.0	29.5	28.3	29.7	29.9	27.9	29.4	28.2	29.6	29.8
3H	29.4	30.8	29.7	31.0	31.3	29.3	30.7	29.6	30.9	31.1
4H	30.0	31.3	30.3	31.6	31.8	29.8	31.1	30.1	31.4	31.6
6H	30.5	31.7	30.8	32.0	32.3	29.9	31.1	30.2	31.4	31.6
8H	30.7	31.8	31.0	32.1	32.4	29.8	31.0	30.1	31.3	31.6
12H	30.8	31.9	31.1	32.2	32.5	29.7	30.9	30.1	31.2	31.5
4H 2H	28.6	30.0	29.0	30.2	30.5	28.5	29.8	28.8	30.1	30.3
3H	30.3	31.4	30.6	31.7	32.0	30.1	31.3	30.5	31.6	31.9
4H	31.0	32.0	31.4	32.3	32.7	30.8	31.9	31.2	32.2	32.5
6H	31.6	32.5	32.0	32.9	33.2	30.9	31.8	31.3	32.2	32.5
8H	31.8	32.7	32.2	33.0	33.4	30.9	31.7	31.3	32.1	32.5
12H	32.0	32.7	32.4	33.1	33.5	30.8	31.6	31.2	32.0	32.4
8H 4H	31.3	32.2	31.7	32.5	32.9	31.1	32.0	31.6	32.4	32.7
6H	32.1	32.8	32.6	33.2	33.7	31.3	32.0	31.7	32.4	32.8
8H	32.4	33.1	32.9	33.5	34.0	31.2	31.9	31.7	32.3	32.7
12H	32.7	33.2	33.2	33.7	34.2	31.2	31.7	31.7	32.2	32.7
12H 4H	31.3	32.1	31.7	32.4	32.9	31.2	32.0	31.6	32.3	32.7
6H	32.1	32.7	32.6	33.2	33.6	31.3	32.0	31.8	32.4	32.8
8H	32.5	33.0	32.9	33.4	33.9	31.3	31.8	31.8	32.3	32.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.2					+ 0.1 / - 0.2				
2.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117 Corrected 30858 lm Total Lamp Luminous Flux. (8log(F/F0) = 11.9)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-17

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=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:231.1V I:1.326A P:301.6W PF:0.9846 Lamp Flux:30857.6x1 lm		
NAME: BT-MG300W	TYPE:Clear pc cover	WEIGHT:
SPEC.:5000k 288LEDs 120D	DIM.: 452*305*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:427*275mm	PROTECTION ANGLE:

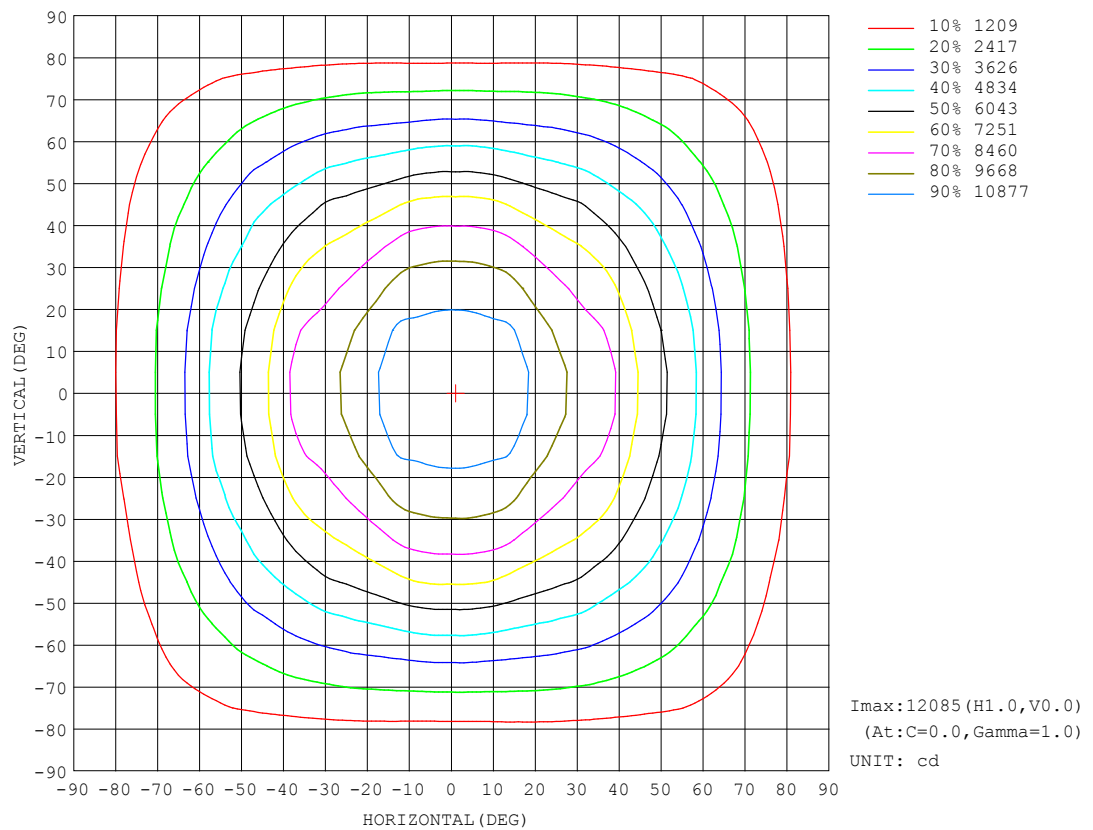
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	48	41	58	47	41	57	47	40	34
0.80	69	58	50	68	57	50	66	56	50	43
1.00	77	67	59	76	66	59	74	67	59	52
1.25	84	74	67	83	74	67	80	72	66	59
1.50	89	80	73	88	79	73	85	77	71	64
2.00	96	88	82	94	87	81	91	84	79	72
2.50	100	92	87	98	91	86	94	88	84	76
3.00	103	97	91	101	95	90	97	92	88	80
4.00	107	102	97	105	100	96	100	96	93	84
5.00	109	105	101	107	103	99	102	99	96	87
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:30DEG
 Operators:
 Test Date:2015-08-17

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=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:231.1V I:1.326A P:301.6W PF:0.9846 Lamp Flux:30857.6x1 lm		
NAME: BT-MG300W	TYPE:Clear pc cover	WEIGHT:
SPEC.:5000k 288LEDs 120D	DIM.: 452*305*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:427*275mm	PROTECTION ANGLE:

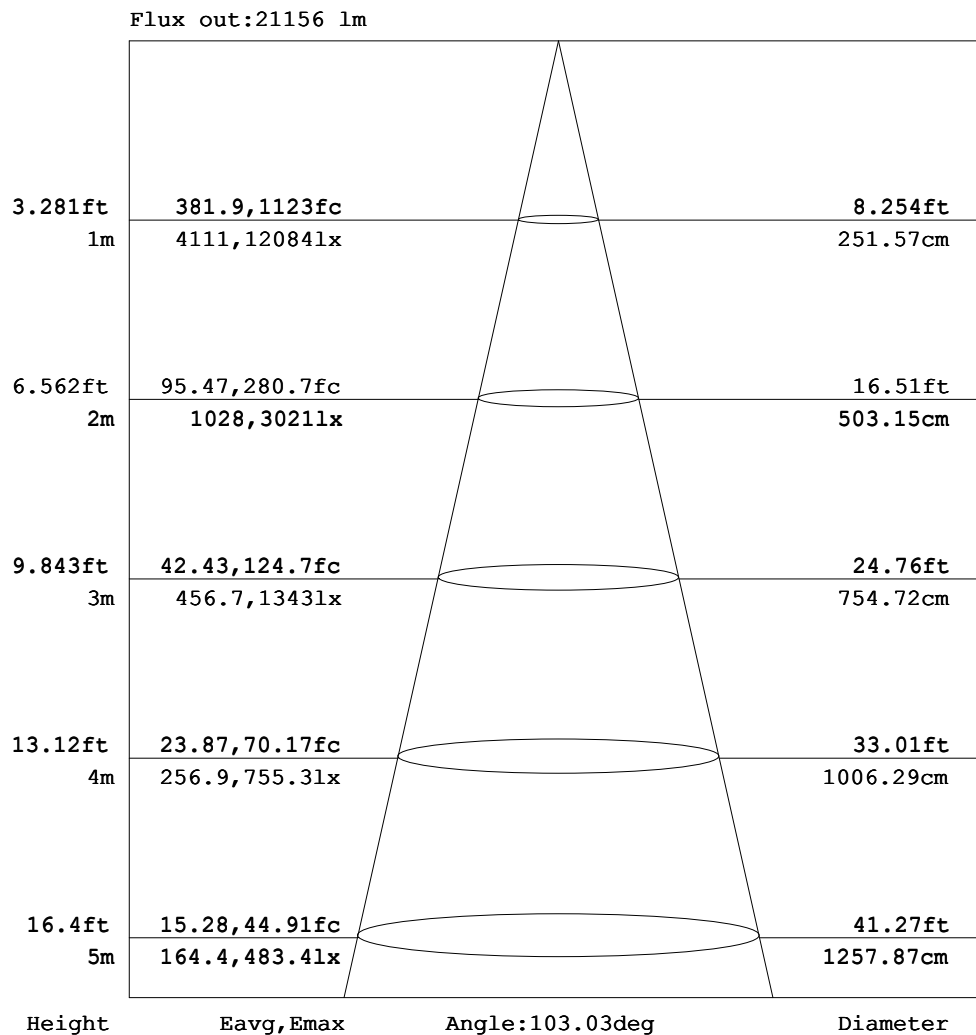


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-17

