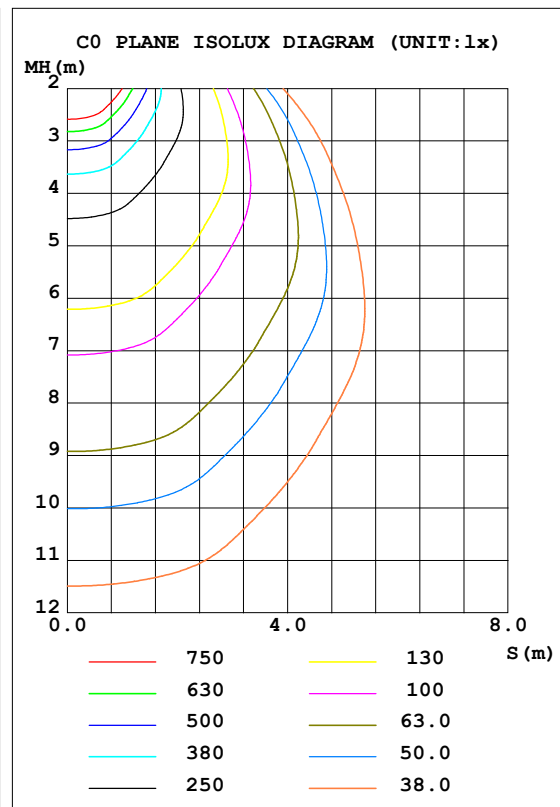
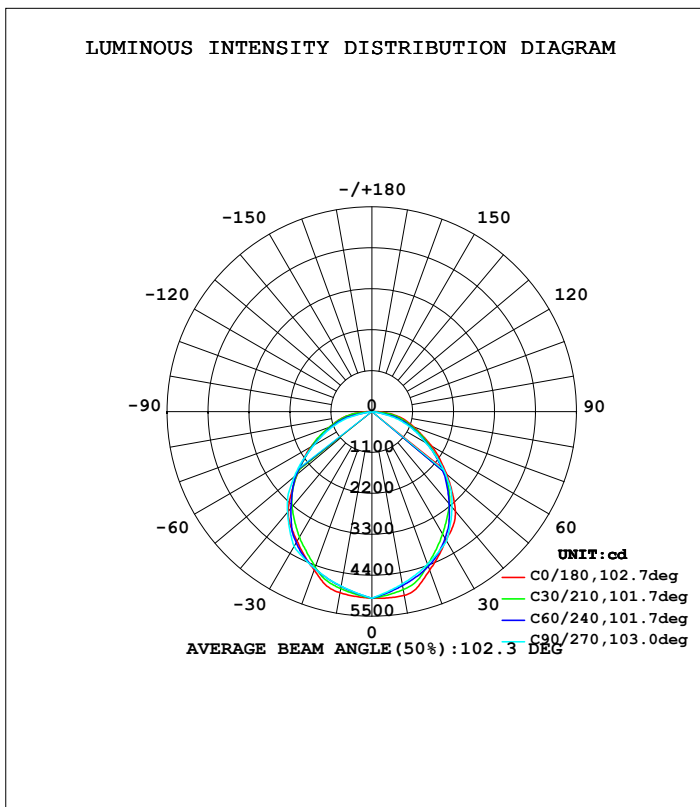


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.7V I:0.6581A P:140.7W PF:0.9687 Lamp Flux:12661x1 lm		
NAME: BT-MG150W	TYPE:5700K	WEIGHT:5000g
SPEC.:3*1	DIM.: 154*452*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	3030	Imax (cd)	5023	S/MH (C0/180)	1.20
NOMINAL POWER (W)	150	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	12661	η UP, DN (C0-180)	0.0, 49.1
NOMINAL FLUX (lm)	12661	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.9
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	5023	4910	4859	4885	4986	4907	4889	4932	0- 5	118.4	118.4	0.94,0.94
10	5015	4793	4703	4749	4943	4793	4764	4835	5- 10	347.9	466.3	3.68,3.68
15	4854	4657	4547	4602	4821	4666	4639	4719	10- 15	563.0	1029	8.13,8.13
20	4540	4438	4370	4423	4535	4512	4489	4523	15- 20	751.6	1781	14.1,14.1
25	4261	4110	4192	4120	4281	4218	4340	4205	20- 25	906.6	2687	21.2,21.2
30	3990	3807	4015	3806	4023	3922	4190	3911	25- 30	1031	3719	29.4,29.4
35	3788	3519	3683	3523	3791	3651	3858	3631	30- 35	1123	4841	38.2,38.2
40	3494	3231	3351	3223	3502	3366	3527	3349	35- 40	1172	6013	47.5,47.5
45	3049	2874	3019	2863	3053	3001	3195	2990	40- 45	1175	7188	56.8,56.8
50	2626	2506	2570	2505	2620	2635	2726	2620	45- 50	1126	8314	65.7,65.7
55	2227	2125	2120	2137	2242	2256	2257	2232	50- 55	1034	9348	73.8,73.8
60	1859	1748	1670	1763	1893	1867	1788	1834	55- 60	916.2	10264	81.1,81.1
65	1472	1400	1319	1423	1493	1514	1423	1469	60- 65	779.9	11044	87.2,87.2
70	1184	1091	967.9	1117	1199	1194	1057	1145	65- 70	642.2	11686	92.3,92.3
75	944.1	816.6	617.1	833.7	950.9	897.4	691.0	859.0	70- 75	504.7	12191	96.3,96.3
80	679.2	473.1	0	479.4	668.7	522.4	0	500.3	75- 80	334.2	12525	98.9,98.9
85	366.7	0	0	0	360.0	0	0	0	80- 85	118.4	12644	99.9,99.9
90	55.09	0	0	0	90.03	0	0	0	85- 90	17.76	12661	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		

