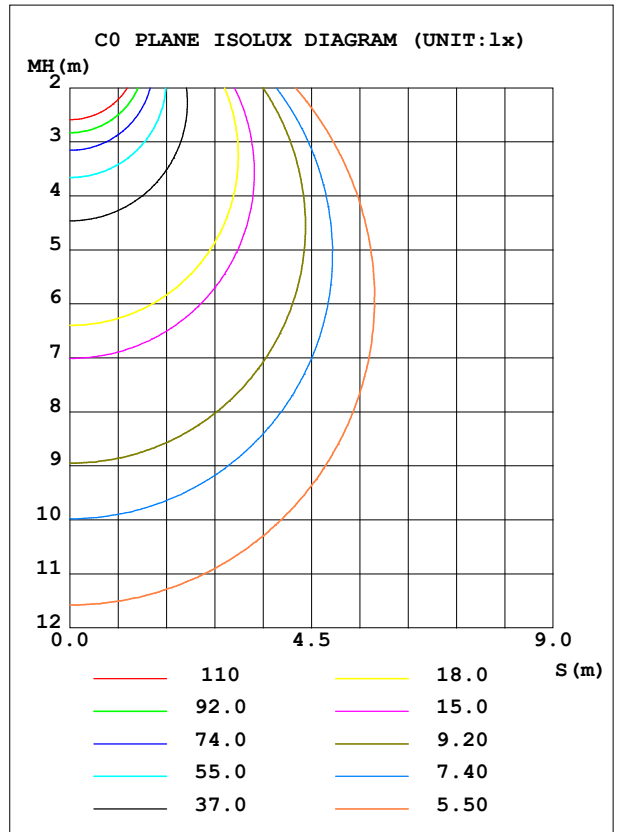
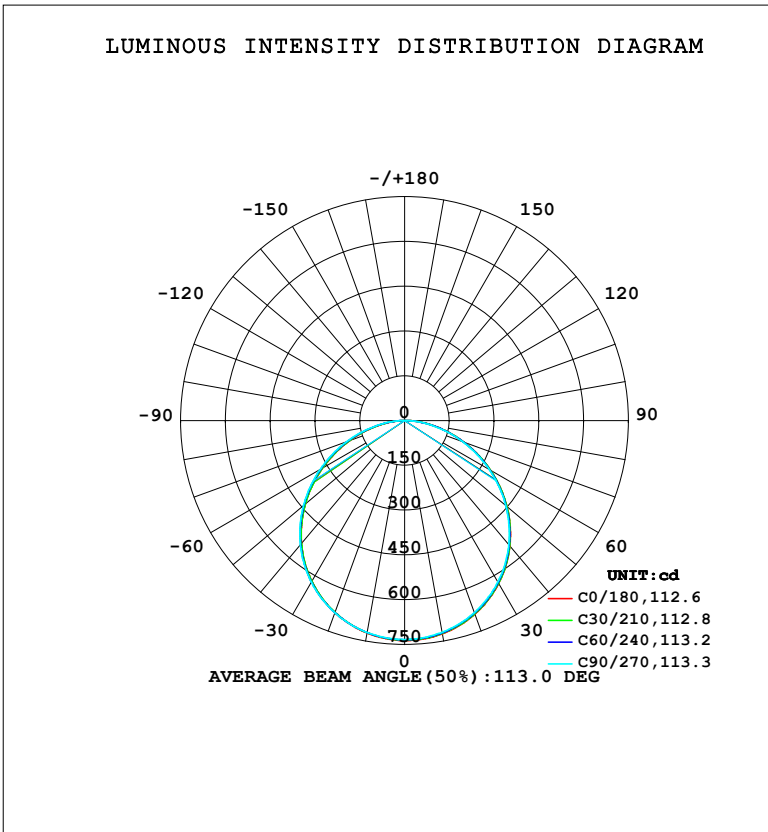


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.48V I:0.2030A P:22.714W PF:0.9288 Freq:59.98Hz Lamp Flux:2122.26x1 lm		
NAME: ADS12R9-DTW-D-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 93.44 lm/W
MODEL	ADS12R9-DTW-D-WH	I <sub>max</sub> (cd)	737.2	S/MH (C0/180)	1.26	
NOMINAL POWER (W)	22	LOR (%)	100.0	S/MH (C90/270)	1.27	
RATED VOLTAGE (V)	120.0	TOTAL FLUX (lm)	2122.3	η UP, DN (C0-180)	0.0, 50.1	
NOMINAL FLUX (lm)	2122.26	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.9	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators:  
Test Date: 2024-01-09

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity: 65.0%  
Test Distance: 10.000m [K=1.0000]  
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

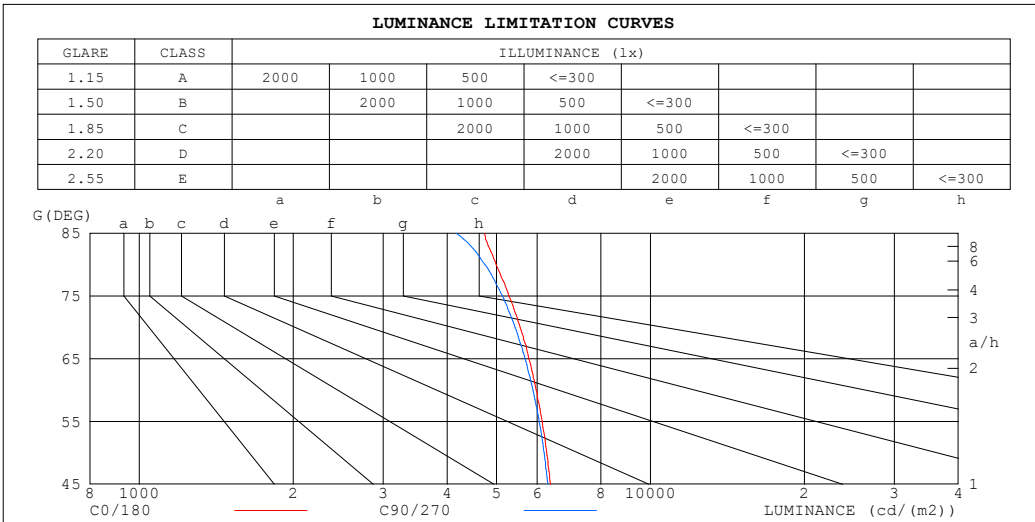
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	725.7	723.3	720.6	717.8	723.3	721.5	720.8	720.7	0- 10	69.44	69.44	3.27,3.27
20	689.7	687.3	684.2	679.7	684.0	684.1	684.9	685.3	10- 20	199.2	268.7	12.7,12.7
30	630.2	628.3	624.7	618.2	621.8	622.7	625.0	626.7	20- 30	303.0	571.7	26.9,26.9
40	549.3	546.8	542.8	535.2	537.9	539.8	543.7	545.6	30- 40	366.6	938.2	44.2,44.2
50	447.4	445.7	442.2	432.6	433.9	437.0	442.0	444.9	40- 50	380.5	1319	62.1,62.1
60	332.2	330.9	327.2	316.9	316.8	320.3	326.3	329.8	50- 60	343.1	1662	78.3,78.3
70	211.3	210.4	206.6	196.3	194.9	199.4	206.2	209.5	60- 70	261.8	1924	90.6,90.6
80	96.31	95.49	91.56	82.90	80.52	85.18	91.58	95.23	70- 80	153.9	2078	97.9,97.9
90	3.499	2.090	1.264	1.264	1.284	1.284	1.298	2.388	80- 90	44.71	2122	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: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:  
 Test Date:2024-01-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
 Humidity:65.0%  
 Test Distance:10.000m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:120.48V I:0.2030A P:22.714W PF:0.9288 Freq:59.98Hz Lamp Flux:2122.26x1 lm		
NAME: ADS12R9-DTW-D-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4728	4165
80	4992	4745
75	5289	5133
70	5560	5437
65	5783	5685
60	5979	5890
55	6138	6058
50	6264	6192
45	6373	6300

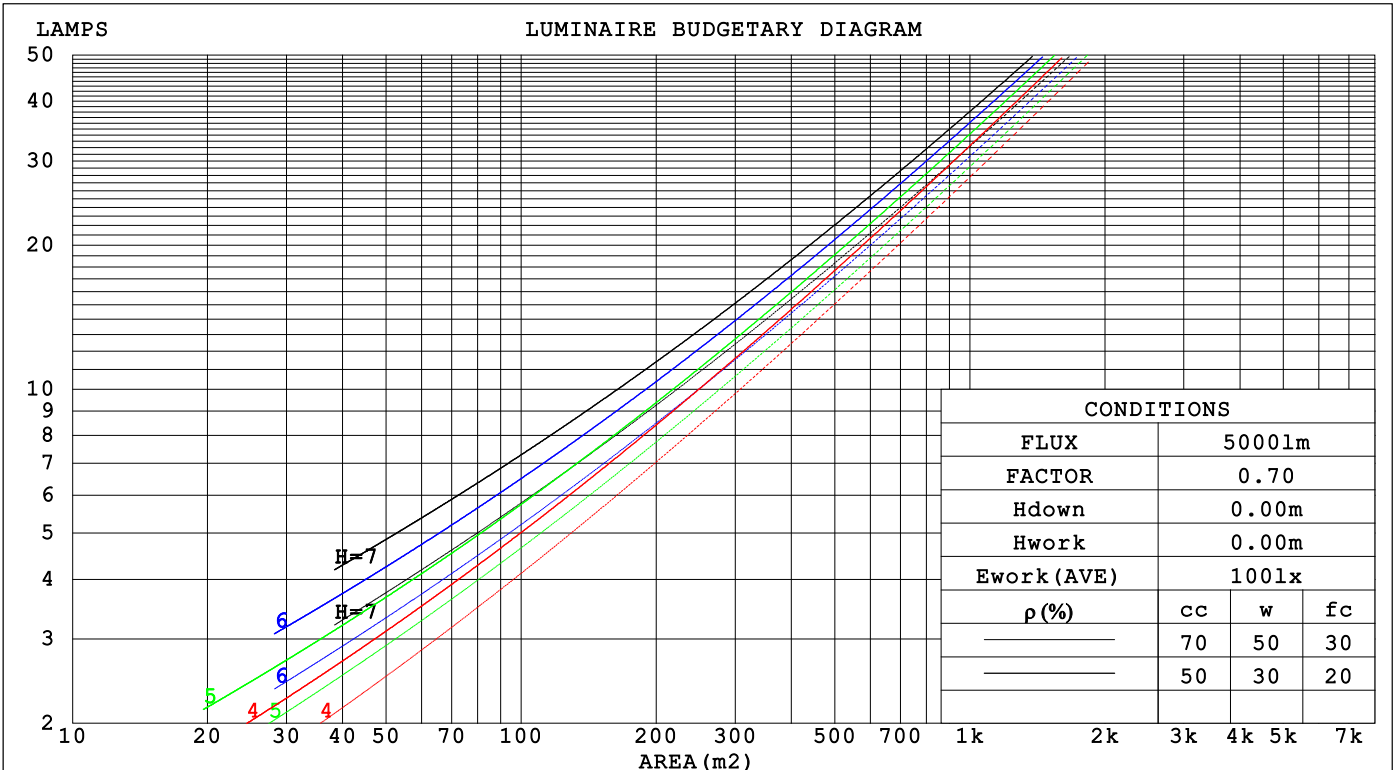
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:  
 Test Date:2024-01-09

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
 Humidity:65.0%  
 Test Distance:10.000m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.48V I:0.2030A P:22.714W PF:0.9288 Freq:59.98Hz Lamp Flux:2122.26x1 lm		
NAME: ADS12R9-DTW-D-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.00
1.0	1.04	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.91	.88	.90	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.77	.85	.79	.75	.81	.77	.73	.78	.75	.71	.69
3.0	.79	.71	.64	.77	.70	.64	.74	.68	.62	.72	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.69	.60	.54	.66	.59	.53	.64	.58	.52	.62	.56	.52	.50
5.0	.62	.53	.47	.61	.53	.46	.59	.52	.46	.57	.51	.45	.55	.50	.45	.43
6.0	.56	.47	.41	.55	.47	.41	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.35	.47	.40	.35	.46	.40	.35	.33
8.0	.46	.38	.32	.46	.38	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.26	.24



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:2024-01-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity:65.0%  
Test Distance:10.000m [K=1.0000]  
Remarks:

WEC AND CCEC

Test:U:120.48V I:0.2030A P:22.714W PF:0.9288 Freq:59.98Hz		
Lamp Flux:2122.26x1 lm		
NAME: ADS12R9-DTW-D-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.314	.178	.056	.306	.175	.056	.293	.168	.054	.281	.162	.052	.270	.156	.050	
2.0	.294	.161	.049	.288	.159	.049	.276	.154	.048	.265	.149	.047	.255	.144	.046	
3.0	.272	.145	.043	.266	.143	.043	.256	.139	.042	.246	.135	.041	.237	.131	.041	
4.0	.250	.130	.038	.246	.129	.038	.236	.125	.037	.228	.122	.037	.220	.120	.036	
5.0	.231	.118	.034	.227	.117	.034	.219	.114	.034	.211	.111	.033	.204	.109	.033	
6.0	.214	.108	.031	.211	.106	.031	.203	.104	.030	.197	.102	.030	.190	.100	.030	
7.0	.199	.099	.028	.196	.098	.028	.190	.096	.028	.184	.094	.027	.178	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.084	.024	.172	.084	.023	.167	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.022	.148	.075	.021	

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	.181	.156	.134	.154	.134	.115	.106	.092	.080	.061	.053	.046	.019	.017	.015	
2.0	.173	.132	.098	.148	.114	.084	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.050	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:  
 Test Date:2024-01-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
 Humidity:65.0%  
 Test Distance:10.000m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:120.48V I:0.2030A P:22.714W PF:0.9288 Freq:59.98Hz										
Lamp Flux:2122.26x1 lm										
NAME: ADS12R9-DTW-D-WH					TYPE:			WEIGHT:		
SPEC.: 3000K					DIM.:			SERIAL No.:		
MFR.:					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	16.6	18.2	16.9	18.4	18.6	16.6	18.1	16.8	18.3	18.5
3H	18.2	19.6	18.5	19.8	20.1	18.1	19.5	18.4	19.8	20.0
4H	18.8	20.2	19.2	20.4	20.7	18.7	20.1	19.1	20.3	20.6
6H	19.3	20.6	19.7	20.9	21.2	19.2	20.5	19.5	20.8	21.0
8H	19.5	20.7	19.9	21.0	21.3	19.4	20.6	19.7	20.9	21.2
12H	19.6	20.8	20.0	21.1	21.4	19.5	20.7	19.8	20.9	21.3
4H 2H	17.2	18.6	17.6	18.8	19.1	17.2	18.5	17.5	18.8	19.0
3H	19.0	20.2	19.4	20.5	20.8	18.9	20.1	19.3	20.4	20.7
4H	19.8	20.9	20.2	21.2	21.5	19.7	20.8	20.1	21.1	21.4
6H	20.4	21.4	20.8	21.7	22.1	20.3	21.3	20.7	21.6	22.0
8H	20.7	21.6	21.1	21.9	22.3	20.5	21.4	20.9	21.8	22.2
12H	20.8	21.7	21.3	22.1	22.5	20.7	21.5	21.1	21.9	22.3
8H 4H	20.1	21.0	20.5	21.3	21.7	20.0	20.9	20.4	21.3	21.6
6H	20.9	21.6	21.3	22.0	22.5	20.8	21.5	21.2	21.9	22.3
8H	21.2	21.9	21.7	22.3	22.8	21.1	21.7	21.5	22.2	22.6
12H	21.5	22.1	22.0	22.5	23.0	21.3	21.9	21.8	22.3	22.8
12H 4H	20.1	20.9	20.5	21.3	21.7	20.0	20.8	20.4	21.2	21.6
6H	21.0	21.6	21.4	22.0	22.5	20.8	21.5	21.3	21.9	22.4
8H	21.3	21.9	21.8	22.4	22.8	21.2	21.8	21.7	22.2	22.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 2122 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.6)  
 Area: 0.111111 m2

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 30.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.479
Temperature:25.3℃	Humidity:65.0%
Operators:	Test Distance:10.000m [K=1.0000]
Test Date:2024-01-09	Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:120.48V I:0.2030A P:22.714W PF:0.9288 Freq:59.98Hz Lamp Flux:2122.26x1 lm		
NAME: ADS12R9-DTW-D-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

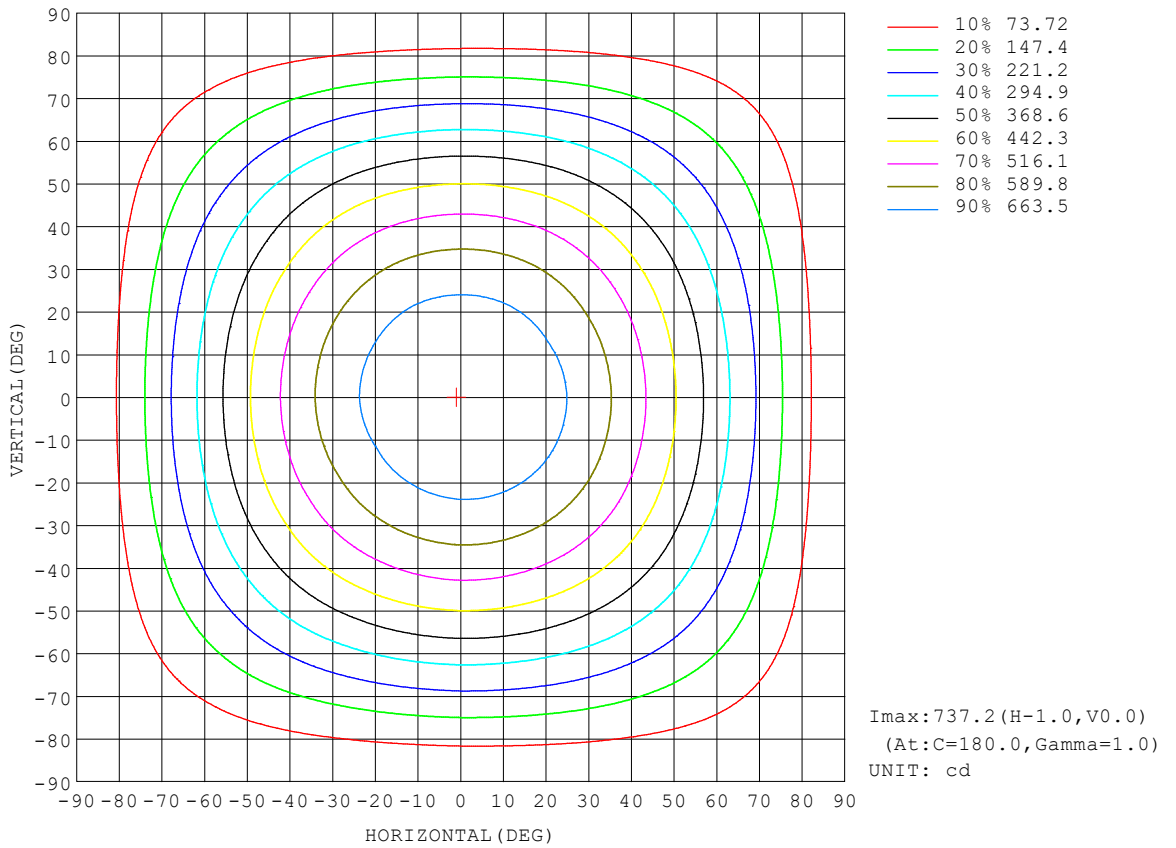
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	46	39	57	45	39	55	45	38	32
0.80	67	56	48	66	55	48	64	54	48	41
1.00	76	65	57	75	64	57	72	65	56	49
1.25	83	72	65	81	72	65	79	70	64	56
1.50	88	78	71	86	77	70	83	75	69	62
2.00	95	86	80	93	85	79	89	83	77	69
2.50	99	91	85	97	89	84	93	87	82	74
3.00	102	95	90	100	94	88	96	91	86	78
4.00	106	100	96	104	99	94	99	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
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:25.3°C  
 Operators:  
 Test Date:2024-01-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
 Humidity:65.0%  
 Test Distance:10.000m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:120.48V I:0.2030A P:22.714W PF:0.9288 Freq:59.98Hz Lamp Flux:2122.26x1 lm		
NAME: ADS12R9-DTW-D-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



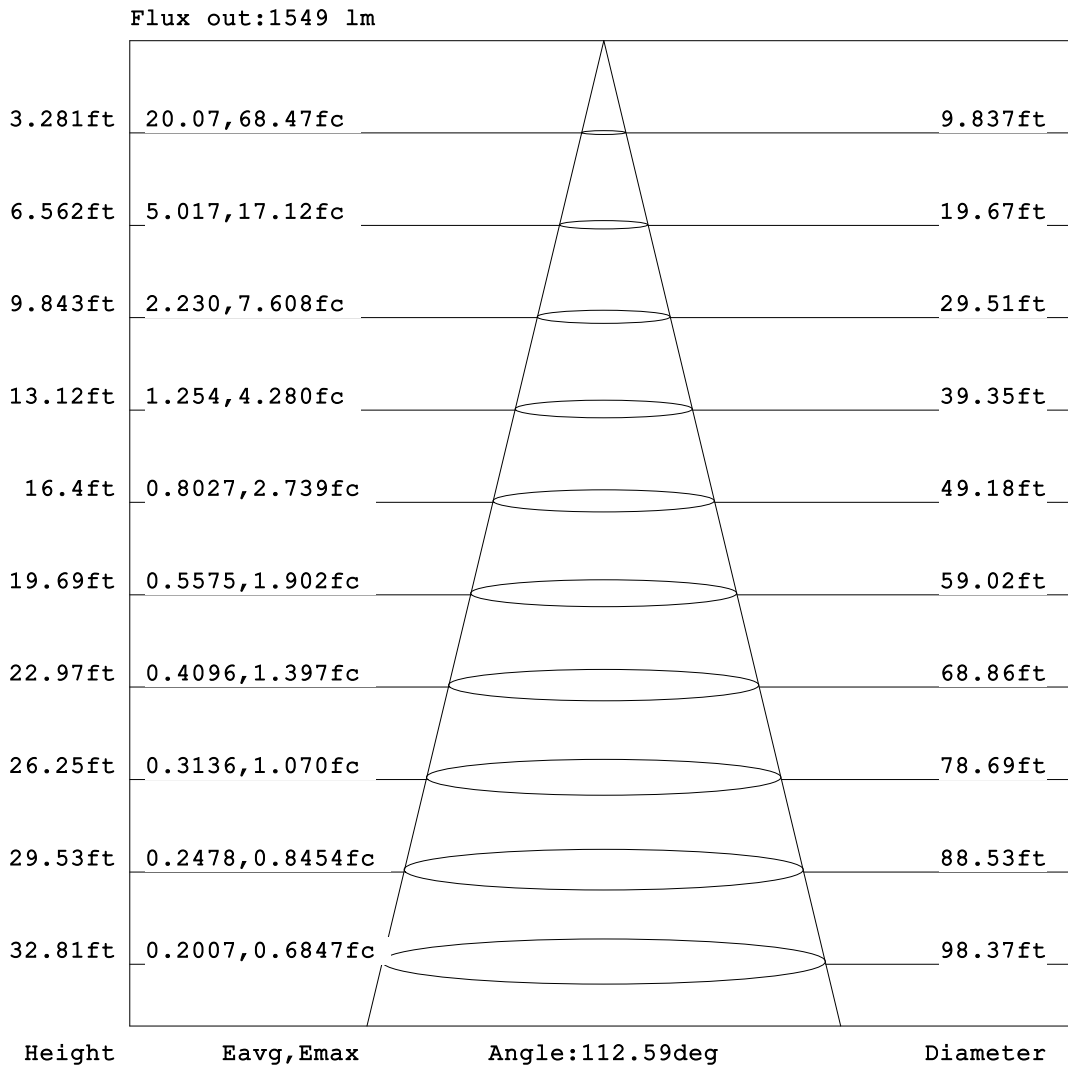
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators:  
Test Date: 2024-01-09

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity: 65.0%  
Test Distance: 10.000m [K=1.0000]  
Remarks:



**AAI Figure**

Test:U:120.48V I:0.2030A P:22.714W PF:0.9288 Freq:59.98Hz Lamp Flux:2122.26x1 lm		
NAME: ADS12R9-DTW-D-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



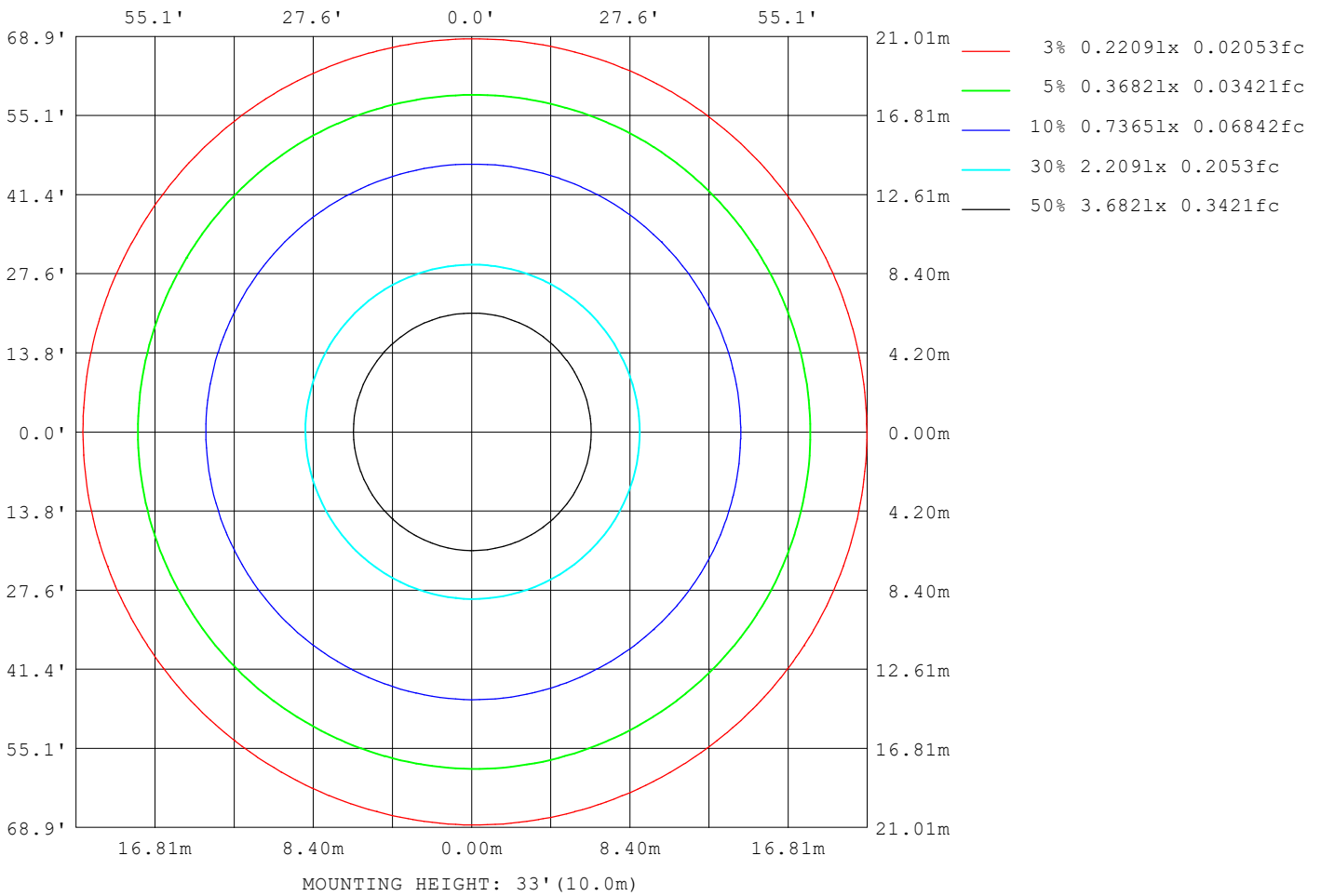
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:2024-01-09

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity:65.0%  
Test Distance:10.000m [K=1.0000]  
Remarks:

**ISOLUX DIAGRAM**

Test:U:120.48V I:0.2030A P:22.714W PF:0.9288 Freq:59.98Hz Lamp Flux:2122.26x1 lm		
NAME: ADS12R9-DTW-D-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:  
 Test Date:2024-01-09

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
 Humidity:65.0%  
 Test Distance:10.000m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

Test:U:120.48V I:0.2030A P:22.714W PF:0.9288 Freq:59.98Hz Lamp Flux:2122.26x1 lm		
NAME: ADS12R9-DTW-D-WH	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

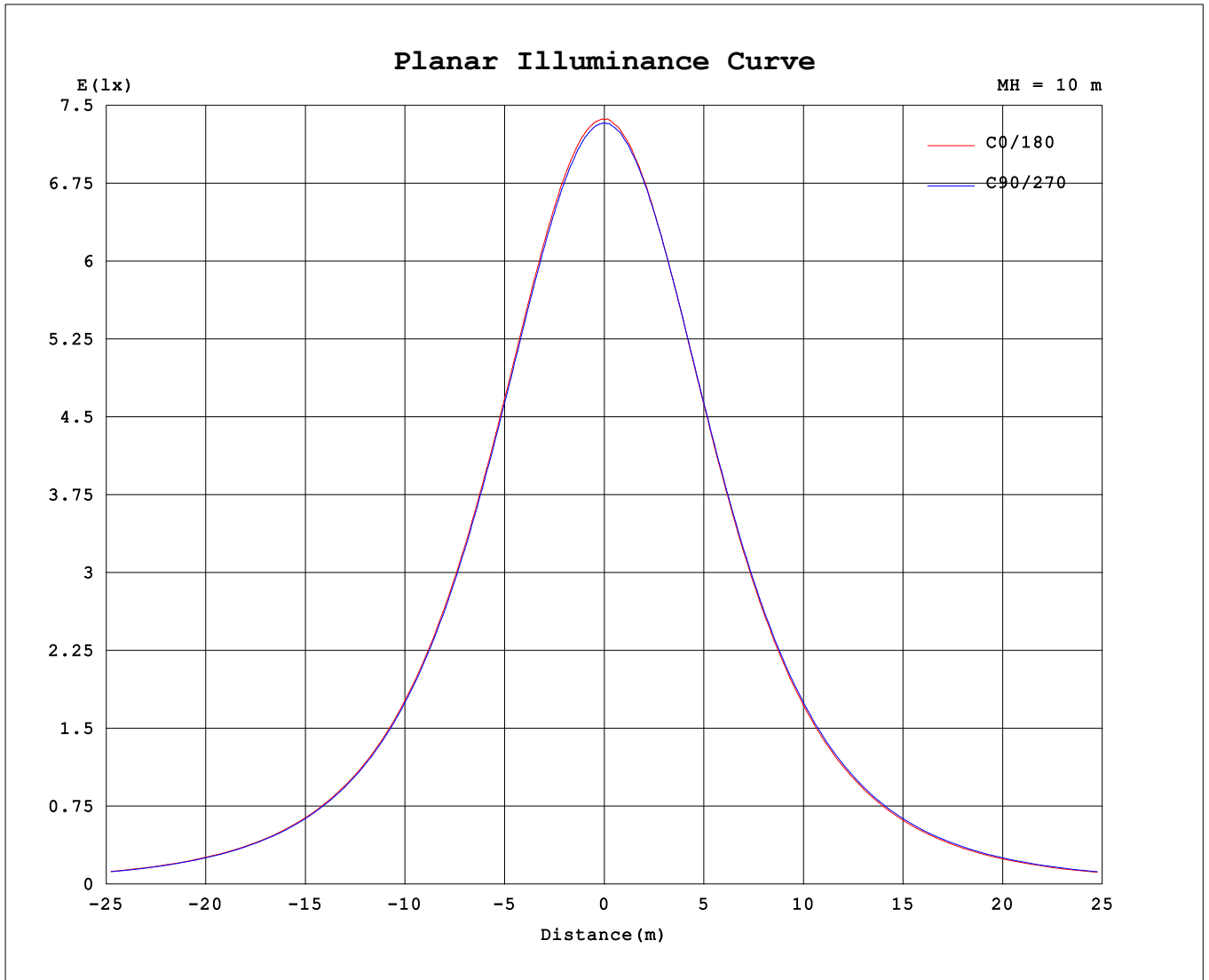
AvgL	cd/m2
L_0~180 (65) av	5613
L_0~180 (75) av	5005
L_0~180 (85) av	3995
L_90~270 (65) av	5679
L_90~270 (75) av	5132
L_90~270 (85) av	4166
L_45 (65) av	5623
L_45 (75) av	5048
L_45 (85) av	4067

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:  
 Test Date:2024-01-09

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
 Humidity:65.0%  
 Test Distance:10.000m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3 °C  
 Operators:  
 Test Date: 2024-01-09

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
 Humidity: 65.0%  
 Test Distance: 10.000m [K=1.0000]  
 Remarks:

