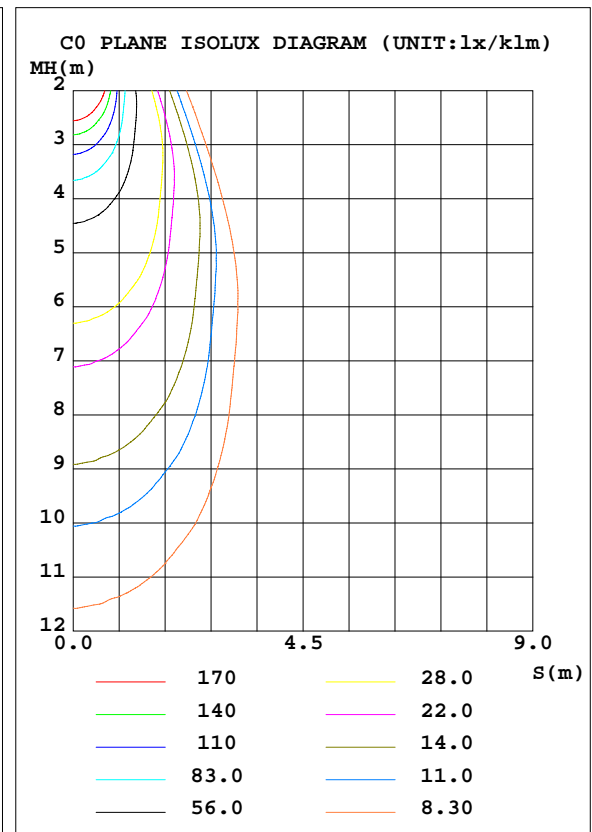
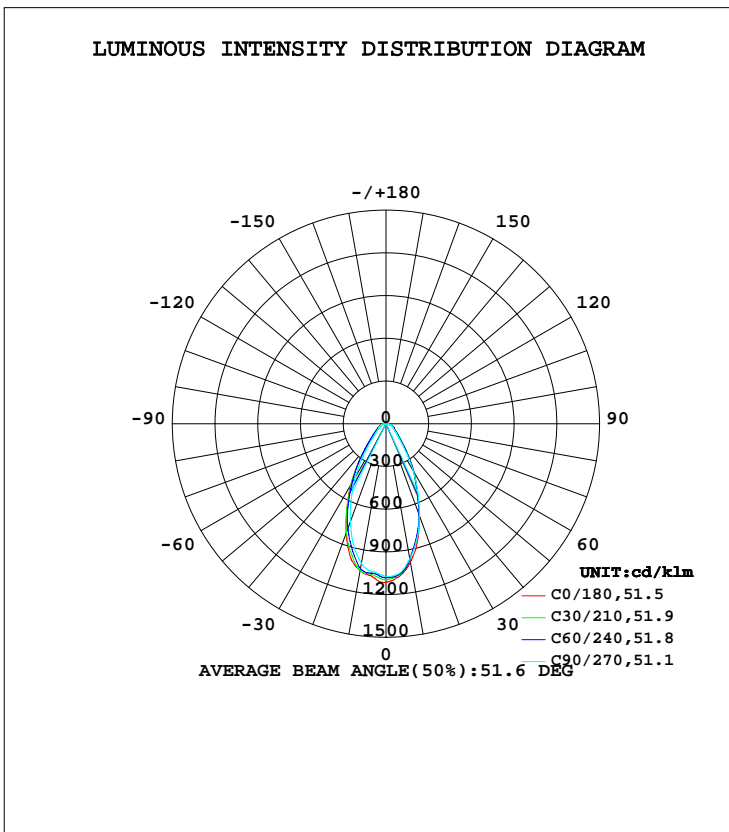


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: PAR30-12W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax(cd/klm)	1116	S/MH(C0/180)	0.85
NOMINAL POWER(W)	12	LOR(%)	106.2	S/MH(C90/270)	0.81
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm/klm)	1062.2	η UP, DN(C0-180)	0.0,51.0
NOMINAL FLUX(lm)	1000	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,55.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230.0	η down(%)	106.2	CIBSE SHR MAX	0.85



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-12-10

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:

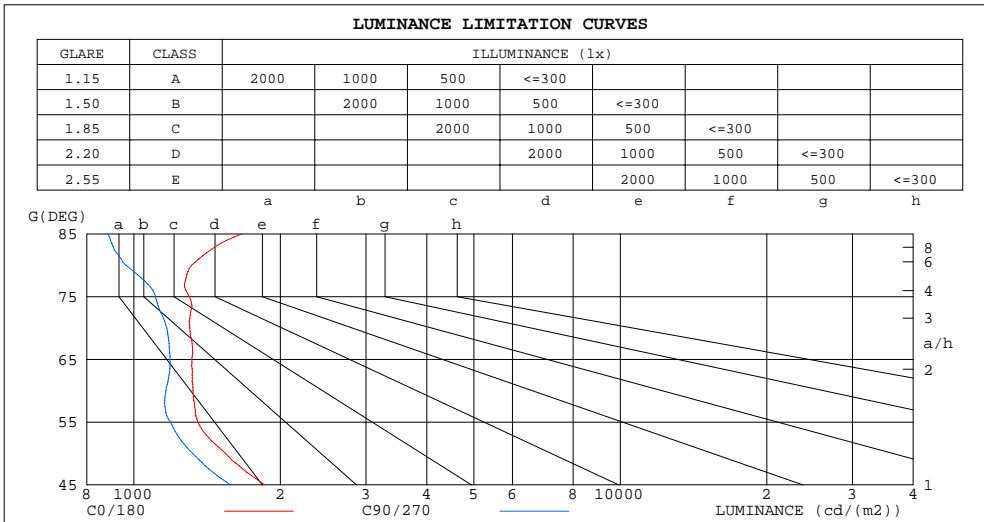
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum,lamp
10	986.0	965.4	964.0	974.6	1047	1039	996.0	968.9	0- 10	98.72	98.72	9.29,9.87
20	682.5	679.6	684.0	722.3	819.7	796.7	731.5	692.9	10- 20	241.9	340.6	32.1,34.1
30	397.1	390.6	384.9	421.4	491.6	480.8	430.8	407.1	20- 30	259.2	599.8	56.5,60
40	185.9	185.1	161.5	192.1	223.3	229.7	180.5	197.1	30- 40	186.2	786.0	74,78.6
50	99.25	100.4	84.95	98.29	111.5	113.3	86.60	101.6	40- 50	106.6	892.6	84,89.3
60	66.11	64.11	58.16	61.98	68.69	65.94	56.24	63.61	50- 60	70.33	962.9	90.7,96.3
70	44.56	42.46	39.98	42.99	49.10	44.02	38.73	42.45	60- 70	52.95	1016	95.6,102
80	22.83	19.24	16.72	21.05	27.97	21.74	16.90	20.57	70- 80	33.73	1050	98.8,105
90	7.048	1.693	0.3669	2.240	9.471	2.246	0.3705	2.294	80- 90	12.63	1062	100,106
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/klm									UNIT:lm/klm		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-12-10

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:

LUMINANCE LIMITATION CURVES

NAME: PAR30-12W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



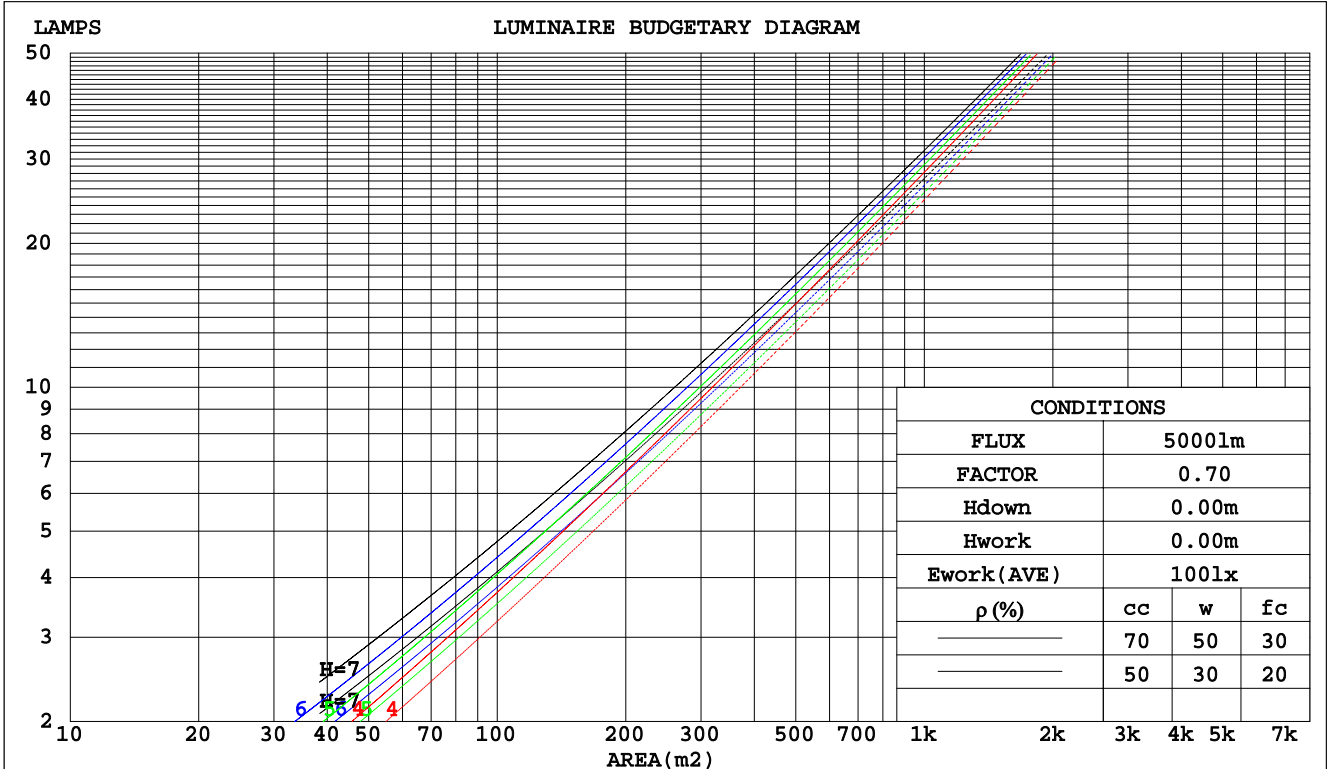
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-12-10

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-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	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																0
pfc																0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.26	1.26	1.26	1.24	1.24	1.24	1.18	1.18	1.18	1.13	1.13	1.13	1.08	1.08	1.08	1.06
1.0	1.15	1.11	1.08	1.12	1.09	1.06	1.08	1.05	1.03	1.04	1.02	.00	1.00	.99	.97	.95
2.0	1.04	.99	.94	1.02	.97	.93	.99	.95	.91	.96	.92	.89	.92	.90	.87	.85
3.0	.95	.89	.84	.94	.88	.83	.91	.86	.82	.88	.84	.80	.86	.82	.79	.77
4.0	.88	.81	.75	.86	.80	.75	.84	.78	.74	.82	.77	.73	.80	.75	.72	.70
5.0	.81	.74	.68	.80	.73	.68	.78	.72	.67	.76	.71	.67	.74	.70	.66	.64
6.0	.75	.68	.63	.75	.67	.62	.73	.67	.62	.71	.66	.61	.70	.65	.61	.59
7.0	.70	.63	.58	.70	.63	.58	.68	.62	.57	.67	.61	.57	.65	.60	.57	.55
8.0	.66	.59	.54	.65	.58	.53	.64	.58	.53	.63	.57	.53	.62	.57	.53	.51
9.0	.62	.55	.50	.61	.55	.50	.60	.54	.50	.59	.54	.50	.58	.53	.49	.48
10.0	.58	.51	.47	.58	.51	.47	.57	.51	.47	.56	.50	.46	.55	.50	.46	.45