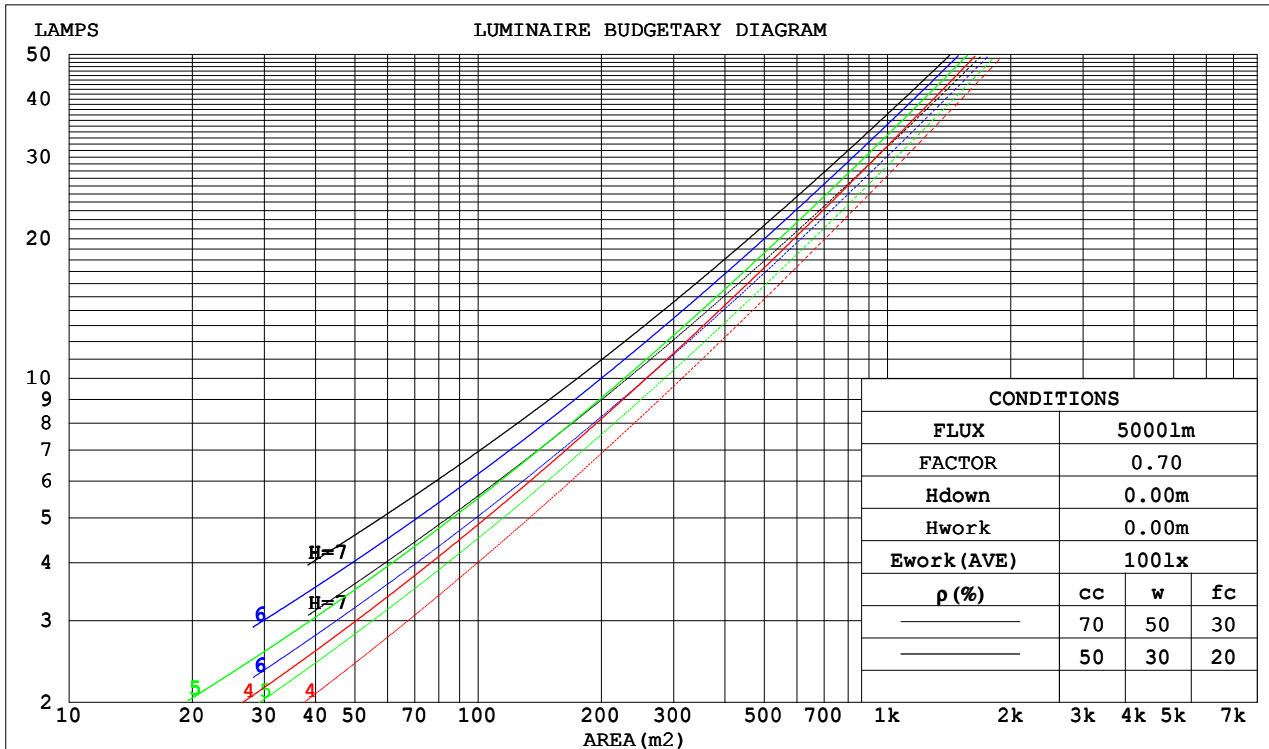
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:VISION
 Test Date:2014-11-08

