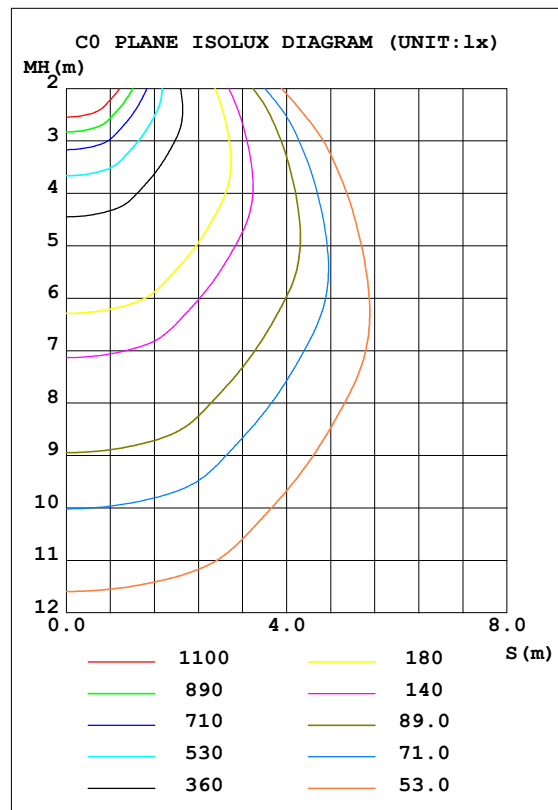
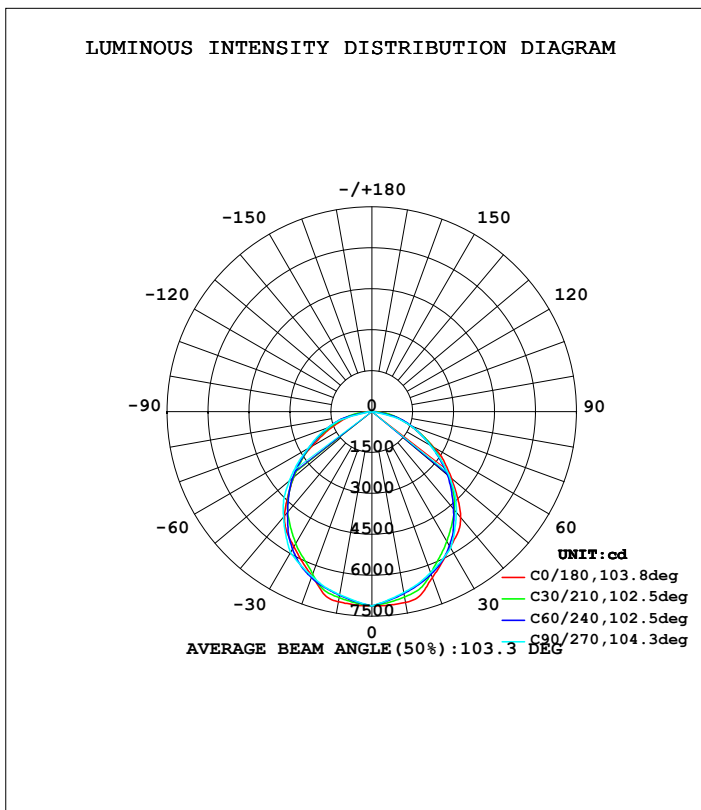


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.7V I:0.8952A P:193.8W PF:0.9807 Lamp Flux:18087x1 lm		
NAME: BT-MG200W	TYPE:5700K	WEIGHT:6600g
SPEC.:4*1	DIM.: 300*300mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	3030	Imax (cd)	7124	S/MH (C0/180)	1.21
NOMINAL POWER (W)	200	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	18087	η UP, DN (C0-180)	0.0, 49.0
NOMINAL FLUX (lm)	18087	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators: VISION
 Test Date: 2014-11-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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
5	7118	6980	6928	6978	7108	7005	6968	7008	0- 5	168.5	168.5	0.93,0.93
10	7101	6820	6733	6814	7075	6868	6813	6876	5- 10	496.1	664.6	3.67,3.67
15	6948	6645	6537	6646	6894	6725	6657	6729	10- 15	806.0	1471	8.13,8.13
20	6478	6405	6284	6395	6419	6503	6428	6527	15- 20	1078	2549	14.1,14.1
25	6095	5929	6030	5889	6062	6013	6200	6059	20- 25	1299	3848	21.3,21.3
30	5745	5483	5776	5447	5719	5581	5971	5619	25- 30	1479	5327	29.5,29.5
35	5468	5073	5295	5051	5425	5198	5507	5224	30- 35	1613	6940	38.4,38.4
40	5065	4663	4813	4640	4986	4800	5043	4826	35- 40	1687	8627	47.7,47.7
45	4429	4158	4332	4131	4344	4299	4579	4328	40- 45	1691	10318	57,57
50	3813	3635	3707	3606	3742	3780	3951	3816	45- 50	1623	11941	66,66
55	3256	3088	3083	3064	3189	3240	3323	3274	50- 55	1496	13438	74.3,74.3
60	2625	2545	2458	2522	2541	2688	2694	2717	55- 60	1329	14766	81.6,81.6
65	1995	2033	1976	2009	1938	2170	2201	2197	60- 65	1123	15889	87.8,87.8
70	1488	1558	1493	1531	1441	1686	1708	1711	65- 70	913.6	16803	92.9,92.9
75	1052	1122	1011	1094	1023	1239	1215	1258	70- 75	702.5	17505	96.8,96.8
80	666.9	608.9	0	587.3	634.3	697.2	0	707.8	75- 80	436.9	17942	99.2,99.2
85	279.1	0	0	0	240.4	0	0	0	80- 85	129.9	18072	99.9,99.9
90	22.53	0	0	0	25.73	0	0	0	85- 90	15.37	18087	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		