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=1.0000]
Remarks:

AAI Figure

Test:U:231.1V I:1.326A P:301.6W PF:0.9846 Lamp Flux:30857.6x1 lm		
NAME: BT-MG300W	TYPE:Clear pc cover	WEIGHT:
SPEC.:5000k 288LEDs 120D	DIM.: 452*305*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:427*275mm	PROTECTION ANGLE:



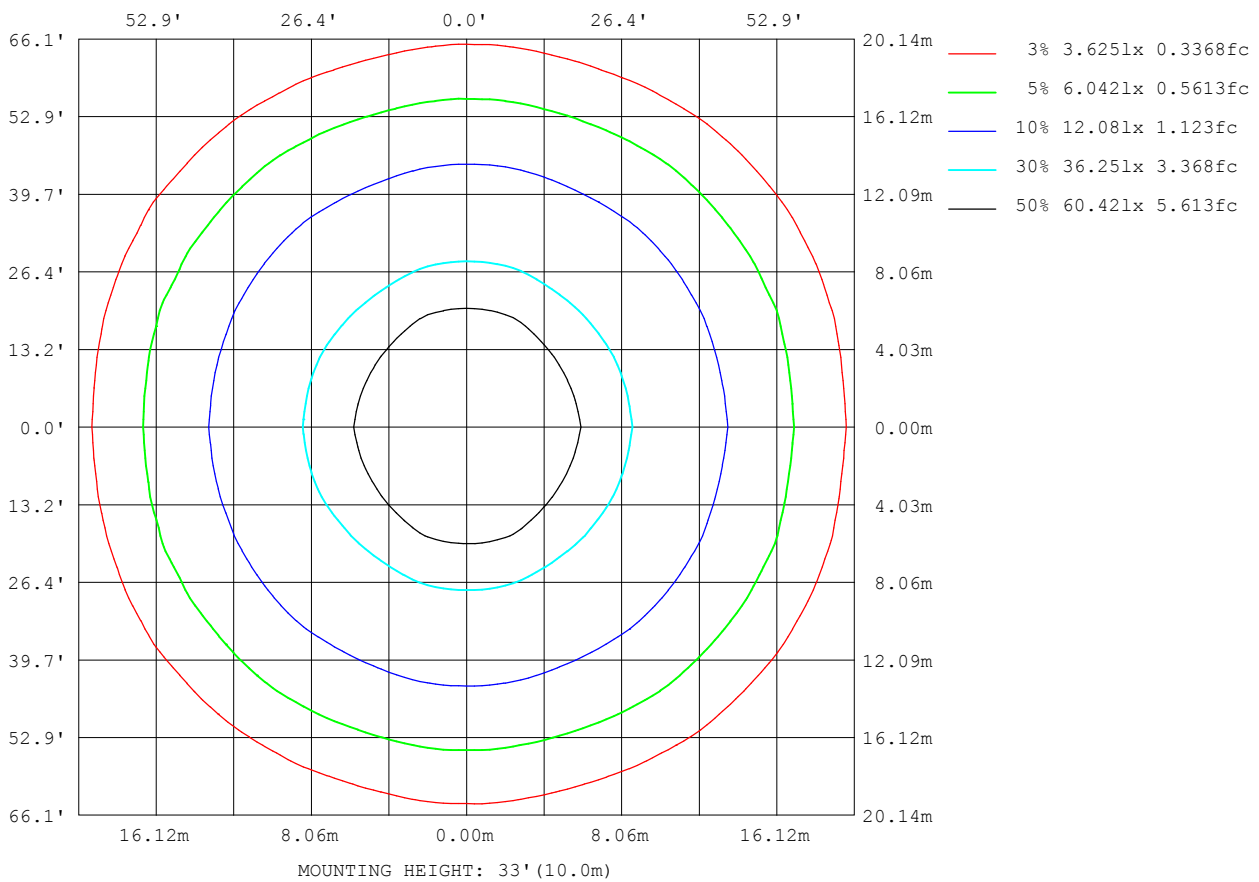
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-17

