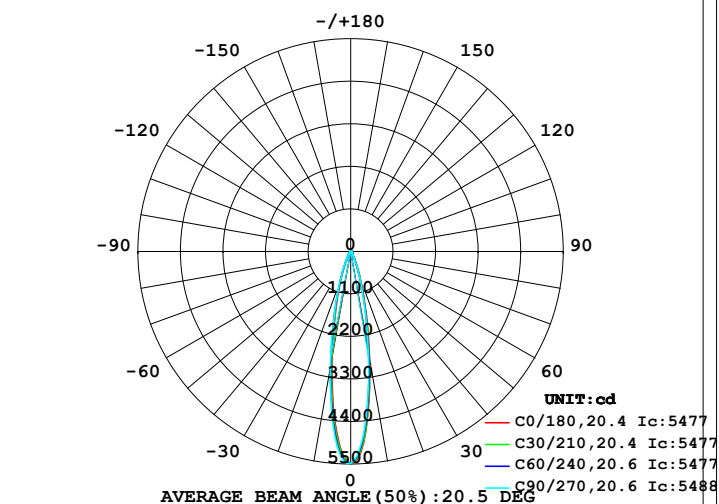


LUMINAIRE PHOTOMETRIC TEST REPORT

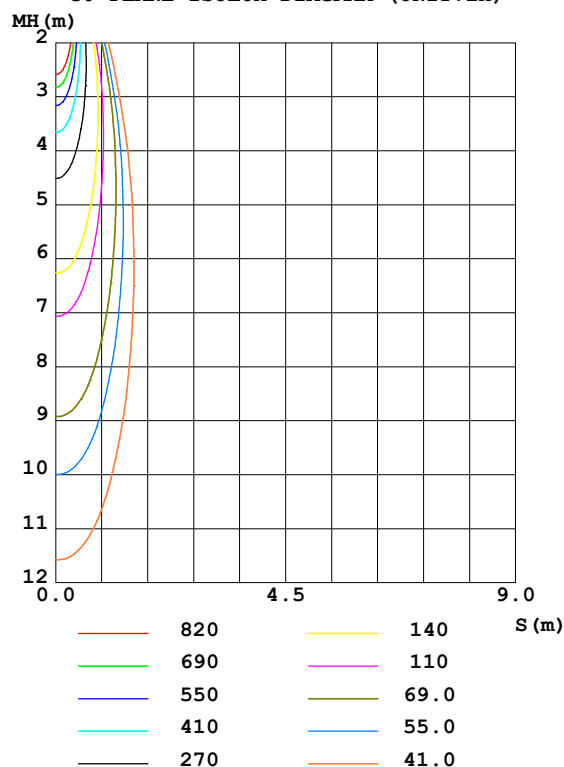
Test:U:225.1V I:0.0700A P:15.10W PF:0.9590 Freq:0Hz Lamp Flux:1047.06x1 lm		
NAME: ALST55-15G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 69.34 lm/W			
MODEL	3000K CRI90	I _{max} (cd)	5498	S/MH(C0/180)	0.35
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	0.37
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	1047.1	η UP,DN(C0-180)	0.0,47.9
NOMINAL FLUX(lm)	1047.06	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,52.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.00

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	2812	2743	2633	2656	2790	2886	3039	2954	0- 10	378.4	378.4	36.1, 36.1
20	709.7	674.0	640.3	637.9	705.4	732.4	785.6	750.8	10- 20	412.8	791.2	75.6, 75.6
30	160.9	154.3	145.2	144.8	159.6	173.5	173.8	166.7	20- 30	158.9	950.1	90.7, 90.7
40	52.97	51.34	47.39	46.02	50.06	54.67	57.12	55.28	30- 40	57.91	1008	96.3, 96.3
50	17.97	17.56	16.99	16.50	17.66	19.24	19.99	19.60	40- 50	23.87	1032	98.6, 98.6
60	5.720	5.763	5.185	5.426	5.898	6.117	6.005	6.097	50- 60	9.036	1041	99.4, 99.4
70	2.802	2.693	2.280	2.292	2.594	2.947	3.185	3.220	60- 70	4.070	1045	99.8, 99.8
80	0.5625	0.5665	0.5568	0.6683	0.4836	0.5129	0.4816	0.5249	70- 80	1.592	1047	100, 100
90	0.6013	0.6103	0.6116	0.6185	0.2069	0.2073	0.1999	0.2036	80- 90	0.4769	1047	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): 1022.4 lm

%lum = 97.6%

%lamp = 97.6%

Conical surface Flux(120deg): 1040.9 lm

%lum = 99.4%

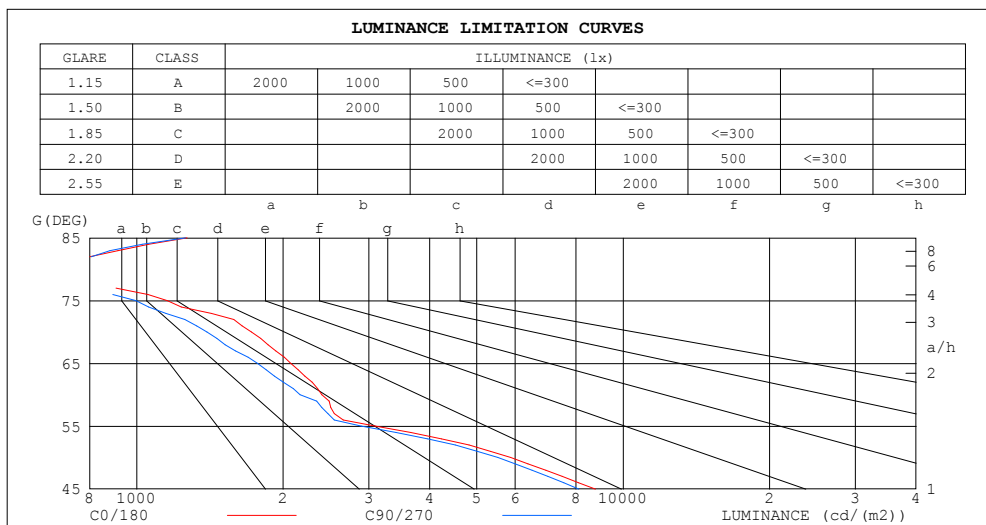
%lamp = 99.4%

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:0.9590 Freq:0Hz Lamp Flux:1047.06x1 lm		
NAME: ALST55-15G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:



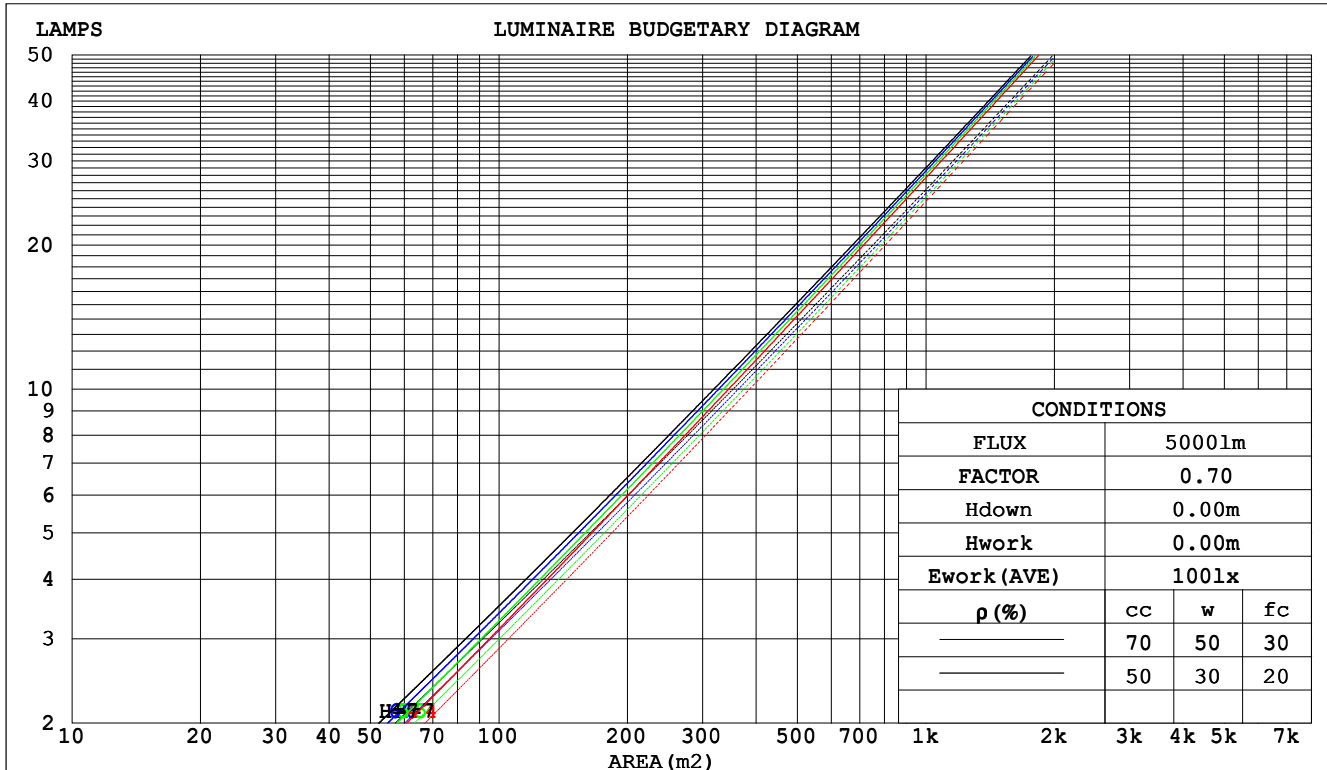
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:225.1V I:0.0700A P:15.10W PF:0.9590 Freq:0Hz Lamp Flux:1047.06x1 lm		
NAME: ALST55-15G30-M	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	1.13	1.11	1.09	1.10	1.09	1.07	1.07	1.05	1.04	1.03	1.02	1.01	.99	.99	.98	.96
2.0	1.07	1.04	1.01	1.05	1.03	1.00	1.02	.00	.98	.99	.98	.96	.97	.95	.94	.93
3.0	1.02	.98	.95	1.01	.97	.95	.98	.96	.93	.96	.94	.92	.94	.92	.90	.89
4.0	.98	.94	.91	.97	.93	.90	.95	.92	.89	.93	.90	.88	.91	.89	.87	.86
5.0	.94	.90	.87	.93	.89	.86	.92	.88	.86	.90	.87	.85	.89	.86	.84	.83
6.0	.91	.86	.83	.90	.86	.83	.89	.85	.83	.87	.84	.82	.86	.84	.81	.80
7.0	.88	.83	.80	.87	.83	.80	.86	.82	.80	.85	.82	.79	.84	.81	.79	.78
8.0	.85	.81	.78	.84	.80	.77	.83	.80	.77	.83	.79	.77	.82	.79	.77	.76
9.0	.82	.78	.75	.82	.78	.75	.81	.77	.75	.80	.77	.75	.80	.77	.74	.74
10.0	.80	.76	.73	.80	.76	.73	.79	.75	.73	.78	.75	.73	.78	.75	.72	.72



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:0.9590 Freq:0Hz Lamp Flux:1047.06x1 lm		
NAME: ALST55-15G30-M	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	.142	.081	.026	.136	.077	.025	.123	.071	.023	.112	.064	.021	.101	.059	.019		
2.0	.132	.073	.022	.127	.070	.022	.117	.065	.020	.107	.060	.019	.098	.056	.018		
3.0	.124	.066	.020	.119	.064	.019	.110	.060	.018	.103	.056	.017	.095	.053	.016		
4.0	.116	.060	.018	.112	.059	.017	.105	.056	.017	.098	.053	.016	.092	.050	.015		
5.0	.109	.056	.016	.106	.054	.016	.100	.052	.015	.094	.050	.015	.089	.047	.014		
6.0	.103	.052	.015	.100	.051	.015	.095	.049	.014	.090	.047	.014	.085	.045	.013		
7.0	.098	.048	.014	.095	.048	.014	.091	.046	.013	.086	.044	.013	.082	.043	.013		
8.0	.093	.046	.013	.091	.045	.013	.087	.043	.012	.083	.042	.012	.080	.041	.012		
9.0	.089	.043	.012	.087	.042	.012	.083	.041	.012	.080	.040	.011	.077	.039	.011		
10.0	.085	.041	.011	.083	.040	.011	.080	.039	.011	.077	.038	.011	.074	.037	.011		

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	.169	.158	.148	.144	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.151	.133	.117	.129	.114	.101	.089	.079	.071	.051	.046	.041	.016	.015	.014	
3.0	.136	.113	.095	.117	.098	.082	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.124	.098	.078	.106	.085	.068	.073	.059	.048	.042	.035	.028	.014	.011	.009	
5.0	.114	.086	.065	.098	.074	.057	.067	.052	.040	.039	.030	.024	.013	.010	.008	
6.0	.105	.076	.055	.090	.066	.048	.062	.046	.034	.036	.027	.020	.012	.009	.007	
7.0	.097	.068	.047	.084	.059	.041	.058	.041	.029	.034	.024	.017	.011	.008	.006	
8.0	.091	.061	.040	.078	.053	.035	.054	.037	.025	.031	.022	.015	.010	.007	.005	
9.0	.085	.055	.035	.073	.048	.031	.051	.034	.022	.030	.020	.013	.010	.007	.004	
10.0	.080	.051	.031	.069	.044	.027	.048	.031	.019	.028	.018	.011	.009	.006	.004	

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:0.9590 Freq:0Hz Lamp Flux:1047.06x1 lm											
NAME: ALST55-15G30-M					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	11.2	11.9	11.4	12.0	12.2	10.9	11.5	11.1	11.7	11.9	
	3H	11.2	11.9	11.5	12.1	12.3	10.9	11.5	11.1	11.7	11.9
	4H	11.2	11.8	11.5	12.0	12.3	10.9	11.5	11.1	11.7	11.9
	6H	11.2	11.7	11.5	12.0	12.2	10.8	11.4	11.1	11.6	11.8
	8H	11.1	11.7	11.4	11.9	12.2	10.8	11.3	11.1	11.6	11.8
	12H	11.1	11.6	11.4	11.9	12.2	10.8	11.3	11.1	11.5	11.8
4H	2H	11.1	11.7	11.3	11.9	12.1	10.8	11.4	11.0	11.6	11.8
	3H	11.2	11.7	11.5	12.0	12.3	10.9	11.4	11.2	11.6	11.9
	4H	11.2	11.7	11.5	12.0	12.3	10.8	11.3	11.2	11.6	11.9
	6H	11.1	11.6	11.5	11.9	12.2	10.8	11.2	11.1	11.5	11.9
	8H	11.1	11.5	11.5	11.9	12.2	10.7	11.1	11.1	11.5	11.9
	12H	11.1	11.5	11.5	11.8	12.2	10.7	11.1	11.1	11.5	11.9
8H	4H	11.1	11.5	11.5	11.8	12.2	10.7	11.1	11.1	11.5	11.9
	6H	11.0	11.4	11.5	11.8	12.2	10.7	11.0	11.1	11.4	11.8
	8H	11.0	11.3	11.5	11.7	12.2	10.7	11.0	11.1	11.4	11.8
	12H	11.0	11.3	11.5	11.7	12.2	10.7	10.9	11.1	11.4	11.8
12H	4H	11.0	11.4	11.5	11.8	12.2	10.7	11.1	11.1	11.4	11.8
	6H	11.0	11.3	11.4	11.7	12.1	10.6	10.9	11.1	11.3	11.8
	8H	11.0	11.2	11.4	11.7	12.1	10.6	10.9	11.1	11.3	11.8
Variations with the observer position at spacings:											
S = 1.0H	+ 2.2 / - 4.1					+ 2.0 / - 4.1					
1.5H	+ 3.4 / - 4.2					+ 3.1 / - 4.1					
2.0H	+ 3.8 / - 2.6					+ 3.7 / - 2.8					

CIE Pub.117, 1047 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 0.2$)

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:0.9590 Freq:0Hz Lamp Flux:1047.06x1 lm		
NAME: ALST55-15G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

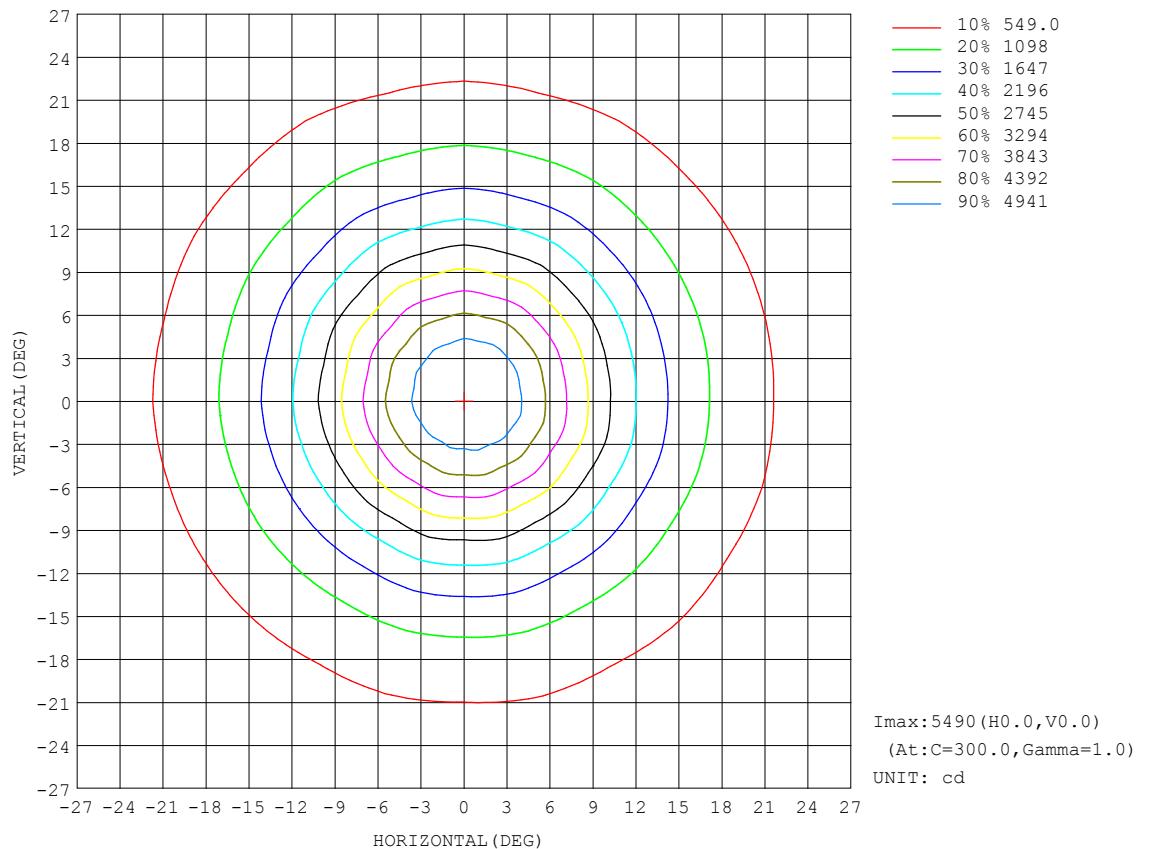
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	80	89	83	80	88	83	79	76
0.80	96	91	87	96	91	87	95	90	87	83
1.00	100	95	92	100	95	92	98	95	91	87
1.25	104	99	96	103	99	96	101	98	95	91
1.50	107	102	99	106	102	99	103	100	98	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	104	102	96
3.00	112	109	106	110	108	105	107	105	103	97
4.00	114	112	109	112	110	108	109	107	105	98
5.00	115	113	112	113	111	110	109	108	107	99
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:0.9590 Freq:0Hz Lamp Flux:1047.06x1 lm		
NAME: ALST55-15G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

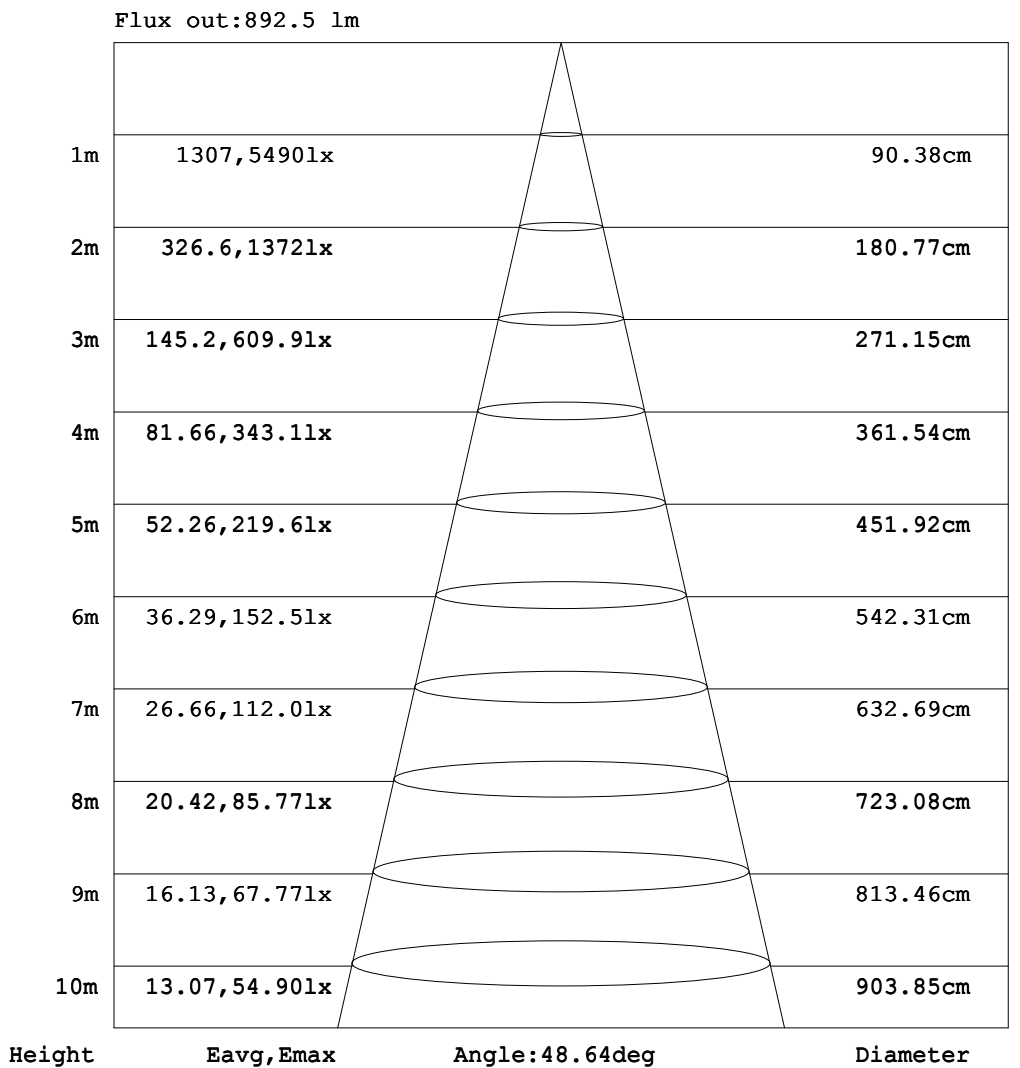


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

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:0.9590 Freq:0Hz Lamp Flux:1047.06x1 lm		
NAME: ALST55-15G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:



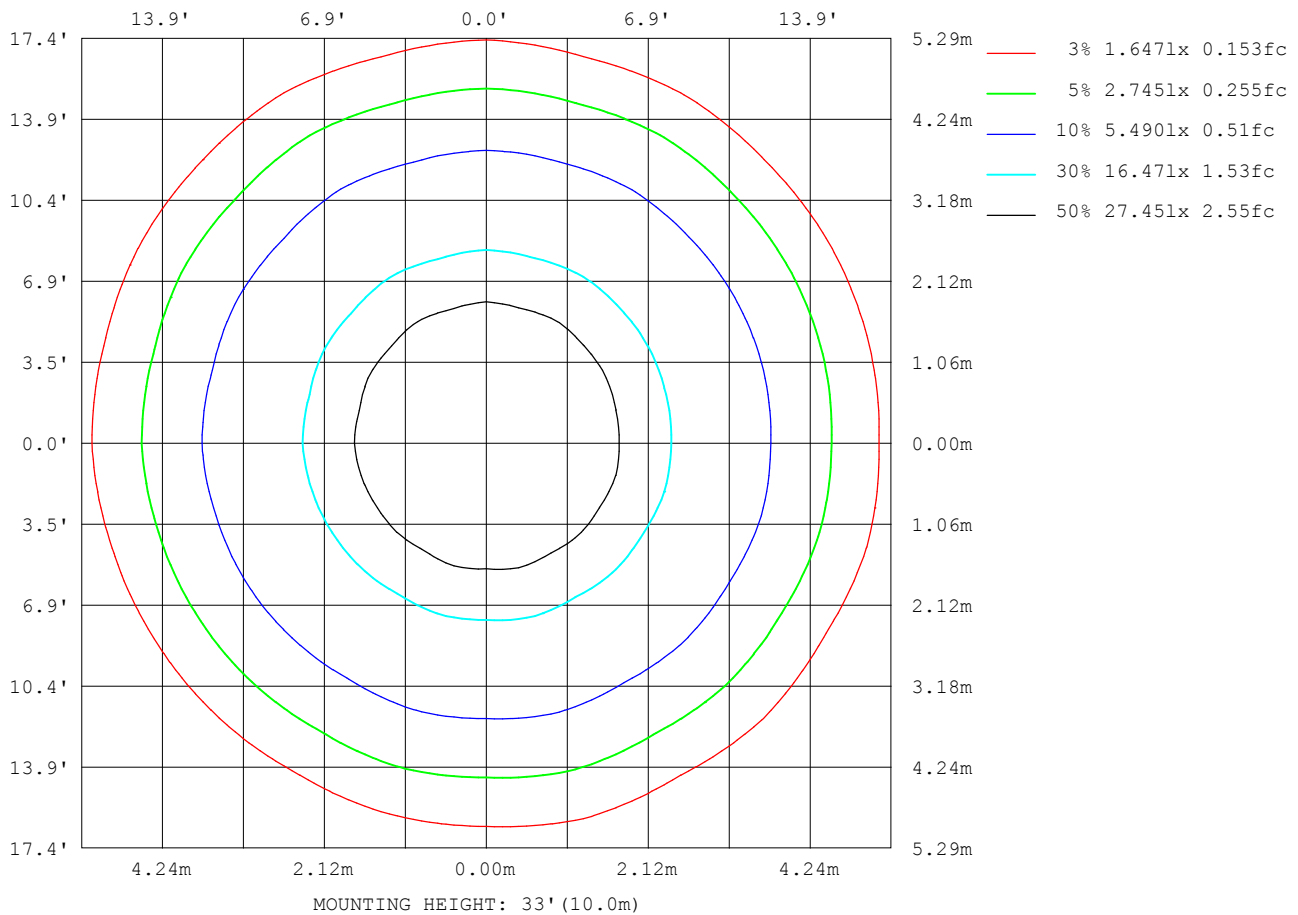
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.9590 Freq:0Hz Lamp Flux:1047.06x1 lm		
NAME: ALST55-15G30-M	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:0.9590 Freq:0Hz Lamp Flux:1047.06x1 lm		
NAME: ALST55-15G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:46	Shielding Angle:

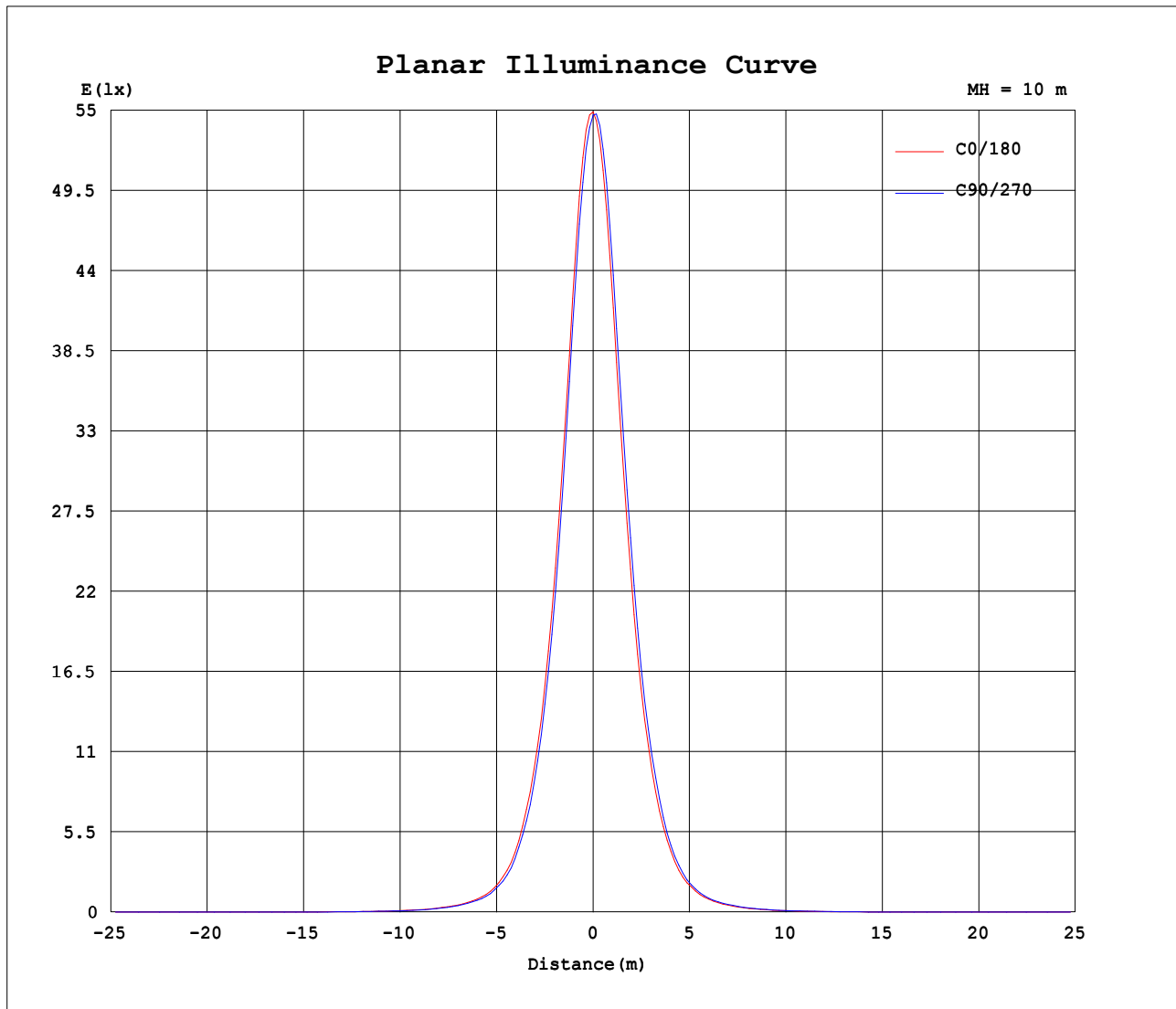
AvgL	cd/m2
L_0~180 (65) av	2019
L_0~180 (75) av	1130
L_0~180 (85) av	994
L_90~270 (65) av	1952
L_90~270 (75) av	1188
L_90~270 (85) av	993
L_45 (65) av	2041
L_45 (75) av	1184
L_45 (85) av	1040

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:

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