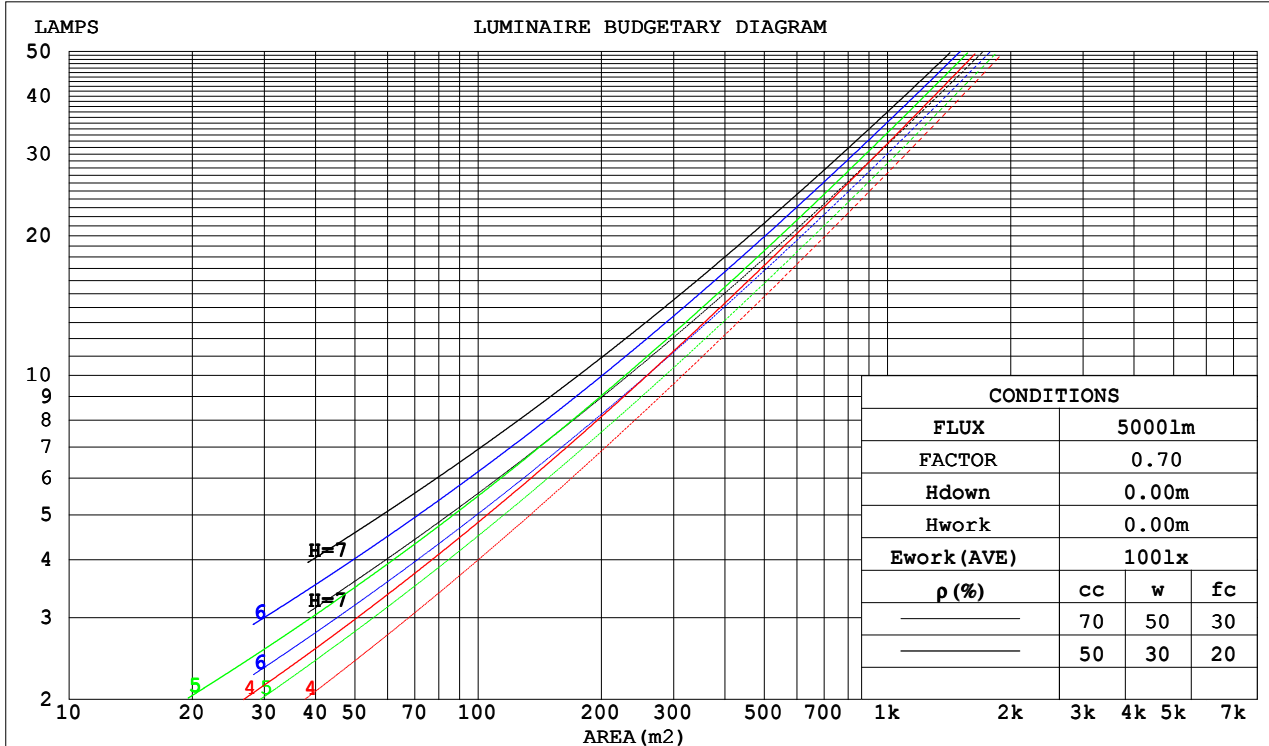
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:VISION
 Test Date:2014-11-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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:0.8952A P:193.8W PF:0.9807 Lamp Flux:18087x1 lm		
NAME: BT-MG200W	TYPE:5700K	WEIGHT:6600g
SPEC.:4*1	DIM.: 300*300mm	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	1.02	1.02	1.02	1.00
1.0	1.05	1.01	.97	1.03	.99	.96	.98	.95	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.77	.74	.71
3.0	.81	.73	.67	.79	.72	.66	.76	.70	.65	.74	.68	.64	.71	.67	.63	.61
4.0	.72	.63	.57	.71	.63	.56	.68	.61	.56	.66	.60	.55	.64	.58	.54	.52
5.0	.64	.56	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.48	.42	.37	.35
8.0	.48	.40	.34	.48	.40	.34	.46	.39	.34	.45	.38	.34	.44	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.31	.43	.35	.30	.41	.35	.30	.40	.35	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.28	.38	.32	.27	.26



