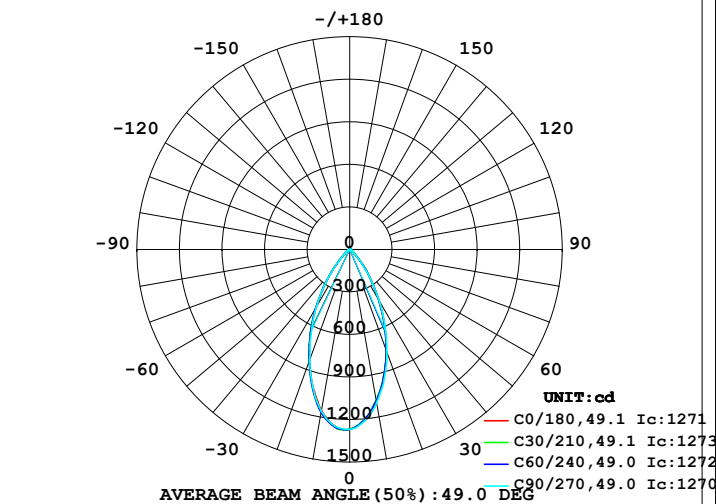


LUMINAIRE PHOTOMETRIC TEST REPORT

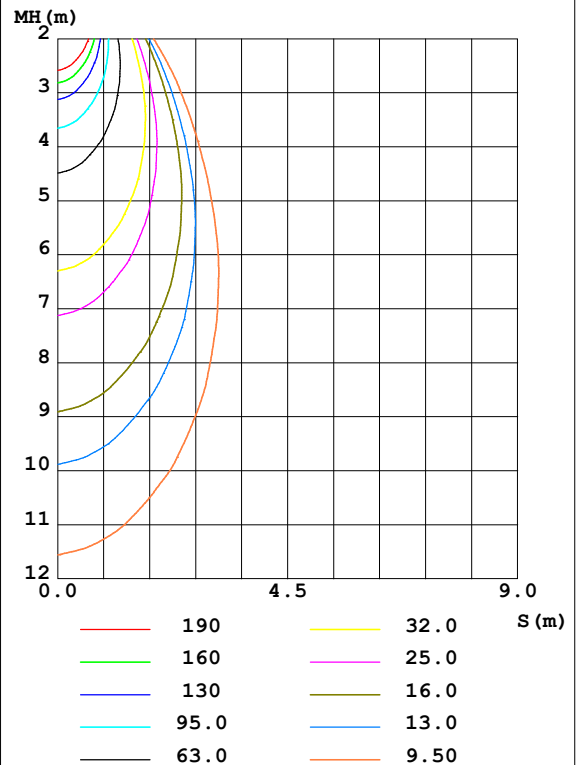
Test:U:225.1V I:0.0700A P:15.10W PF:0.9570 Freq:0Hz Lamp Flux:949.312x1 lm					
NAME: ALST55-15G30-WF		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:46		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 62.87 lm/W
MODEL	3000K CRI90	I _{max} (cd)	1273	S/MH (C0/180)	0.78	
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.78	
RATED VOLTAGE (V)	220-240	TOTAL FLUX (lm)	949.31	η UP, DN (C0-180)	0.0, 48.4	
NOMINAL FLUX (lm)	949.312	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.6	
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	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.240m [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	1086	1084	1099	1128	1153	1160	1157	1120	0- 10	114.0	114.0	12,12
20	755.9	759.4	771.2	810.7	834.7	829.7	825.8	783.2	10- 20	269.4	383.4	40.4,40.4
30	413.0	414.1	412.2	443.5	473.8	476.5	474.7	434.9	20- 30	281.1	664.5	70,70
40	159.6	159.1	144.8	165.7	183.9	181.0	182.3	165.1	30- 40	181.1	845.7	89.1,89.1
50	40.11	39.78	36.91	44.04	47.63	46.07	45.52	41.80	40- 50	67.26	912.9	96.2,96.2
60	15.12	14.35	13.35	13.89	16.20	16.74	17.39	16.17	50- 60	24.32	937.2	98.7,98.7
70	5.403	5.013	4.337	4.539	4.991	5.174	5.753	5.598	60- 70	8.991	946.2	99.7,99.7
80	0.5054	0.4888	0.4894	0.4464	0.3672	0.3877	0.4217	0.4042	70- 80	2.639	948.9	100,100
90	0.6418	0.6531	0.6065	0.6110	0.3679	0.3402	0.3365	0.3603	80- 90	0.4512	949.3	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): 889.68 lm

%lum = 93.7%

%lamp = 93.7%

Conical surface Flux(120deg): 937.23 lm

%lum = 98.7%

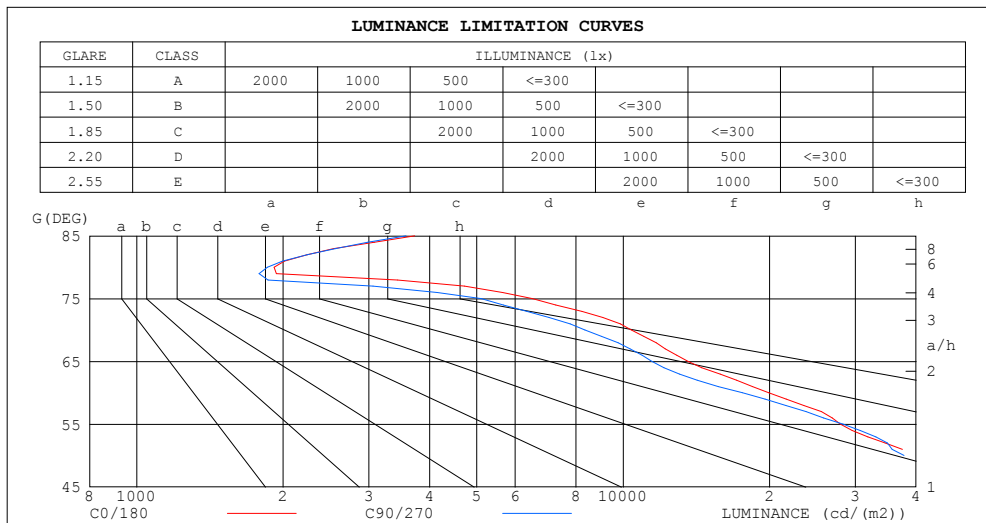
%lamp = 98.7%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.240m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:225.1V I:0.0700A P:15.10W PF:0.9570 Freq:0Hz Lamp Flux:949.312x1 lm		
NAME: ALST55-15G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3724	3576
80	1916	1856
75	6504	5107
70	10399	8350
65	13598	11455
60	19907	17580
55	27949	28287
50	41076	37801
45	69707	61631

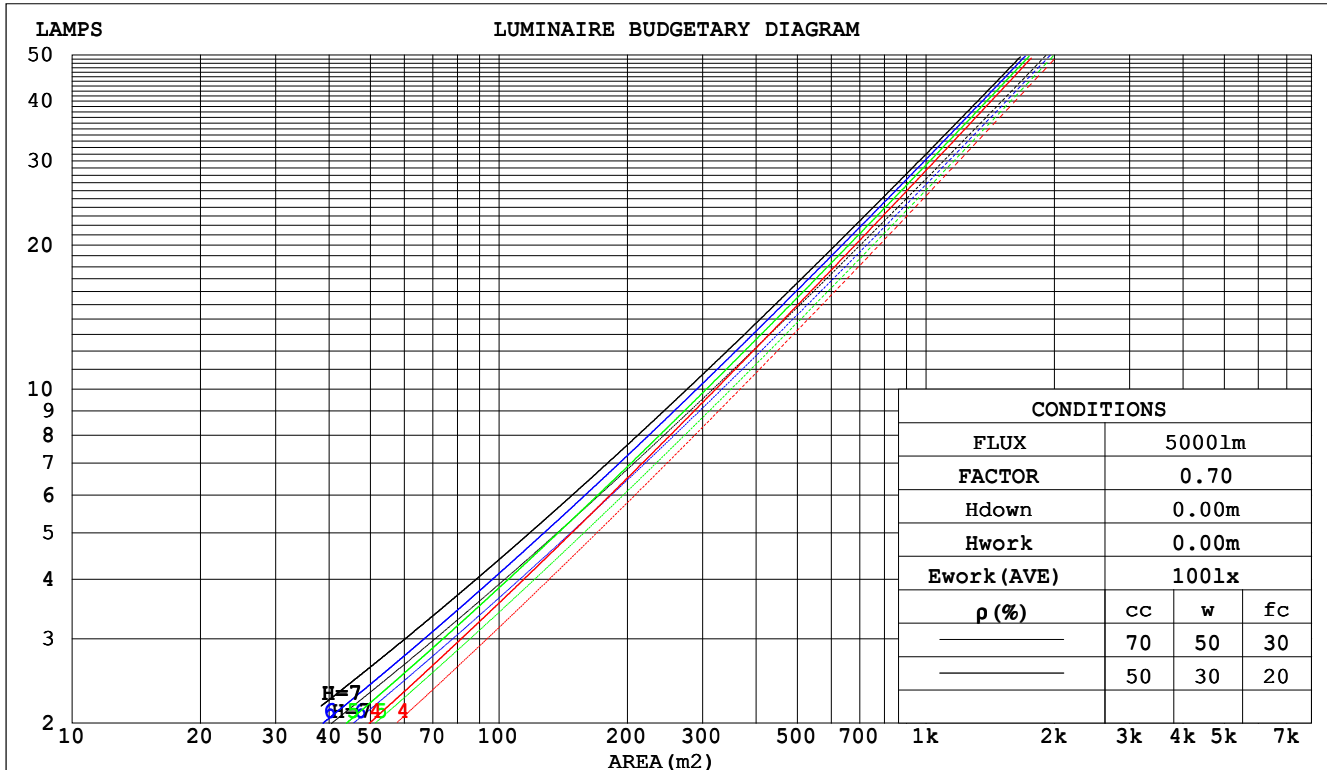
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:225.1V I:0.0700A P:15.10W PF:0.9570 Freq:0Hz Lamp Flux:949.312x1 lm		
NAME: ALST55-15G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	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						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	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.97	.94	.98	.95	.92	.95	.92	.90	.92	.90	.88	.87
3.0	.96	.91	.87	.94	.90	.86	.92	.88	.84	.89	.86	.83	.87	.84	.82	.80
4.0	.89	.84	.79	.88	.83	.79	.86	.82	.78	.84	.80	.77	.82	.79	.76	.75
5.0	.84	.78	.73	.83	.77	.73	.81	.76	.72	.79	.75	.72	.78	.74	.71	.70
6.0	.78	.72	.68	.78	.72	.68	.76	.71	.67	.75	.70	.67	.73	.70	.66	.65
7.0	.74	.68	.64	.73	.67	.63	.72	.67	.63	.71	.66	.63	.70	.65	.62	.61
8.0	.70	.64	.59	.69	.63	.59	.68	.63	.59	.67	.62	.59	.66	.62	.59	.57
9.0	.66	.60	.56	.65	.60	.56	.64	.59	.56	.63	.59	.55	.63	.58	.55	.54
10.0	.62	.57	.53	.62	.56	.53	.61	.56	.52	.60	.56	.52	.60	.55	.52	.51



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.240m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:225.1V I:0.0700A P:15.10W PF:0.9570 Freq:0Hz Lamp Flux:949.312x1 lm									
NAME: ALST55-15G30-WF					TYPE:			WEIGHT:	
SPEC.:					DIM.:			SERIAL No.:	
MFR.:					SUR.:46			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	.181	.103	.033	.175	.100	.032	.162	.093	.030	.150	.087	.028	.140	.081	.026	
2.0	.174	.095	.029	.168	.093	.029	.158	.088	.027	.148	.083	.026	.139	.078	.025	
3.0	.166	.088	.026	.161	.086	.026	.152	.082	.025	.143	.079	.024	.136	.075	.023	
4.0	.158	.082	.024	.153	.080	.024	.146	.077	.023	.138	.074	.022	.131	.071	.022	
5.0	.150	.076	.022	.146	.075	.022	.139	.073	.021	.133	.070	.021	.127	.068	.020	
6.0	.143	.072	.020	.140	.071	.020	.134	.068	.020	.128	.067	.020	.123	.065	.019	
7.0	.136	.067	.019	.133	.066	.019	.128	.065	.019	.123	.063	.018	.118	.062	.018	
8.0	.130	.064	.018	.128	.063	.018	.123	.061	.018	.118	.060	.017	.114	.059	.017	
9.0	.125	.060	.017	.122	.060	.017	.118	.058	.017	.114	.057	.016	.110	.056	.016	
10.0	.119	.057	.016	.117	.057	.016	.113	.056	.016	.110	.055	.015	.106	.053	.015	

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	.171	.157	.145	.147	.135	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.157	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.134	.099	.072	.115	.085	.063	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.126	.087	.059	.108	.076	.051	.074	.053	.036	.043	.031	.022	.014	.010	.007	
6.0	.118	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.096	.061	.036	.066	.043	.026	.039	.025	.015	.012	.008	.005	
8.0	.106	.064	.036	.091	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.101	.059	.031	.087	.051	.027	.060	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.096	.055	.027	.083	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:225.1V I:0.0700A P:15.10W PF:0.9570 Freq:0Hz Lamp Flux:949.312x1 lm											
NAME: ALST55-15G30-WF					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					SUR.:46			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		22.9	23.9	23.2	24.1	24.2	22.7	23.7	22.9	23.8	24.0
	3H	22.9	23.8	23.1	24.0	24.2	22.6	23.5	22.9	23.7	23.9
	4H	22.8	23.6	23.1	23.9	24.1	22.5	23.4	22.8	23.6	23.8
	6H	22.7	23.5	23.0	23.8	24.0	22.5	23.2	22.8	23.5	23.7
	8H	22.7	23.4	23.0	23.7	24.0	22.4	23.2	22.7	23.4	23.7
	12H	22.6	23.4	23.0	23.6	23.9	22.4	23.1	22.7	23.4	23.6
4H	2H	22.8	23.6	23.0	23.8	24.0	22.5	23.4	22.8	23.6	23.8
	3H	22.7	23.4	23.0	23.7	24.0	22.5	23.2	22.8	23.5	23.7
	4H	22.7	23.3	23.0	23.6	23.9	22.4	23.1	22.8	23.4	23.7
	6H	22.6	23.2	23.0	23.5	23.8	22.3	22.9	22.7	23.2	23.6
	8H	22.5	23.1	22.9	23.4	23.8	22.3	22.8	22.7	23.2	23.5
	12H	22.5	23.0	22.9	23.3	23.7	22.2	22.7	22.6	23.1	23.5
8H	4H	22.5	23.1	22.9	23.4	23.8	22.3	22.8	22.7	23.2	23.5
	6H	22.4	22.9	22.9	23.3	23.7	22.2	22.6	22.6	23.0	23.4
	8H	22.4	22.8	22.8	23.2	23.6	22.1	22.5	22.6	22.9	23.4
	12H	22.4	22.7	22.8	23.1	23.6	22.1	22.4	22.6	22.9	23.3
12H	4H	22.5	23.0	22.9	23.3	23.7	22.2	22.7	22.6	23.1	23.5
	6H	22.4	22.8	22.8	23.2	23.6	22.1	22.5	22.6	22.9	23.4
	8H	22.3	22.7	22.8	23.1	23.6	22.1	22.4	22.6	22.9	23.3
Variations with the observer position at spacings:											
S = 1.0H	+ 2.4 / - 5.4					+ 2.5 / - 5.6					
1.5H	+ 4.2 / - 4.0					+ 4.3 / - 3.9					
2.0H	+ 4.1 / - 4.1					+ 3.7 / - 4.0					

CIE Pub.117, 949.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.2)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:225.1V I:0.0700A P:15.10W PF:0.9570 Freq:0Hz Lamp Flux:949.312x1 lm		
NAME: ALST55-15G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

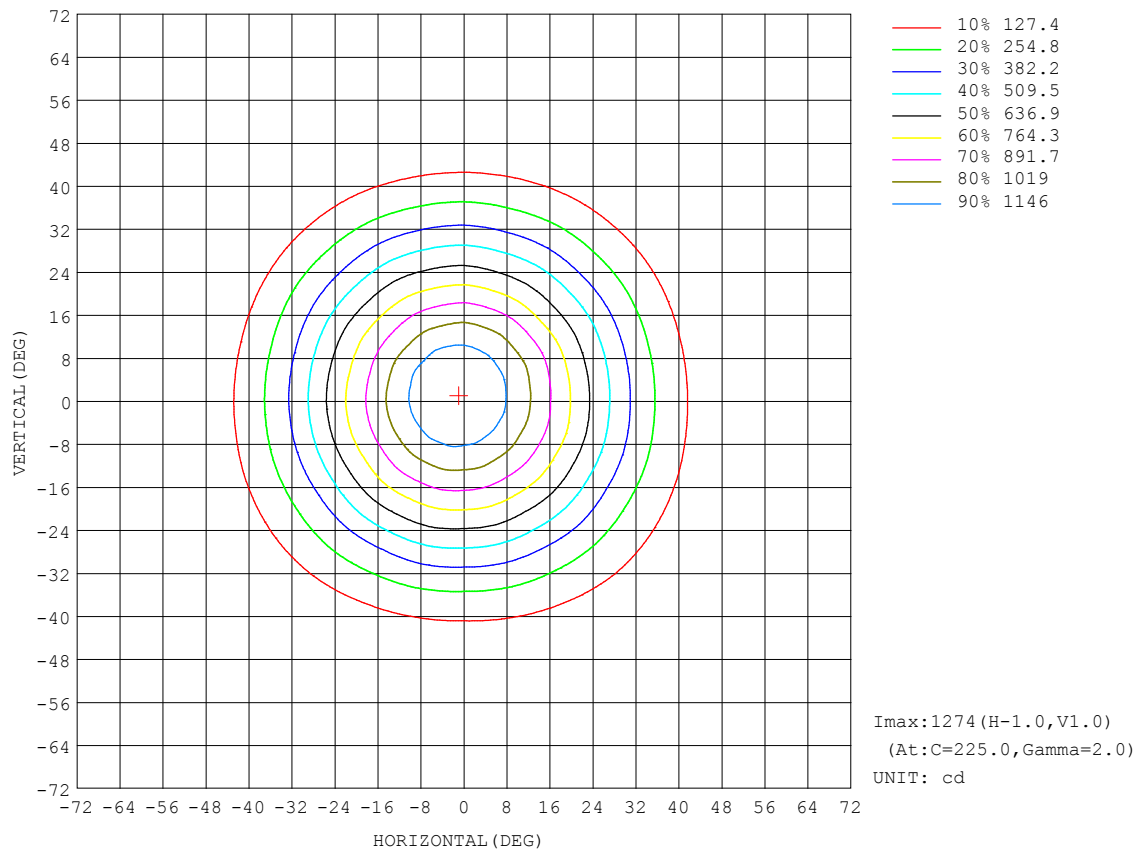
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	78	74	84	78	74	83	77	73	70
0.80	92	86	82	92	86	82	91	85	82	78
1.00	97	91	88	97	91	87	95	91	87	83
1.25	102	96	93	101	96	92	99	95	91	87
1.50	105	100	96	103	99	96	101	97	95	90
2.00	108	103	100	106	102	99	104	100	98	92
2.50	110	106	102	108	104	101	105	102	100	94
3.00	111	108	105	109	106	104	106	104	101	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	112	110	109	108	107	106	98
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:225.1V I:0.0700A P:15.10W PF:0.9570 Freq:0Hz Lamp Flux:949.312x1 lm		
NAME: ALST55-15G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

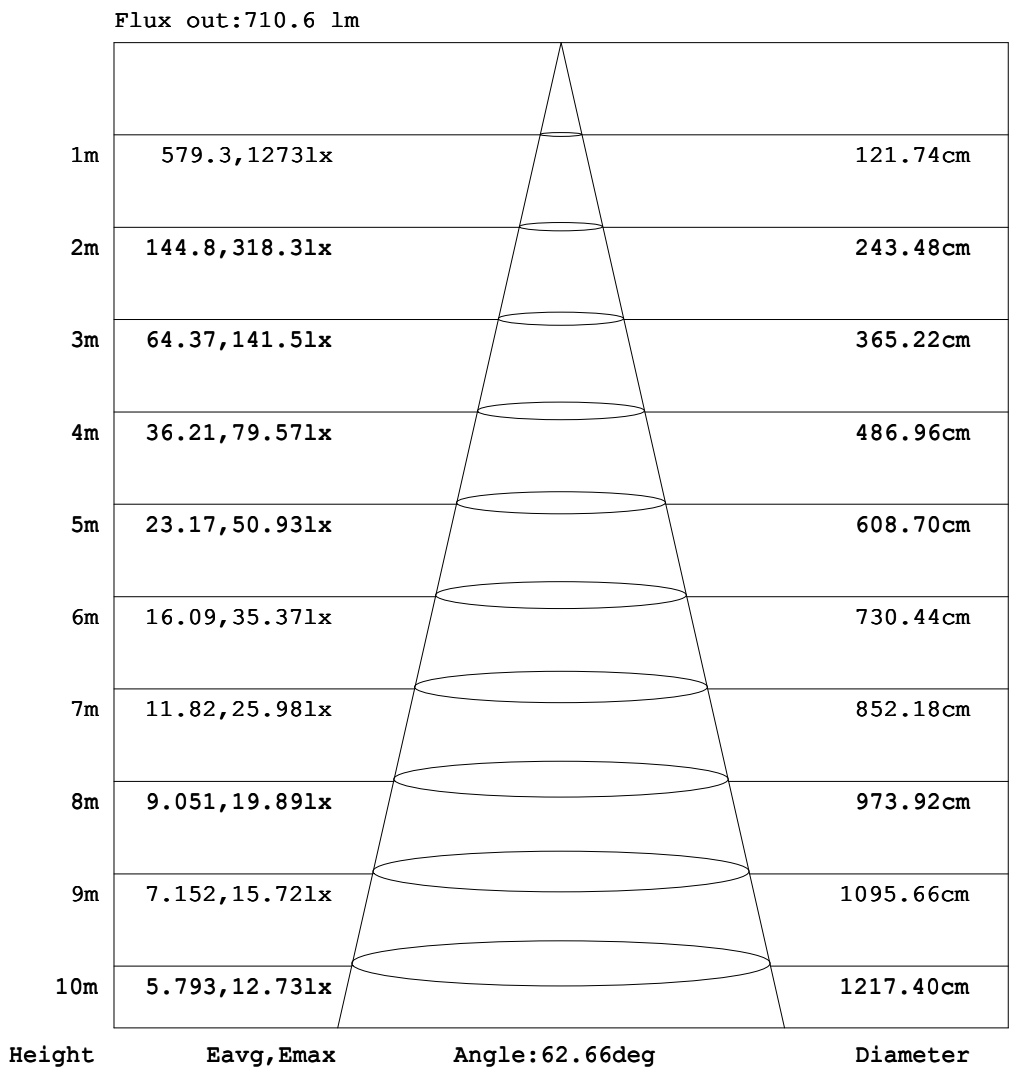


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

AAI Figure

Test:U:225.1V I:0.0700A P:15.10W PF:0.9570 Freq:0Hz Lamp Flux:949.312x1 lm		
NAME: ALST55-15G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:



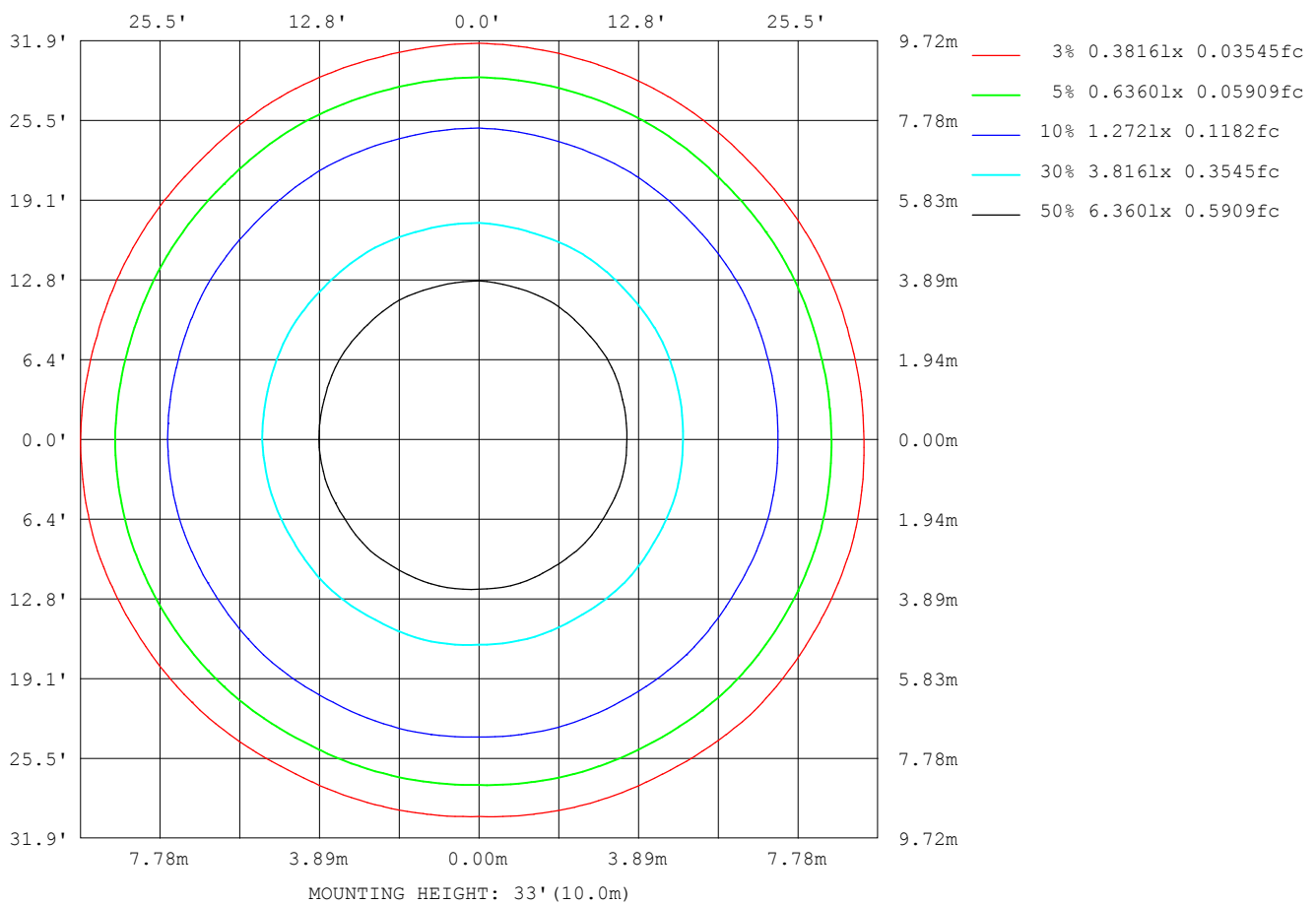
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.240m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:225.1V I:0.0700A P:15.10W PF:0.9570 Freq:0Hz Lamp Flux:949.312x1 lm		
NAME: ALST55-15G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:225.1V I:0.0700A P:15.10W PF:0.9570 Freq:0Hz Lamp Flux:949.312x1 lm		
NAME: ALST55-15G30-WF	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

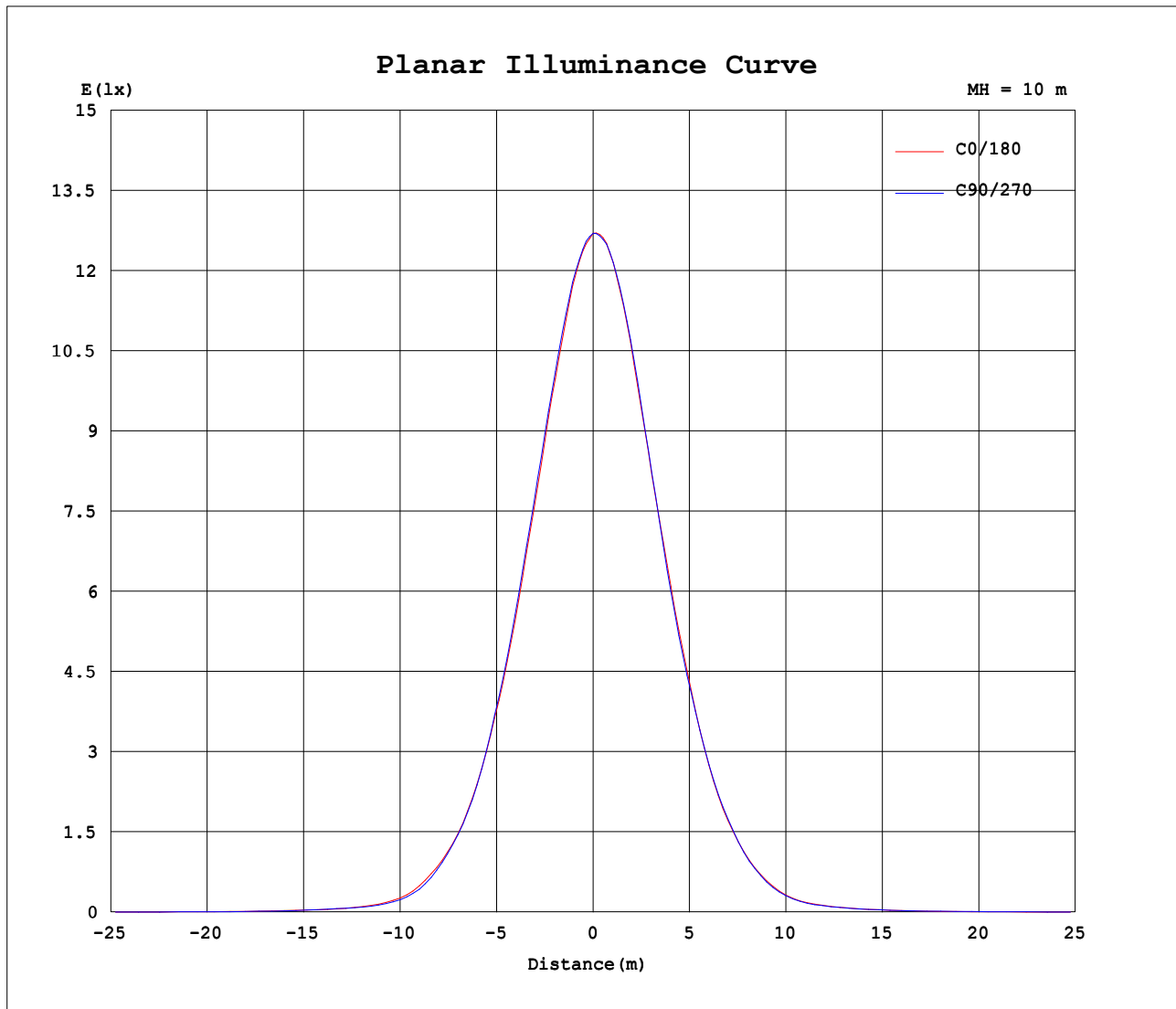
AvgL	cd/m2
L_0~180 (65) av	13456
L_0~180 (75) av	6372
L_0~180 (85) av	3054
L_90~270 (65) av	13155
L_90~270 (75) av	6150
L_90~270 (85) av	2975
L_45 (65) av	13247
L_45 (75) av	6157
L_45 (85) av	2972

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.240m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: AE
Test Date: 2020-11-06

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.240m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```