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-12-10

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-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	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	.246	.140	.044	.239	.136	.043	.225	.129	.041	.213	.123	.039	.201	.117	.038	
2.0	.231	.127	.039	.225	.124	.038	.213	.119	.037	.202	.114	.036	.192	.109	.034	
3.0	.216	.115	.034	.210	.113	.034	.200	.108	.033	.191	.105	.032	.182	.101	.031	
4.0	.201	.105	.031	.197	.103	.030	.188	.100	.030	.180	.097	.029	.172	.093	.028	
5.0	.189	.096	.028	.185	.095	.028	.177	.092	.027	.170	.089	.027	.163	.087	.026	
6.0	.177	.089	.025	.174	.088	.025	.167	.085	.025	.160	.083	.024	.154	.081	.024	
7.0	.167	.083	.023	.164	.082	.023	.158	.080	.023	.152	.078	.023	.147	.076	.022	
8.0	.158	.077	.022	.155	.076	.022	.150	.075	.021	.144	.073	.021	.140	.072	.021	
9.0	.150	.072	.020	.147	.072	.020	.142	.070	.020	.138	.069	.020	.133	.068	.020	
10.0	.142	.068	.019	.140	.068	.019	.135	.066	.019	.131	.065	.019	.127	.064	.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	.202	.202	.202	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.186	.167	.149	.159	.143	.128	.109	.098	.089	.063	.057	.052	.020	.018	.017	
2.0	.172	.140	.114	.148	.121	.098	.101	.084	.069	.058	.049	.040	.019	.016	.013	
3.0	.161	.121	.089	.138	.104	.077	.095	.072	.054	.055	.042	.032	.018	.014	.010	
4.0	.151	.106	.071	.130	.091	.062	.089	.064	.044	.052	.037	.026	.017	.012	.008	
5.0	.142	.094	.058	.122	.081	.051	.084	.057	.036	.049	.033	.021	.016	.011	.007	
6.0	.134	.084	.049	.115	.073	.042	.080	.051	.030	.046	.030	.018	.015	.010	.006	
7.0	.127	.077	.041	.109	.066	.036	.076	.047	.026	.044	.027	.015	.014	.009	.005	
8.0	.121	.070	.036	.104	.061	.031	.072	.043	.022	.042	.025	.013	.014	.008	.004	
9.0	.115	.065	.031	.099	.056	.027	.069	.040	.019	.040	.023	.011	.013	.008	.004	
10.0	.110	.060	.027	.094	.052	.024	.066	.037	.017	.038	.022	.010	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-12-10

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-3000K					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	11.9	13.1	12.2	13.3	13.5	11.5	12.6	11.7	12.8	13.0				
3H	13.2	14.3	13.5	14.5	14.7	12.7	13.8	13.0	14.0	14.2				
4H	13.9	14.9	14.2	15.1	15.4	13.3	14.3	13.6	14.5	14.7				
6H	14.4	15.4	14.7	15.6	15.9	13.7	14.6	14.0	14.9	15.1				
8H	14.7	15.6	15.0	15.8	16.1	13.8	14.7	14.1	15.0	15.2				
12H	14.9	15.8	15.2	16.1	16.3	13.9	14.8	14.2	15.0	15.3				
4H 2H	12.4	13.4	12.7	13.6	13.8	12.0	13.0	12.3	13.2	13.4				
3H	13.9	14.8	14.3	15.1	15.4	13.5	14.3	13.8	14.6	14.9				
4H	14.7	15.5	15.1	15.8	16.1	14.2	15.0	14.5	15.3	15.6				
6H	15.4	16.1	15.8	16.4	16.8	14.7	15.4	15.1	15.7	16.1				
8H	15.7	16.4	16.1	16.7	17.1	14.9	15.5	15.3	15.9	16.2				
12H	16.0	16.6	16.4	17.0	17.4	15.0	15.6	15.4	16.0	16.4				
8H 4H	14.9	15.6	15.3	16.0	16.3	14.5	15.1	14.9	15.5	15.8				
6H	15.8	16.3	16.2	16.7	17.1	15.1	15.7	15.5	16.1	16.5				
8H	16.2	16.7	16.7	17.1	17.6	15.4	15.9	15.8	16.3	16.7				
12H	16.7	17.1	17.1	17.5	18.0	15.6	16.0	16.0	16.4	16.9				
12H 4H	14.9	15.5	15.4	15.9	16.3	14.5	15.1	14.9	15.5	15.9				
6H	15.8	16.3	16.3	16.7	17.2	15.2	15.7	15.6	16.1	16.5				
8H	16.3	16.7	16.8	17.2	17.7	15.5	15.9	16.0	16.4	16.8				
Variations with the observer position at spacings:														
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4								
1.5H	+ 0.3 / - 0.3					+ 0.4 / - 0.4								
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.4								

CIE Pub.117, 1000 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.0)

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-12-10

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-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

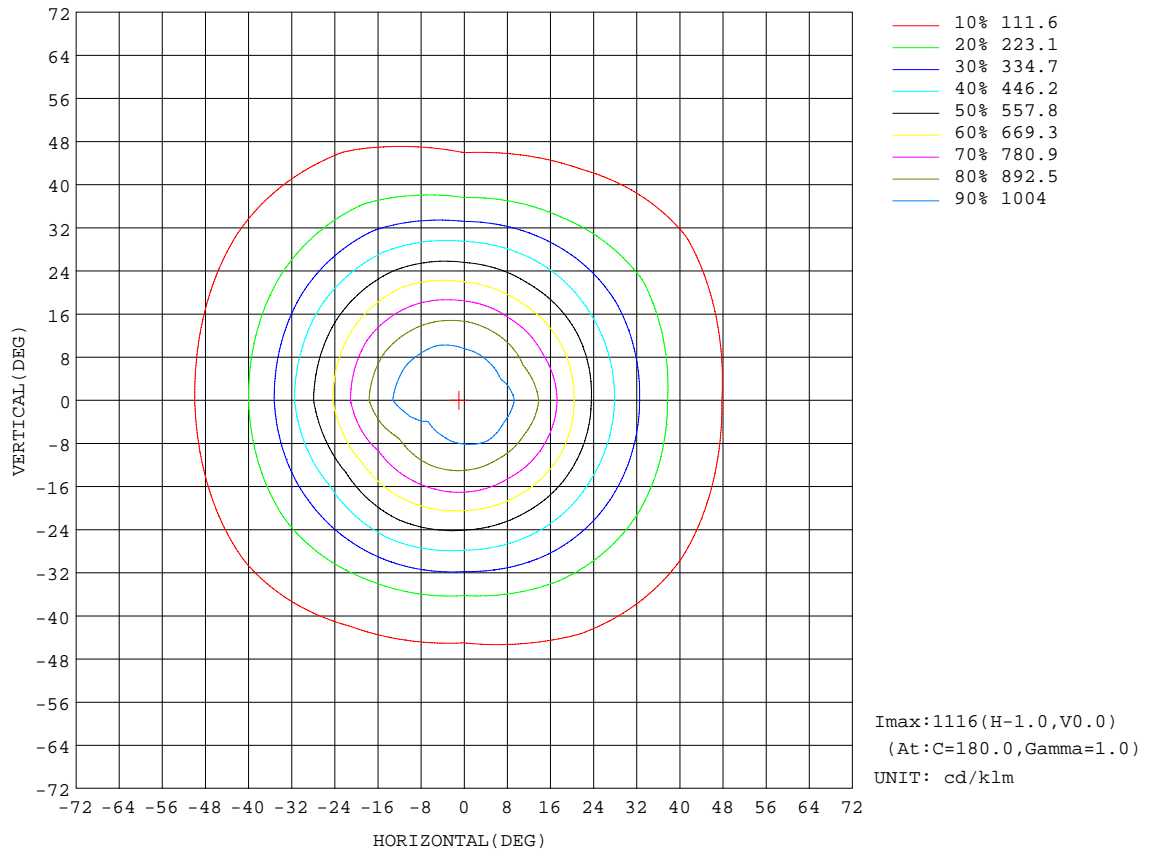
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	80	71	66	80	71	66	79	71	66	61
0.80	89	81	75	88	80	75	87	79	75	69
1.00	96	87	82	95	87	82	93	87	81	76
1.25	101	93	88	100	93	88	97	91	87	81
1.50	105	98	93	103	97	92	101	95	91	85
2.00	109	103	98	108	102	98	105	100	96	89
2.50	112	106	102	110	105	101	107	102	99	92
3.00	115	109	105	112	108	104	109	105	102	94
4.00	118	113	110	115	111	108	111	108	106	97
5.00	119	116	113	117	114	111	112	110	108	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-12-10

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-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

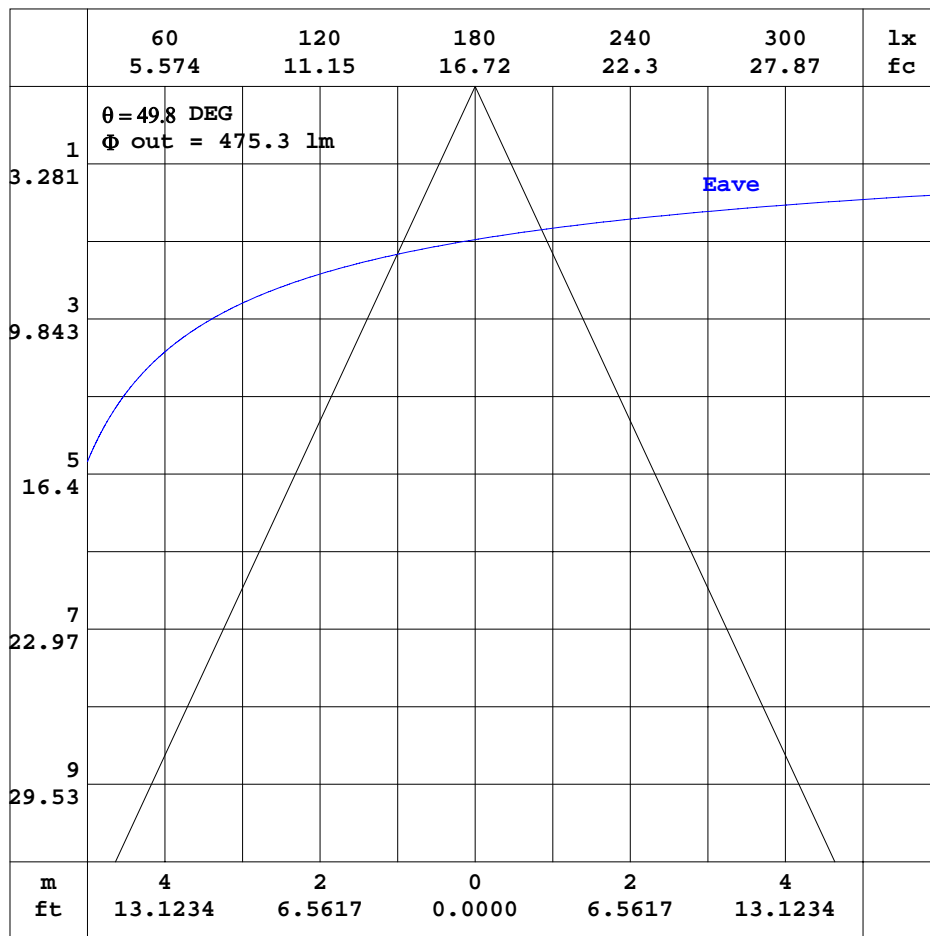


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-12-10

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 CURVES

NAME: PAR30-12W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



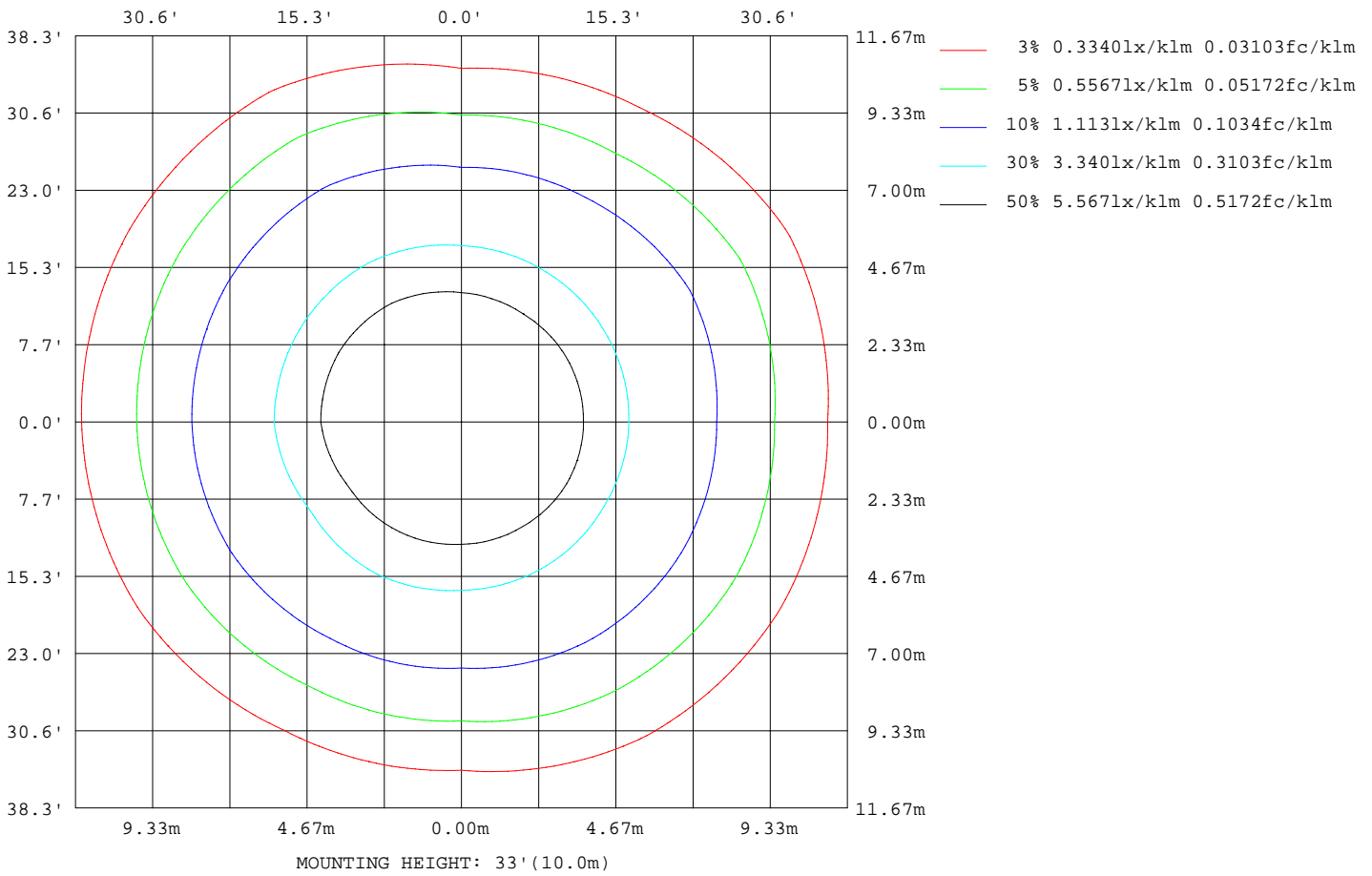
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-12-10

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-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-12-10

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-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