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:VISION
 Test Date:2014-11-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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:0.8952A P:193.8W PF:0.9807 Lamp Flux:18087x1 lm		
NAME: BT-MG200W	TYPE:5700K	WEIGHT:6600g
SPEC.:4*1	DIM.: 300*300mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

ρcc	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						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.291	.165	.052	.284	.162	.051	.270	.155	.050	.258	.149	.048	.247	.143	.046	
2.0	.278	.153	.047	.272	.150	.046	.261	.145	.045	.250	.140	.044	.240	.136	.043	
3.0	.260	.138	.041	.255	.136	.041	.244	.132	.040	.235	.129	.039	.226	.125	.039	
4.0	.241	.125	.037	.236	.124	.037	.227	.121	.036	.219	.118	.035	.211	.115	.035	
5.0	.224	.114	.033	.220	.113	.033	.212	.110	.032	.204	.108	.032	.197	.105	.032	
6.0	.208	.104	.030	.205	.103	.030	.197	.101	.029	.191	.099	.029	.184	.097	.029	
7.0	.194	.096	.027	.191	.095	.027	.185	.093	.027	.179	.092	.027	.173	.090	.026	
8.0	.182	.089	.025	.179	.088	.025	.173	.087	.025	.168	.085	.025	.163	.084	.024	
9.0	.171	.083	.023	.168	.082	.023	.163	.081	.023	.158	.079	.023	.154	.078	.023	
10.0	.161	.077	.021	.158	.077	.021	.154	.075	.021	.149	.074	.021	.145	.073	.021	

ρcc	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						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	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.076	.139	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.052	.091	.061	.036	.053	.036	.022	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.030	.051	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.121	.071	.035	.083	.050	.025	.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	.127	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:VISION
 Test Date:2014-11-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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:0.8952A P:193.8W PF:0.9807 Lamp Flux:18087x1 lm										
NAME: BT-MG200W					TYPE:5700K			WEIGHT:6600g		
SPEC.:4*1					DIM.: 300*300mm			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	22.2	23.7	22.5	23.9	24.1	22.0	23.5	22.3	23.7	23.9
3H	23.5	24.8	23.7	25.0	25.3	23.4	24.7	23.7	25.0	25.2
4H	24.0	25.3	24.3	25.5	25.8	23.9	25.2	24.2	25.4	25.7
6H	24.4	25.6	24.7	25.9	26.1	23.9	25.1	24.3	25.4	25.7
8H	24.5	25.7	24.8	26.0	26.2	23.9	25.1	24.2	25.3	25.6
12H	24.6	25.7	24.9	26.0	26.3	23.8	25.0	24.2	25.2	25.5
4H 2H	22.7	24.0	23.0	24.3	24.5	22.6	23.9	22.9	24.2	24.4
3H	24.2	25.3	24.6	25.6	25.9	24.1	25.3	24.5	25.6	25.9
4H	24.9	25.9	25.2	26.2	26.5	24.8	25.8	25.2	26.2	26.5
6H	25.4	26.3	25.8	26.7	27.0	24.9	25.8	25.3	26.2	26.5
8H	25.6	26.4	26.0	26.8	27.2	24.8	25.7	25.3	26.1	26.4
12H	25.7	26.5	26.1	26.9	27.3	24.8	25.6	25.2	26.0	26.4
8H 4H	25.1	26.0	25.6	26.4	26.7	25.1	25.9	25.5	26.3	26.7
6H	25.9	26.6	26.3	27.0	27.4	25.2	25.9	25.7	26.3	26.8
8H	26.2	26.8	26.6	27.2	27.7	25.2	25.8	25.6	26.2	26.7
12H	26.4	26.9	26.9	27.4	27.8	25.1	25.7	25.6	26.1	26.6
12H 4H	25.1	25.9	25.5	26.3	26.7	25.1	25.9	25.5	26.3	26.7
6H	25.9	26.5	26.3	26.9	27.4	25.3	25.9	25.7	26.3	26.8
8H	26.2	26.7	26.6	27.1	27.6	25.2	25.8	25.7	26.2	26.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
2.0H	+ 0.3 / - 0.3					+ 0.4 / - 0.3				