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=1.0000]
Remarks:

ISOLUX DIAGRAM

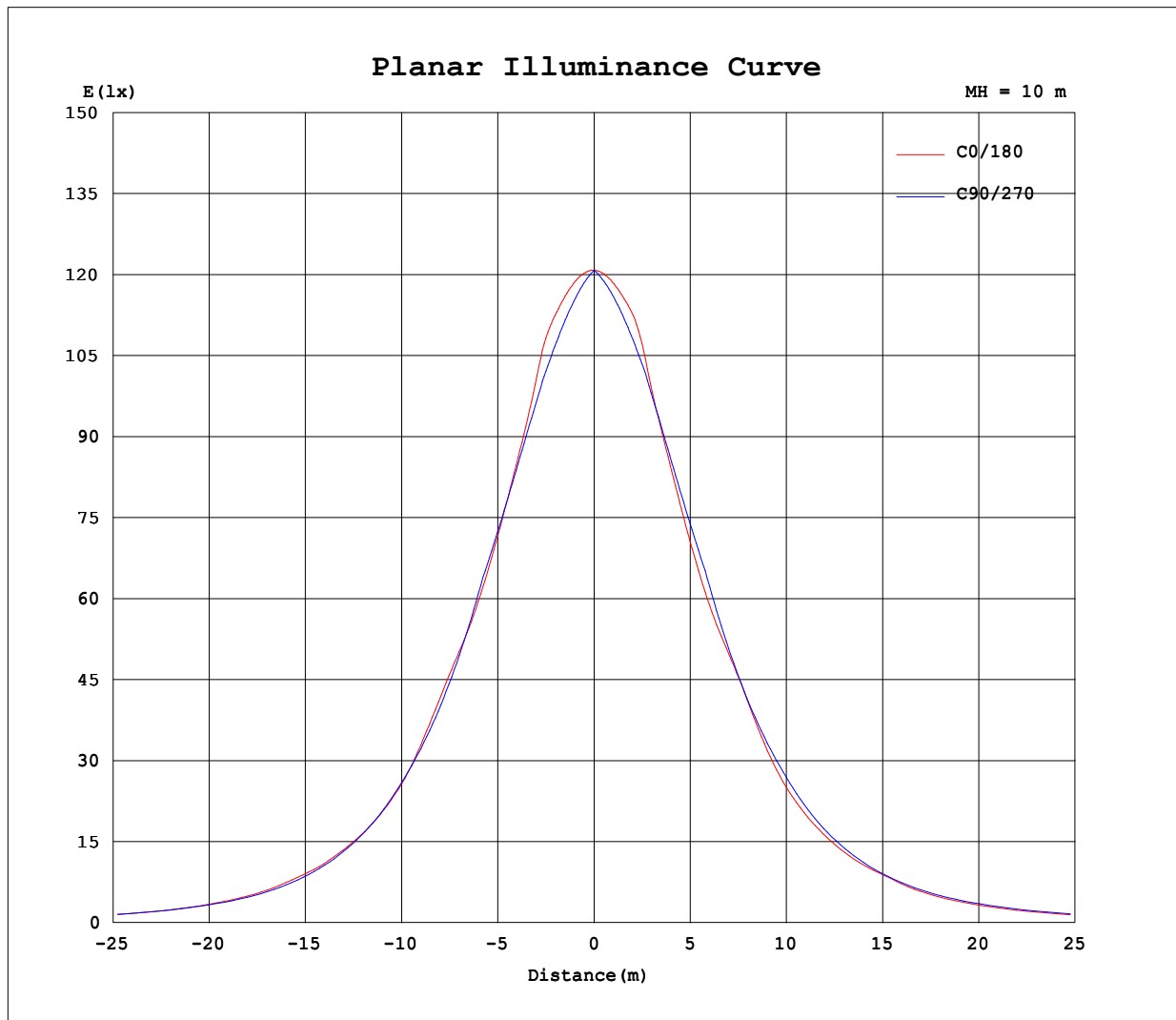
Test:U:231.1V I:1.326A P:301.6W PF:0.9846 Lamp Flux:30857.6x1 lm		
NAME: BT-MG300W	TYPE:Clear pc cover	WEIGHT:
SPEC.:5000k 288LEDs 120D	DIM.: 452*305*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:427*275mm	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:
Test Date:2015-08-17

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=1.0000]
Remarks:

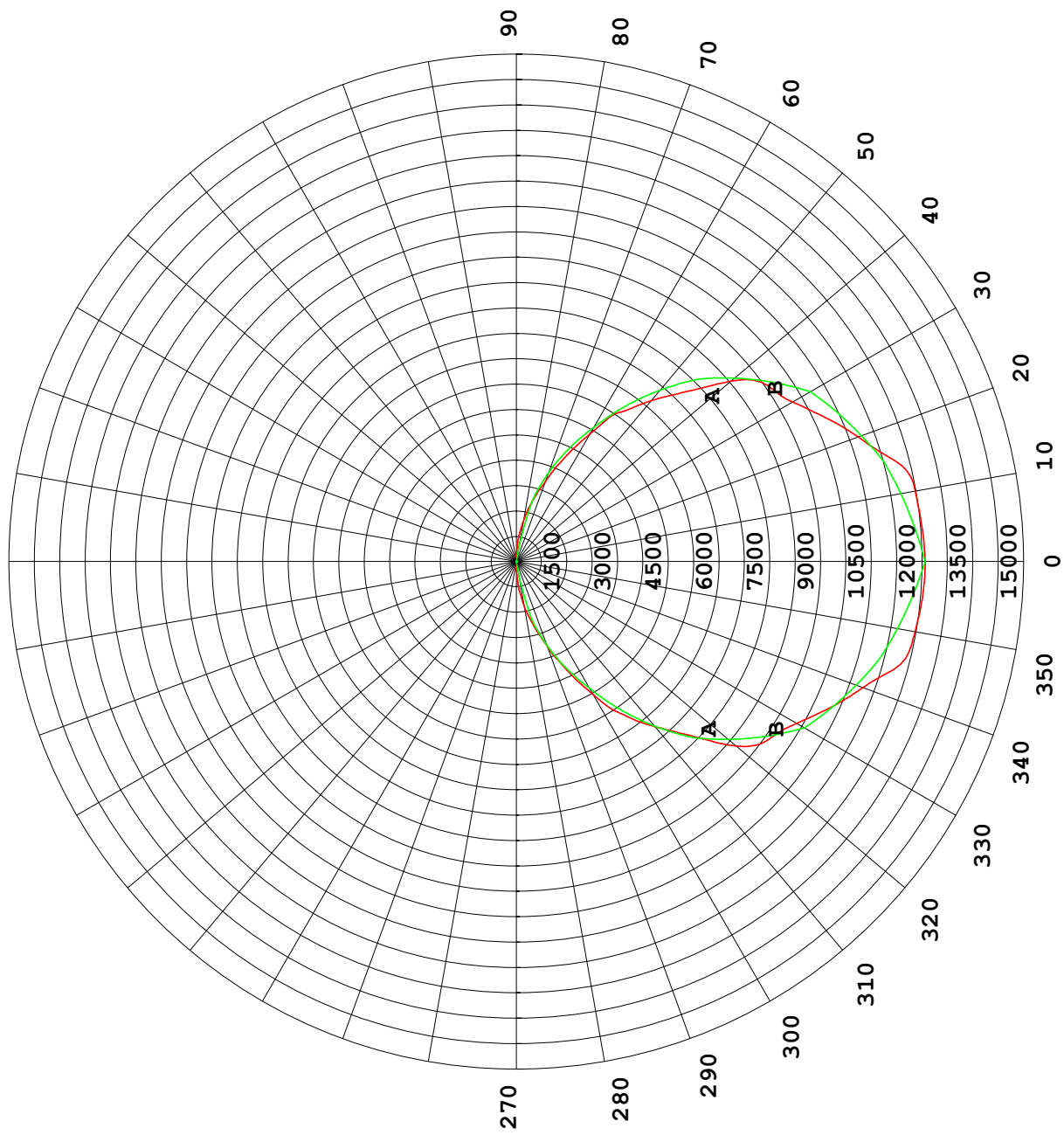
Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 30DEG
Operators:
Test Date: 2015-08-17

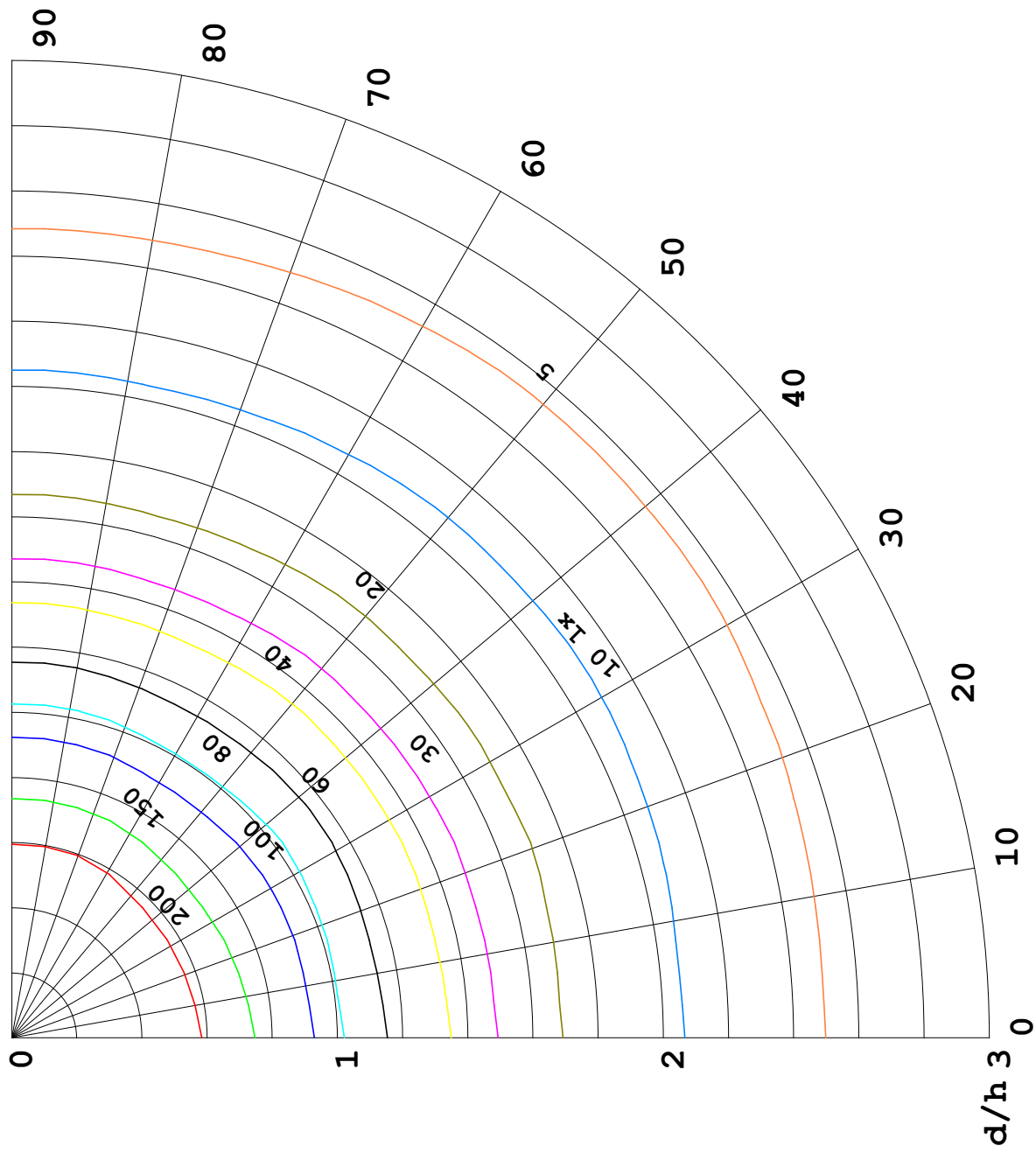
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity: 65.0%
Test Distance: 9.390m [K=1.0000]
Remarks:

I (cd)



$\kappa = 1$

1000 lm



F = 5000 lm
K = 0.7
Hcc = 0.0 m
Hfc = 0.0 m
Eave = 100 lx

Pcc
70
50

Pw
50
30

Pfc
30
20

