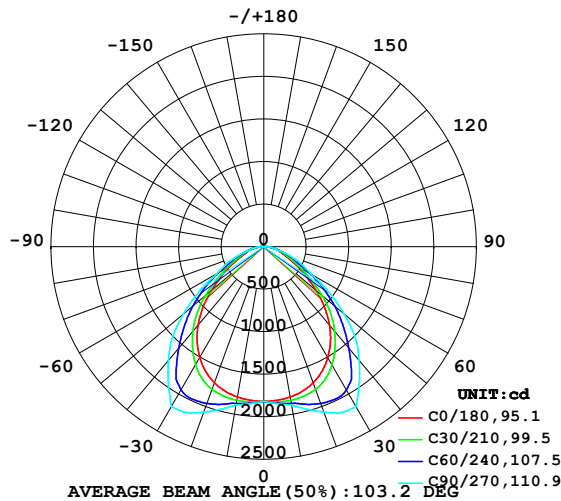


LUMINAIRE PHOTOMETRIC TEST REPORT

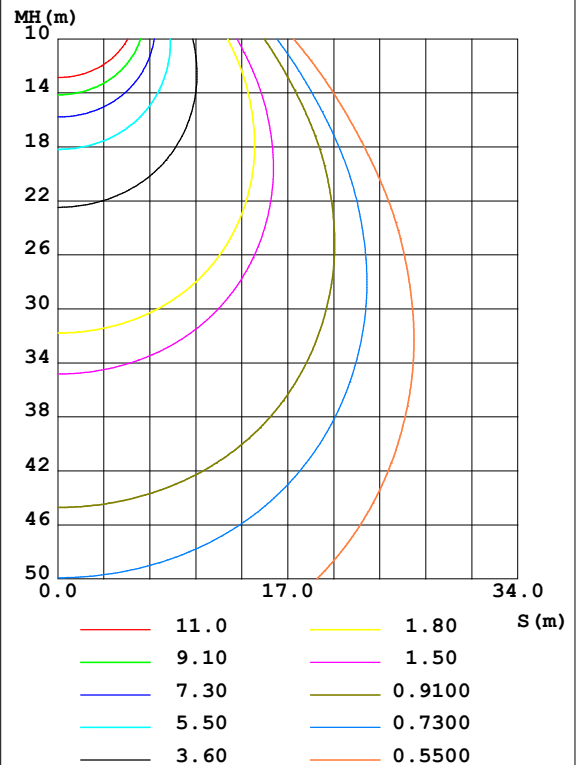
Test:U:231.5V I:0.1741A P:39.04W PF:0.9689 Freq:49.99Hz Lamp Flux:4900.24x1 lm		
NAME: P17ES-UD-40-0606B-40H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 125.51 lm/W			
MODEL		I _{max} (cd)	2171	S/MH (C0/180)	1.23
NOMINAL POWER (W)	40	LOR (%)	100.0	S/MH (C90/270)	1.51
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4900.2	η UP, DN (C0-180)	0.0, 50.0
NOMINAL FLUX (lm)	4900.24	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.0
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 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 02 May 2018

γ Range: -90 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 53.0%
Test Distance: 10.380m [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	1794	1854	1889	1854	1794	1854	1889	1854	0- 10	175.8	175.8	3.59,3.59
20	1702	1865	2069	1865	1702	1865	2069	1865	10- 20	529.8	705.6	14.4,14.4
30	1506	1754	2171	1754	1506	1754	2171	1754	20- 30	856.4	1562	31.9,31.9
40	1202	1440	1745	1440	1202	1440	1745	1440	30- 40	1023	2585	52.7,52.7
50	803.7	968.2	1233	968.2	803.7	968.2	1233	968.2	40- 50	946.6	3531	72.1,72.1
60	449.0	540.1	637.0	540.1	449.0	540.1	637.0	540.1	50- 60	685.1	4216	86,86
70	231.9	240.9	337.8	240.9	231.9	240.9	337.8	240.9	60- 70	400.4	4617	94.2,94.2
80	111.4	120.8	123.7	120.8	111.4	120.8	123.7	120.8	70- 80	213.0	4830	98.6,98.6
90	1.728	2.226	2.328	2.226	1.728	2.226	2.328	2.226	80- 90	70.69	4900	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 3080.1 lm