CIE Pub.117 Corrected 18087 lm Total Lamp Luminous Flux. (8log(F/F0) = 10.1)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:VISION
 Test Date:2014-11-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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:0.8952A P:193.8W PF:0.9807 Lamp Flux:18087x1 lm		
NAME: BT-MG200W	TYPE:5700K	WEIGHT:6600g
SPEC.:4*1	DIM.: 300*300mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

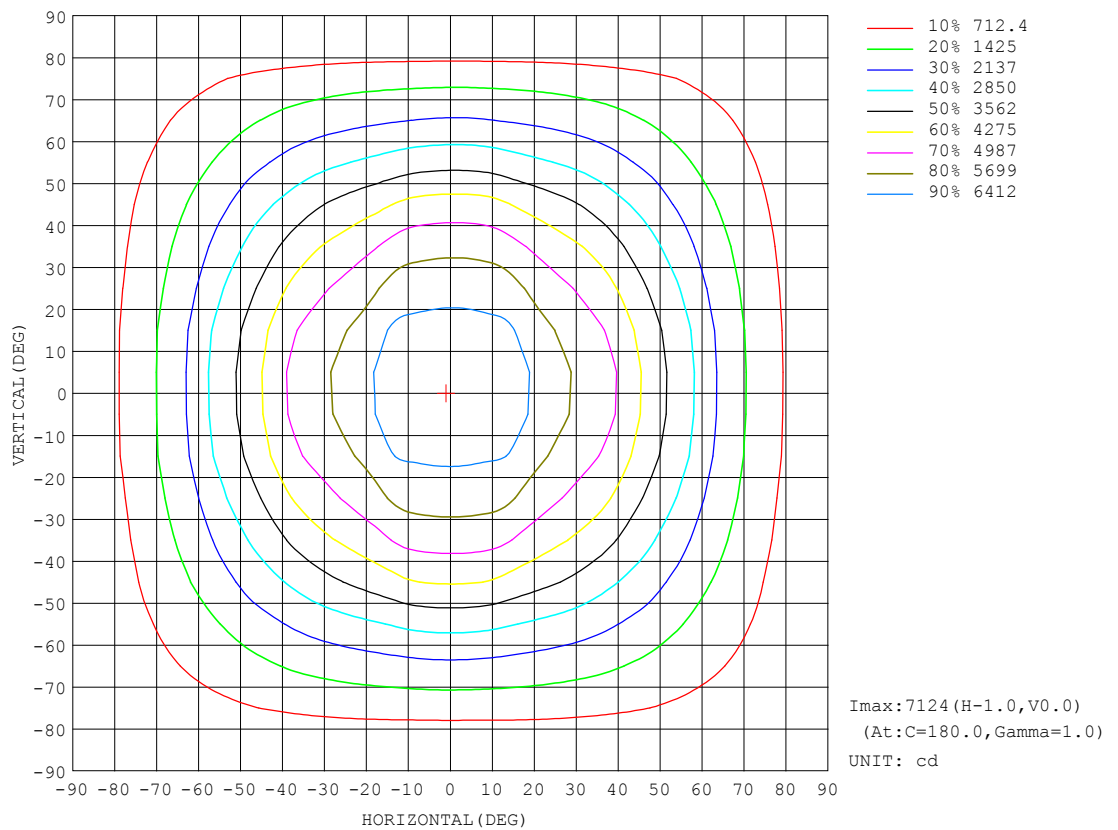
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	48	41	59	48	41	57	47	41	35
0.80	69	58	51	68	58	51	67	57	50	44
1.00	78	67	60	77	66	60	74	68	59	52
1.25	85	75	68	83	74	67	81	73	67	60
1.50	90	80	74	88	79	73	85	78	72	65
2.00	96	88	82	95	87	81	91	85	80	72
2.50	100	93	87	98	91	86	94	89	84	76
3.00	103	97	92	101	95	91	97	92	88	80
4.00	107	102	97	105	100	96	101	97	93	85
5.00	109	105	101	107	103	100	103	99	96	88
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:VISION
 Test Date:2014-11-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 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:0.8952A P:193.8W PF:0.9807 Lamp Flux:18087x1 lm		
NAME: BT-MG200W	TYPE:5700K	WEIGHT:6600g
SPEC.:4*1	DIM.: 300*300mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