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:0.6581A P:140.7W PF:0.9687 Lamp Flux:12661x1 lm		
NAME: BT-MG150W	TYPE:5700K	WEIGHT:5000g
SPEC.:3*1	DIM.: 154*452*185mm	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	1.02	.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	.65	.73	.68	.63	.71	.66	.62	.60
4.0	.72	.63	.57	.70	.62	.56	.68	.61	.55	.66	.59	.55	.63	.58	.54	.52
5.0	.64	.55	.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	.39
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.47	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.31	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.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:0.6581A P:140.7W PF:0.9687 Lamp Flux:12661x1 lm		
NAME: BT-MG150W	TYPE:5700K	WEIGHT:5000g
SPEC.:3*1	DIM.: 154*452*185mm	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	.295	.168	.053	.288	.164	.052	.275	.158	.050	.262	.151	.049	.251	.146	.047	
2.0	.281	.154	.047	.275	.151	.047	.263	.146	.045	.252	.142	.044	.243	.137	.043	
3.0	.262	.139	.042	.256	.137	.041	.246	.133	.040	.236	.130	.040	.228	.126	.039	
4.0	.242	.126	.037	.238	.124	.037	.228	.121	.036	.220	.118	.036	.212	.115	.035	
5.0	.225	.115	.033	.220	.113	.033	.212	.111	.033	.205	.108	.032	.198	.106	.032	
6.0	.209	.105	.030	.205	.104	.030	.198	.101	.030	.191	.099	.029	.185	.097	.029	
7.0	.195	.096	.027	.191	.095	.027	.185	.094	.027	.179	.092	.027	.173	.090	.026	
8.0	.182	.089	.025	.179	.088	.025	.174	.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	.159	.077	.021	.154	.075	.021	.150	.074	.021	.145	.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	.052	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.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	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.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:0.6581A P:140.7W PF:0.9687 Lamp Flux:12661x1 lm										
NAME: BT-MG150W				TYPE:5700K				WEIGHT:5000g		
SPEC.:3*1				DIM.: 154*452*185mm				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	26.6	28.1	26.8	28.3	28.5	26.3	27.8	26.6	28.0	28.2
3H	28.1	29.5	28.4	29.7	29.9	27.6	28.9	27.9	29.2	29.4
4H	28.9	30.2	29.2	30.4	30.7	28.0	29.3	28.3	29.6	29.8
6H	29.6	30.8	29.9	31.1	31.3	28.0	29.3	28.4	29.5	29.8
8H	29.8	31.0	30.1	31.3	31.5	28.0	29.2	28.3	29.4	29.7
12H	30.0	31.1	30.3	31.4	31.7	27.9	29.1	28.3	29.3	29.7
4H 2H	27.1	28.4	27.4	28.6	28.9	26.9	28.2	27.2	28.5	28.7
3H	28.8	30.0	29.2	30.3	30.6	28.4	29.5	28.7	29.8	30.1
4H	29.8	30.8	30.1	31.1	31.4	28.9	30.0	29.3	30.3	30.6
6H	30.6	31.5	31.0	31.9	32.3	29.0	29.9	29.4	30.3	30.6
8H	30.9	31.8	31.3	32.1	32.5	28.9	29.8	29.4	30.2	30.6
12H	31.1	31.9	31.5	32.3	32.7	28.9	29.7	29.3	30.1	30.5
8H 4H	30.0	30.9	30.4	31.2	31.6	29.3	30.1	29.7	30.5	30.9
6H	31.1	31.8	31.5	32.2	32.6	29.4	30.1	29.8	30.5	30.9
8H	31.5	32.1	32.0	32.6	33.0	29.4	30.0	29.8	30.4	30.9
12H	31.8	32.4	32.3	32.8	33.3	29.3	29.9	29.8	30.3	30.8
12H 4H	30.0	30.8	30.4	31.2	31.6	29.3	30.1	29.8	30.5	30.9
6H	31.1	31.7	31.6	32.1	32.6	29.5	30.1	29.9	30.5	31.0
8H	31.5	32.1	32.0	32.5	33.0	29.4	30.0	29.9	30.4	30.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
2.0H	+ 0.2 / - 0.3					+ 0.4 / - 0.4				

CIE Pub.117 Corrected 12661 lm Total Lamp Luminous Flux. (8log(F/F0) = 8.8)

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:0.6581A P:140.7W PF:0.9687 Lamp Flux:12661x1 lm		
NAME: BT-MG150W	TYPE:5700K	WEIGHT:5000g
SPEC.:3*1	DIM.: 154*452*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

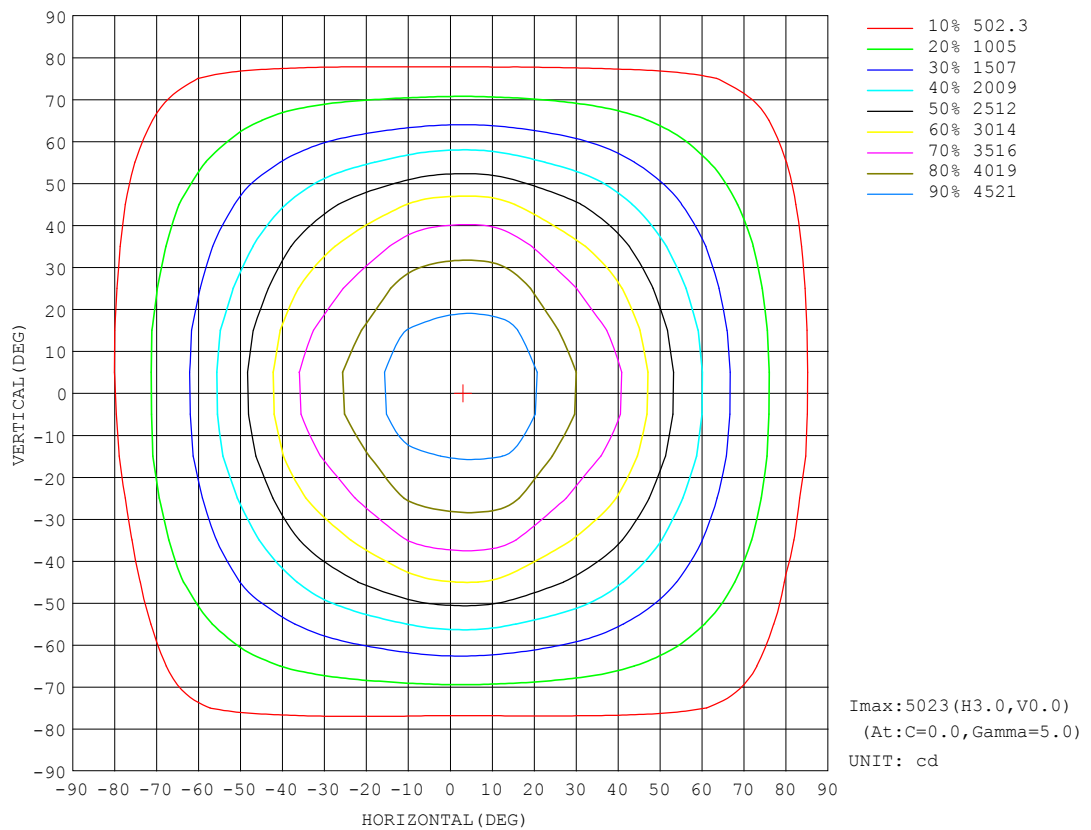
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	48	41	58	48	41	57	47	41	35
0.80	69	58	51	68	58	51	66	57	50	43
1.00	78	67	60	76	66	59	74	68	59	52
1.25	85	74	68	83	74	67	80	72	66	59
1.50	89	80	73	88	79	73	85	77	72	64
2.00	96	88	82	94	87	81	91	85	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: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:0.6581A P:140.7W PF:0.9687 Lamp Flux:12661x1 lm		
NAME: BT-MG150W	TYPE:5700K	WEIGHT:5000g
SPEC.:3*1	DIM.: 154*452*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

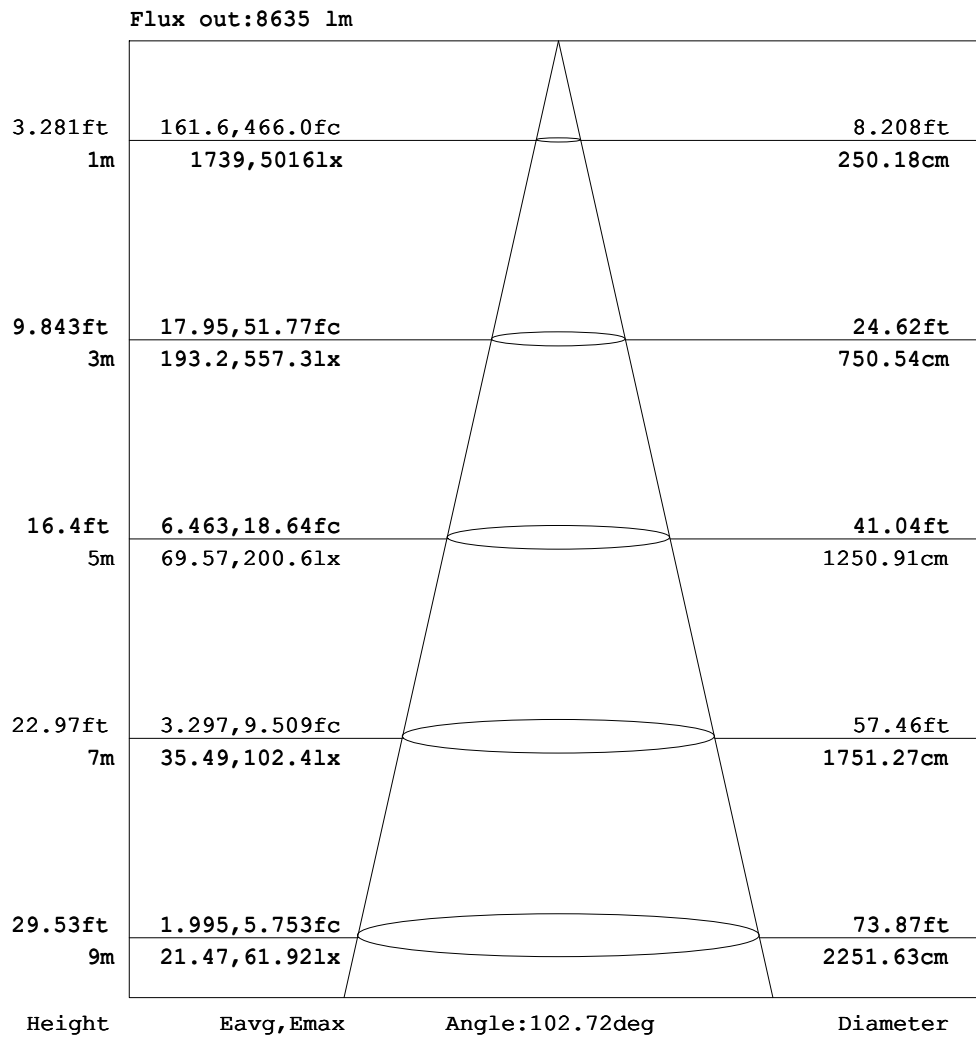


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators: VISION
 Test Date: 2014-11-08

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:0.6581A P:140.7W PF:0.9687 Lamp Flux:12661x1 lm		
NAME: BT-MG150W	TYPE:5700K	WEIGHT:5000g
SPEC.:3*1	DIM.: 154*452*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



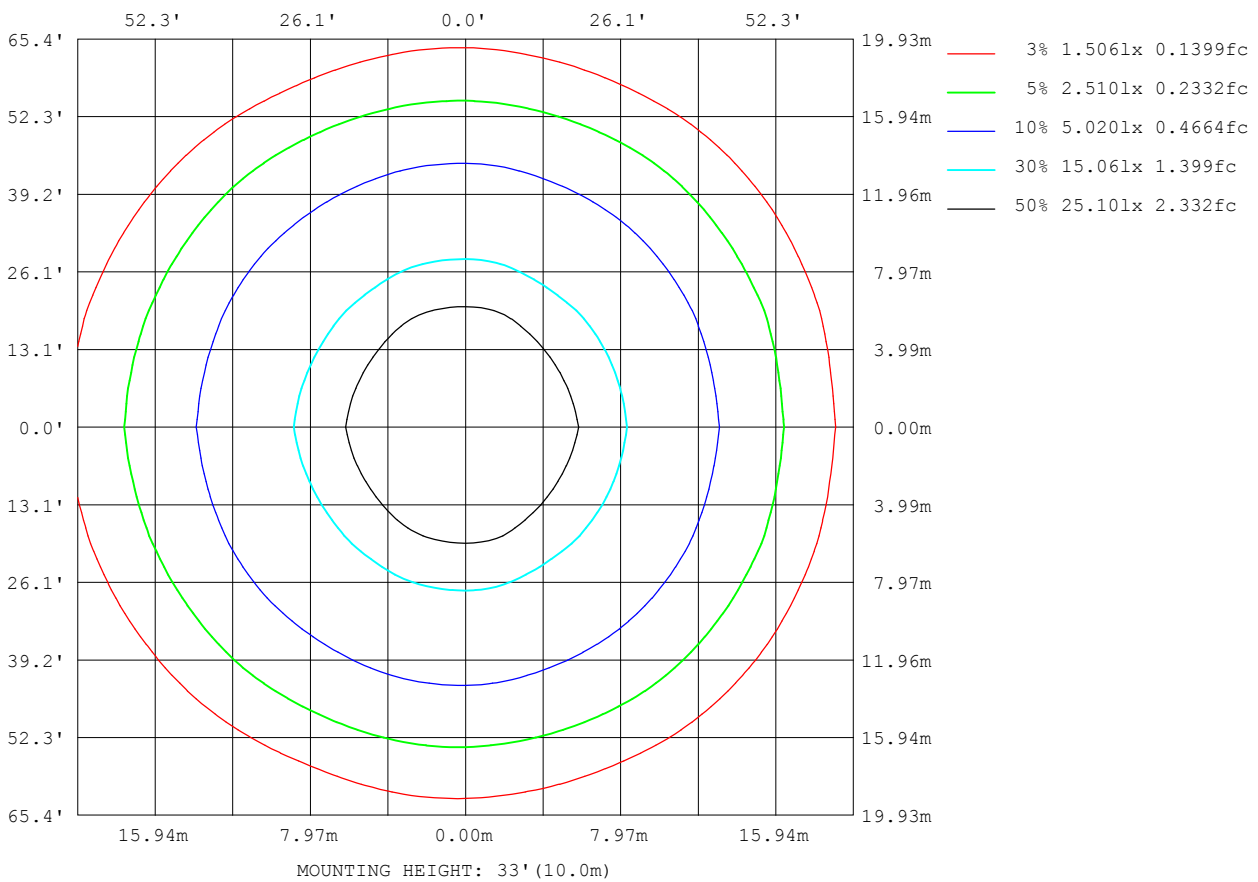
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

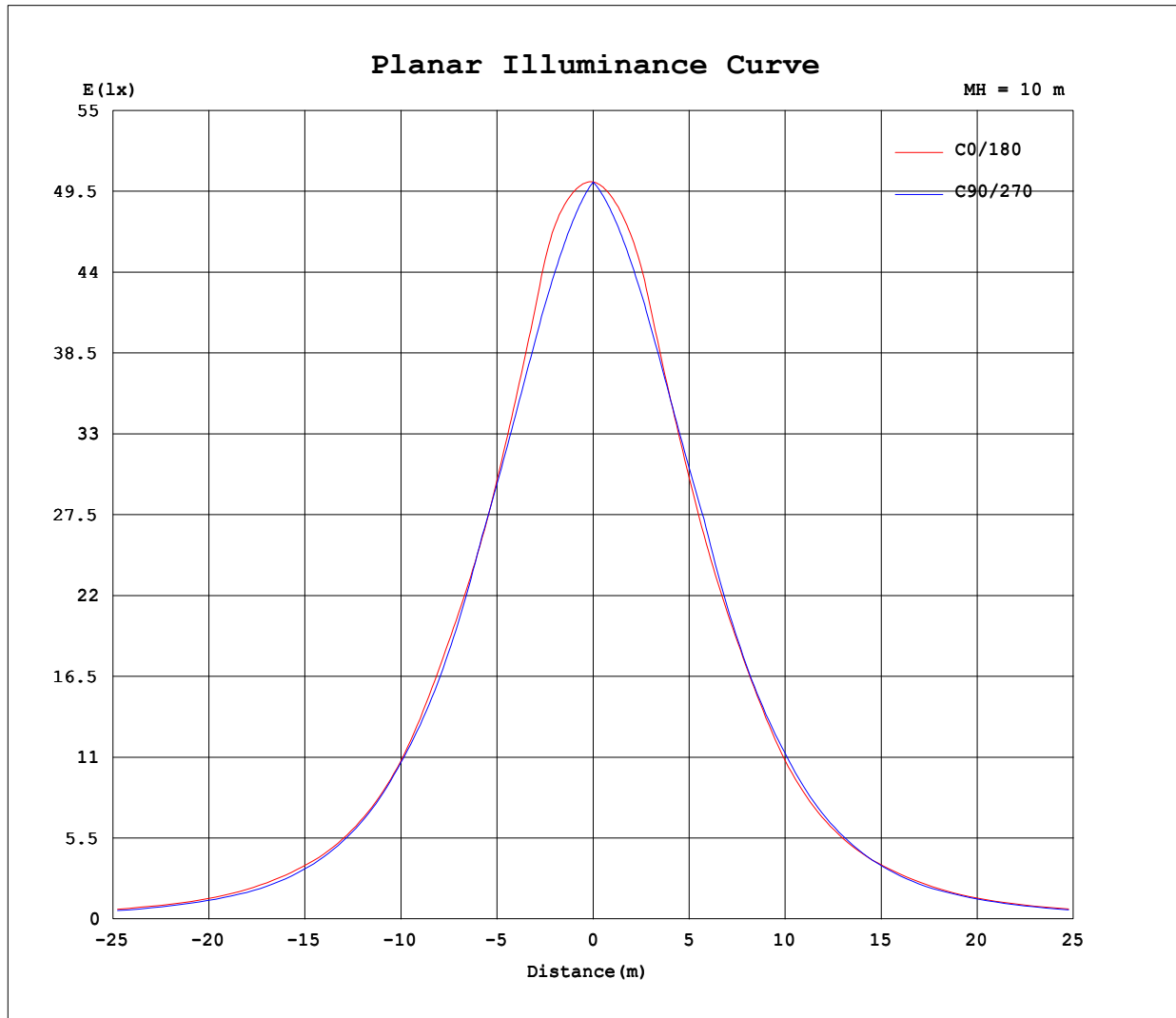
Test:U:220.7V I:0.6581A P:140.7W PF:0.9687 Lamp Flux:12661x1 lm		
NAME: BT-MG150W	TYPE:5700K	WEIGHT:5000g
SPEC.:3*1	DIM.: 154*452*185mm	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



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

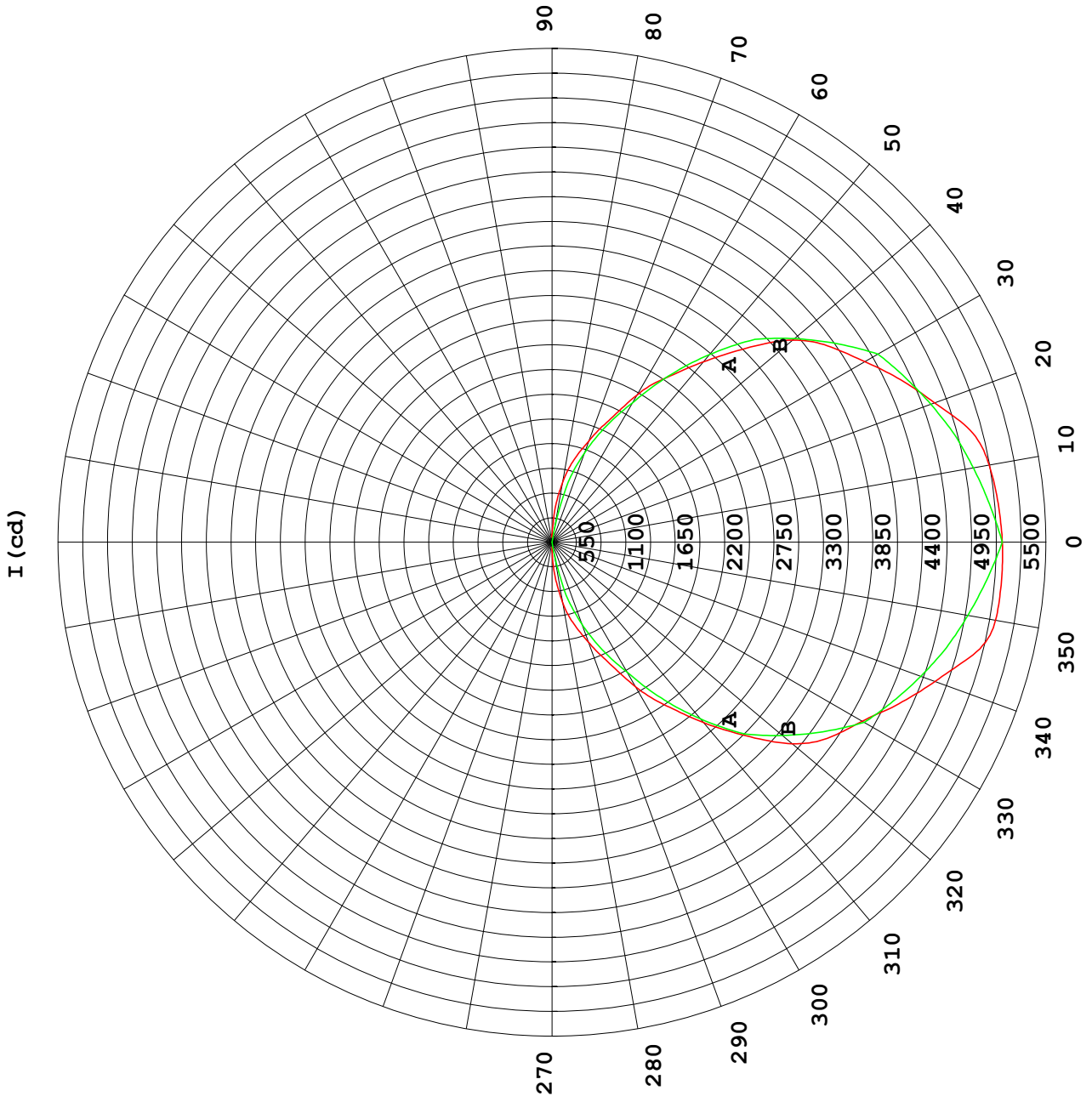
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.284
 Humidity:65.0%
 Test Distance:9.256m [K=1.0000]
 Remarks:

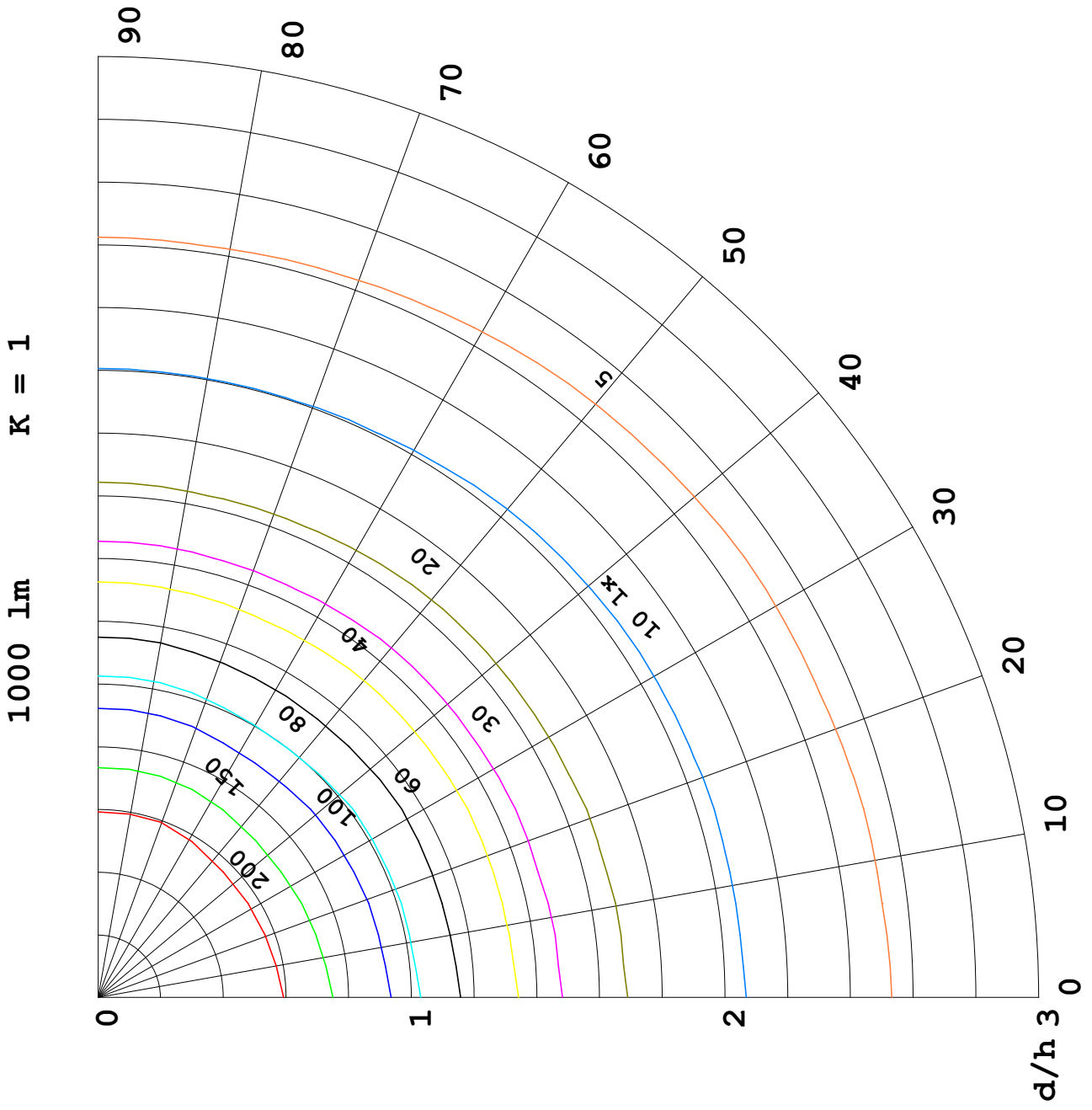
Planar Illuminance Curve



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

