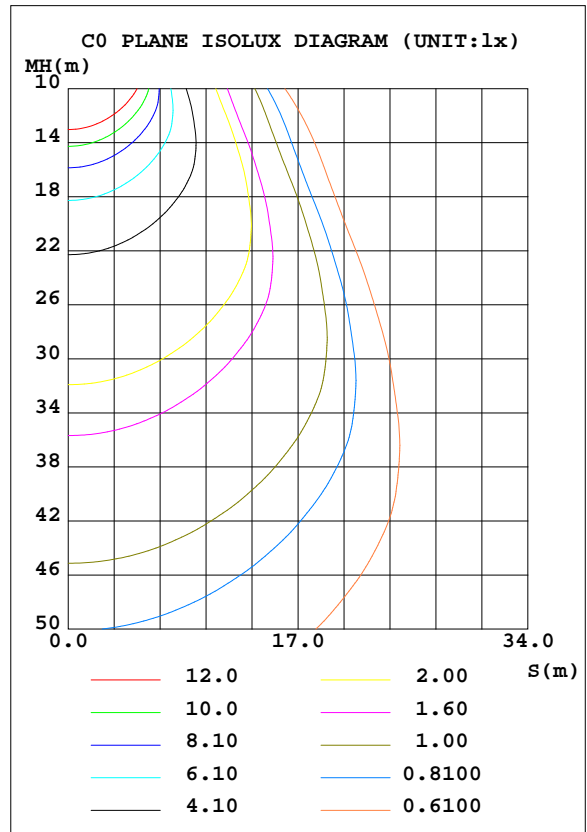
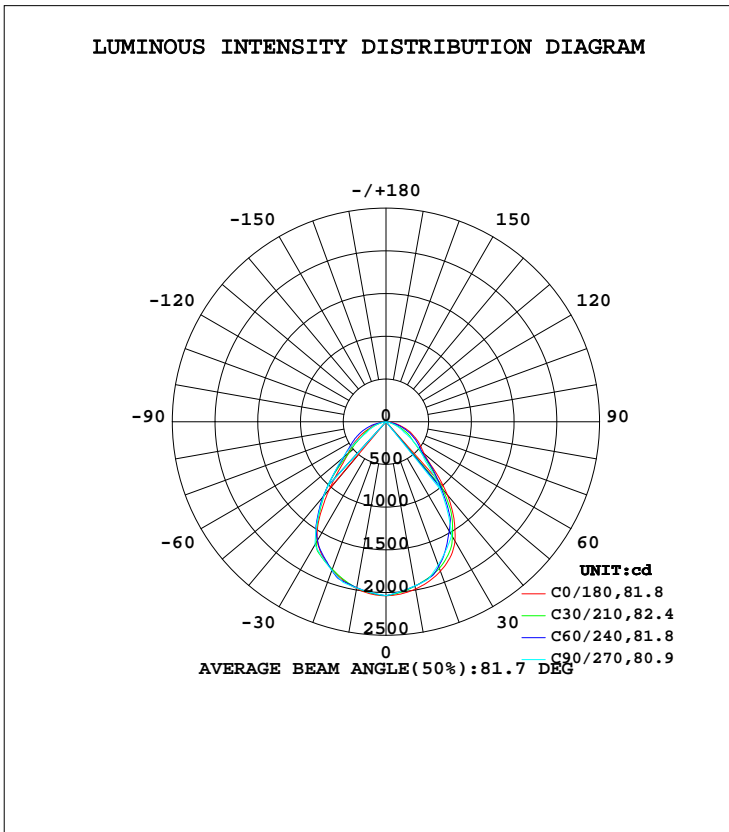


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.21V I:0.1343A P:30.161W PF:0.9752 Freq:50.00Hz Lamp Flux:3746.72x1 lm		
NAME: IL-PN595U(S) 3.500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:550*550	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 124.22 lm/W			
MODEL	IL-PN595U(S) 3.500K	Imax(cd)	2036	S/MH(C0/180)	1.18
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.12
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3746.7	η UP, DN(C0-180)	0.0,51.8
NOMINAL FLUX(lm)	3746.72	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,48.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.25



βH() Range:-90 - 90DEG
 βH() Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-03

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.240m [K=1.0000]
 Remarks: IL-PN595U(S) 3.500K