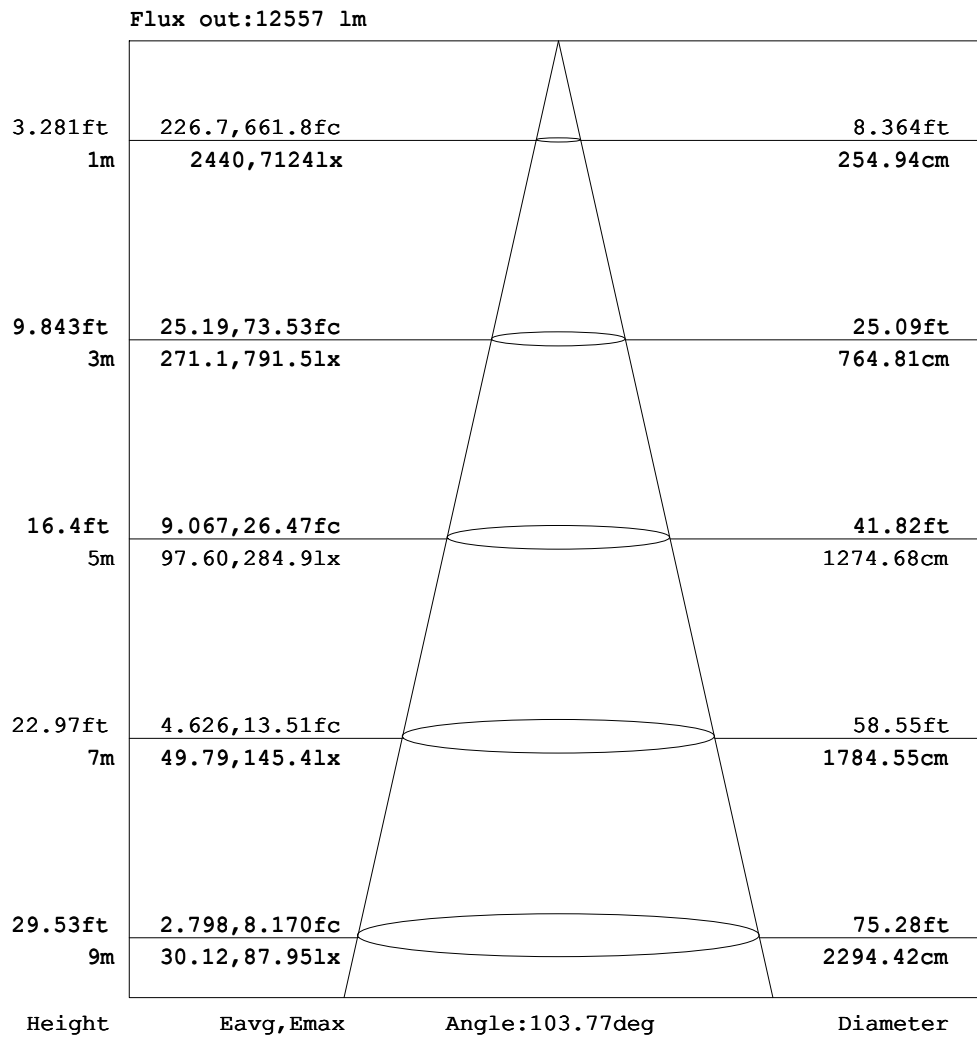


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 30DEG
Operators: VISION
Test Date: 2014-11-08

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
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:0.8952A P:193.8W PF:0.9807 Lamp Flux:18087x1 lm		
NAME: BT-MG200W	TYPE:5700K	WEIGHT:6600g
SPEC.:4*1	DIM.: 300*300mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