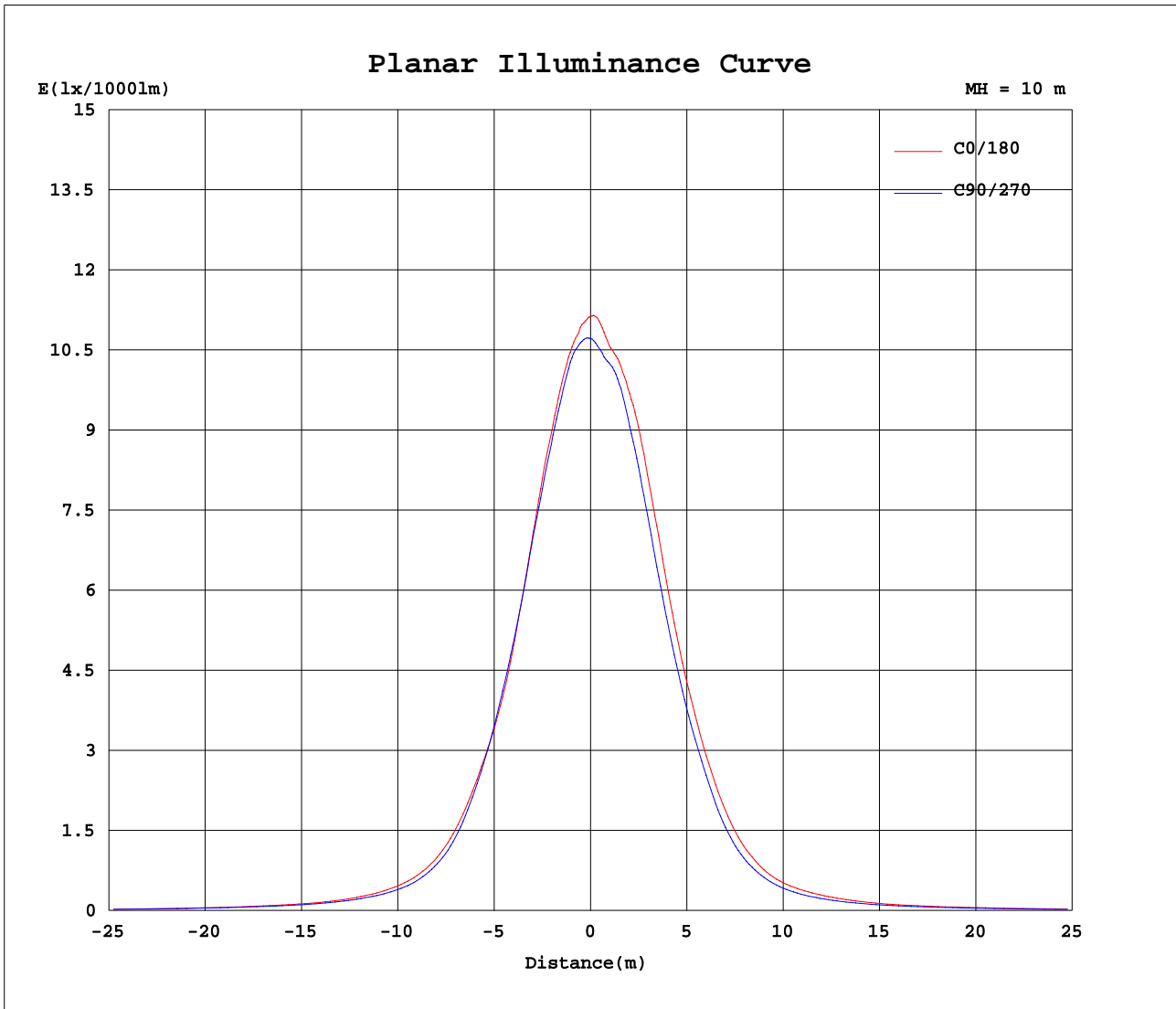
AvgL	cd/m2
L_0~180(65)av	1377
L_0~180(75)av	1402
L_0~180(85)av	1892
L_90~270(65)av	1163
L_90~270(75)av	1100
L_90~270(85)av	889
L_45(65)av	1271
L_45(75)av	1234
L_45(85)av	1302

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-12-10

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: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-12-10

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: PAR30-12W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: cd/klm

C(DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330								
0	1112	1095	1081	1072	1064	1059	1112	1095	1081	1072	1064	1059								
5	1076	1065	1063	1056	1041	1026	1080	1064	1054	1041	1034	1030								
10	986	964	967	964	970	979	1047	1046	1033	996	975	962								
15	856	835	827	839	855	866	967	943	916	881	847	829								
20	682	683	677	684	709	736	820	813	781	732	697	688								
25	517	512	517	531	562	575	648	648	629	575	545	533								
30	397	392	389	385	415	428	492	487	474	431	416	399								
35	277	276	269	251	276	310	342	348	341	284	284	296								
40	186	189	181	162	176	209	223	230	229	180	185	209								
45	131	135	128	112	119	139	147	153	153	119	125	145								
50	99.3	102	98.4	85.0	91.5	105	111	114	112	86.6	94.7	108								
55	77.7	79.1	75.1	68.2	71.1	80.0	84.6	83.7	82.8	67.1	71.3	82.6								
60	66.1	65.6	62.6	58.2	59.2	64.7	68.7	66.8	65.1	56.2	59.6	67.6								
65	55.6	54.7	52.3	50.1	51.4	55.2	60.8	56.2	53.6	48.2	50.7	55.7								
70	44.6	43.7	41.2	40.0	41.4	44.6	49.1	46.0	42.0	38.7	40.3	44.6								
75	33.6	32.4	29.6	28.7	30.3	34.1	38.9	35.0	30.4	28.3	29.8	34.3								
80	22.8	21.0	17.5	16.7	18.4	23.7	28.0	24.6	18.9	16.9	18.3	22.8								
85	14.6	12.1	8.65	7.70	8.73	14.6	18.4	15.0	9.04	7.80	9.07	14.3								
90	7.05	2.56	0.82	0.37	0.69	3.79	9.47	3.62	0.87	0.37	0.49	4.10								

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-12-10

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: