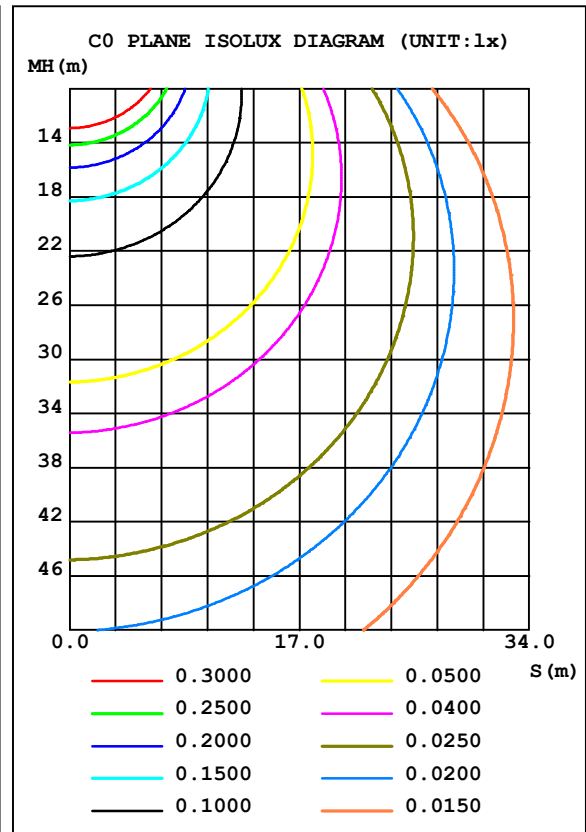
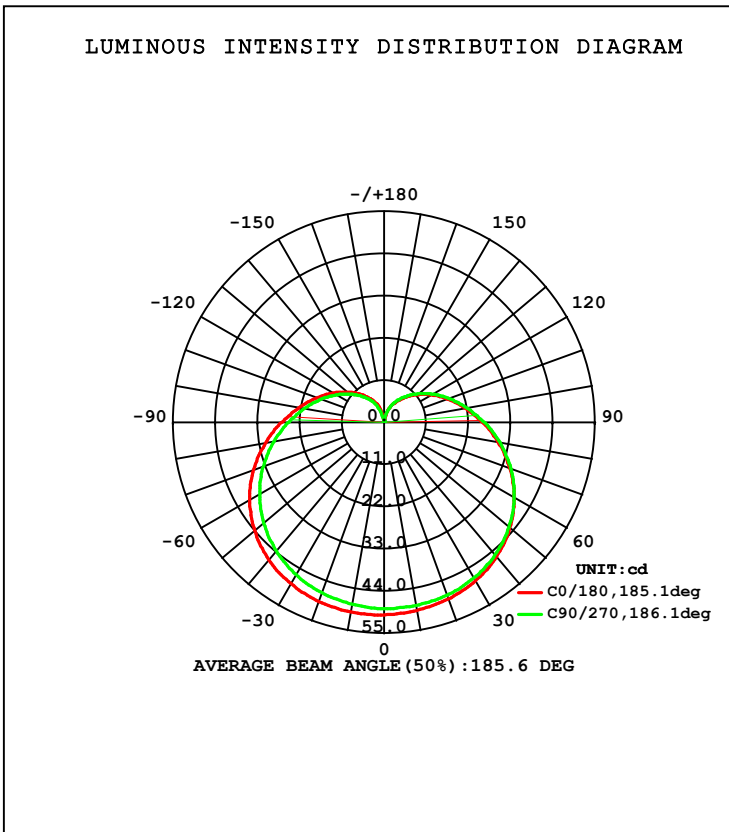


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: G45塑料4W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MK	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 79.44 lm/W			
MODEL	G45	I _{max} (cd)	50.28	S/MH (C0/180)	1.43
NOMINAL POWER (W)	4	LOR (%)	44.2	S/MH (C90/270)	1.46
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	332.04	η UP, DN (C0-180)	6.1, 16.2
NOMINAL FLUX (lm)	751.093	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	6.0, 15.9
LAMPS INSIDE	1	η up (%)	12.1	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	230.8	η down (%)	32.1	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2012-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 8.920m [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	49.77	49.04	48.45	48.11	50.24	49.02	48.18	47.61	0- 10	4.669	4.669	1.41,0.62
20	49.03	48.44	47.99	47.78	49.71	48.33	47.32	46.82	10- 20	13.75	18.42	5.55,2.45
30	47.71	47.21	46.93	46.92	48.64	46.97	45.91	45.48	20- 30	22.03	40.44	12.2,5.38
40	45.69	45.25	45.11	45.25	46.80	44.94	43.78	43.49	30- 40	28.92	69.36	20.9,9.23
50	42.85	42.53	42.54	42.73	44.05	42.12	40.99	40.80	40- 50	33.84	103.2	31.1,13.7
60	39.23	39.13	39.24	39.43	40.50	38.75	37.52	37.33	50- 60	36.45	139.7	42.1,18.6
70	34.91	34.98	35.18	35.36	36.22	34.64	33.52	33.23	60- 70	36.57	176.2	53.1,23.5
80	30.25	30.47	30.68	30.76	31.44	30.11	29.21	28.83	70- 80	34.36	210.6	63.4,28
90	25.72	26.03	26.18	26.21	26.77	25.71	24.99	24.57	80- 90	30.51	241.1	72.6,32.1
100	21.58	21.89	22.00	22.04	22.54	21.70	21.13	20.69	90-100	25.86	267.0	80.4,35.5
110	17.84	18.12	18.23	18.32	18.82	18.11	17.64	17.18	100-110	21.00	288.0	86.7,38.3
120	14.44	14.65	14.83	14.99	15.43	14.89	14.47	13.98	110-120	16.25	304.2	91.6,40.5
130	11.36	11.50	11.73	11.94	12.38	11.97	11.56	11.07	120-130	11.84	316.0	95.2,42.1
140	8.554	8.653	8.919	9.198	9.601	9.269	8.911	8.421	130-140	7.998	324.0	97.6,43.1
150	6.097	6.158	6.466	6.760	7.151	6.880	6.533	6.100	140-150	4.871	328.9	99.1,43.8
160	3.731	3.687	3.984	4.503	4.775	3.861	3.280	3.082	150-160	2.482	331.4	99.8,44.1
170	0.4158	0.4005	0.3904	0.3701	0.4055	0.4566	0.4360	0.4514	160-170	0.6016	332.0	100,44.2
180	0.3904	0.4005	0.3853	0.3701	0.3954	0.3903	0.3853	0.3701	170-180	0.0384	332.0	100,44.2
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

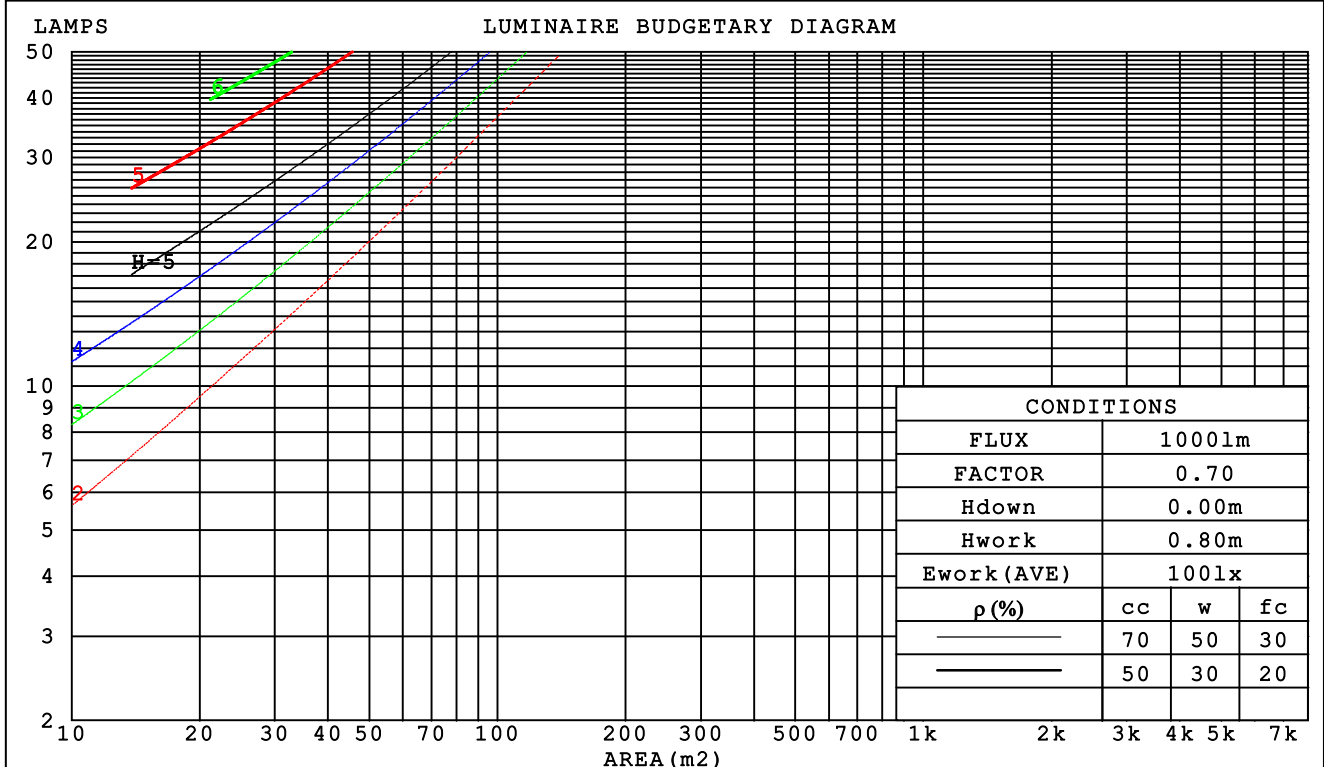
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2012-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:8.920m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: G45塑料4W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MK	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	.50	.50	.50	.47	.47	.47	.42	.42	.42	.38	.38	.38	.34	.34	.34	.32
1.0	.41	.38	.36	.38	.36	.34	.34	.33	.31	.30	.29	.28	.27	.26	.25	.23
2.0	.34	.31	.28	.33	.29	.27	.29	.26	.24	.26	.24	.22	.23	.21	.19	.18
3.0	.30	.26	.22	.28	.24	.21	.25	.22	.19	.22	.20	.18	.19	.17	.16	.14
4.0	.26	.22	.18	.25	.21	.18	.22	.19	.16	.19	.17	.15	.17	.15	.13	.12
5.0	.23	.19	.15	.22	.18	.15	.19	.16	.14	.17	.14	.12	.15	.13	.11	.10
6.0	.20	.16	.13	.19	.16	.13	.17	.14	.12	.15	.13	.11	.14	.11	.10	.08
7.0	.18	.14	.11	.17	.14	.11	.16	.12	.10	.14	.11	.09	.12	.10	.08	.07
8.0	.17	.13	.10	.16	.12	.10	.14	.11	.09	.13	.10	.08	.11	.09	.07	.06
9.0	.15	.11	.09	.14	.11	.09	.13	.10	.08	.12	.09	.07	.10	.08	.07	.06
10.0	.14	.10	.08	.13	.10	.08	.12	.09	.07	.11	.08	.06	.10	.07	.06	.05



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2012-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 8.920m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME: G45塑料4W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MK	SUR.:	PROTECTION ANGLE:

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.182	.103	.033	.175	.100	.032	.162	.093	.030	.150	.086	.028	.139	.081	.026	
2.0	.154	.084	.026	.148	.081	.025	.136	.075	.023	.125	.070	.022	.115	.065	.020	
3.0	.135	.072	.022	.129	.069	.021	.119	.064	.020	.109	.060	.018	.100	.055	.017	
4.0	.121	.063	.018	.115	.060	.018	.106	.056	.017	.097	.052	.016	.088	.048	.015	
5.0	.109	.056	.016	.104	.054	.016	.095	.050	.015	.087	.046	.014	.079	.042	.013	
6.0	.099	.050	.014	.095	.048	.014	.087	.045	.013	.079	.041	.012	.072	.038	.011	
7.0	.091	.045	.013	.087	.044	.012	.080	.040	.012	.073	.037	.011	.066	.034	.010	
8.0	.085	.041	.012	.081	.040	.011	.074	.037	.011	.068	.034	.010	.061	.032	.009	
9.0	.079	.038	.011	.075	.037	.010	.069	.034	.010	.063	.032	.009	.057	.029	.008	
10.0	.073	.035	.010	.070	.034	.009	.064	.032	.009	.059	.029	.008	.054	.027	.008	

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.176	.176	.176	.151	.151	.151	.103	.103	.103	.059	.059	.059	.019	.019	.019	
1.0	.176	.162	.149	.150	.139	.128	.103	.095	.089	.059	.055	.052	.019	.018	.017	
2.0	.173	.152	.134	.148	.131	.116	.102	.090	.081	.059	.053	.047	.019	.017	.015	
3.0	.170	.145	.125	.146	.125	.108	.100	.087	.076	.058	.051	.045	.019	.016	.015	
4.0	.166	.139	.119	.143	.120	.103	.098	.084	.073	.057	.049	.043	.018	.016	.014	
5.0	.163	.135	.115	.140	.117	.100	.096	.082	.070	.056	.048	.042	.018	.016	.014	
6.0	.160	.132	.112	.137	.114	.097	.095	.080	.069	.055	.047	.041	.018	.015	.014	
7.0	.157	.129	.110	.135	.112	.096	.093	.078	.068	.054	.046	.040	.017	.015	.013	
8.0	.154	.127	.108	.132	.110	.094	.091	.077	.067	.053	.045	.040	.017	.015	.013	
9.0	.151	.124	.107	.130	.108	.093	.090	.076	.066	.052	.045	.039	.017	.015	.013	
10.0	.148	.123	.106	.128	.107	.092	.089	.075	.066	.052	.044	.039	.017	.015	.013	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2012-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 8.920m [K=1.0000]
 Remarks:

Uncorrected UGR Table

NAME: G45塑料4W		TYPE:					WEIGHT:				
DIM.:		SPEC.:					SERIAL No.:				
MFR.: MK		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		14.3	15.6	15.0	16.3	17.0	14.3	15.6	14.9	16.3	17.0
	3H	17.0	18.2	17.7	18.9	19.7	17.0	18.2	17.7	18.9	19.7
	4H	18.5	19.6	19.2	20.3	21.1	18.5	19.7	19.2	20.4	21.2
	6H	20.1	21.2	20.8	21.9	22.7	20.2	21.2	20.9	21.9	22.8
	8H	21.0	22.1	21.7	22.8	23.6	21.1	22.1	21.8	22.8	23.7
	12H	22.1	23.1	22.8	23.8	24.6	22.1	23.1	22.8	23.9	24.7
	4H 2H	15.2	16.3	15.9	17.0	17.8	15.2	16.3	15.9	17.0	17.8
	3H	18.1	19.1	18.8	19.8	20.6	18.1	19.1	18.8	19.8	20.7
	4H	19.7	20.6	20.4	21.4	22.2	19.7	20.6	20.4	21.4	22.3
	6H	21.5	22.3	22.2	23.1	24.0	21.5	22.4	22.3	23.1	24.0
	8H	22.5	23.3	23.3	24.0	25.0	22.5	23.3	23.3	24.1	25.0
	12H	23.6	24.4	24.4	25.1	26.1	23.7	24.4	24.5	25.2	26.2
	8H 4H	20.3	21.1	21.1	21.9	22.8	20.3	21.1	21.1	21.9	22.8
	6H	22.4	23.0	23.2	23.8	24.8	22.4	23.1	23.2	23.9	24.9
	8H	23.6	24.2	24.4	25.0	26.0	23.6	24.2	24.4	25.0	26.0
	12H	25.0	25.5	25.8	26.3	27.3	25.0	25.5	25.8	26.4	27.4
	12H 4H	20.5	21.2	21.2	22.0	22.9	20.5	21.2	21.3	22.0	22.9
	6H	22.7	23.3	23.5	24.1	25.1	22.7	23.3	23.5	24.1	25.1
	8H	24.0	24.5	24.8	25.3	26.3	24.0	24.5	24.8	25.4	26.4
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.3 / - 0.4					+ 0.3 / - 0.4				

CIE Pub.117 Corrected 751.1 lm Total Lamp Luminous Flux. (8log(F/F0) = -1.0)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2012-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 8.920m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

NAME: G45塑料4W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MK	SUR.:	PROTECTION ANGLE:

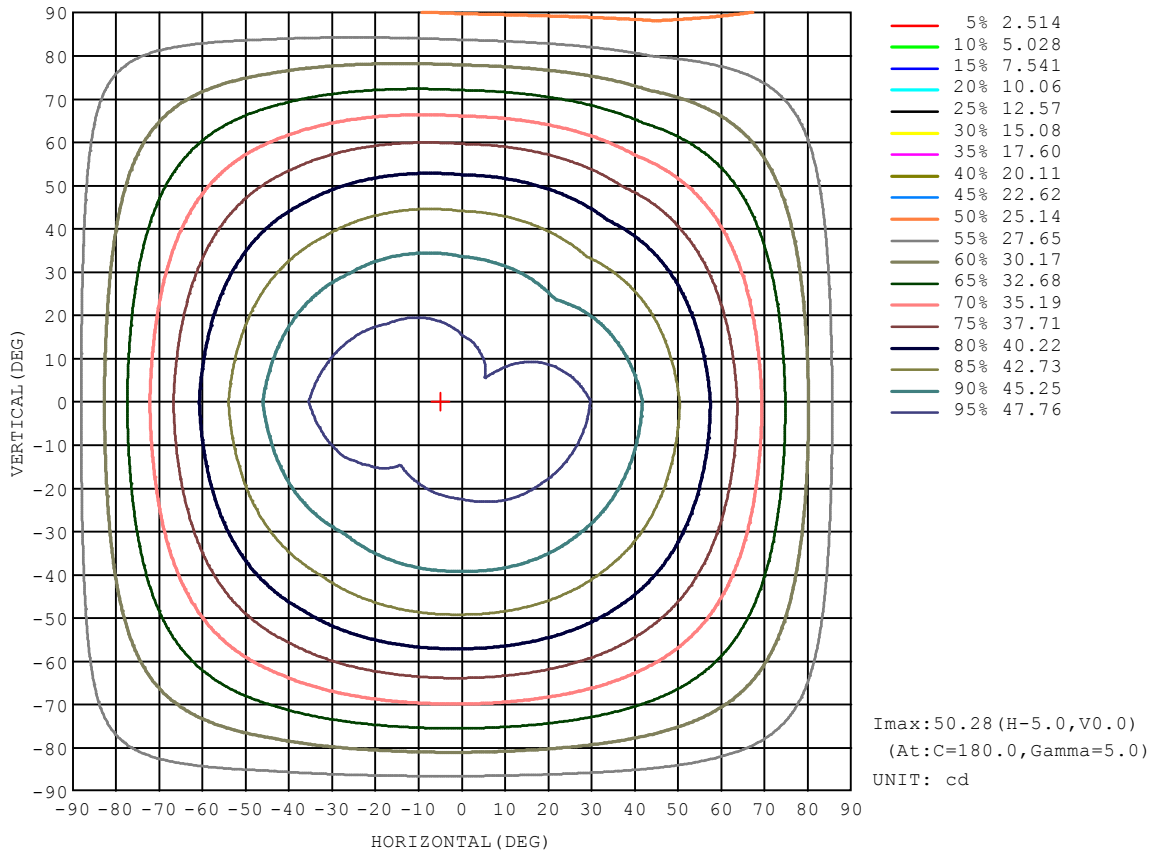
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	19	13	10	18	13	10	17	13	10	7
0.80	23	17	13	22	16	13	21	16	12	9
1.00	26	20	16	25	20	16	23	20	15	11
1.25	29	23	19	28	23	19	26	21	18	13
1.50	32	26	22	30	25	21	28	23	20	15
2.00	35	30	26	33	28	25	30	26	23	17
2.50	37	32	28	35	31	27	32	28	25	19
3.00	39	34	31	37	33	29	33	30	27	20
4.00	41	37	34	39	35	32	35	32	30	22
5.00	42	39	36	40	37	35	36	34	32	24
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: 25.3DEG
 Operators:
 Test Date: 2012-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 8.920m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: G45塑料4W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MK	SUR.:	PROTECTION ANGLE:

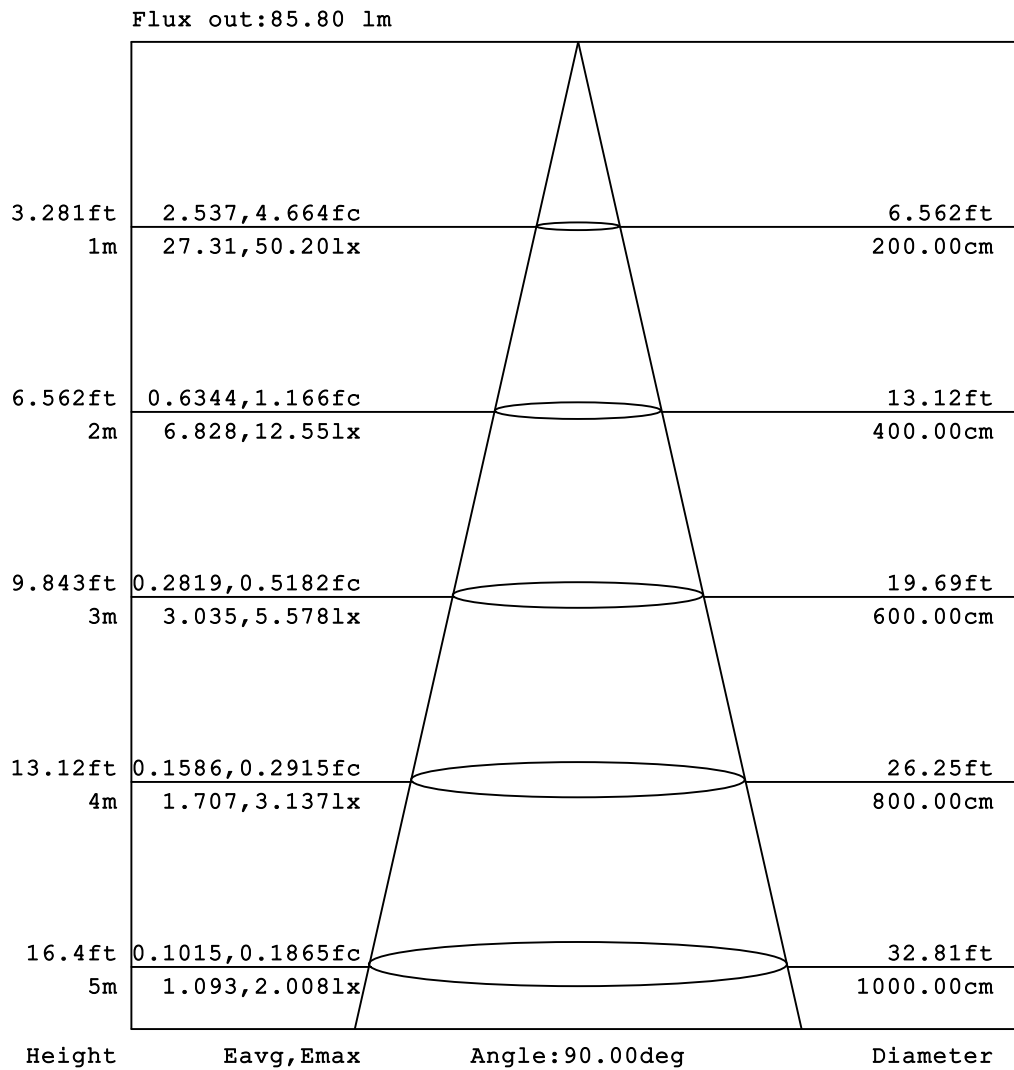


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2012-10-17

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
Humidity:65.0%
Test Distance:8.920m [K=1.0000]
Remarks:

AAI Figure

NAME: G45塑料4W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MK	SUR.:	PROTECTION ANGLE:



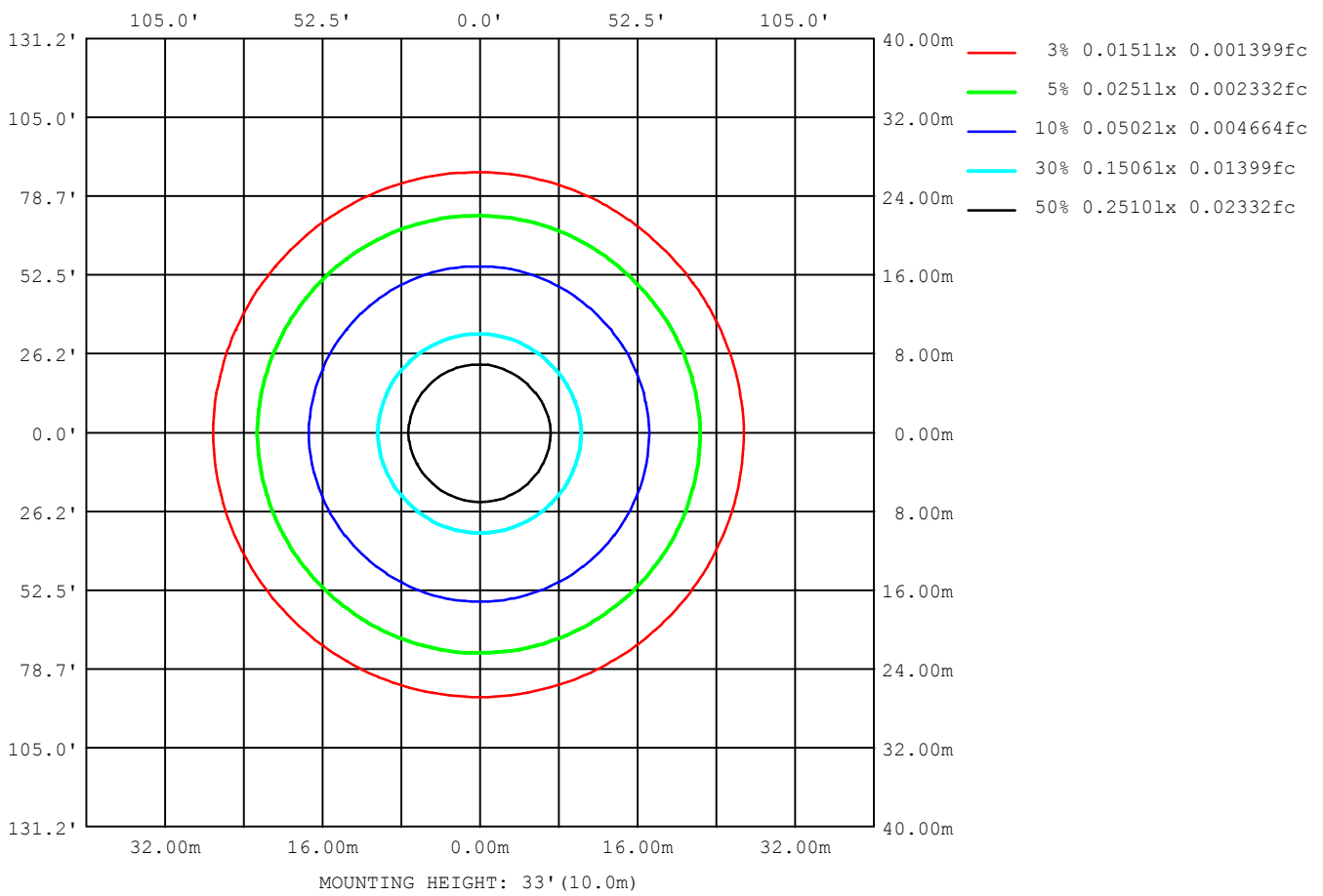
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2012-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 8.920m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