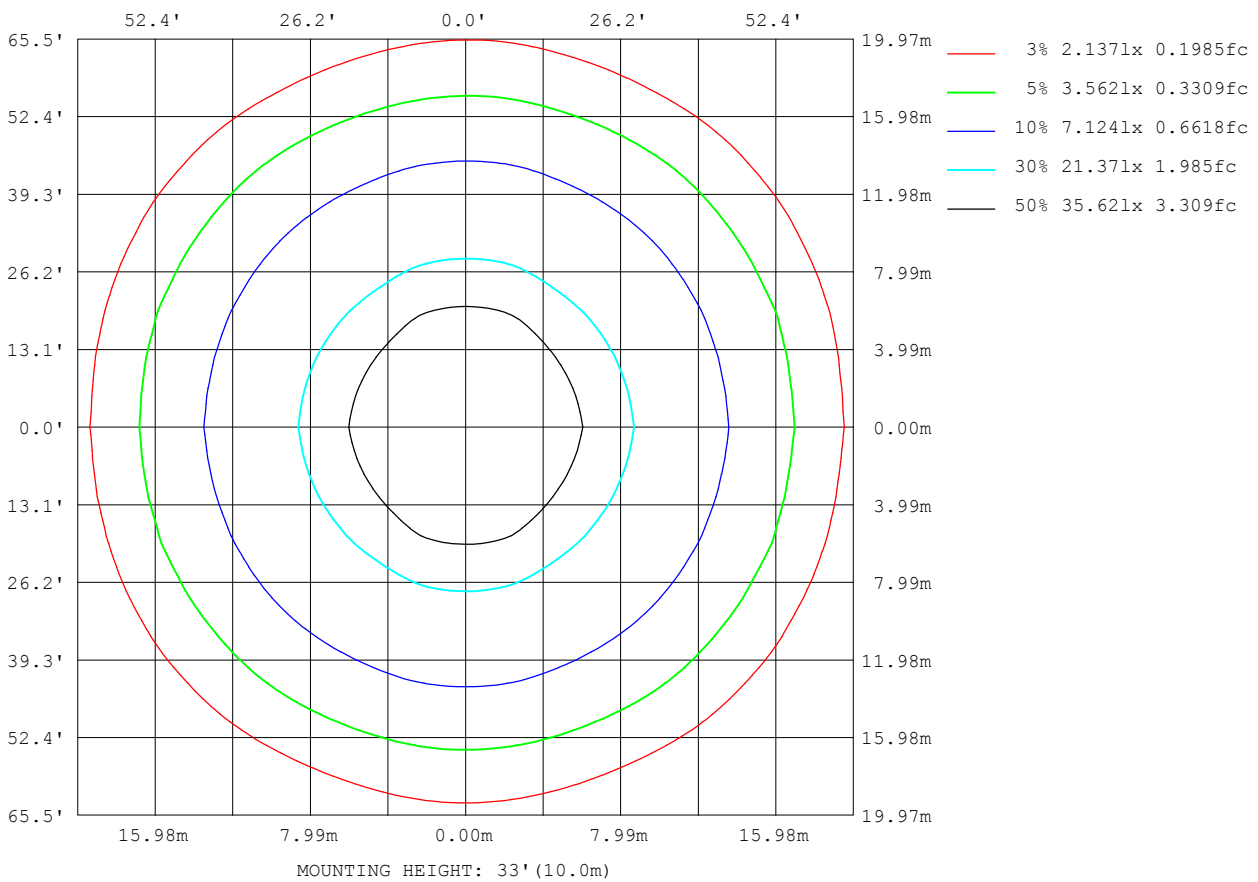
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:30DEG
Operators:VISION
Test Date:2014-11-08

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.256m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

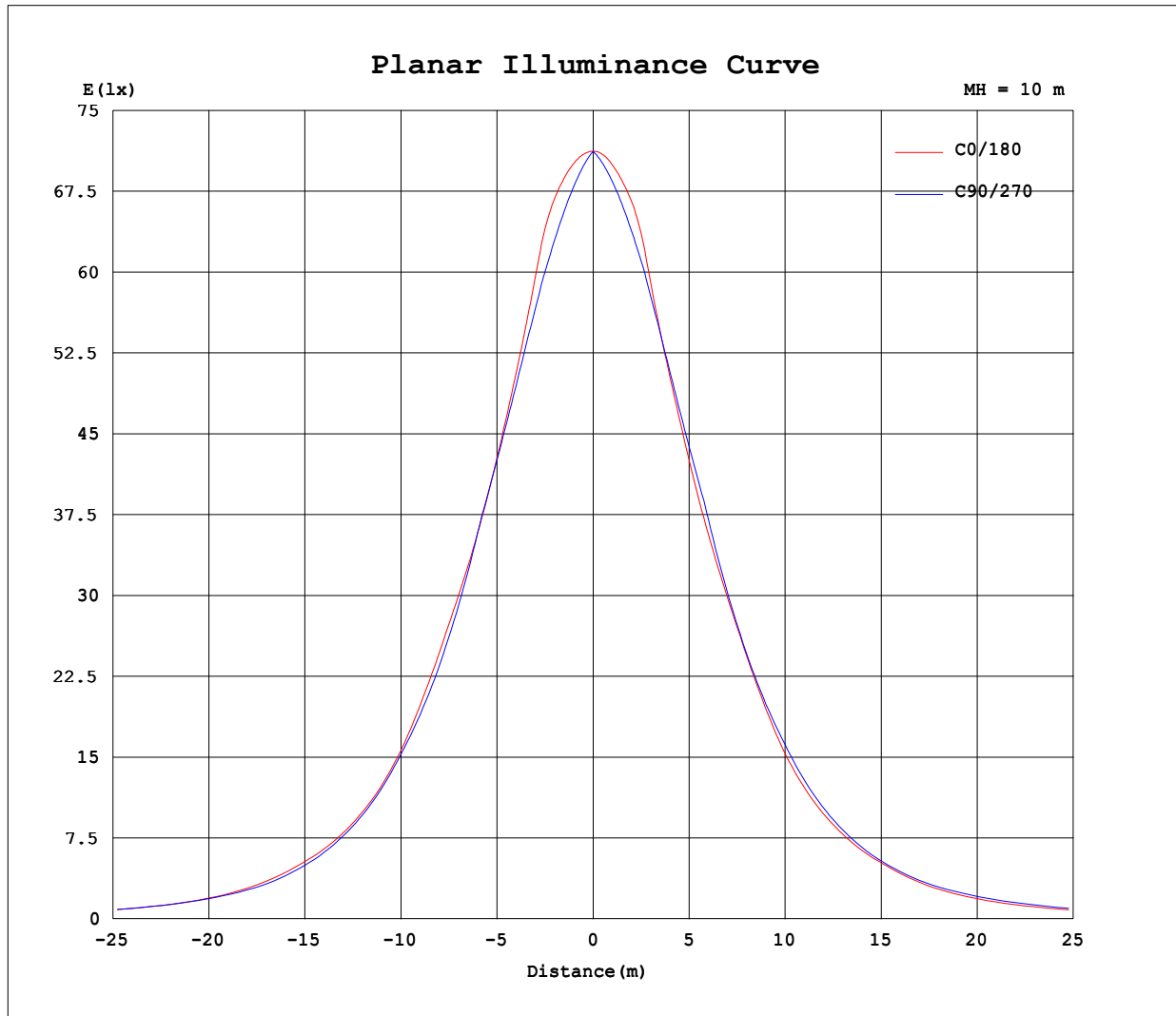
Test:U:220.7V I:0.8952A P:193.8W PF:0.9807 Lamp Flux:18087x1 lm		
NAME: BT-MG200W	TYPE:5700K	WEIGHT:6600g
SPEC.:4*1	DIM.: 300*300mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:VISION
 Test Date:2014-11-08

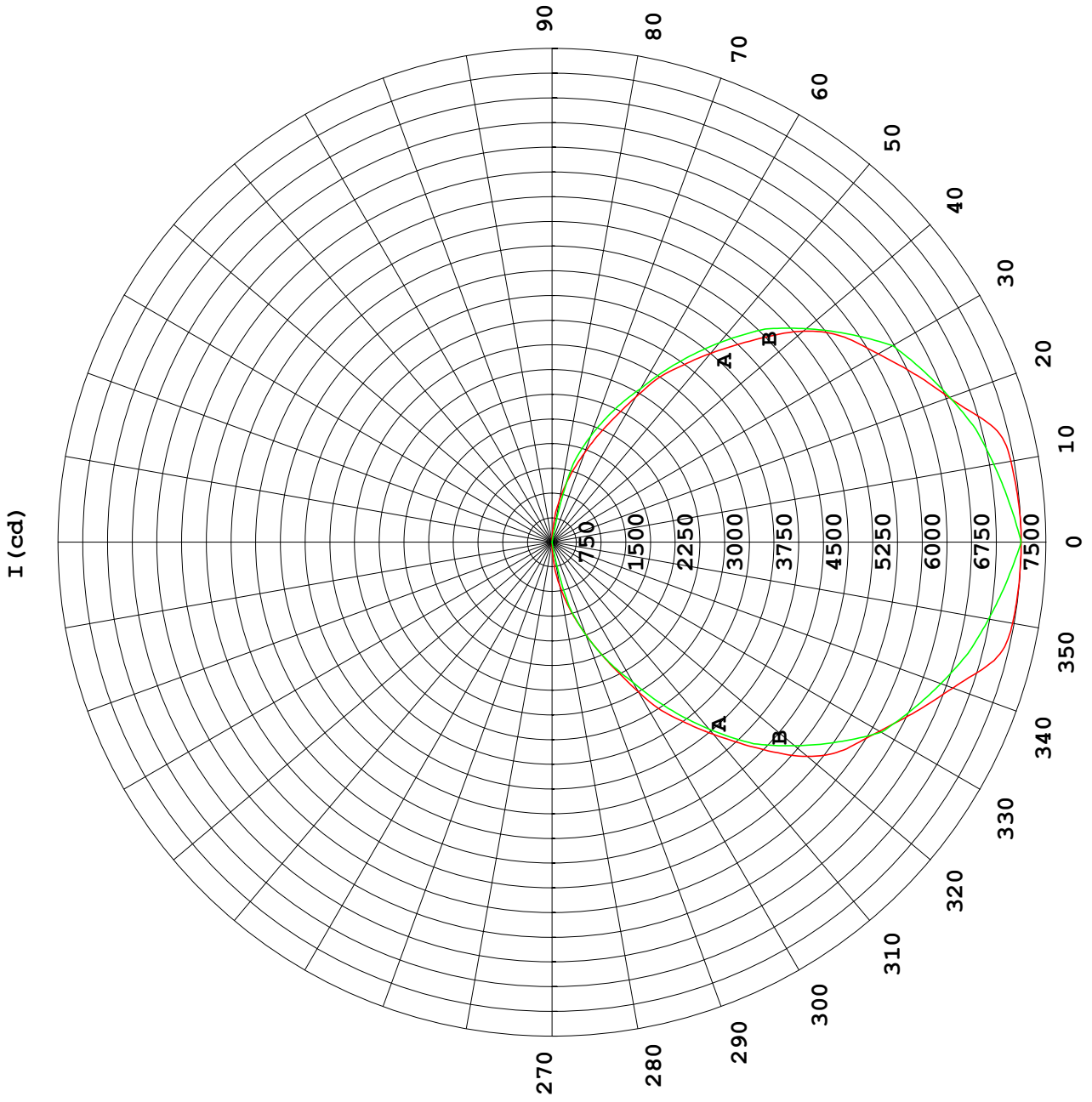
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity:65.0%
 Test Distance:9.256m [K=1.0000]
 Remarks:

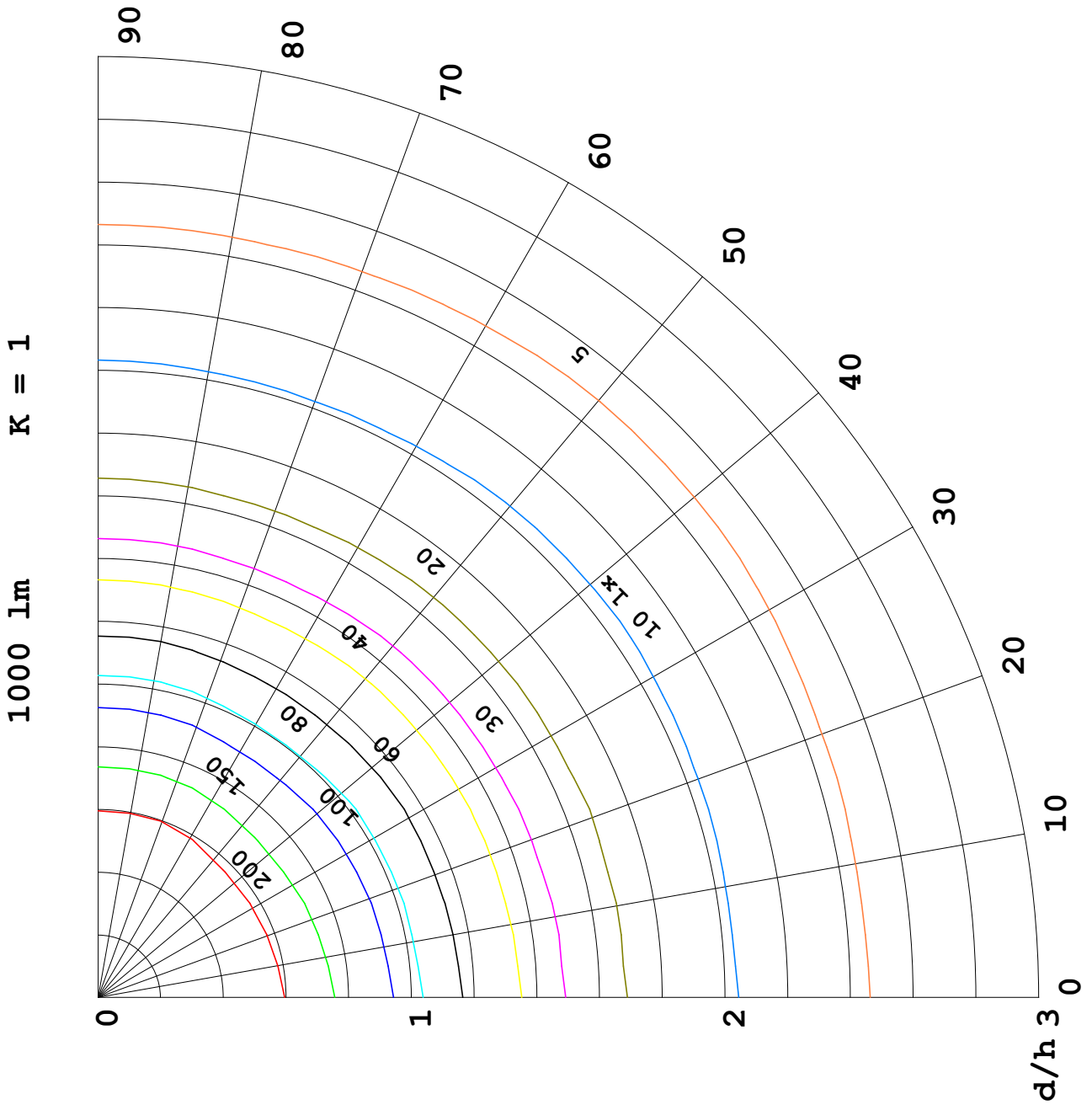
Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators: VISION
 Test Date: 2014-11-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity: 65.0%
 Test Distance: 9.256m [K=1.0000]
 Remarks:





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