%lum = 62.9%

%lamp = 62.9%

Conical surface Flux(120deg): 4216.2 lm

%lum = 86.0%

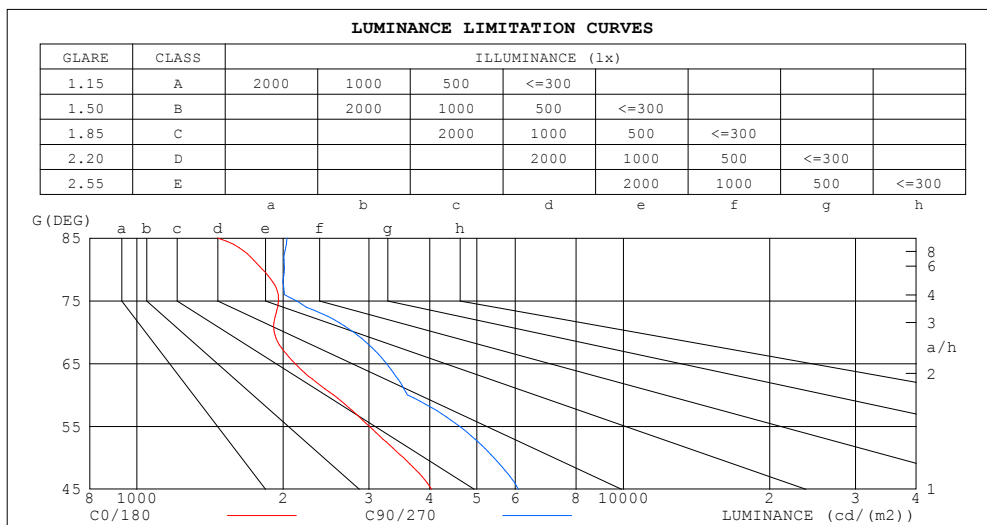
%lamp = 86.0%

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:02 May 2018

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:231.5V I:0.1741A P:39.04W PF:0.9689 Freq:49.99Hz Lamp Flux:4900.24x1 lm		
NAME: P17ES-UD-40-0606B-40H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1466	2037
80	1813	2012
75	1956	2128
70	1915	2790
65	2114	3260
60	2537	3599
55	3006	4608
50	3532	5421
45	4041	6085

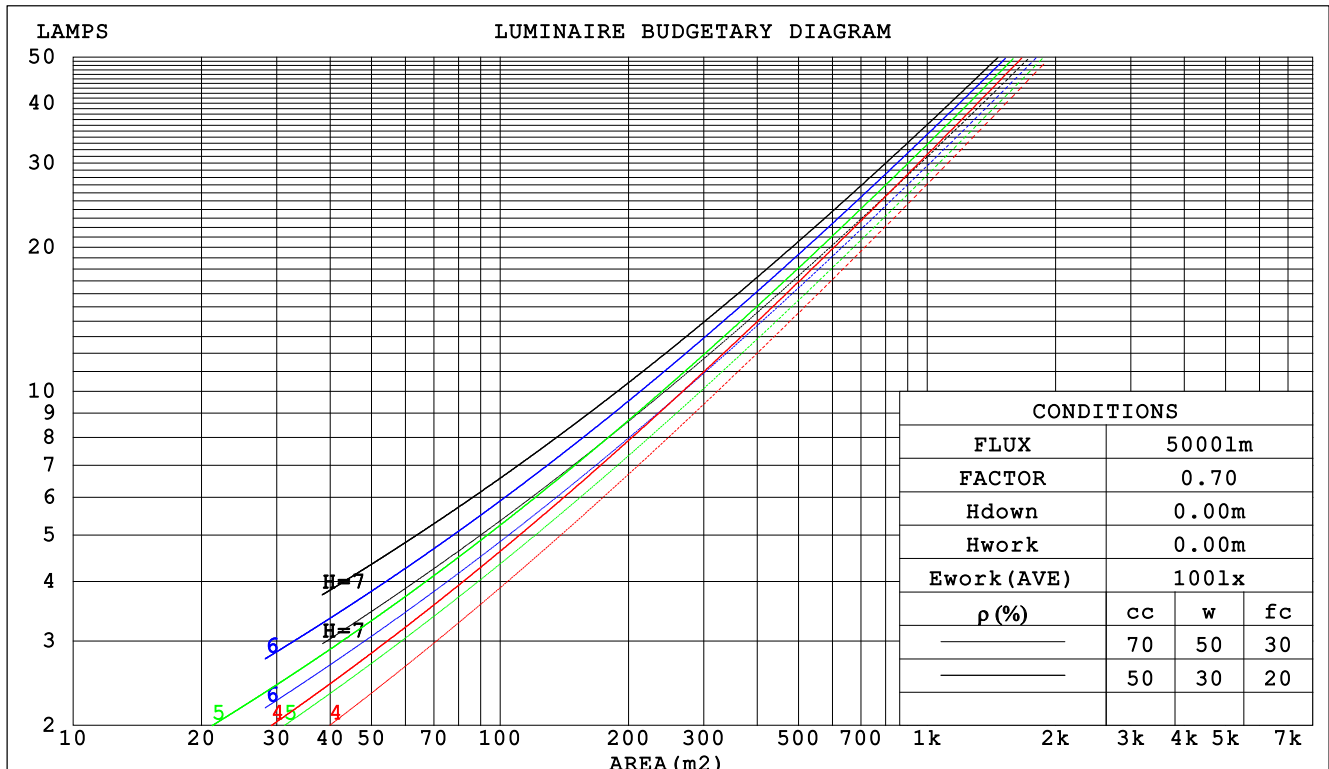
C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:02 May 2018

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:231.5V I:0.1741A P:39.04W PF:0.9689 Freq:49.99Hz Lamp Flux:4900.24x1 lm		
NAME: P17ES-UD-40-0606B-40H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding 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						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	1.06	1.02	.98	1.03	.90	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.87	.82	.91	.86	.81	.88	.83	.79	.85	.81	.77	.82	.78	.76	.73
3.0	.83	.75	.69	.81	.74	.69	.78	.72	.68	.76	.71	.66	.73	.69	.65	.63
4.0	.74	.66	.60	.73	.65	.59	.70	.64	.58	.68	.62	.58	.66	.61	.57	.55
5.0	.67	.58	.52	.66	.58	.52	.63	.56	.51	.62	.55	.51	.60	.54	.50	.48
6.0	.60	.52	.46	.59	.51	.45	.58	.50	.45	.56	.50	.45	.54	.49	.44	.42
7.0	.55	.46	.41	.54	.46	.40	.53	.45	.40	.51	.45	.40	.50	.44	.40	.38
8.0	.50	.42	.36	.49	.42	.36	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
9.0	.46	.38	.33	.45	.38	.33	.44	.37	.33	.43	.37	.32	.42	.37	.32	.30
10.0	.43	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.29	.39	.34	.29	.28



C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:02 May 2018

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:231.5V I:0.1741A P:39.04W PF:0.9689 Freq:49.99Hz Lamp Flux:4900.24x1 lm		
NAME: P17ES-UD-40-0606B-40H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding 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	.278	.158	.050	.271	.155	.049	.258	.148	.047	.246	.142	.046	.235	.136	.044		
2.0	.264	.145	.044	.258	.142	.044	.247	.137	.043	.236	.133	.041	.226	.128	.040		
3.0	.247	.132	.039	.242	.130	.039	.232	.126	.038	.223	.122	.037	.214	.119	.037		
4.0	.231	.120	.035	.226	.118	.035	.217	.115	.034	.209	.112	.034	.201	.109	.033		
5.0	.215	.110	.032	.211	.108	.032	.203	.106	.031	.196	.103	.031	.189	.101	.030		
6.0	.201	.101	.029	.198	.100	.029	.191	.098	.028	.184	.096	.028	.178	.094	.028		
7.0	.189	.093	.026	.185	.092	.026	.179	.091	.026	.173	.089	.026	.168	.087	.026		
8.0	.177	.087	.024	.174	.086	.024	.169	.084	.024	.163	.083	.024	.158	.081	.024		
9.0	.167	.081	.023	.164	.080	.022	.159	.079	.022	.155	.077	.022	.150	.076	.022		
10.0	.158	.076	.021	.155	.075	.021	.151	.074	.021	.146	.073	.021	.142	.072	.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	.178	.156	.137	.152	.134	.118	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.169	.132	.101	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.077	.137	.098	.067	.094	.068	.047	.054	.040	.028	.017	.013	.009	
4.0	.152	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007	
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.138	.082	.041	.119	.071	.036	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.035	.113	.065	.030	.078	.045	.021	.045	.027	.013	.015	.009	.004	
8.0	.126	.069	.030	.108	.060	.026	.075	.042	.018	.043	.025	.011	.014	.008	.004	
9.0	.120	.064	.026	.103	.055	.023	.071	.039	.016	.042	.023	.010	.013	.008	.003	
10.0	.114	.060	.023	.099	.052	.020	.068	.036	.014	.040	.022	.009	.013	.007	.003	

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:02 May 2018

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:231.5V I:0.1741A P:39.04W PF:0.9689 Freq:49.99Hz Lamp Flux:4900.24x1 lm										
NAME: P17ES-UD-40-0606B-40H					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: EVERFINE					SUR.:			Shielding 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	10.5	11.9	10.8	12.1	12.3	12.5	13.9	12.8	14.1	14.3
3H	11.3	12.6	11.6	12.9	13.1	13.4	14.7	13.7	14.9	15.2
4H	11.7	13.0	12.0	13.2	13.5	13.7	14.9	14.0	15.2	15.4
6H	12.1	13.2	12.4	13.5	13.8	13.9	15.1	14.2	15.3	15.6
8H	12.2	13.3	12.5	13.6	13.8	14.0	15.1	14.3	15.4	15.7
12H	12.2	13.3	12.5	13.6	13.9	14.0	15.1	14.4	15.4	15.7
4H 2H	11.0	12.2	11.3	12.4	12.7	12.6	13.9	12.9	14.1	14.4
3H	12.0	13.1	12.3	13.3	13.6	13.7	14.8	14.1	15.1	15.4
4H	12.5	13.5	12.9	13.8	14.2	14.1	15.1	14.5	15.4	15.8
6H	13.0	13.9	13.4	14.2	14.6	14.5	15.4	14.9	15.7	16.1
8H	13.2	14.0	13.6	14.4	14.7	14.7	15.5	15.1	15.8	16.2
12H	13.3	14.0	13.7	14.4	14.8	14.8	15.5	15.2	15.9	16.3
8H 4H	12.7	13.5	13.1	13.9	14.3	14.2	15.0	14.6	15.4	15.8
6H	13.4	14.1	13.9	14.5	14.9	14.7	15.4	15.1	15.8	16.2
8H	13.7	14.3	14.2	14.7	15.2	14.9	15.5	15.4	15.9	16.4
12H	13.9	14.4	14.4	14.9	15.3	15.1	15.7	15.6	16.1	16.6
12H 4H	12.7	13.5	13.2	13.9	14.3	14.2	15.0	14.6	15.3	15.7
6H	13.5	14.1	14.0	14.5	15.0	14.7	15.3	15.2	15.7	16.2
8H	13.8	14.4	14.3	14.8	15.3	15.0	15.5	15.5	16.0	16.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.4					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.4					+ 0.3 / - 0.4				
2.0H	+ 0.5 / - 0.7					+ 0.9 / - 0.8				

CIE Pub.117, 4900 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 5.5$)

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:02 May 2018

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:231.5V I:0.1741A P:39.04W PF:0.9689 Freq:49.99Hz Lamp Flux:4900.24x1 lm		
NAME: P17ES-UD-40-0606B-40H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

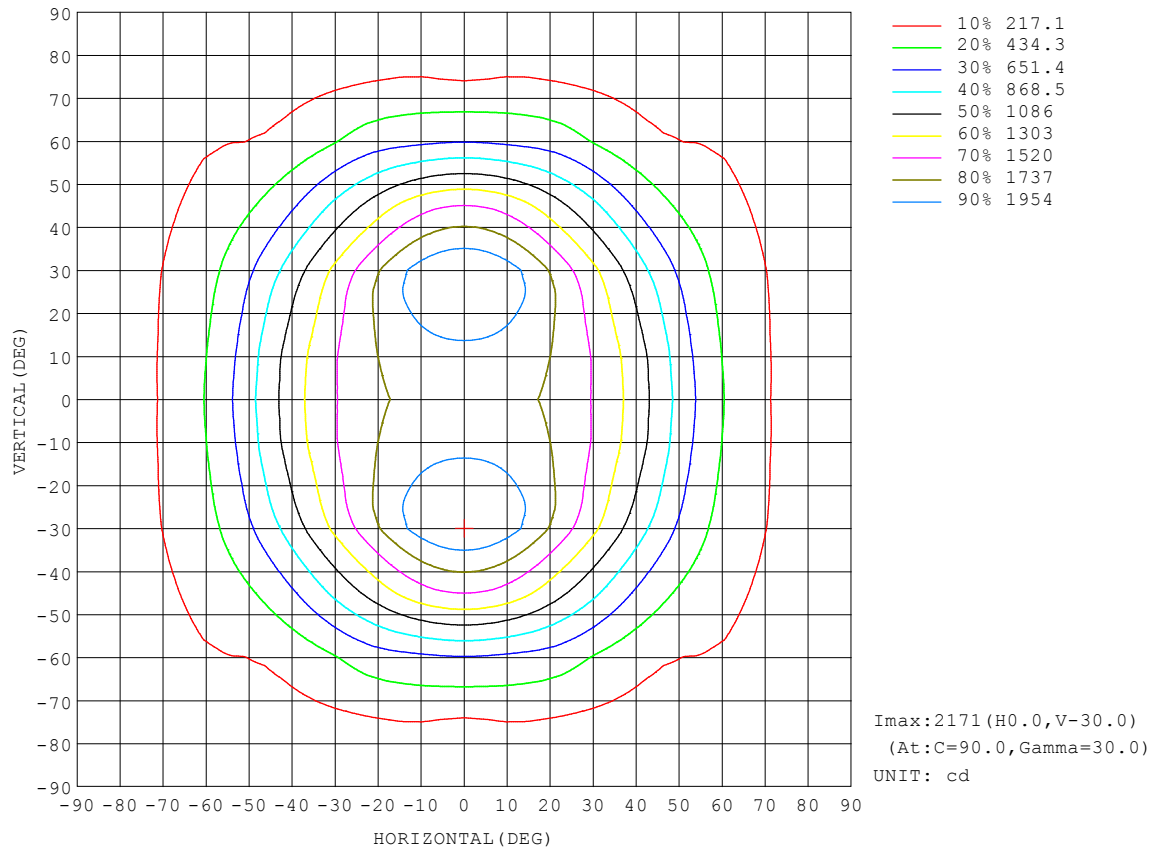
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	62	51	45	61	51	45	60	50	44	38
0.80	72	62	55	71	61	55	70	60	54	48
1.00	81	70	64	79	70	64	77	71	63	57
1.25	87	78	72	86	77	71	83	76	70	64
1.50	92	83	77	90	82	76	88	81	75	69
2.00	98	91	85	96	89	84	93	87	83	75
2.50	101	95	89	100	93	88	96	91	86	79
3.00	104	98	93	102	97	92	98	94	90	82
4.00	108	103	99	106	101	97	101	98	95	86
5.00	110	106	102	108	104	100	103	100	97	88
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:02 May 2018

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:231.5V I:0.1741A P:39.04W PF:0.9689 Freq:49.99Hz Lamp Flux:4900.24x1 lm		
NAME: P17ES-UD-40-0606B-40H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

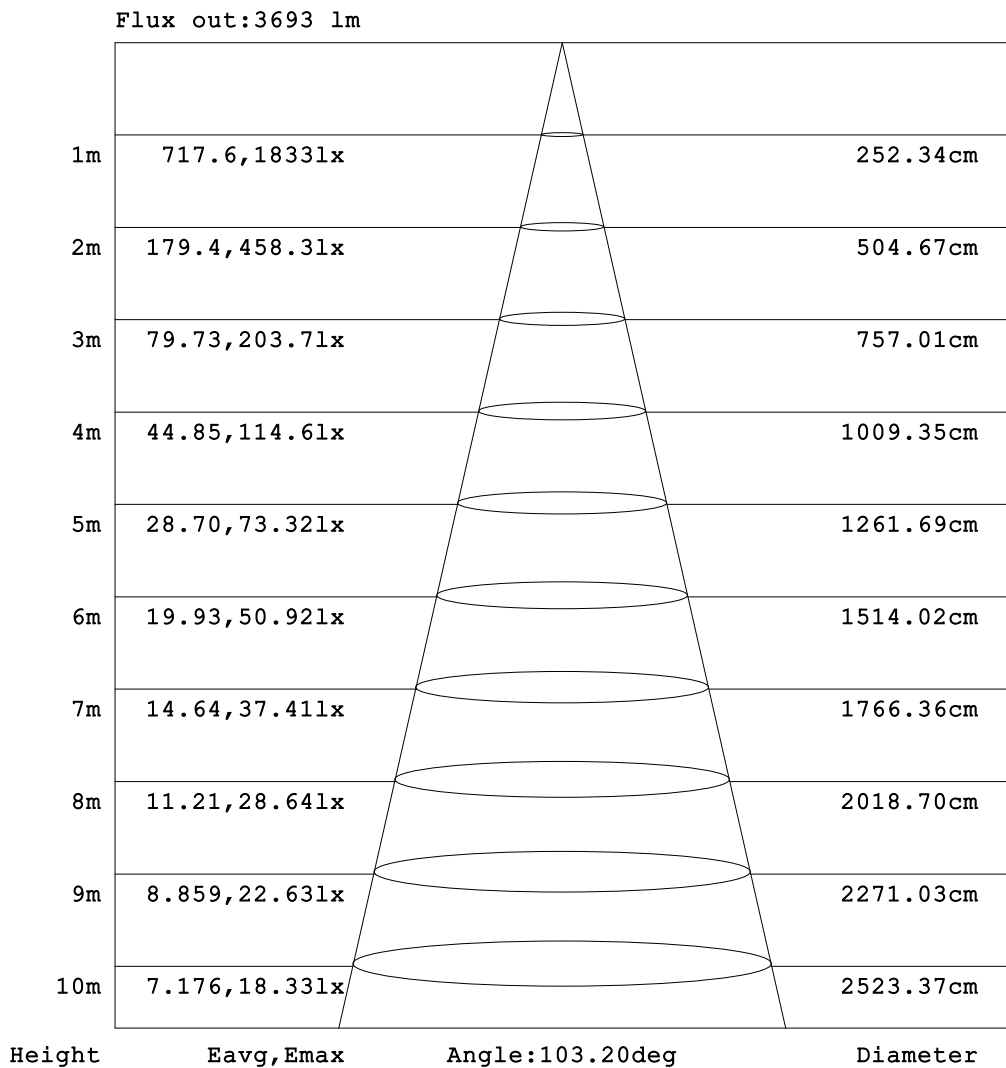


C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:02 May 2018

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

AAI Figure

Test:U:231.5V I:0.1741A P:39.04W PF:0.9689 Freq:49.99Hz Lamp Flux:4900.24x1 lm		
NAME: P17ES-UD-40-0606B-40H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



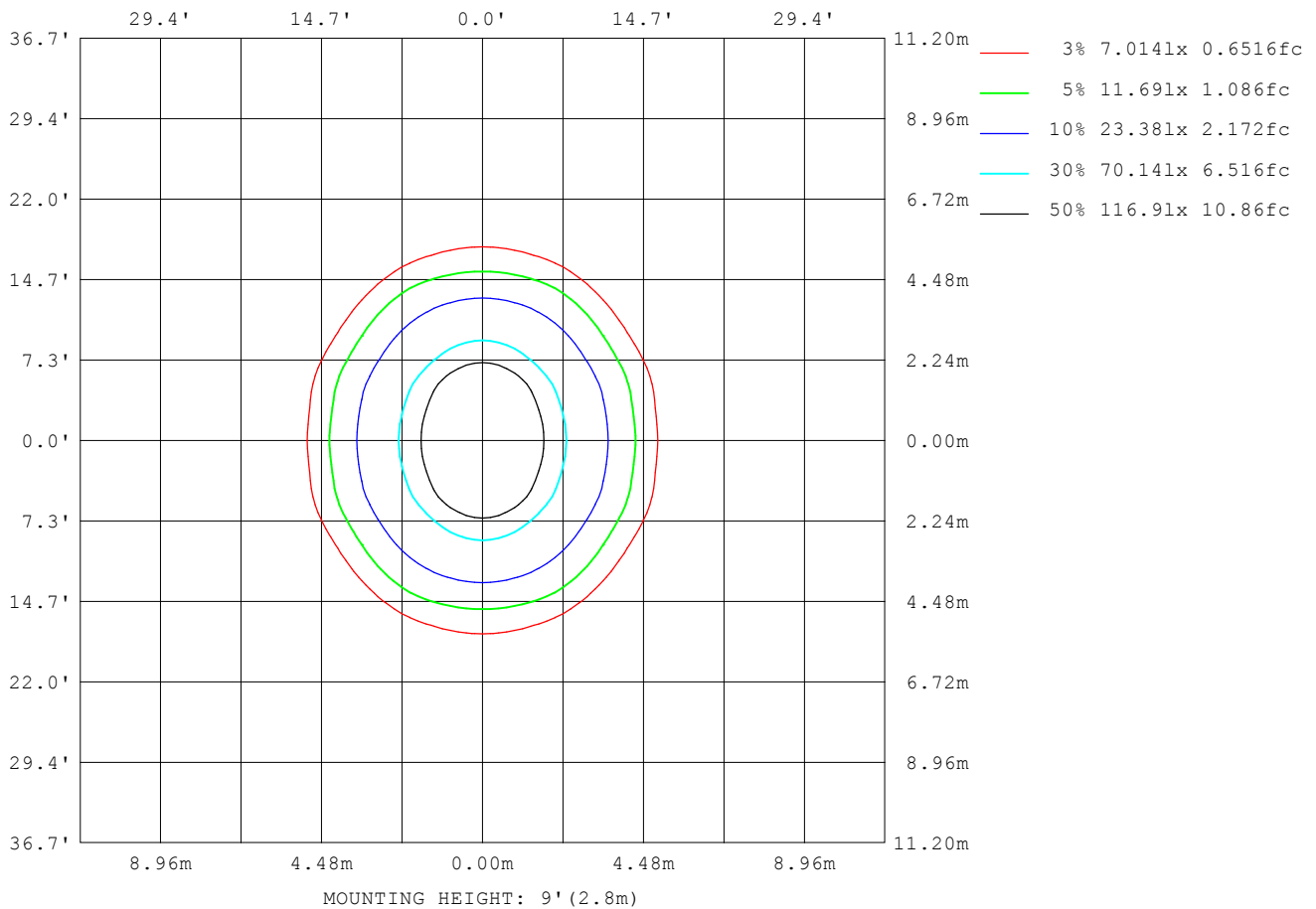
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:02 May 2018

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:231.5V I:0.1741A P:39.04W PF:0.9689 Freq:49.99Hz Lamp Flux:4900.24x1 lm		
NAME: P17ES-UD-40-0606B-40H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:02 May 2018

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:231.5V I:0.1741A P:39.04W PF:0.9689 Freq:49.99Hz Lamp Flux:4900.24x1 lm		
NAME: P17ES-UD-40-0606B-40H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

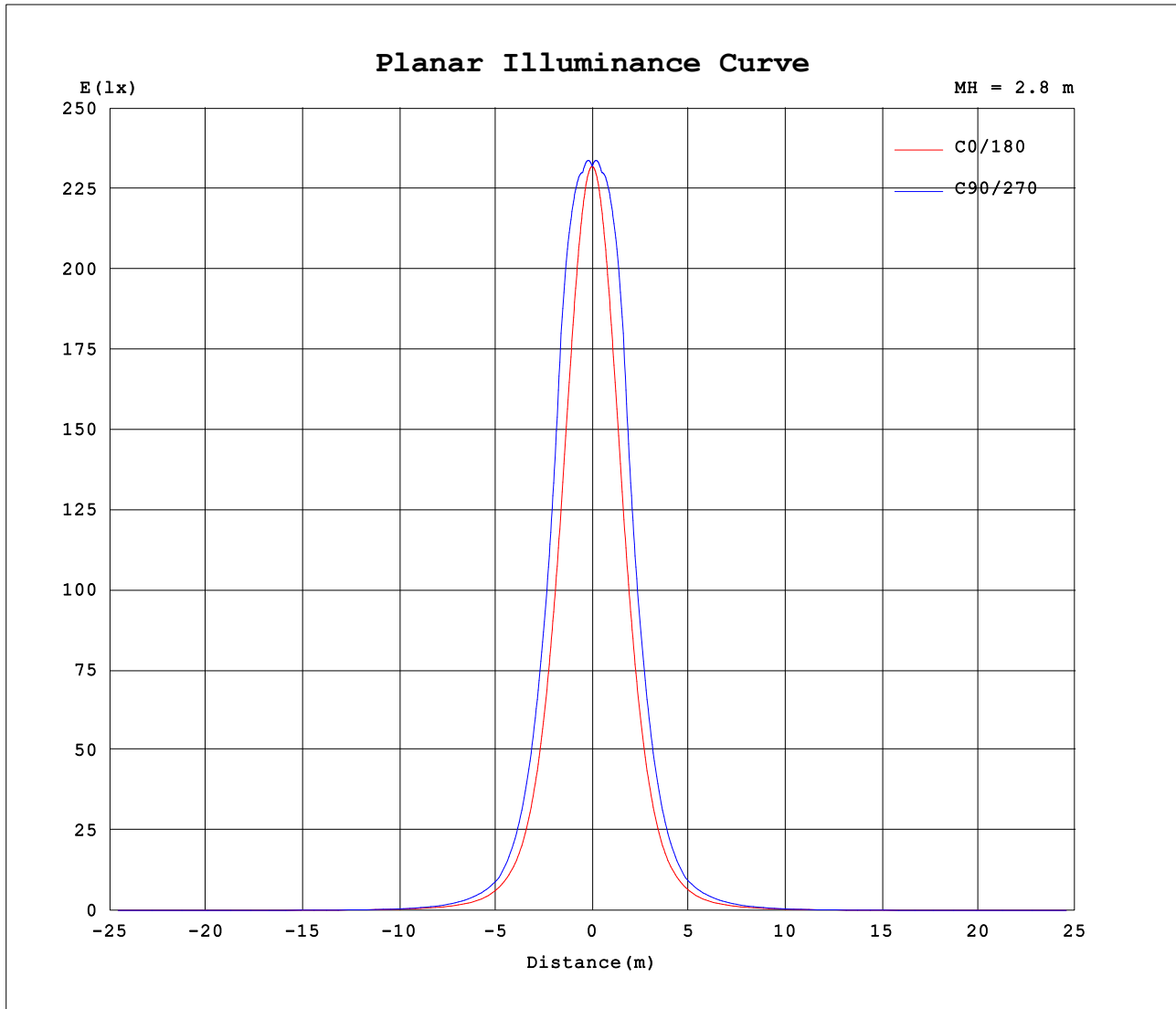
AvgL	cd/m2
L_0~180 (65) av	2114
L_0~180 (75) av	1956
L_0~180 (85) av	1466
L_90~270 (65) av	3260
L_90~270 (75) av	2128
L_90~270 (85) av	2037
L_45 (65) av	2417
L_45 (75) av	1941
L_45 (85) av	2010

Standard: GB/T 29293-2012

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:02 May 2018

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 02 May 2018

γ Range: -90 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 53.0%
 Test Distance: 10.380m [K=1.0000]
 Remarks:

```

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

```

```

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

```

```

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

```

```

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

```


[illegible]

```

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

```

[illegible]

```

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

```

[illegible]

```

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

```

[illegible]

```

γ Range:-90 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

```