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1983	1972	1976	1968	1989	1951	1951	1954	0- 10	190.2	190.2	5.08,5.08
20	1844	1869	1852	1864	1861	1828	1785	1833	10- 20	539.1	729.3	19.5,19.5
30	1610	1574	1664	1579	1615	1491	1537	1492	20- 30	788.8	1518	40.5,40.5
40	1029	1138	1132	1174	1121	1061	949.1	1021	30- 40	833.4	2352	62.8,62.8
50	581.1	644.1	667.9	662.7	584.6	584.1	517.3	552.0	40- 50	616.5	2968	79.2,79.2
60	369.8	359.3	271.5	353.9	414.6	321.6	241.9	301.2	50- 60	395.5	3364	89.8,89.8
70	186.2	233.1	144.4	213.7	254.0	200.0	116.2	211.0	60- 70	247.9	3611	96.4,96.4
80	63.58	108.9	0	103.8	96.76	85.97	0	81.64	70- 80	121.9	3733	99.6,99.6
90	1.270	0	0	0	1.750	0	0	0	80- 90	13.41	3747	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): 2695.4 lm

%lum = 71.9%
%lamp = 71.9%

Conical surface Flux(120deg): 3363.5 lm

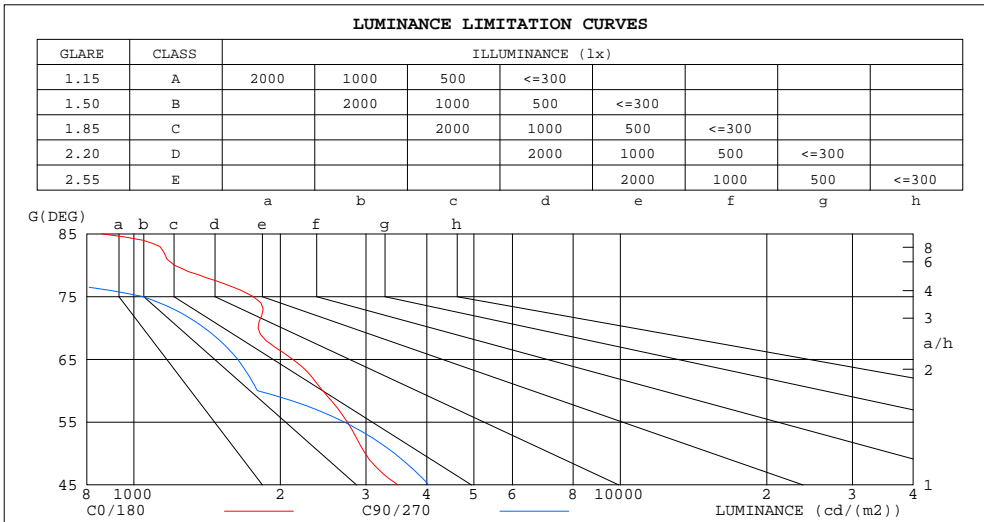
%lum = 89.8%
%lamp = 89.8%

β H() Range:-90 - 90DEG
 β H() Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-06-03

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:8.240m [K=1.0000]
Remarks: IL-PN595U(S) 3.500K

LUMINANCE LIMITATION CURVES

Test:U:230.21V I:0.1343A P:30.161W PF:0.9752 Freq:50.00Hz Lamp Flux:3746.72x1 lm		
NAME: IL-PN595U(S) 3.500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:550*550	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	859	0
80	1210	0
75	1759	1043
70	1800	1396
65	2121	1635
60	2445	1795
55	2745	2708
50	2989	3435
45	3492	4040

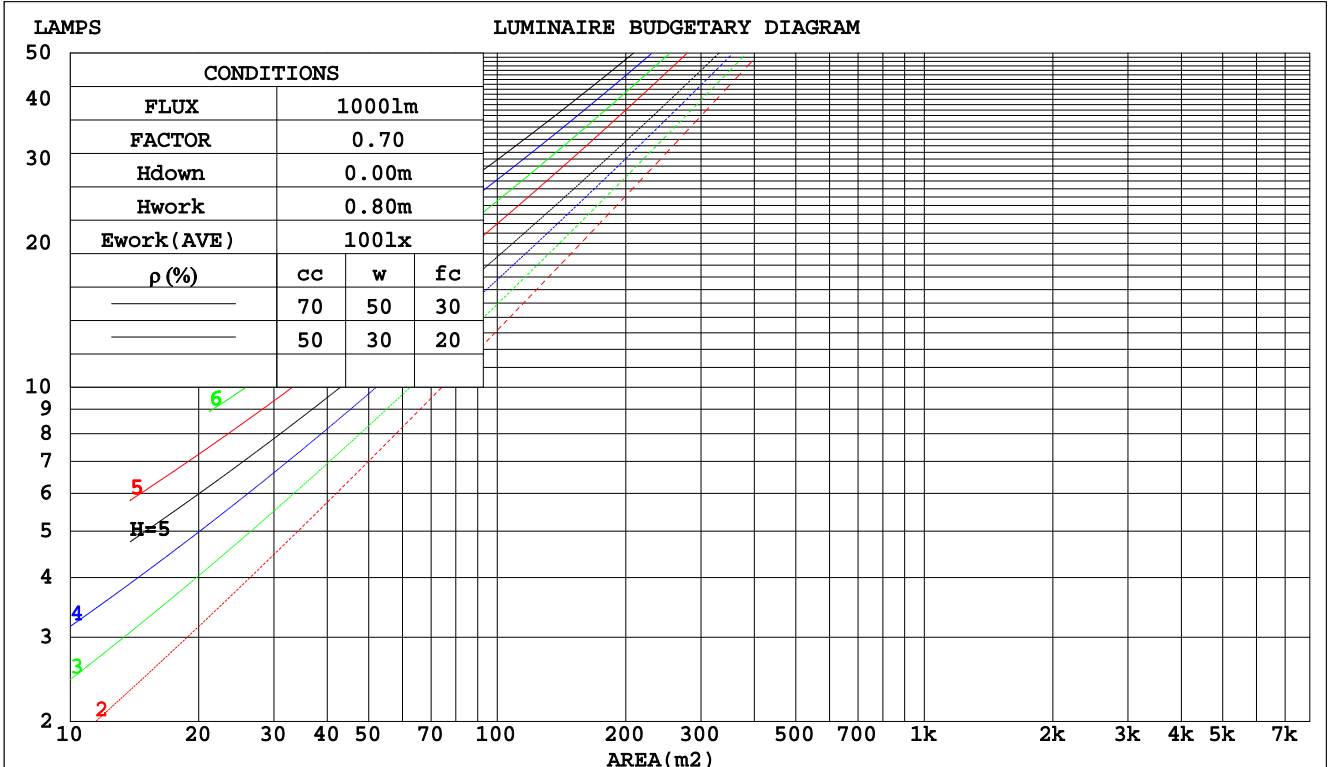
$\beta H()$ Range:-90 - 90DEG
 $\beta H()$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-03

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.240m [K=1.0000]
 Remarks: IL-PN595U(S) 3.500K

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.21V I:0.1343A P:30.161W PF:0.9752 Freq:50.00Hz Lamp Flux:3746.72x1 lm		
NAME: IL-PN595U(S) 3.500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:550*550	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
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	1.07	1.04	1.01	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.93	.92	.90	.88
2.0	.96	.90	.86	.94	.89	.85	.91	.86	.83	.88	.84	.81	.85	.82	.79	.77
3.0	.86	.79	.74	.85	.78	.73	.82	.77	.72	.79	.75	.71	.77	.73	.70	.68
4.0	.78	.70	.65	.77	.70	.64	.74	.68	.63	.72	.67	.63	.70	.66	.62	.60
5.0	.71	.63	.57	.70	.63	.57	.68	.61	.56	.66	.60	.56	.64	.59	.55	.53
6.0	.65	.57	.51	.64	.56	.51	.62	.56	.51	.61	.55	.50	.59	.54	.50	.48
7.0	.59	.52	.46	.59	.51	.46	.57	.51	.46	.56	.50	.45	.55	.49	.45	.43
8.0	.55	.47	.42	.54	.47	.42	.53	.46	.42	.52	.46	.41	.51	.45	.41	.39
9.0	.51	.43	.38	.50	.43	.38	.49	.43	.38	.48	.42	.38	.47	.42	.38	.36
10.0	.47	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.35	.44	.39	.35	.33



βH() Range:-90 - 90DEG
 βH() Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-03

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.240m [K=1.0000]
 Remarks: IL-PN595U(S) 3.500K

WEC AND CCEC

Test:U:230.21V I:0.1343A P:30.161W PF:0.9752 Freq:50.00Hz Lamp Flux:3746.72x1 lm		
NAME: IL-PN595U(S) 3.500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:550*550	Shielding 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	.247	.140	.045	.240	.137	.044	.227	.130	.042	.215	.124	.040	.204	.118	.038	
2.0	.239	.131	.040	.233	.128	.039	.222	.123	.038	.211	.118	.037	.202	.114	.036	
3.0	.226	.120	.036	.220	.118	.036	.211	.114	.035	.201	.110	.034	.193	.107	.033	
4.0	.212	.110	.032	.207	.108	.032	.199	.105	.031	.191	.102	.031	.183	.100	.030	
5.0	.199	.101	.029	.195	.100	.029	.187	.097	.029	.180	.095	.028	.173	.093	.028	
6.0	.187	.094	.027	.183	.093	.027	.177	.090	.026	.170	.088	.026	.164	.086	.026	
7.0	.176	.087	.025	.173	.086	.025	.167	.084	.024	.161	.083	.024	.156	.081	.024	
8.0	.166	.081	.023	.163	.080	.023	.158	.079	.023	.153	.077	.022	.148	.076	.022	
9.0	.157	.076	.021	.154	.075	.021	.150	.074	.021	.145	.073	.021	.141	.071	.021	
10.0	.149	.071	.020	.147	.071	.020	.142	.070	.020	.138	.068	.019	.134	.067	.019	

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	.176	.157	.139	.151	.134	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.165	.132	.104	.141	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.156	.114	.081	.134	.098	.070	.092	.068	.049	.053	.040	.029	.017	.013	.009	
4.0	.148	.100	.064	.127	.087	.055	.087	.060	.039	.050	.035	.023	.016	.012	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.133	.081	.043	.114	.070	.037	.079	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.127	.074	.036	.109	.064	.032	.075	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.121	.068	.031	.104	.059	.027	.072	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.115	.063	.027	.099	.054	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.110	.058	.024	.095	.051	.021	.066	.036	.015	.038	.021	.009	.012	.007	.003	

βH() Range:-90 - 90DEG
 βH() Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-03

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.240m [K=1.0000]
 Remarks: IL-PN595U(S) 3.500K

UGR(Unified Glare Rating) Table

Test:U:230.21V I:0.1343A P:30.161W PF:0.9752 Freq:50.00Hz Lamp Flux:3746.72x1 lm										
NAME: IL-PN595U(S) 3.500K					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: EVERFINE					SUR.:550*550			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	15.4	16.7	15.6	16.8	17.0	16.0	17.3	16.2	17.5	17.6
3H	16.2	17.4	16.5	17.6	17.8	16.6	17.8	16.9	18.1	18.3
4H	16.6	17.7	16.9	17.9	18.2	16.8	18.0	17.1	18.2	18.5
6H	16.8	17.9	17.1	18.1	18.4	16.8	17.9	17.1	18.1	18.4
8H	16.8	17.8	17.1	18.1	18.4	16.7	17.8	17.1	18.0	18.3
12H	16.8	17.8	17.2	18.1	18.4	16.7	17.7	17.0	18.0	18.2
4H 2H	15.7	16.9	16.0	17.1	17.4	16.3	17.4	16.6	17.7	17.9
3H	16.6	17.6	17.0	17.9	18.2	17.4	18.3	17.7	18.6	18.9
4H	17.1	18.0	17.4	18.3	18.6	17.8	18.7	18.1	19.0	19.3
6H	17.4	18.2	17.8	18.5	18.9	17.8	18.6	18.2	18.9	19.3
8H	17.4	18.2	17.8	18.5	18.9	17.8	18.5	18.2	18.9	19.2
12H	17.5	18.1	17.9	18.5	18.9	17.7	18.4	18.1	18.8	19.2
8H 4H	17.3	18.1	17.7	18.4	18.8	18.0	18.7	18.4	19.1	19.5
6H	17.7	18.3	18.1	18.7	19.1	18.1	18.7	18.5	19.1	19.5
8H	17.8	18.3	18.3	18.8	19.2	18.1	18.6	18.5	19.0	19.5
12H	17.9	18.4	18.4	18.8	19.3	18.0	18.5	18.5	18.9	19.4
12H 4H	17.3	18.0	17.7	18.4	18.8	18.0	18.7	18.4	19.0	19.4
6H	17.7	18.2	18.1	18.6	19.1	18.1	18.6	18.5	19.0	19.5
8H	17.8	18.3	18.3	18.7	19.2	18.0	18.5	18.5	18.9	19.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.7					+ 0.4 / - 0.5				
1.5H	+ 0.5 / - 0.5					+ 0.4 / - 0.4				
2.0H	+ 1.0 / - 0.7					+ 0.9 / - 1.8				

CIE Pub.117, 3747 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.6)

βH() Range:-90 - 90DEG	V(B) Range:-75 - 75DEG
βH() Interval: 1.0DEG	V(B) Interval: 5.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
Temperature:25.3DEG	Humidity:65.0%
Operators:	Test Distance:8.240m [K=1.0000]
Test Date:2023-06-03	Remarks: IL-PN595U(S) 3.500K

UTILIZATION FACTORS TABLE

Test:U:230.21V I:0.1343A P:30.161W PF:0.9752 Freq:50.00Hz Lamp Flux:3746.72x1 lm		
NAME: IL-PN595U(S) 3.500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:550*550	Shielding Angle:

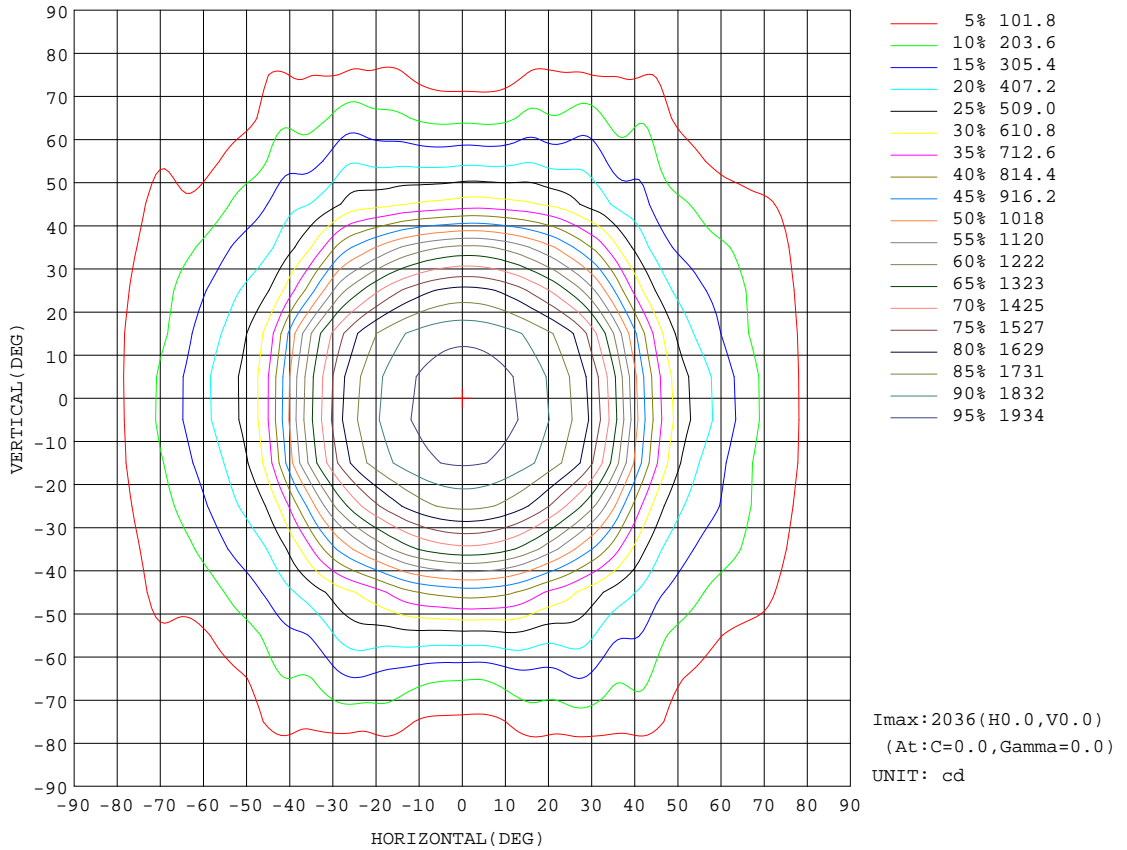
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	68	59	53	68	58	53	67	58	53	47
0.80	78	68	62	77	68	62	75	67	62	56
1.00	85	76	71	84	76	70	82	77	70	64
1.25	91	83	77	90	82	77	88	81	76	70
1.50	96	88	82	94	87	82	91	85	81	75
2.00	101	94	89	99	93	89	96	91	87	80
2.50	104	98	93	102	97	92	99	94	90	83
3.00	107	101	97	105	100	96	101	97	94	86
4.00	110	105	102	107	104	100	103	100	98	90
5.00	111	108	105	109	106	103	105	102	100	92
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

H(β) Range:-90 - 90DEG
 β H() Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-03

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.240m [K=1.0000]
 Remarks: IL-PN595U(S) 3.500K

ISOCANDELA DIAGRAM

Test:U:230.21V I:0.1343A P:30.161W PF:0.9752 Freq:50.00Hz Lamp Flux:3746.72x1 lm		
NAME: IL-PN595U(S) 3.500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:550*550	Shielding Angle:

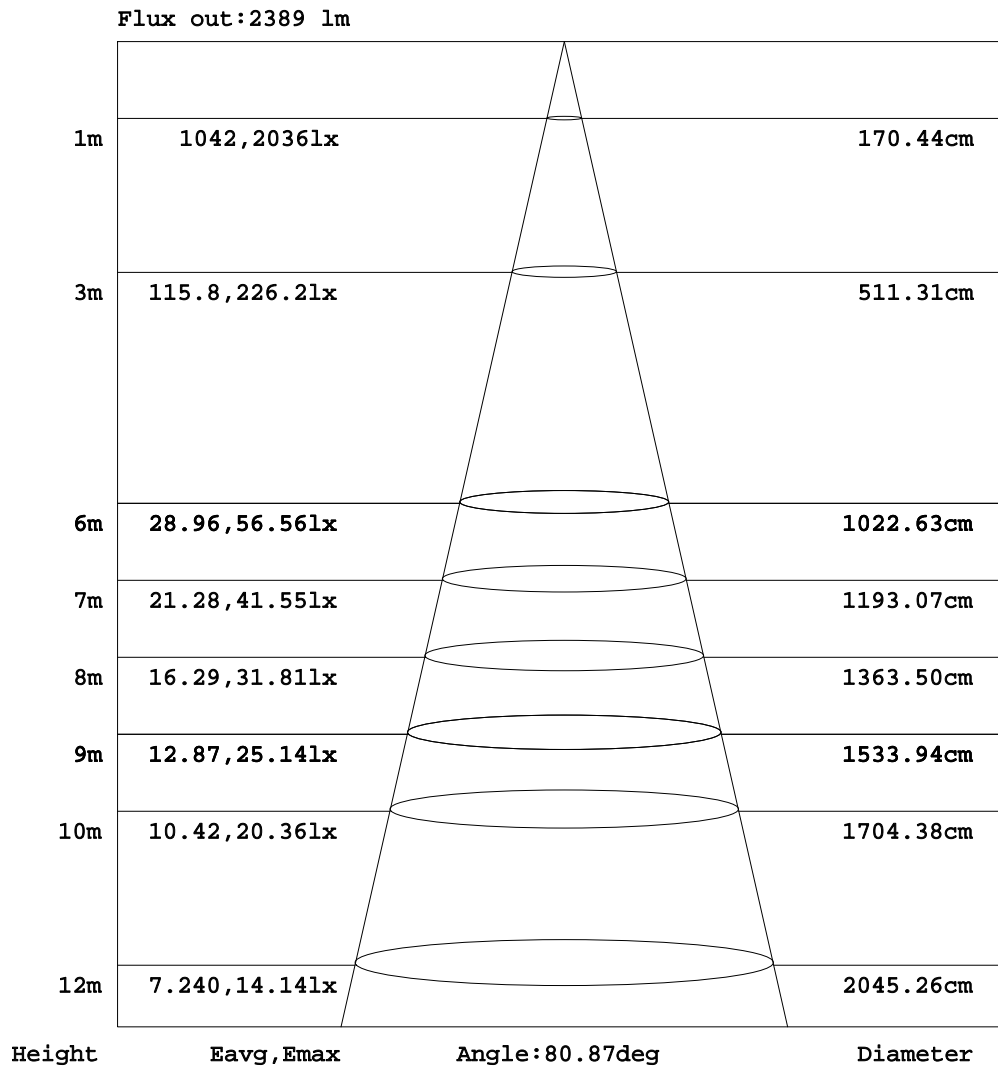


βH() Range:-90 - 90DEG
 βH() Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-03

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.240m [K=1.0000]
 Remarks: IL-PN595U(S) 3.500K

AAI Figure

Test:U:230.21V I:0.1343A P:30.161W PF:0.9752 Freq:50.00Hz Lamp Flux:3746.72x1 lm		
NAME: IL-PN595U(S) 3.500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:550*550	Shielding Angle:



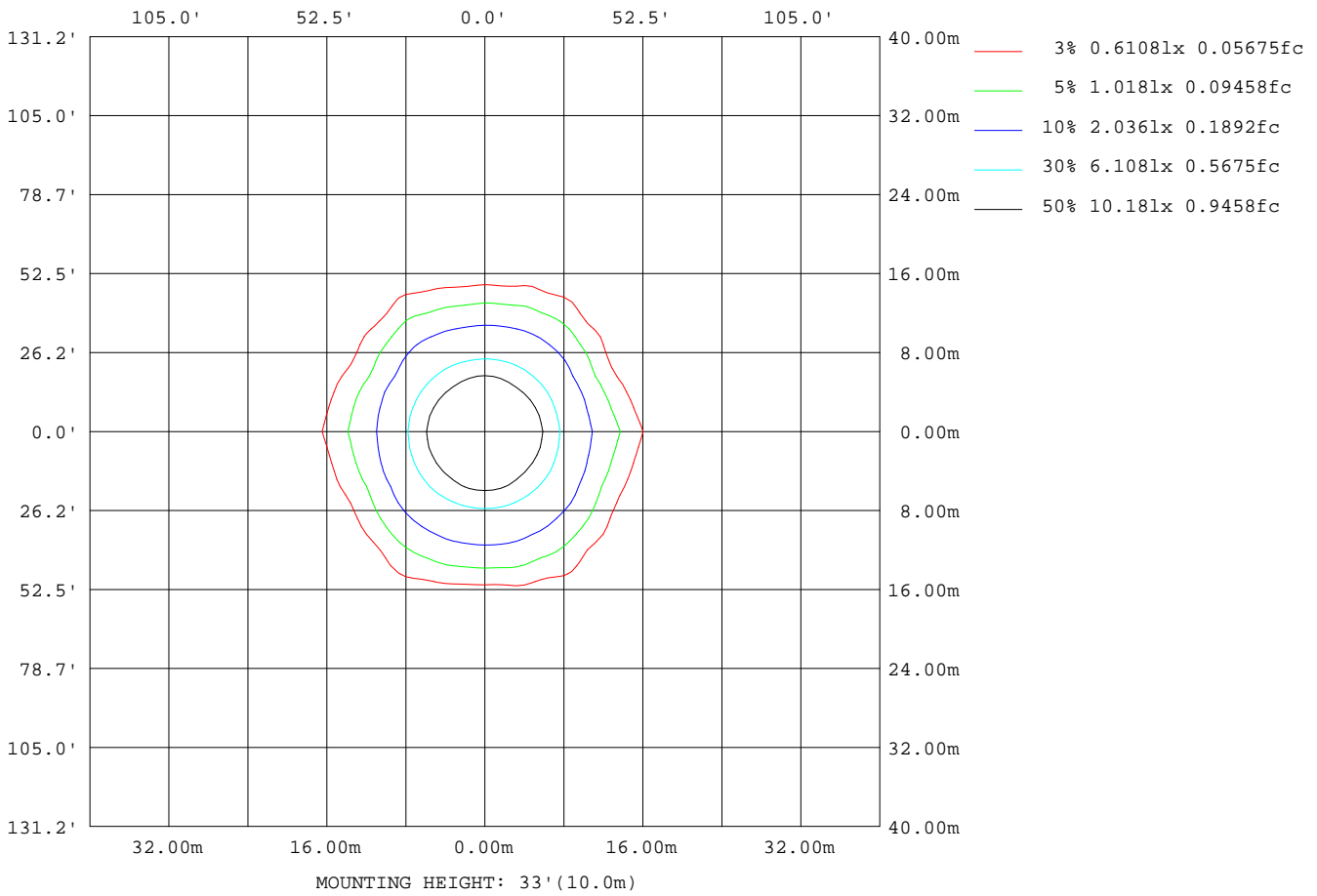
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

βH() Range:-90 - 90DEG
 βH() Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-03

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.240m [K=1.0000]
 Remarks: IL-PN595U(S) 3.500K

ISOLUX DIAGRAM

Test:U:230.21V I:0.1343A P:30.161W PF:0.9752 Freq:50.00Hz Lamp Flux:3746.72x1 lm		
NAME: IL-PN595U(S) 3.500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:550*550	Shielding Angle:



βH() Range:-90 - 90DEG
 βH() Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-03

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.240m [K=1.0000]
 Remarks: IL-PN595U(S) 3.500K

LED Avg.L Report

Test:U:230.21V I:0.1343A P:30.161W PF:0.9752 Freq:50.00Hz Lamp Flux:3746.72x1 lm		
NAME: IL-PN595U(S) 3.500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:550*550	Shielding Angle:

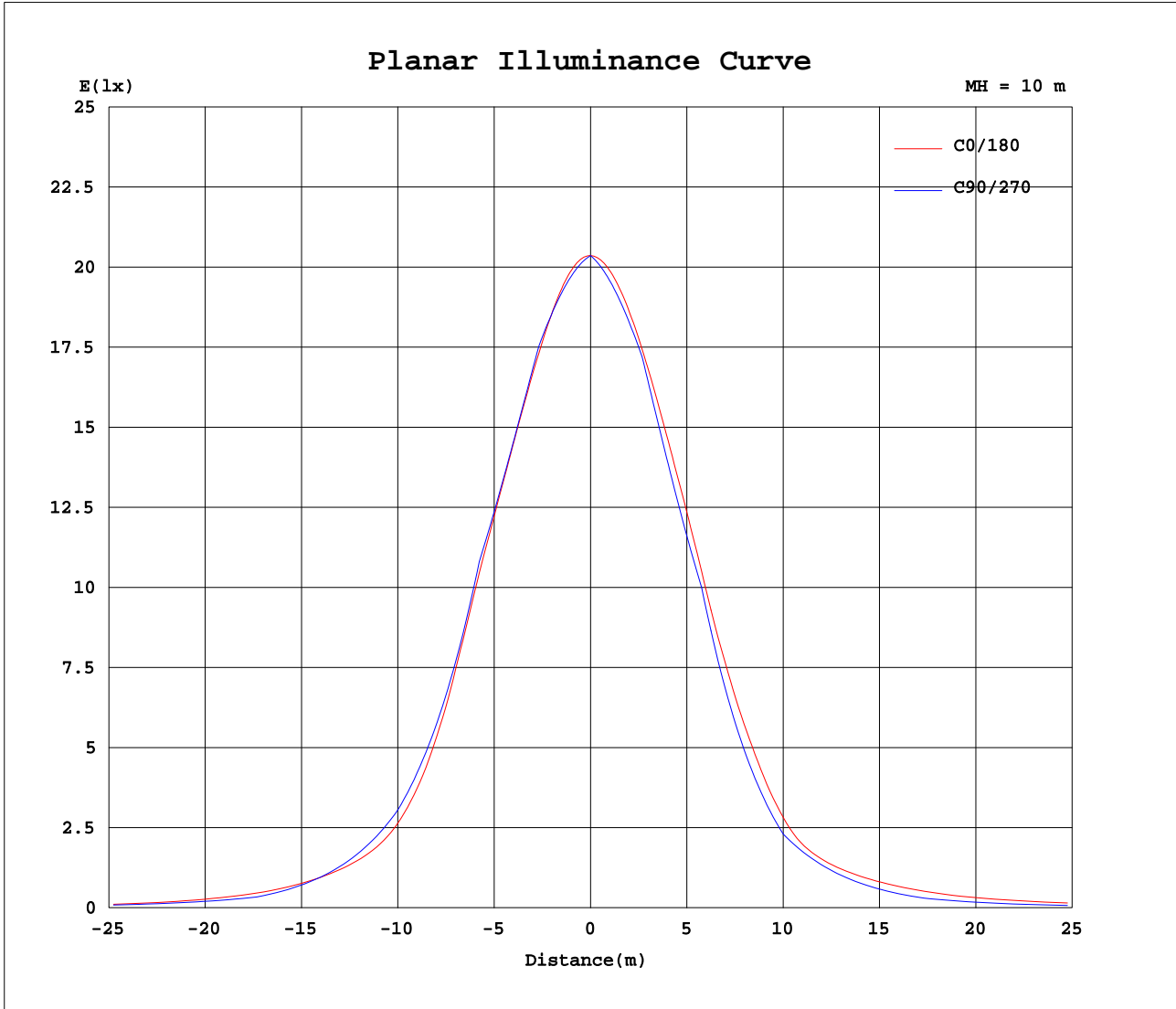
AvgL	cd/m2
L_0~180(65)av	2366
L_0~180(75)av	1938
L_0~180(85)av	1152
L_90~270(65)av	1517
L_90~270(75)av	863
L_90~270(85)av	0
L_45(65)av	2113
L_45(75)av	2045
L_45(85)av	0

Standard: GB/T 29293-2012

βH() Range:-90 - 90DEG
 βH() Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-03

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.240m [K=1.0000]
 Remarks: IL-PN595U(S) 3.500K

Planar Illuminance Curve



β H() Range:-90 - 90DEG
 β H() Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-03

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.240m [K=1.0000]
 Remarks: IL-PN595U(S) 3.500K