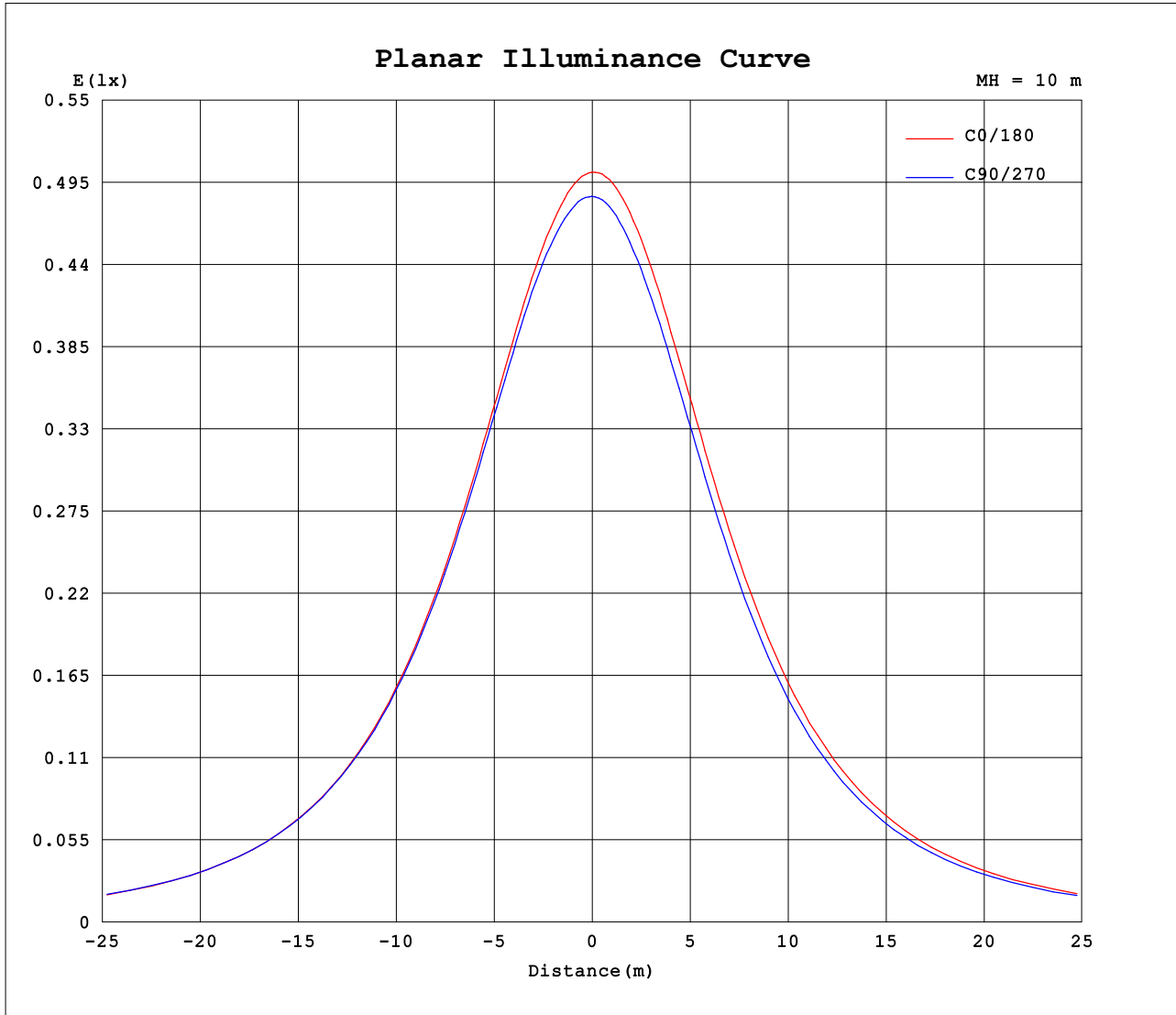
NAME: G45塑料4W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MK	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
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 Operators:
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γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 8.920m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2012-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 8.920m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: G45塑料4W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: MK	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	45	90	135	180	225	270	315											
0	50.2	49.4	48.6	48.1	50.2	49.4	48.6	48.1											
5	50.0	49.2	48.5	48.1	50.3	49.3	48.4	47.9											
10	49.8	49.0	48.5	48.1	50.2	49.0	48.2	47.6											
15	49.4	48.8	48.3	48.0	50.0	48.8	47.8	47.3											
20	49.0	48.4	48.0	47.8	49.7	48.3	47.3	46.8											
25	48.5	47.9	47.5	47.4	49.3	47.7	46.7	46.2											
30	47.7	47.2	46.9	46.9	48.6	47.0	45.9	45.5											
35	46.8	46.3	46.1	46.2	47.8	46.0	44.9	44.6											
40	45.7	45.2	45.1	45.2	46.8	44.9	43.8	43.5											
45	44.4	44.0	43.9	44.1	45.5	43.6	42.5	42.2											
50	42.8	42.5	42.5	42.7	44.1	42.1	41.0	40.8											
55	41.1	40.9	41.0	41.2	42.4	40.5	39.3	39.1											
60	39.2	39.1	39.2	39.4	40.5	38.7	37.5	37.3											
65	37.1	37.1	37.3	37.5	38.4	36.8	35.6	35.3											
70	34.9	35.0	35.2	35.4	36.2	34.6	33.5	33.2											
75	32.6	32.8	33.0	33.1	33.9	32.4	31.4	31.0											
80	30.3	30.5	30.7	30.8	31.4	30.1	29.2	28.8											
85	27.9	28.2	28.4	28.4	29.1	27.9	27.1	26.7											
90	25.7	26.0	26.2	26.2	26.8	25.7	25.0	24.6											
95	23.6	23.9	24.0	24.1	24.6	23.6	23.0	22.6											
100	21.6	21.9	22.0	22.0	22.5	21.7	21.1	20.7											
105	19.7	20.0	20.1	20.1	20.6	19.9	19.4	18.9											
110	17.8	18.1	18.2	18.3	18.8	18.1	17.6	17.2											
115	16.1	16.3	16.5	16.6	17.1	16.5	16.0	15.5											
120	14.4	14.6	14.8	15.0	15.4	14.9	14.5	14.0											
125	12.8	13.0	13.2	13.4	13.9	13.4	13.0	12.5											
130	11.4	11.5	11.7	11.9	12.4	12.0	11.6	11.1											
135	9.90	10.0	10.3	10.5	11.0	10.6	10.2	9.70											
140	8.55	8.65	8.92	9.20	9.60	9.27	8.91	8.42											
145	7.28	7.38	7.63	7.94	8.34	8.04	7.72	7.22											
150	6.10	6.16	6.47	6.76	7.15	6.88	6.53	6.10											
155	4.98	5.03	5.30	5.68	6.05	5.69	5.17	4.71											
160	3.73	3.69	3.98	4.50	4.77	3.86	3.28	3.08											
165	1.98	1.80	2.25	2.90	2.86	1.46	1.18	0.69											
170	0.42	0.40	0.39	0.37	0.41	0.46	0.44	0.45											
175	0.40	0.39	0.39	0.37	0.39	0.39	0.38	0.39											
180	0.39	0.40	0.39	0.37	0.40	0.39	0.39	0.37											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2012-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:8.920m [K=1.0000]
 Remarks: