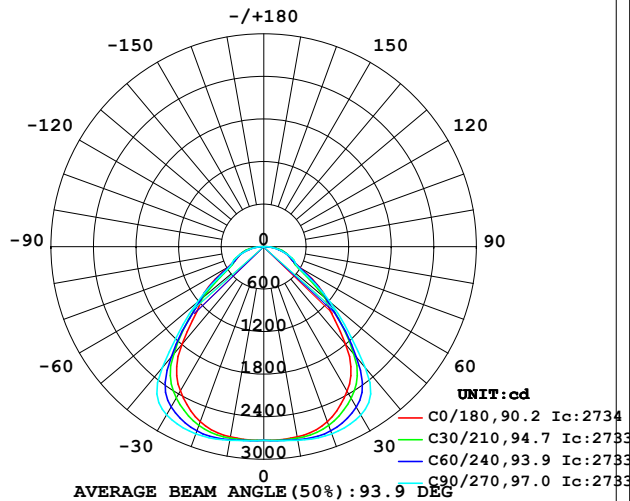


LUMINAIRE PHOTOMETRIC TEST REPORT

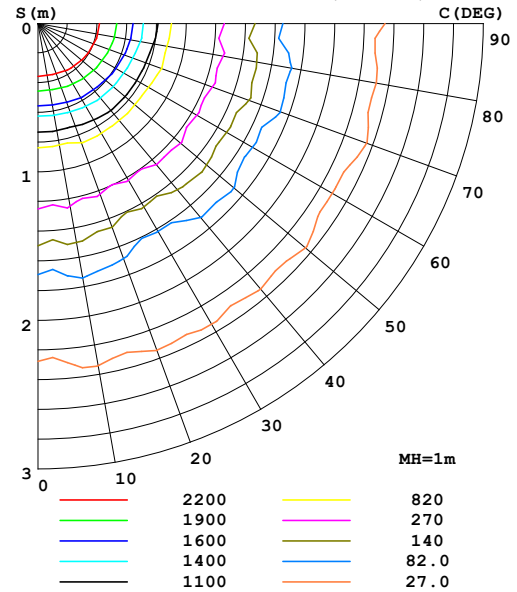
Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6459.82x1 lm		
NAME: LTY40X612CT19 700x2mA_3500K	TYPE: YALA ONE	WEIGHT:
SPEC.:	DIM.: 600x1200x12	SERIAL No.:1
MFR.: TECONEX	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 131.83 lm/W			
MODEL	LTY40X612CT19	I _{max} (cd)	2809	S/MH(C0/180)	1.26
NOMINAL POWER(W)	54	LOR(%)	100.0	S/MH(C90/270)	1.35
RATED VOLTAGE(V)	35	TOTAL FLUX(lm)	6459.8	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	6459.82	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)	35	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM(UNIT:lx)



C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-07-17

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.270m [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	2725	2755	2772	2755	2725	2755	2772	2755	0- 10	262.0	262.0	4.06, 4.06
20	2626	2710	2809	2710	2626	2710	2809	2710	10- 20	777.5	1039	16.1, 16.1
30	2354	2499	2740	2499	2354	2499	2740	2499	20- 30	1215	2255	34.9, 34.9
40	1793	1900	2229	1900	1793	1900	2229	1900	30- 40	1434	3689	57.1, 57.1
50	1145	1133	1228	1133	1145	1133	1228	1133	40- 50	1173	4862	75.3, 75.3
60	587.6	614.4	546.0	614.4	587.6	614.4	546.0	614.4	50- 60	746.5	5608	86.8, 86.8
70	370.3	338.3	387.1	338.3	370.3	338.3	387.1	338.3	60- 70	465.0	6074	94, 94
80	208.8	184.9	188.1	184.9	208.8	184.9	188.1	184.9	70- 80	288.1	6362	98.5, 98.5
90	0	0	0	0	0	0	0	0	80- 90	98.16	6460	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): 4441.9 lm

%lum = 68.8%

%lamp = 68.8%

Conical surface Flux(120deg): 5608.5 lm

%lum = 86.8%

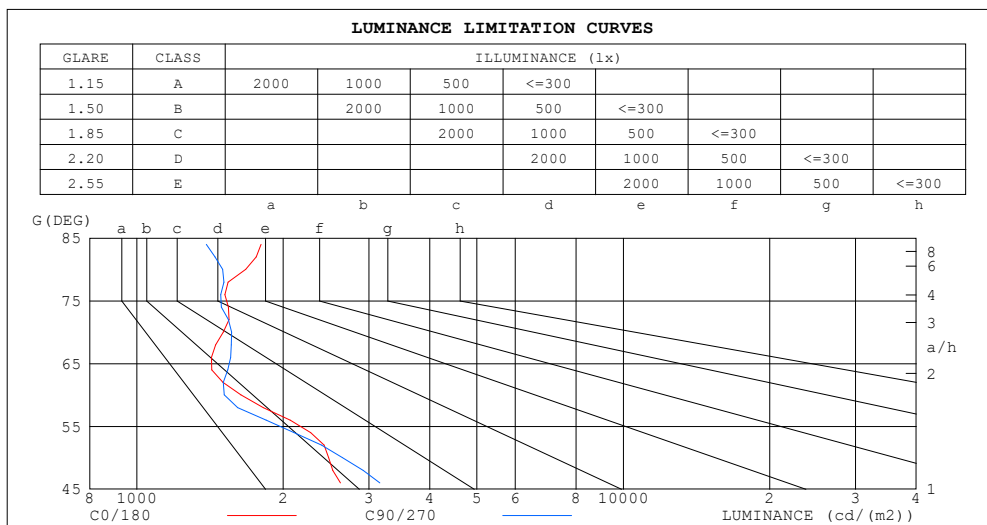
%lamp = 86.8%

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-07-17

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.270m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6459.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2158	1667
80	1674	1500
75	1642	1590
70	1507	1568
65	1479	1596
60	1636	1512
55	2334	2156
50	2480	2645
45	2855	3481

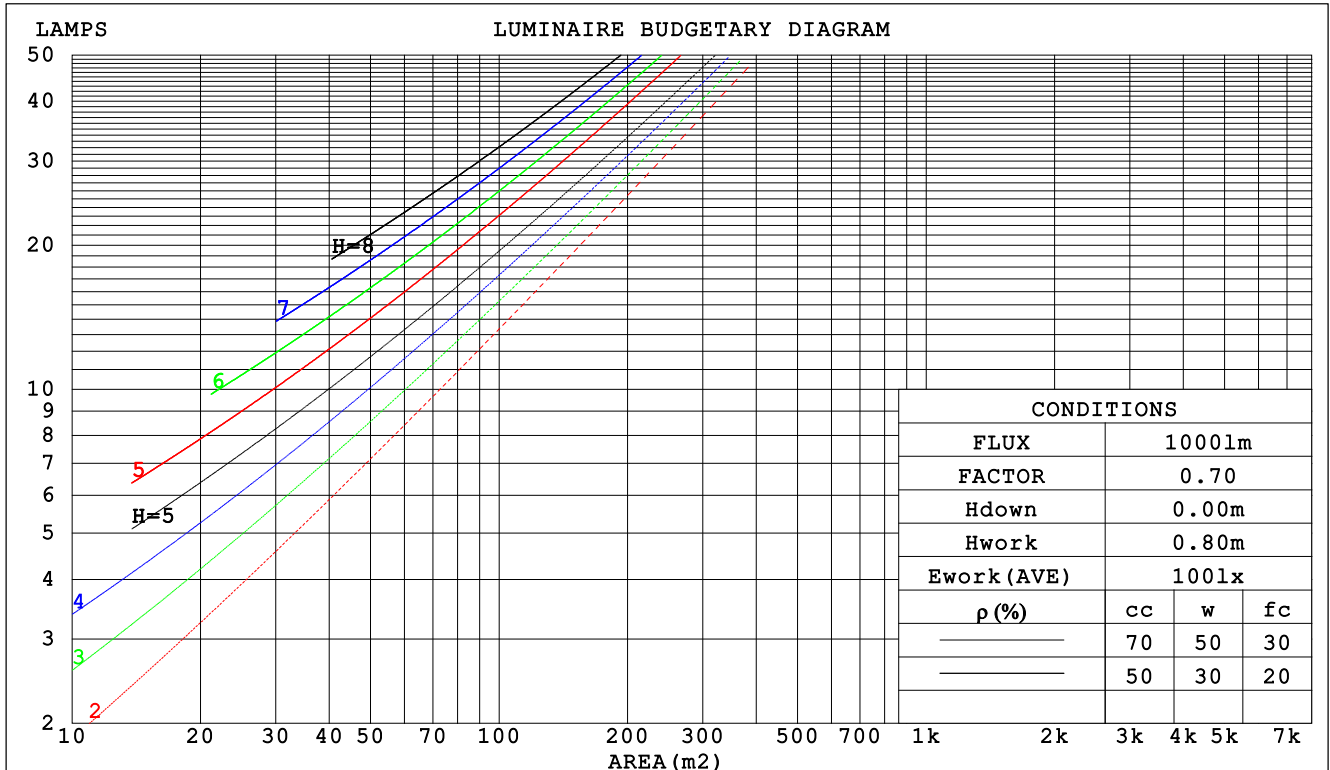
C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-07-17

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.270m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6459.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
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	Coefficients of Utilization(CU)															
	RCR:Room Cavity Ratio															
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	1.06	1.02	.99	1.04	1.00	.97	.99	.97	.94	.96	.93	.91	.92	.90	.88	.86
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.78	.83	.79	.76	.74
3.0	.84	.77	.71	.82	.76	.70	.80	.74	.69	.77	.72	.68	.74	.70	.67	.65
4.0	.75	.67	.61	.74	.67	.61	.72	.65	.60	.69	.64	.59	.67	.63	.59	.57
5.0	.68	.60	.54	.67	.59	.54	.65	.58	.53	.63	.57	.52	.61	.56	.52	.50
6.0	.62	.54	.48	.61	.53	.48	.59	.52	.47	.58	.51	.47	.56	.51	.46	.44
7.0	.57	.48	.43	.56	.48	.43	.54	.47	.42	.53	.47	.42	.52	.46	.42	.40
8.0	.52	.44	.38	.51	.44	.38	.50	.43	.38	.49	.42	.38	.48	.42	.38	.36
9.0	.48	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.34	.44	.38	.34	.33
10.0	.44	.37	.32	.44	.37	.32	.43	.36	.32	.42	.36	.31	.41	.35	.31	.30



C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-07-17

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.270m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6459.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
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	.272	.155	.049	.265	.151	.048	.252	.145	.046	.240	.138	.044	.229	.133	.043		
2.0	.257	.141	.043	.251	.138	.043	.240	.133	.041	.229	.129	.040	.220	.124	.039		
3.0	.241	.128	.038	.235	.126	.038	.225	.122	.037	.216	.118	.036	.207	.115	.036		
4.0	.224	.117	.034	.220	.115	.034	.211	.112	.033	.203	.109	.033	.195	.106	.032		
5.0	.210	.107	.031	.205	.105	.031	.198	.103	.030	.190	.100	.030	.183	.098	.029		
6.0	.196	.098	.028	.192	.097	.028	.185	.095	.028	.179	.093	.027	.173	.091	.027		
7.0	.184	.091	.026	.181	.090	.026	.175	.088	.025	.169	.086	.025	.163	.085	.025		
8.0	.173	.085	.024	.170	.084	.024	.165	.082	.023	.159	.081	.023	.154	.079	.023		
9.0	.163	.079	.022	.161	.078	.022	.156	.077	.022	.151	.076	.022	.146	.074	.022		
10.0	.154	.074	.021	.152	.073	.020	.148	.072	.020	.143	.071	.020	.139	.070	.020		

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	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.159	.114	.078	.136	.098	.068	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.151	.100	.062	.129	.087	.054	.089	.060	.038	.051	.035	.022	.017	.012	.007	
5.0	.143	.090	.050	.123	.078	.044	.085	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.136	.081	.042	.117	.070	.036	.081	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.130	.074	.035	.112	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.124	.068	.030	.107	.059	.026	.074	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.118	.063	.026	.102	.055	.023	.071	.039	.016	.041	.023	.010	.013	.007	.003	
10.0	.113	.059	.023	.097	.051	.020	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-07-17

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.270m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6459.82x1 lm										
NAME:					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
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	14.4	15.8	14.7	16.0	16.2	14.8	16.2	15.1	16.4	16.6
3H	15.4	16.6	15.6	16.9	17.1	15.6	16.9	15.9	17.1	17.3
4H	15.9	17.1	16.2	17.3	17.6	16.0	17.2	16.3	17.5	17.7
6H	16.4	17.5	16.7	17.8	18.1	16.5	17.6	16.8	17.9	18.1
8H	16.6	17.7	17.0	18.0	18.3	16.6	17.7	16.9	18.0	18.3
12H	16.8	17.9	17.1	18.1	18.4	16.7	17.7	17.0	18.0	18.3
4H 2H	14.8	16.0	15.1	16.2	16.5	15.1	16.3	15.4	16.5	16.7
3H	16.0	17.0	16.3	17.3	17.6	16.1	17.2	16.5	17.5	17.8
4H	16.6	17.6	17.0	17.9	18.2	16.7	17.6	17.1	18.0	18.3
6H	17.4	18.2	17.8	18.5	18.9	17.3	18.1	17.7	18.5	18.8
8H	17.7	18.5	18.1	18.8	19.2	17.5	18.3	17.9	18.6	19.0
12H	17.9	18.7	18.4	19.0	19.4	17.6	18.4	18.1	18.7	19.1
8H 4H	16.9	17.7	17.3	18.1	18.4	16.9	17.7	17.3	18.1	18.5
6H	17.9	18.5	18.3	18.9	19.3	17.7	18.3	18.1	18.7	19.2
8H	18.3	18.9	18.8	19.3	19.7	18.0	18.6	18.5	19.0	19.4
12H	18.7	19.2	19.1	19.6	20.1	18.2	18.7	18.7	19.2	19.6
12H 4H	16.9	17.6	17.3	18.0	18.4	17.0	17.7	17.4	18.1	18.5
6H	17.9	18.5	18.4	18.9	19.4	17.8	18.4	18.2	18.8	19.2
8H	18.4	18.9	18.9	19.4	19.8	18.1	18.6	18.6	19.1	19.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.6				
1.5H	+ 0.2 / - 0.4					+ 0.4 / - 0.3				
2.0H	+ 0.7 / - 0.6					+ 1.1 / - 0.8				

CIE Pub.117, 6460 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 6.5$)

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-07-17

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.270m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6459.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

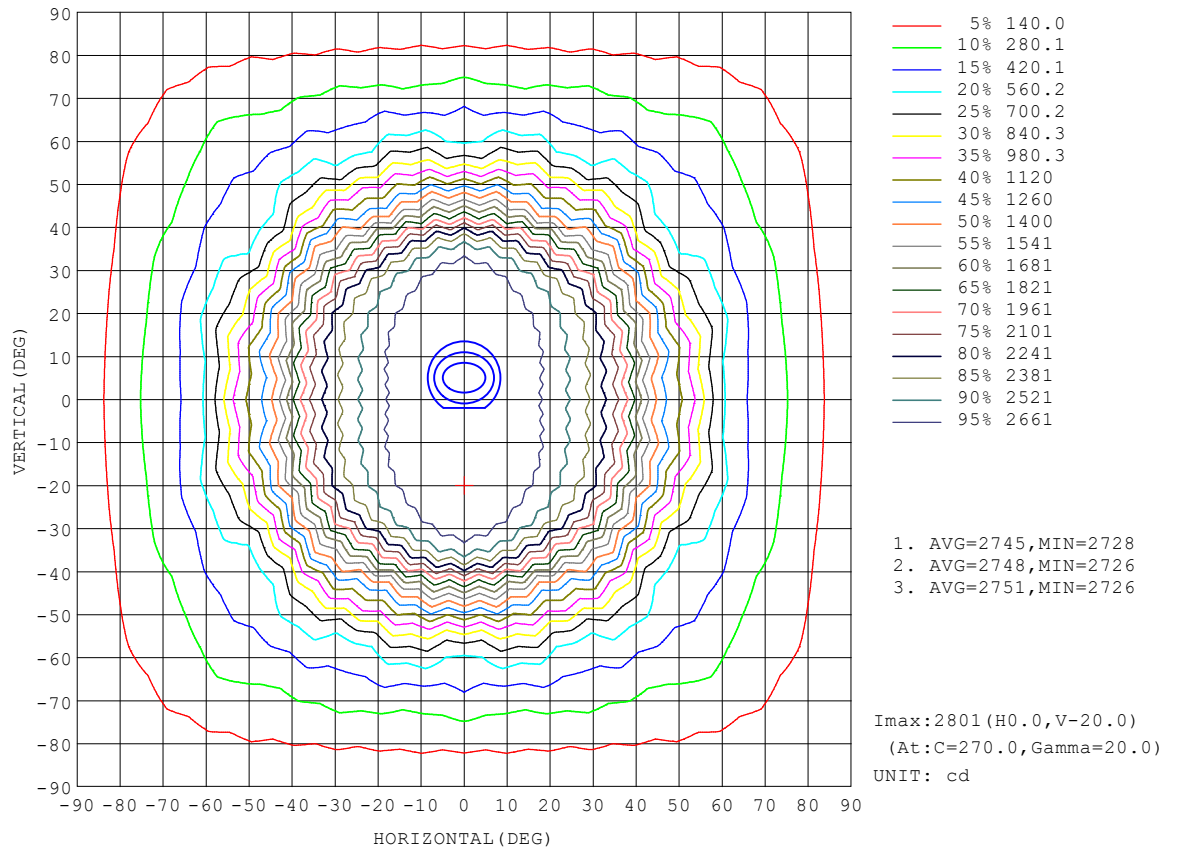
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	55	48	64	54	48	63	54	48	42
0.80	75	65	58	74	64	58	72	63	58	51
1.00	82	73	67	81	72	66	79	73	66	60
1.25	89	80	74	88	79	73	85	78	73	66
1.50	93	85	79	92	84	79	89	82	77	71
2.00	99	92	86	97	91	86	94	89	84	77
2.50	102	96	90	100	94	90	97	92	88	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	104	101	98	89
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: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-07-17

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.270m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6459.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

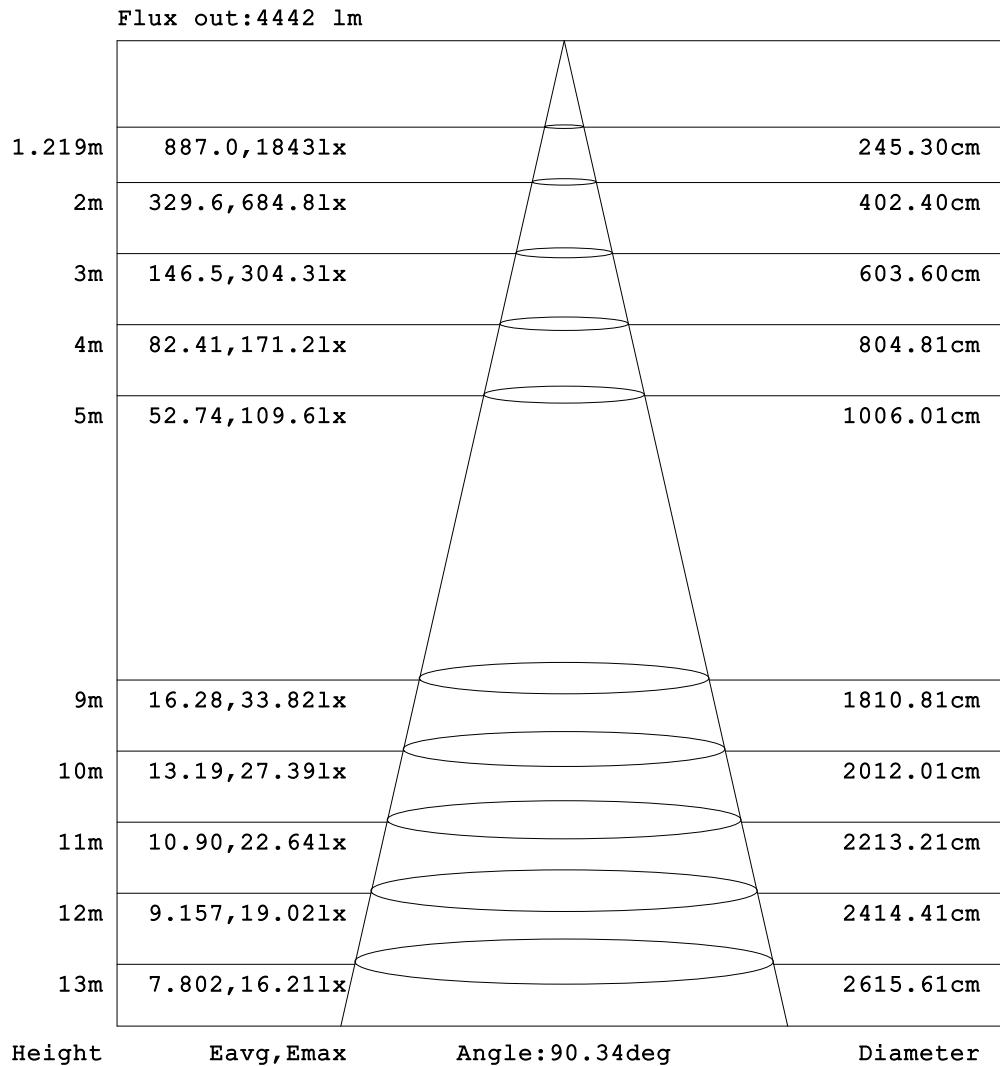


C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-07-17

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.270m [K=1.0000]
 Remarks:

AAI Figure

Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6459.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



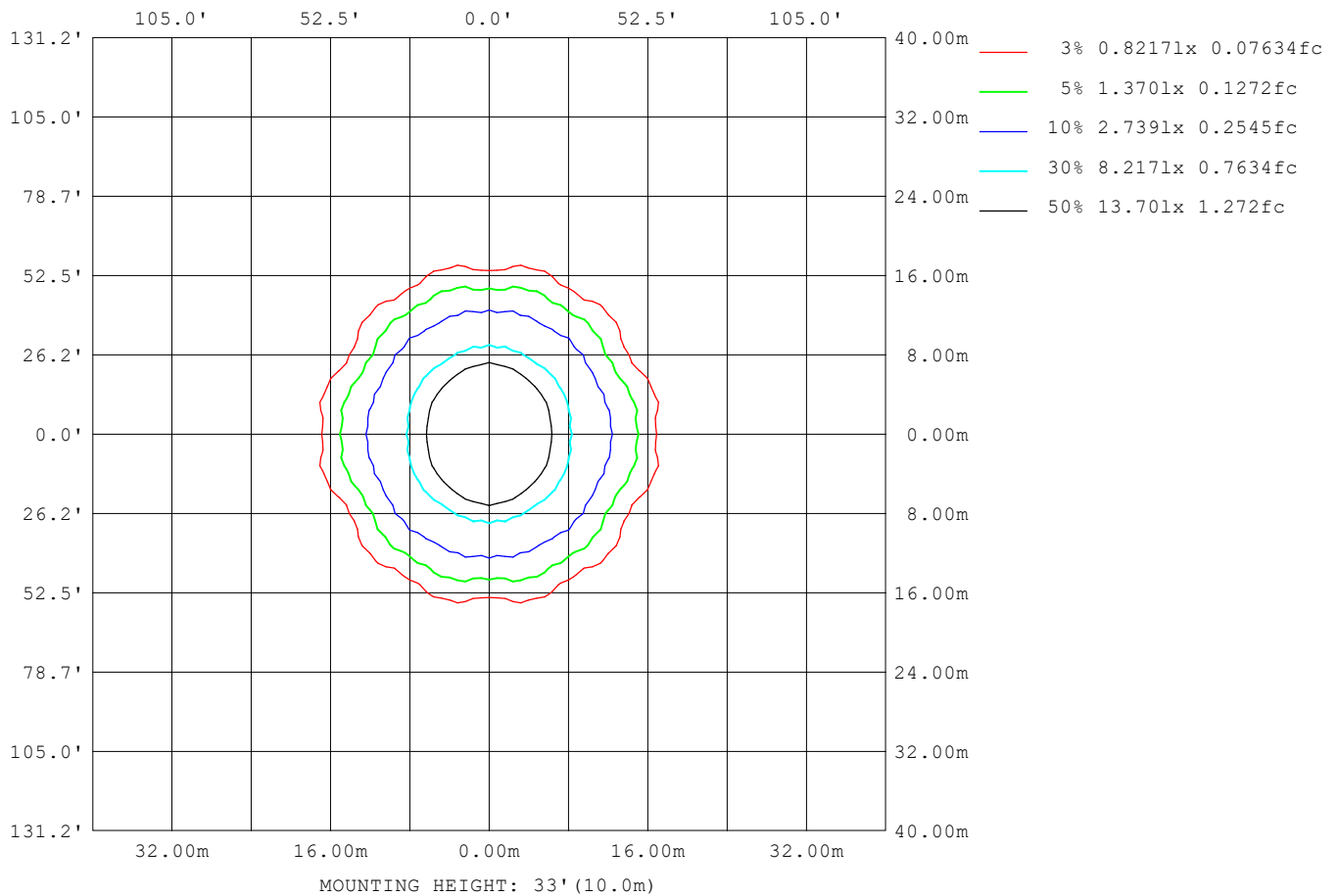
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-07-17

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.270m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6459.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-07-17

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.270m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6459.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

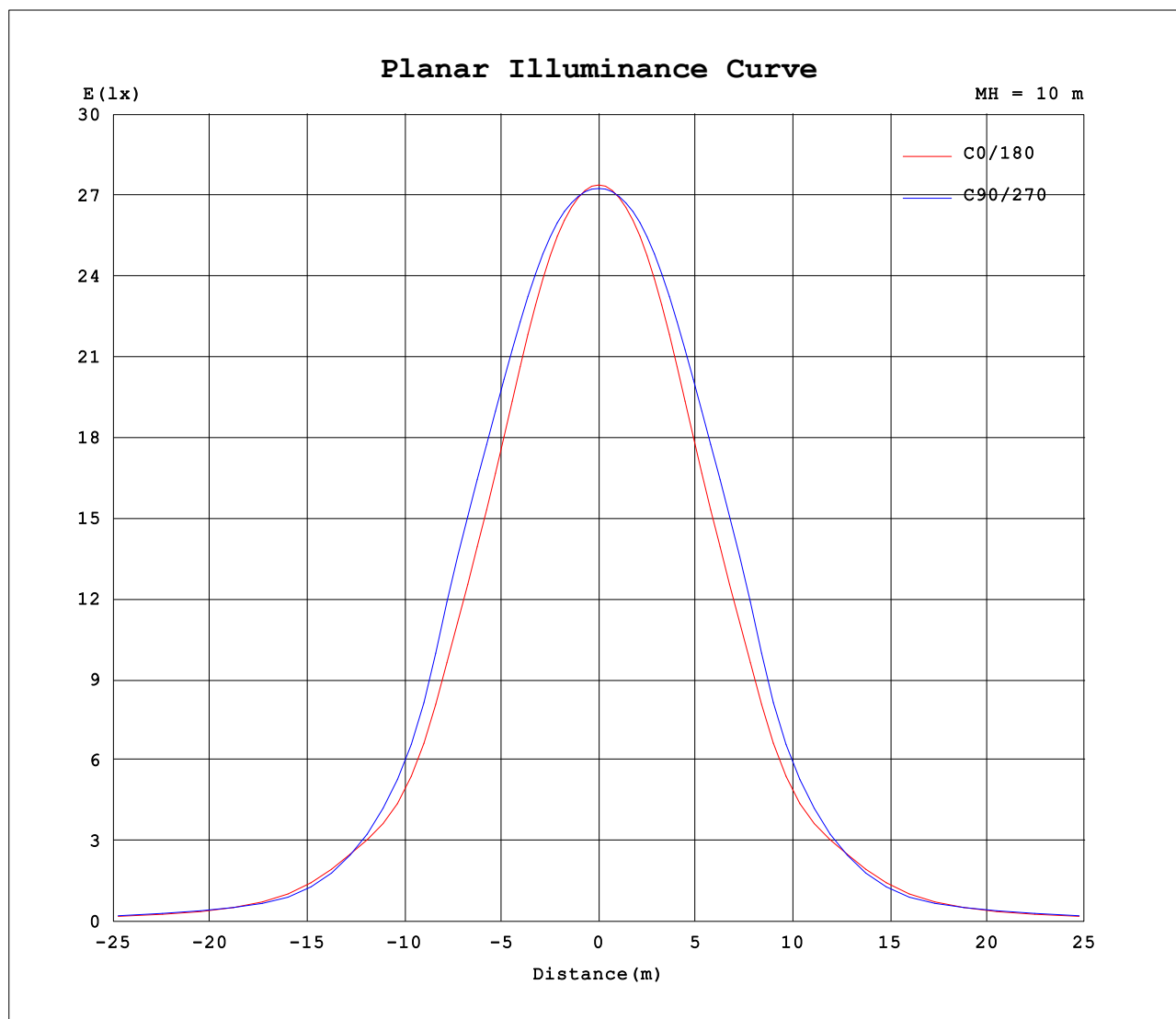
AvgL	cd/m2
L_0~180 (65) av	1415
L_0~180 (75) av	1526
L_0~180 (85) av	1810
L_90~270 (65) av	1554
L_90~270 (75) av	1490
L_90~270 (85) av	1326
L_45 (65) av	1551
L_45 (75) av	1406
L_45 (85) av	1275

Standard: GB/T 29293-2012

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-07-17

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.270m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-07-17

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 10.270m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
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