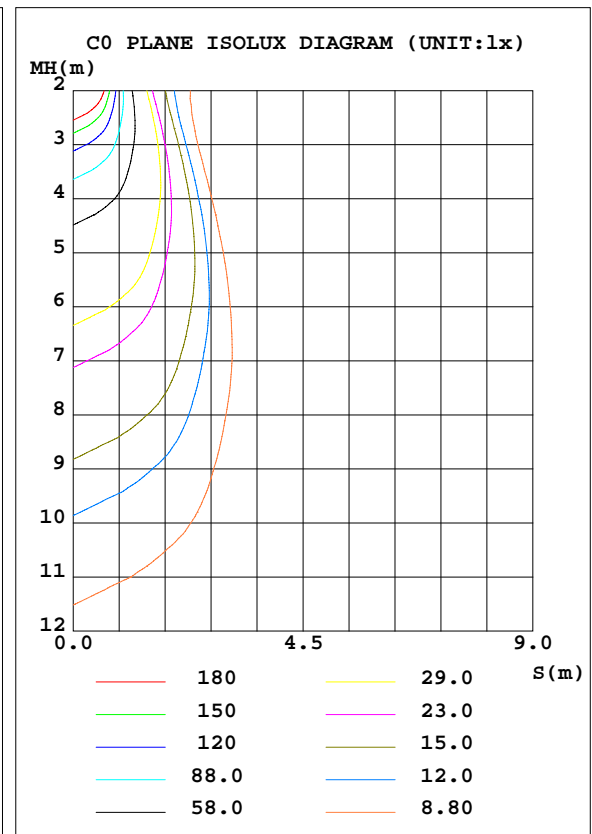
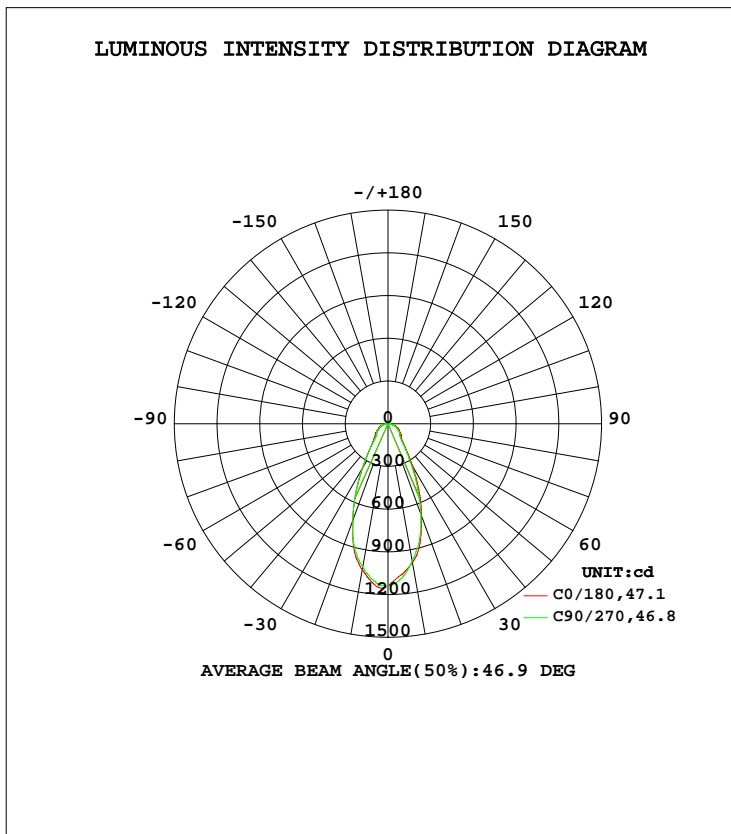


**LUMINAIRE PHOTOMETRIC TEST REPORT**

NAME: PAR30-12W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	1018	I <sub>max</sub> (cd)	1155	S/MH(C0/180)	0.76
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	0.76
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1048.7	η UP, DN(C0-180)	0.0,49.0
NOMINAL FLUX(lm)	1048.68	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,51.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	0.80



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

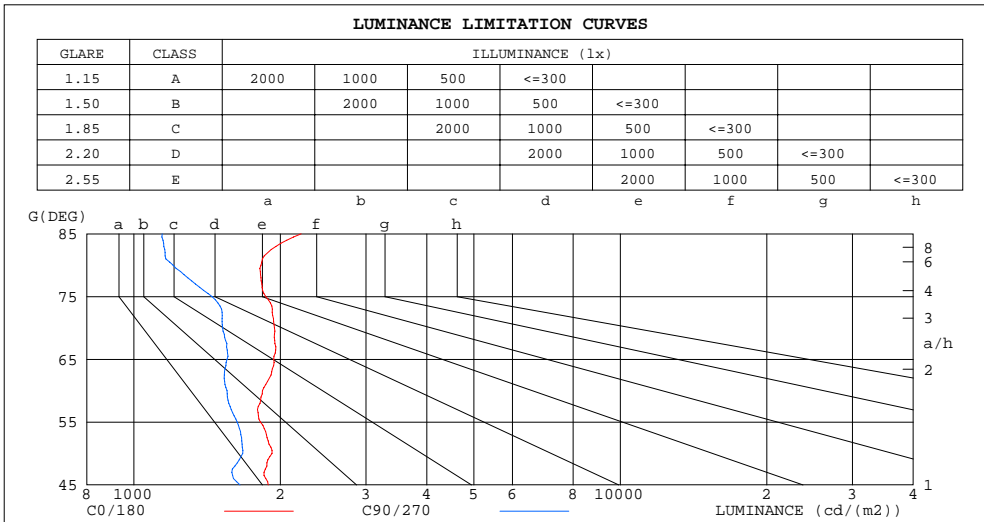
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	987.6	988.1	979.7	1003	1040	1052	1021	996.7	0- 10	101.9	101.9	9.72,9.72
20	687.3	668.3	675.5	699.8	722.4	752.2	725.2	713.7	10- 20	243.3	345.3	32.9,32.9
30	348.4	351.5	321.1	333.1	357.0	390.1	362.0	362.3	20- 30	238.4	583.7	55.7,55.7
40	157.7	161.6	144.4	152.1	164.3	178.1	152.3	162.8	30- 40	147.4	731.1	69.7,69.7
50	120.8	121.9	108.7	108.5	115.7	124.2	104.8	112.9	40- 50	101.0	832.1	79.3,79.3
60	89.78	88.28	78.44	79.30	82.50	83.09	74.70	81.48	50- 60	87.19	919.3	87.7,87.7
70	64.97	58.96	52.59	55.98	59.30	56.24	49.47	58.67	60- 70	70.17	989.5	94.4,94.4
80	30.95	26.88	21.11	26.22	30.82	25.91	20.53	26.24	70- 80	44.31	1034	98.6,98.6
90	7.399	0.2049	0.8359	0.7165	9.101	0.5269	0.5516	0.4462	80- 90	14.90	1049	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		

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

NAME: PAR30-12W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2207	1143
80	1824	1204
75	1868	1447
70	1945	1523
65	1940	1554
60	1838	1554
55	1820	1630
50	1924	1675
45	1889	1653

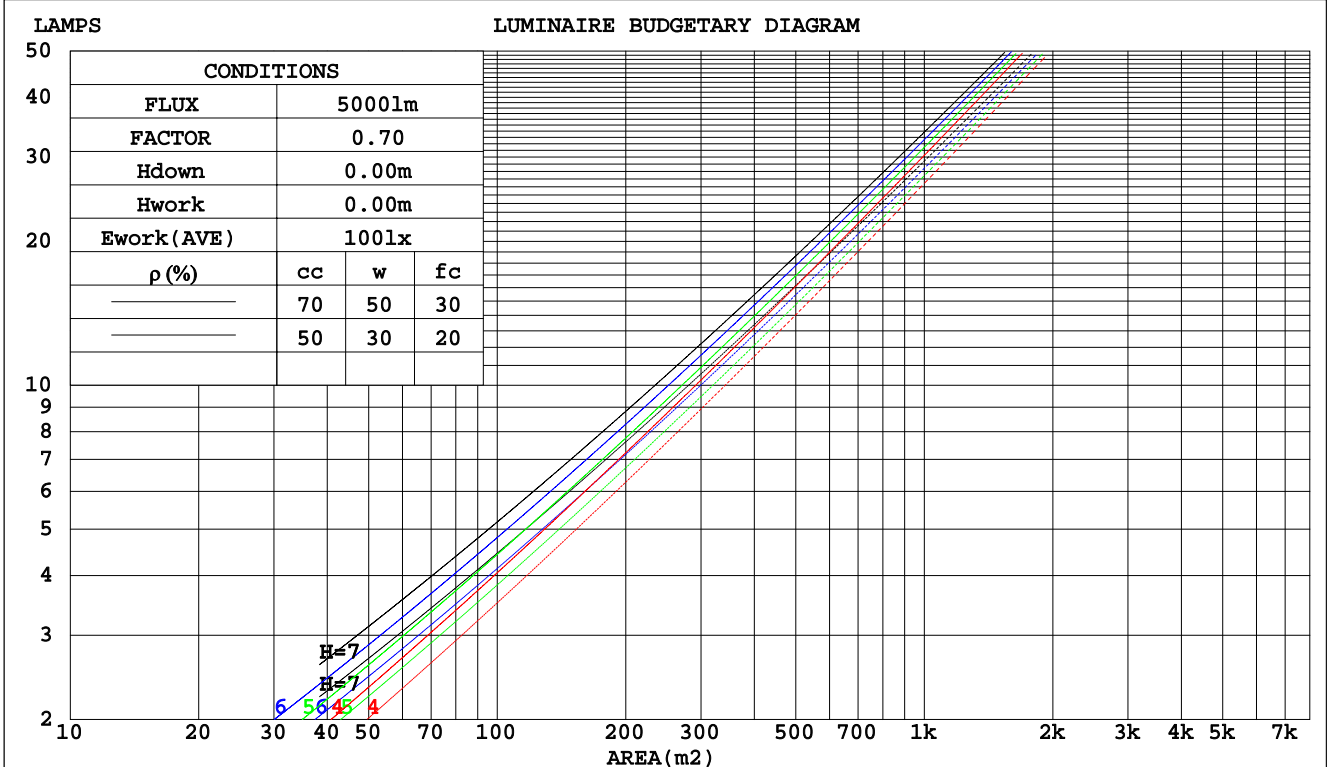
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators: fu  
 Test Date: 09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity: 65.0%  
 Test Distance: 3.161m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: PAR30-12W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	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	.00
1.0	1.07	1.04	1.01	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.94	.92	.90	.88
2.0	.97	.92	.87	.95	.90	.86	.92	.88	.84	.89	.85	.82	.86	.83	.81	.79
3.0	.88	.82	.77	.87	.81	.76	.84	.79	.75	.82	.77	.74	.79	.76	.72	.71
4.0	.81	.74	.69	.80	.73	.68	.78	.72	.68	.75	.71	.67	.73	.69	.66	.64
5.0	.75	.68	.62	.74	.67	.62	.72	.66	.62	.70	.65	.61	.69	.64	.60	.59
6.0	.70	.62	.57	.69	.62	.57	.67	.61	.57	.66	.60	.56	.64	.59	.56	.54
7.0	.65	.58	.53	.64	.58	.53	.63	.57	.52	.62	.56	.52	.60	.56	.52	.50
8.0	.61	.54	.49	.60	.54	.49	.59	.53	.49	.58	.53	.49	.57	.52	.48	.47
9.0	.57	.51	.46	.57	.50	.46	.56	.50	.46	.55	.49	.45	.54	.49	.45	.44
10.0	.54	.48	.43	.54	.47	.43	.53	.47	.43	.52	.47	.43	.51	.46	.43	.41



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

WEC AND CCEC

NAME: PAR30-12W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	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	.245	.139	.044	.238	.136	.043	.225	.129	.041	.213	.123	.039	.202	.117	.038	
2.0	.229	.125	.038	.223	.123	.038	.212	.118	.037	.201	.113	.035	.192	.109	.034	
3.0	.212	.113	.034	.207	.111	.033	.197	.107	.032	.188	.103	.032	.180	.100	.031	
4.0	.197	.102	.030	.192	.101	.030	.184	.097	.029	.176	.095	.029	.169	.092	.028	
5.0	.183	.093	.027	.179	.092	.027	.172	.089	.026	.165	.087	.026	.159	.085	.025	
6.0	.171	.086	.025	.168	.085	.024	.161	.083	.024	.155	.081	.024	.149	.079	.023	
7.0	.161	.079	.023	.158	.079	.022	.152	.077	.022	.146	.075	.022	.141	.073	.022	
8.0	.151	.074	.021	.149	.073	.021	.143	.072	.020	.139	.070	.020	.134	.069	.020	
9.0	.143	.069	.019	.140	.068	.019	.136	.067	.019	.131	.066	.019	.127	.065	.019	
10.0	.135	.065	.018	.133	.064	.018	.129	.063	.018	.125	.062	.018	.121	.061	.018	

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	.150	.134	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.164	.132	.106	.140	.114	.091	.096	.079	.064	.055	.046	.037	.018	.015	.012	
3.0	.153	.114	.083	.131	.098	.072	.090	.068	.050	.052	.040	.030	.017	.013	.010	
4.0	.144	.100	.066	.123	.086	.057	.085	.060	.040	.049	.035	.024	.016	.011	.008	
5.0	.135	.089	.054	.116	.077	.047	.080	.054	.033	.046	.031	.020	.015	.010	.007	
6.0	.128	.080	.045	.110	.069	.039	.076	.048	.028	.044	.028	.017	.014	.009	.005	
7.0	.121	.072	.038	.104	.063	.033	.072	.044	.024	.042	.026	.014	.013	.008	.005	
8.0	.115	.066	.033	.099	.058	.029	.068	.040	.020	.040	.024	.012	.013	.008	.004	
9.0	.109	.061	.029	.094	.053	.025	.065	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.104	.057	.025	.090	.049	.022	.062	.035	.016	.036	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

NAME: PAR30-12W-4000K					TYPE:					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.: EVERFINE					SUR.:0.005					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	13.1	14.3	13.4	14.5	14.7	12.5	13.7	12.8	13.9	14.1				
3H	14.9	16.0	15.2	16.3	16.5	14.1	15.2	14.3	15.4	15.6				
4H	15.7	16.8	16.0	17.0	17.2	14.7	15.8	15.0	16.0	16.2				
6H	16.3	17.3	16.6	17.6	17.8	15.1	16.1	15.5	16.4	16.6				
8H	16.6	17.5	16.9	17.8	18.1	15.3	16.2	15.6	16.5	16.8				
12H	16.8	17.7	17.1	18.0	18.3	15.4	16.3	15.7	16.6	16.8				
4H 2H	13.7	14.8	14.0	15.0	15.3	13.3	14.3	13.6	14.6	14.8				
3H	15.7	16.7	16.1	16.9	17.2	15.0	16.0	15.4	16.2	16.5				
4H	16.6	17.5	17.0	17.8	18.1	15.8	16.7	16.2	17.0	17.3				
6H	17.4	18.1	17.8	18.5	18.8	16.3	17.1	16.7	17.4	17.8				
8H	17.7	18.4	18.1	18.7	19.1	16.5	17.2	16.9	17.6	18.0				
12H	18.0	18.6	18.4	19.0	19.4	16.6	17.3	17.1	17.7	18.1				
8H 4H	16.9	17.6	17.3	18.0	18.3	16.2	16.9	16.6	17.2	17.6				
6H	17.8	18.4	18.2	18.8	19.2	16.9	17.4	17.3	17.8	18.3				
8H	18.2	18.7	18.7	19.1	19.6	17.1	17.6	17.6	18.1	18.5				
12H	18.6	19.1	19.1	19.5	20.0	17.3	17.8	17.8	18.2	18.7				
12H 4H	16.9	17.6	17.3	17.9	18.3	16.2	16.9	16.6	17.2	17.6				
6H	17.8	18.4	18.3	18.8	19.2	17.0	17.5	17.4	17.9	18.3				
8H	18.3	18.7	18.8	19.2	19.7	17.3	17.7	17.7	18.2	18.6				
Variations with the observer position at spacings:														
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2								
1.5H	+ 0.1 / - 0.2					+ 0.2 / - 0.3								
2.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.4								

CIE Pub.117, 1049 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.2)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

NAME: PAR30-12W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

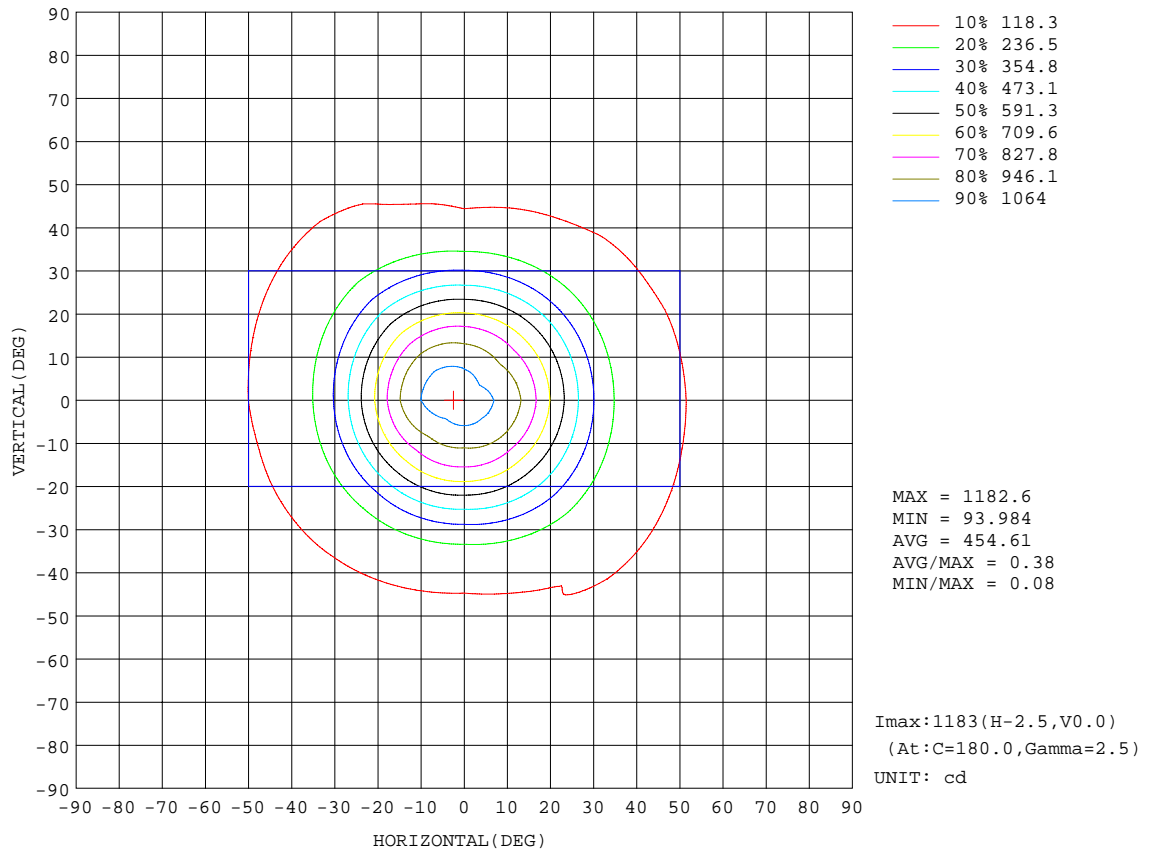
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	73	64	59	72	64	59	71	64	59	54
0.80	82	73	67	81	73	67	79	72	67	62
1.00	88	79	74	87	79	74	85	79	73	68
1.25	93	85	80	92	85	80	90	83	79	73
1.50	97	90	84	95	89	84	93	87	83	77
2.00	102	95	90	100	94	89	97	92	88	81
2.50	104	98	94	103	97	93	99	95	91	84
3.00	107	102	97	105	100	96	101	97	94	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	104	105	103	100	92
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: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

NAME: PAR30-12W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

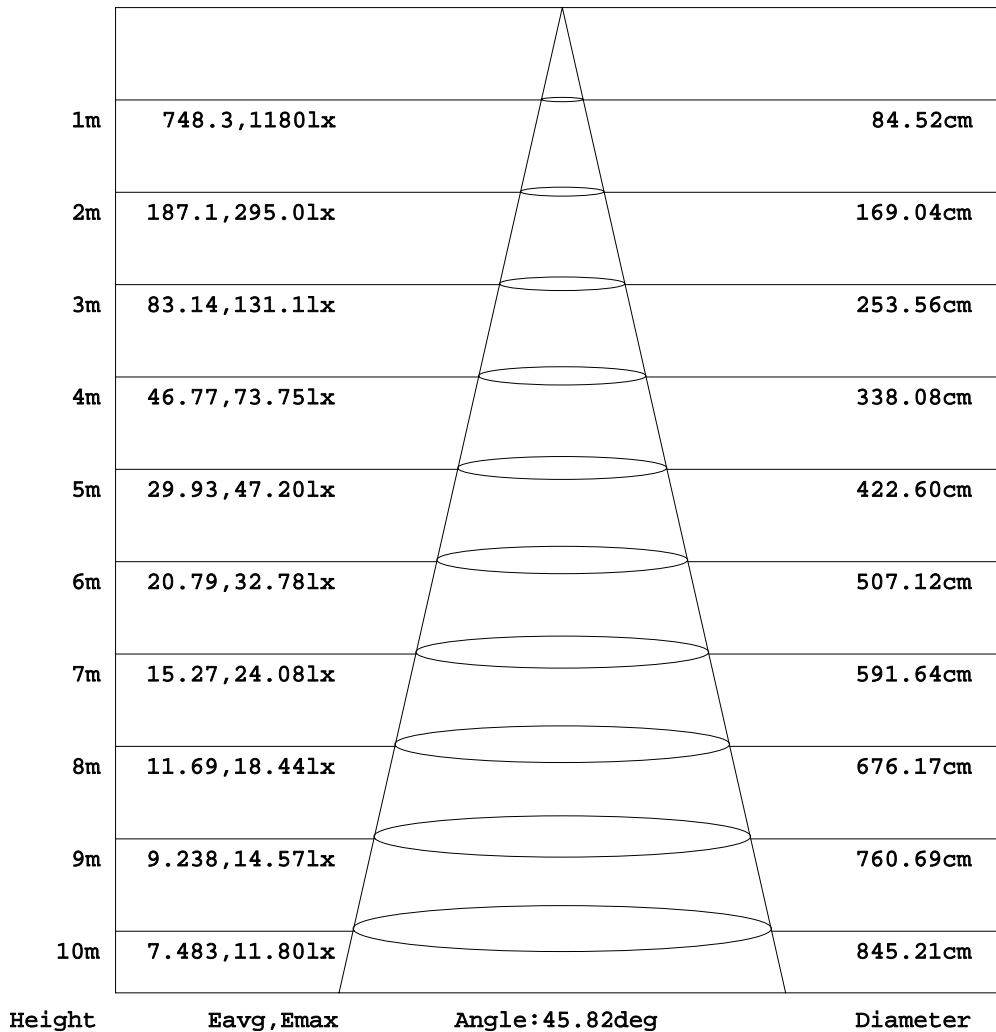
γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:



**AAI Figure**

NAME: PAR30-12W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

Flux out:423.6 lm



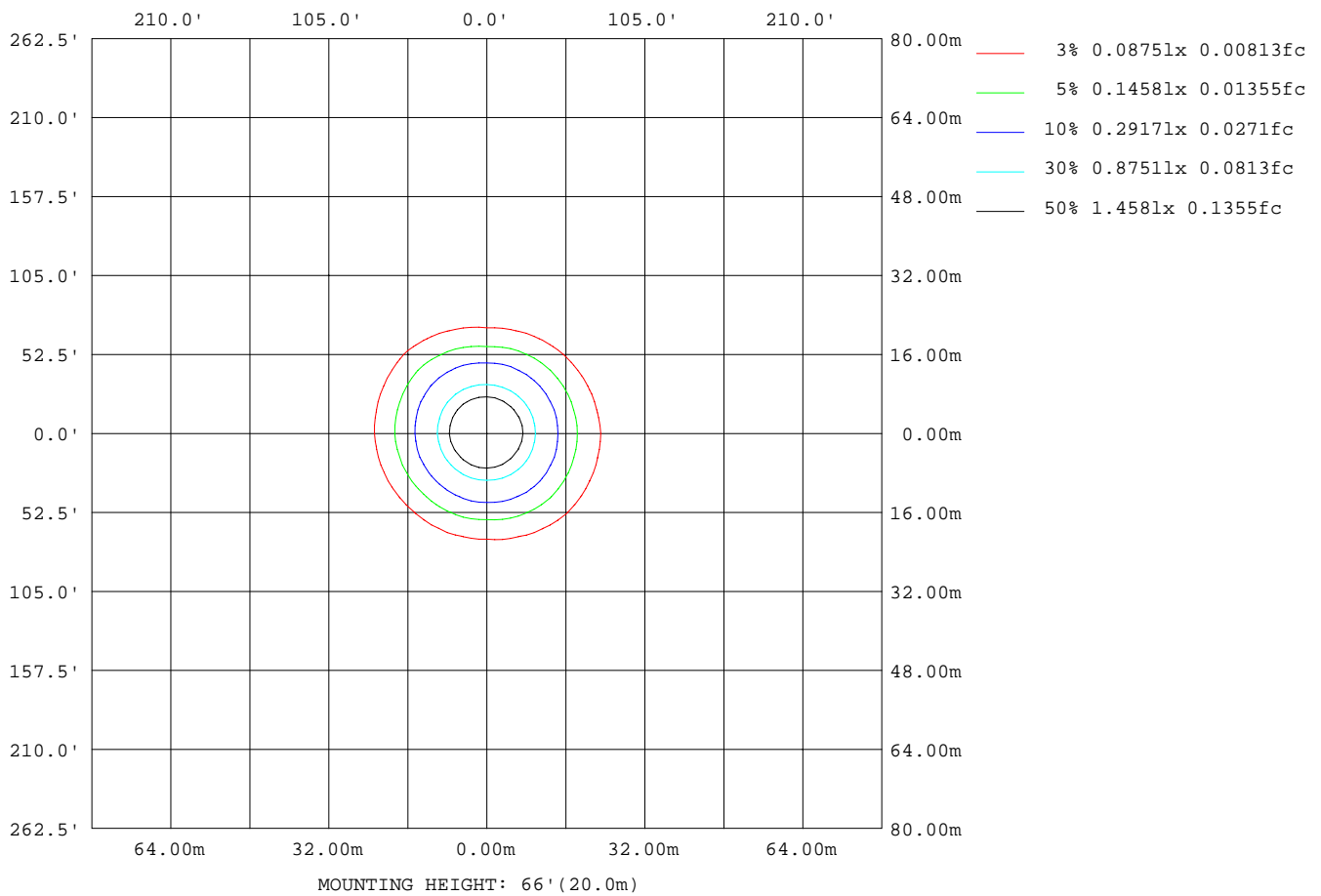
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

NAME: PAR30-12W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

LED Avg.L Report

NAME: PAR30-12W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

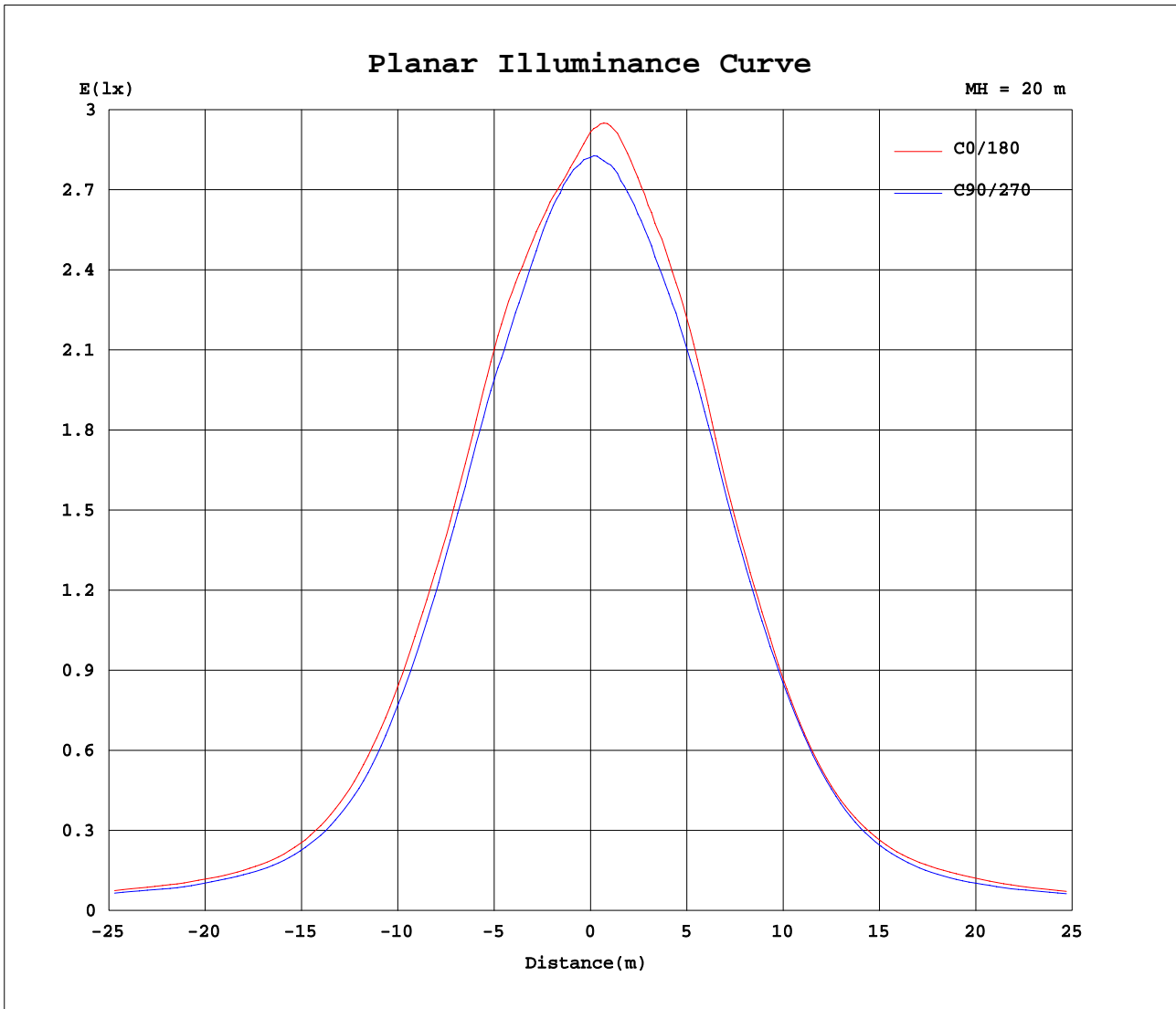
AvgL	cd/m2
L_0~180(65)av	1801
L_0~180(75)av	1815
L_0~180(85)av	2173
L_90~270(65)av	1550
L_90~270(75)av	1417
L_90~270(85)av	1123
L_45(65)av	1693
L_45(75)av	1652
L_45(85)av	1521

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators: fu  
 Test Date: 09 August 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity: 65.0%  
 Test Distance: 3.161m [K=1.0000]  
 Remarks:

