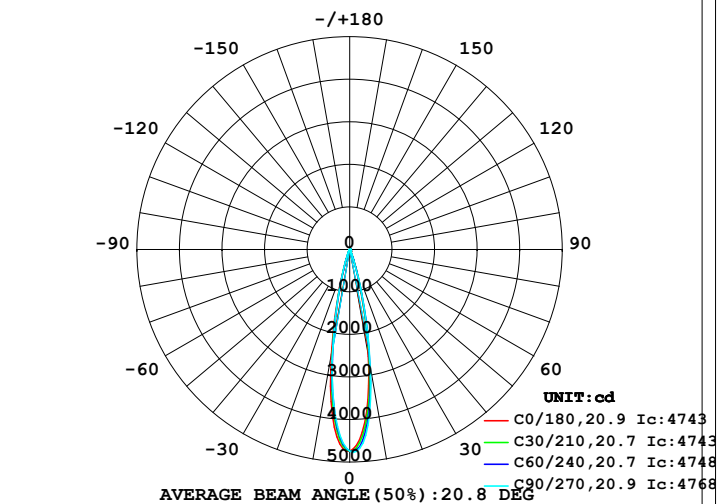


LUMINAIRE PHOTOMETRIC TEST REPORT

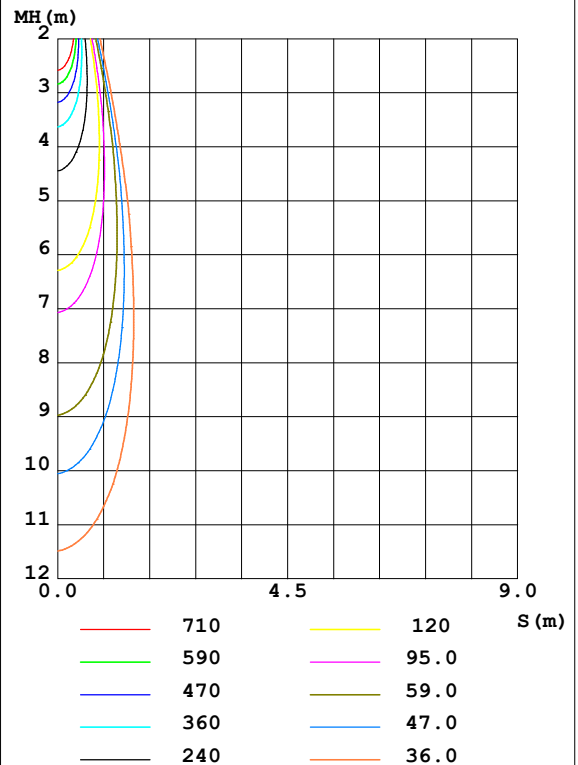
Test:U:225.1V I:0.0530A P:10.90W PF:0.9080 Freq:0Hz Lamp Flux:719.232x1 lm		
NAME: ALST45-11G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:38	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 65.98 lm/W			
MODEL	3000K CEI90	I _{max} (cd)	4775	S/MH (C0/180)	0.34
NOMINAL POWER (W)	11	LOR (%)	100.0	S/MH (C90/270)	0.33
RATED VOLTAGE (V)	220-240	TOTAL FLUX (lm)	719.23	η UP, DN (C0-180)	0.0, 53.1
NOMINAL FLUX (lm)	719.232	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 46.9
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	2554	2770	2809	2752	2502	2234	2294	2401	0- 10	343.0	343.0	47.7, 47.7
20	314.0	343.0	314.5	286.7	260.8	224.3	264.8	288.7	10- 20	290.9	634.0	88.1, 88.1
30	59.40	61.55	55.20	50.87	48.27	46.64	50.84	55.95	20- 30	54.72	688.7	95.8, 95.8
40	20.71	21.12	19.01	17.66	16.09	15.20	17.11	20.05	30- 40	19.89	708.6	98.5, 98.5
50	5.447	5.567	5.107	4.720	4.054	4.005	4.799	5.894	40- 50	8.338	716.9	99.7, 99.7
60	0.5847	0.4877	0.4516	0.4570	0.4908	0.4863	0.5532	0.6874	50- 60	1.991	718.9	100, 100
70	0.0431	0.0039	0.0158	0.0157	0.1155	0.1370	0.1156	0.1530	60- 70	0.1630	719.1	100, 100
80	0.0390	0.0588	0.0469	0.0785	0.0429	0.0627	0.0271	0.0707	70- 80	0.0647	719.2	100, 100
90	0.1798	0.1800	0.1720	0.1803	0	0	0	0	80- 90	0.0705	719.2	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): 713.88 lm

%lum = 99.3%

%lamp = 99.3%

Conical surface Flux(120deg): 718.93 lm

%lum = 100.0%

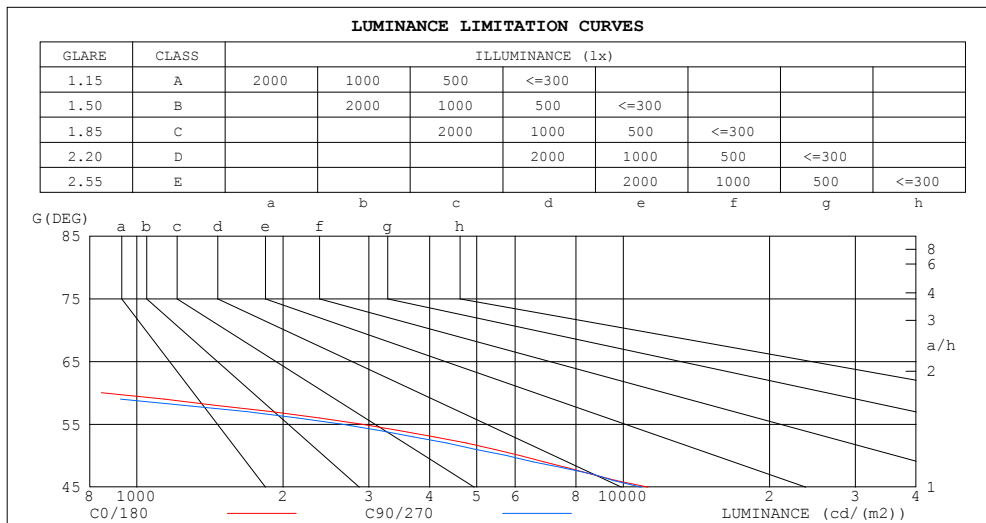
%lamp = 100.0%

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:0.0530A P:10.90W PF:0.9080 Freq:0Hz Lamp Flux:719.232x1 lm		
NAME: ALST45-11G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:38	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	908	908
80	163	195
75	66	33
70	91	33
65	168	87
60	846	653
55	2891	2634
50	6130	5747
45	11238	10871

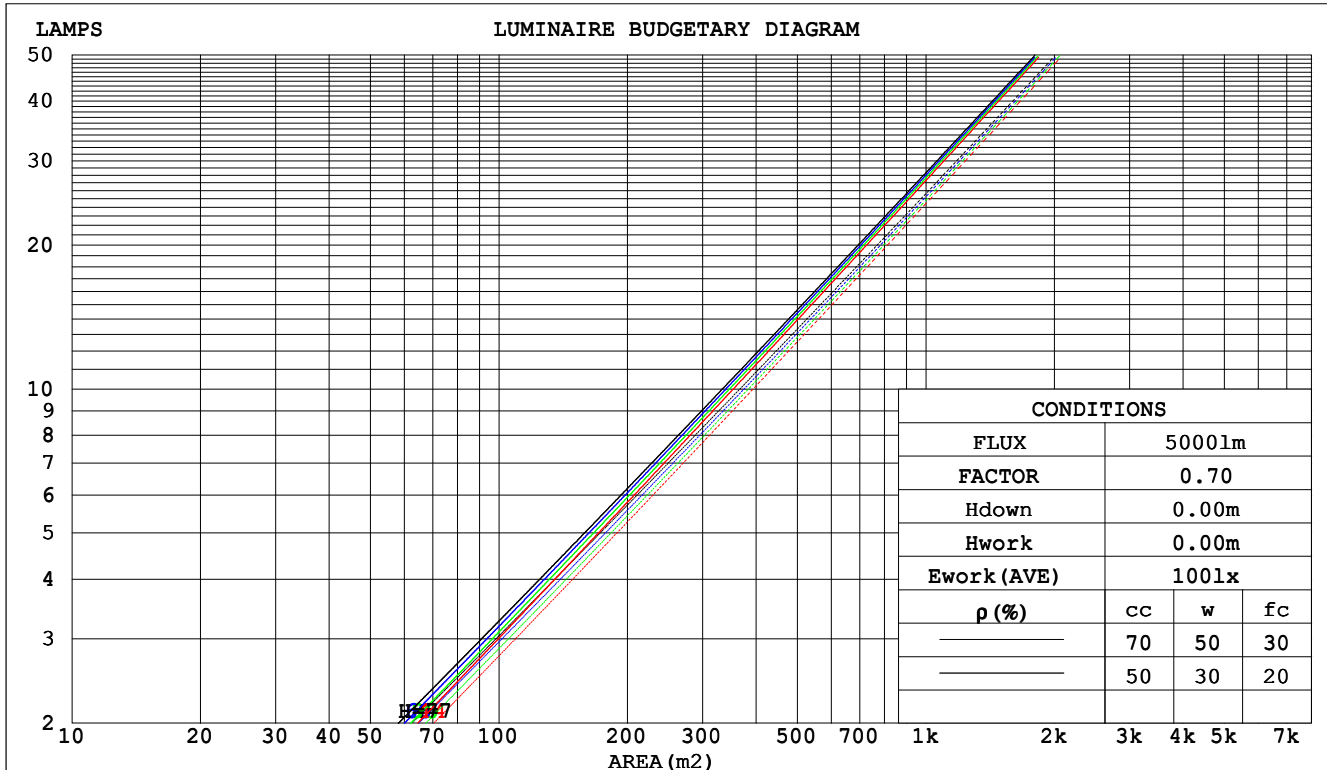
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

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:0.0530A P:10.90W PF:0.9080 Freq:0Hz Lamp Flux:719.232x1 lm		
NAME: ALST45-11G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:38	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	1.00
1.0	1.13	1.12	1.10	1.11	1.10	1.08	1.07	1.06	1.05	1.04	1.03	1.02	1.00	.00	.99	.97
2.0	1.09	1.06	1.04	1.07	1.05	1.03	1.04	1.02	1.00	1.01	.00	.98	.99	.97	.96	.95
3.0	1.05	1.01	.99	1.03	1.00	.98	1.01	.99	.97	.99	.97	.95	.97	.95	.94	.92
4.0	1.01	.98	.95	1.00	.97	.94	.98	.96	.93	.96	.94	.92	.95	.93	.91	.90
5.0	.98	.94	.92	.97	.94	.91	.96	.93	.91	.94	.92	.90	.93	.91	.89	.88
6.0	.95	.92	.89	.95	.91	.89	.93	.90	.88	.92	.90	.88	.91	.89	.87	.86
7.0	.93	.89	.87	.92	.89	.86	.91	.88	.86	.90	.88	.86	.89	.87	.85	.84
8.0	.91	.87	.85	.90	.87	.84	.89	.86	.84	.88	.86	.84	.88	.85	.83	.83
9.0	.89	.85	.83	.88	.85	.82	.87	.84	.82	.87	.84	.82	.86	.84	.82	.81
10.0	.87	.83	.81	.86	.83	.81	.86	.83	.81	.85	.82	.80	.85	.82	.80	.79



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:0.0530A P:10.90W PF:0.9080 Freq:0Hz Lamp Flux:719.232x1 lm									
NAME: ALST45-11G30-M					TYPE:			WEIGHT:	
SPEC.:					DIM.:			SERIAL No.:	
MFR.:					SUR.:38			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	.127	.072	.023	.120	.068	.022	.108	.062	.020	.096	.056	.018	.086	.050	.016	
2.0	.116	.064	.020	.111	.061	.019	.101	.056	.017	.091	.051	.016	.083	.047	.015	
3.0	.108	.057	.017	.103	.055	.017	.095	.051	.016	.087	.048	.015	.080	.044	.014	
4.0	.100	.052	.015	.096	.050	.015	.089	.047	.014	.083	.044	.013	.077	.042	.013	
5.0	.094	.048	.014	.091	.047	.014	.085	.044	.013	.079	.042	.012	.074	.040	.012	
6.0	.088	.044	.013	.086	.043	.012	.081	.041	.012	.076	.039	.012	.071	.038	.011	
7.0	.083	.041	.012	.081	.040	.012	.077	.039	.011	.073	.037	.011	.069	.036	.011	
8.0	.079	.039	.011	.077	.038	.011	.073	.037	.010	.070	.035	.010	.066	.034	.010	
9.0	.075	.036	.010	.074	.036	.010	.070	.035	.010	.067	.034	.010	.064	.033	.009	
10.0	.072	.035	.010	.070	.034	.009	.068	.033	.009	.065	.032	.009	.062	.031	.009	

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	.168	.158	.149	.143	.135	.128	.098	.093	.089	.056	.054	.052	.018	.017	.017	
2.0	.149	.133	.119	.127	.114	.103	.087	.079	.072	.050	.046	.042	.016	.015	.014	
3.0	.133	.113	.097	.114	.098	.084	.078	.068	.059	.045	.040	.035	.015	.013	.011	
4.0	.120	.098	.081	.103	.084	.070	.071	.059	.049	.041	.034	.029	.013	.011	.010	
5.0	.109	.085	.067	.094	.074	.059	.065	.051	.041	.037	.030	.025	.012	.010	.008	
6.0	.100	.075	.057	.086	.065	.050	.059	.045	.035	.034	.027	.021	.011	.009	.007	
7.0	.092	.067	.049	.079	.058	.043	.055	.040	.030	.032	.024	.018	.010	.008	.006	
8.0	.085	.060	.042	.073	.052	.037	.051	.036	.026	.029	.021	.016	.010	.007	.005	
9.0	.079	.054	.037	.068	.047	.032	.047	.033	.023	.028	.019	.014	.009	.006	.005	
10.0	.074	.049	.032	.064	.043	.028	.044	.030	.020	.026	.018	.012	.008	.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:0.0530A P:10.90W PF:0.9080 Freq:0Hz Lamp Flux:719.232x1 lm											
NAME: ALST45-11G30-M						TYPE:		WEIGHT:			
SPEC.:						DIM.:		SERIAL No.:			
MFR.:						SUR.:38		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		11.1	11.7	11.3	11.9	12.0	10.8	11.4	11.0	11.5	11.7
	3H	11.0	11.5	11.2	11.7	11.9	10.7	11.2	10.9	11.4	11.6
	4H	10.9	11.4	11.2	11.6	11.8	10.6	11.1	10.8	11.3	11.5
	6H	10.8	11.3	11.1	11.6	11.8	10.5	11.0	10.8	11.2	11.5
	8H	10.8	11.3	11.1	11.5	11.8	10.5	10.9	10.8	11.2	11.4
	12H	10.8	11.2	11.1	11.5	11.7	10.4	10.9	10.7	11.1	11.4
4H	2H	10.9	11.5	11.2	11.7	11.9	10.6	11.1	10.9	11.3	11.5
	3H	10.8	11.2	11.1	11.5	11.7	10.4	10.9	10.7	11.2	11.4
	4H	10.7	11.1	11.0	11.4	11.7	10.3	10.8	10.7	11.1	11.4
	6H	10.6	10.9	10.9	11.3	11.6	10.2	10.6	10.6	10.9	11.3
	8H	10.5	10.9	10.9	11.2	11.6	10.2	10.5	10.6	10.9	11.2
	12H	10.5	10.8	10.9	11.2	11.5	10.2	10.5	10.6	10.8	11.2
8H	4H	10.5	10.9	10.9	11.2	11.6	10.2	10.5	10.6	10.9	11.2
	6H	10.4	10.7	10.8	11.1	11.5	10.1	10.4	10.5	10.8	11.2
	8H	10.3	10.6	10.8	11.0	11.4	10.0	10.3	10.5	10.7	11.1
	12H	10.3	10.5	10.8	11.0	11.4	10.0	10.2	10.4	10.6	11.1
12H	4H	10.4	10.8	10.8	11.1	11.5	10.1	10.5	10.5	10.8	11.2
	6H	10.3	10.6	10.8	11.0	11.4	10.0	10.3	10.5	10.7	11.1
	8H	10.3	10.5	10.7	10.9	11.4	10.0	10.2	10.4	10.6	11.1
Variations with the observer position at spacings:											
S = 1.0H	+ 2.6 / -11.4					+ 2.5 / -11.2					
1.5H	+ 4.0 / - 7.7					+ 3.7 / - 6.8					
2.0H	+ 6.0 / -14.8					+ 5.9 / -14.4					

CIE Pub.117, 719.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.1)

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:0.0530A P:10.90W PF:0.9080 Freq:0Hz Lamp Flux:719.232x1 lm		
NAME: ALST45-11G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:38	Shielding Angle:

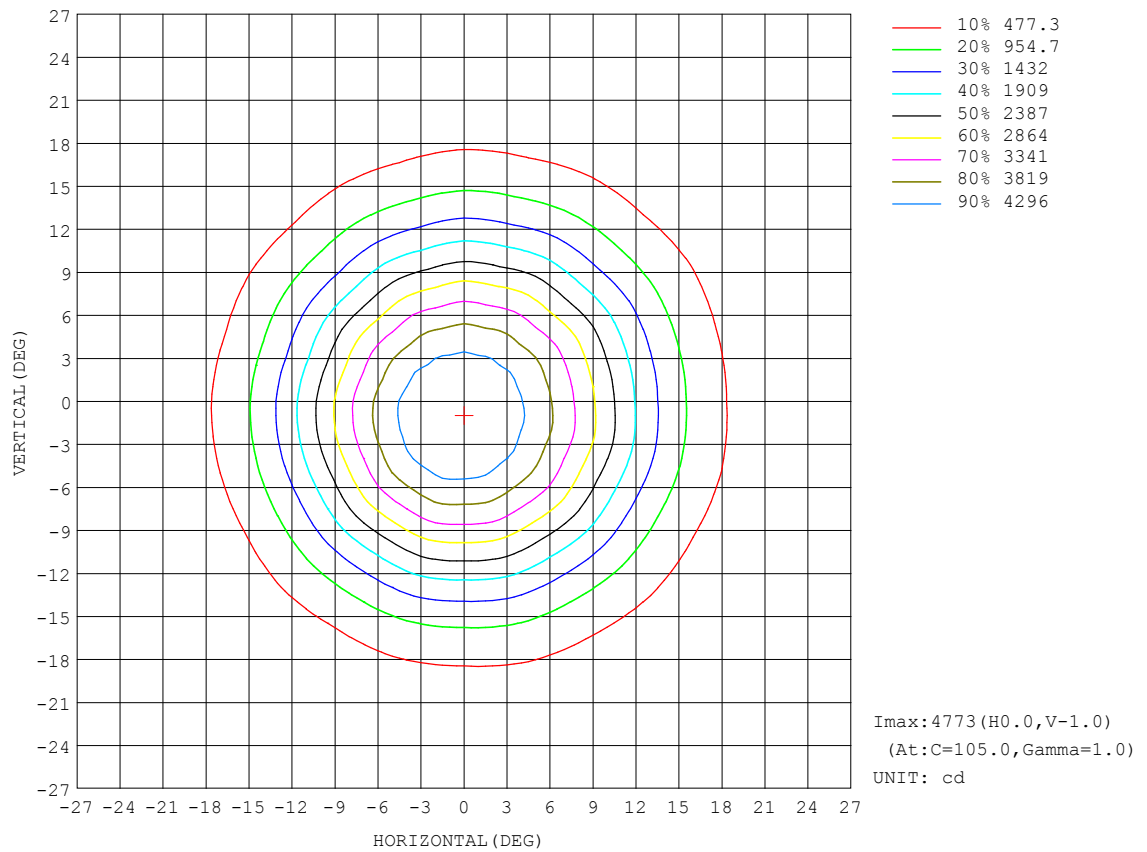
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	81	90	85	81	89	84	81	78
0.80	98	92	89	97	92	89	96	91	89	85
1.00	101	96	93	101	96	93	99	96	92	89
1.25	105	100	97	104	100	97	102	99	96	92
1.50	108	103	100	106	103	100	104	101	99	95
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	107	104	107	104	102	97
3.00	113	110	107	111	108	106	108	105	104	98
4.00	114	112	110	112	110	109	109	107	106	99
5.00	116	114	112	114	112	110	110	108	107	100
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:0.0530A P:10.90W PF:0.9080 Freq:0Hz Lamp Flux:719.232x1 lm		
NAME: ALST45-11G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:38	Shielding Angle:

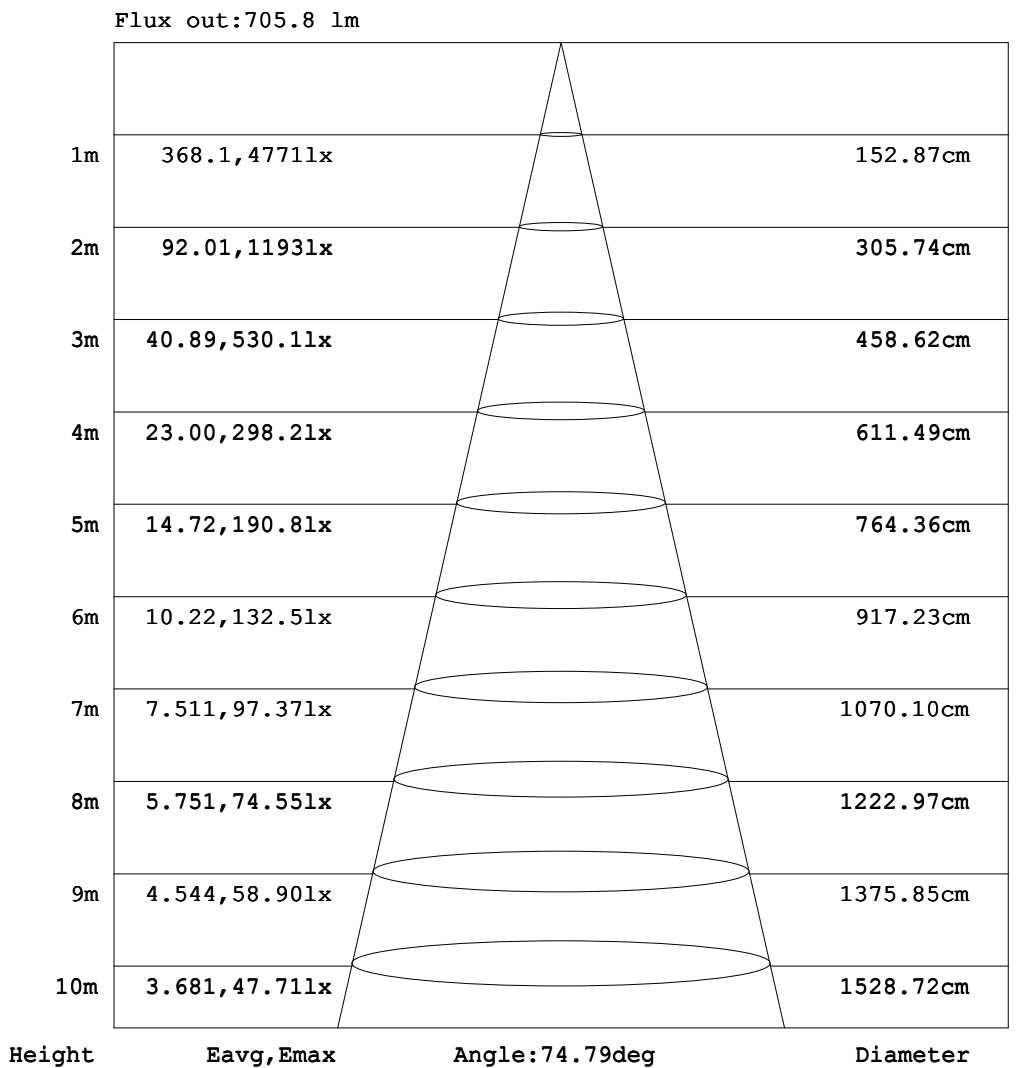


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-11-06

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:0.0530A P:10.90W PF:0.9080 Freq:0Hz Lamp Flux:719.232x1 lm		
NAME: ALST45-11G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:38	Shielding Angle:



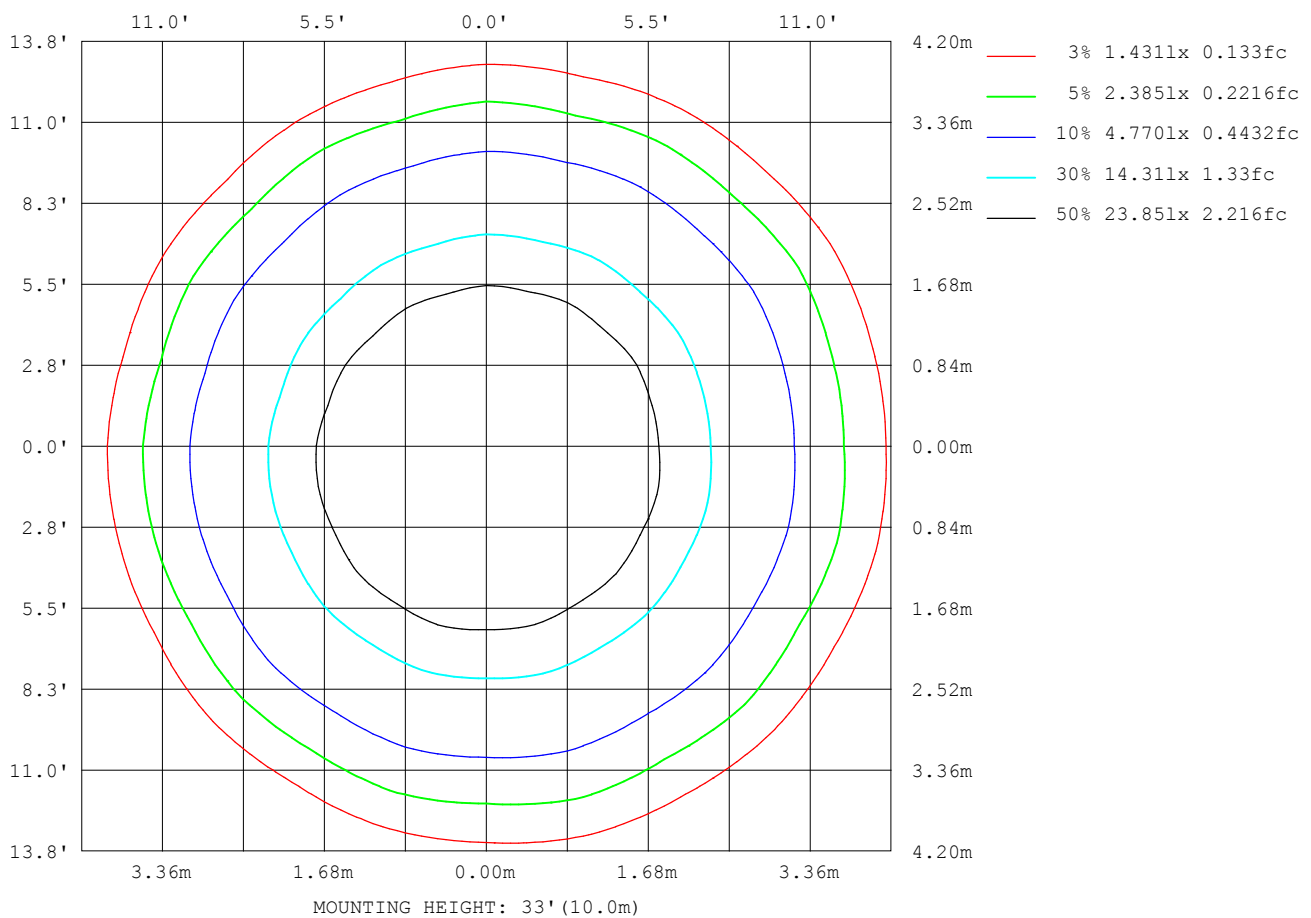
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.0530A P:10.90W PF:0.9080 Freq:0Hz Lamp Flux:719.232x1 lm		
NAME: ALST45-11G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:38	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:0.0530A P:10.90W PF:0.9080 Freq:0Hz Lamp Flux:719.232x1 lm		
NAME: ALST45-11G30-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:38	Shielding Angle:

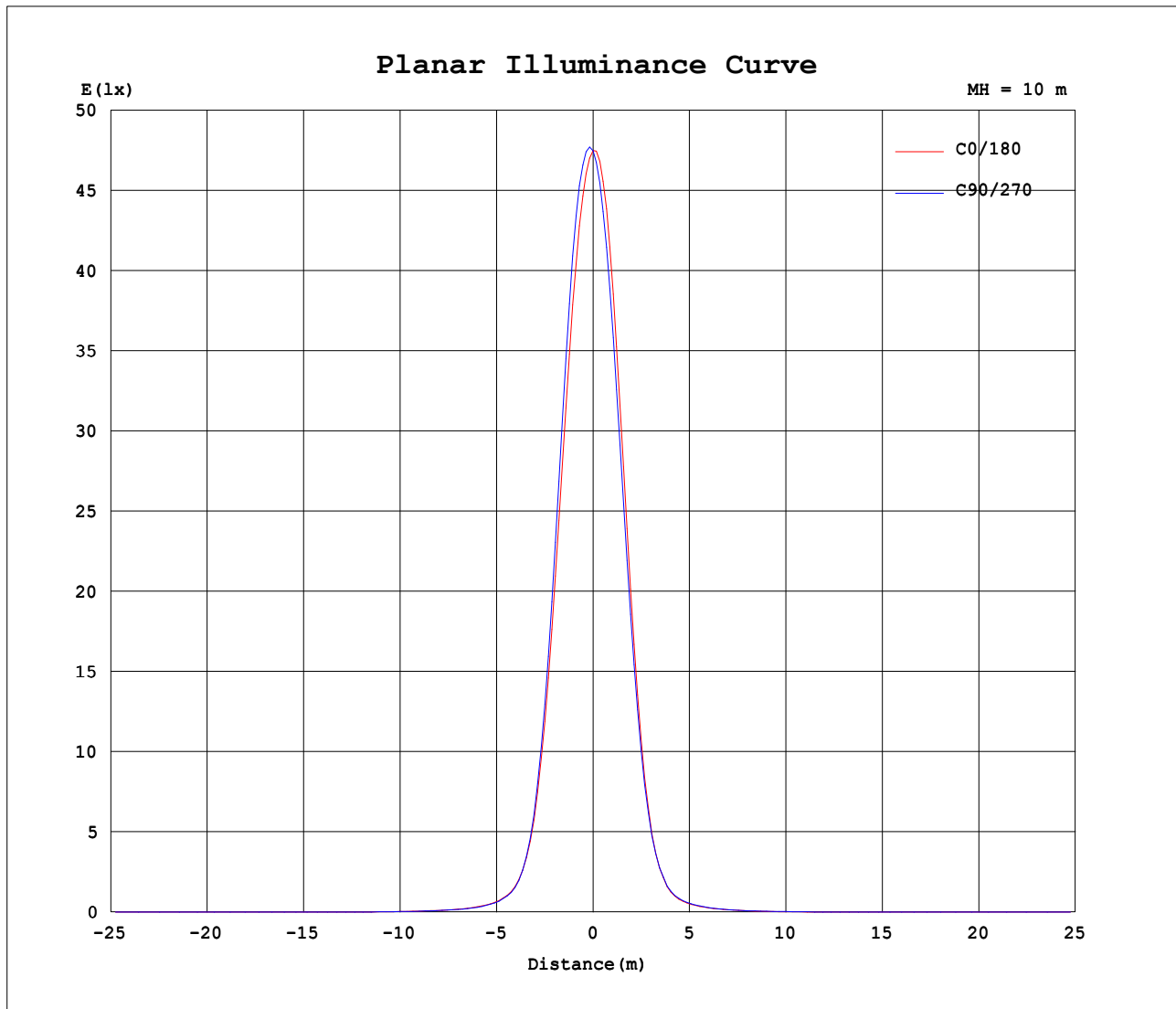
AvgL	cd/m2
L_0~180 (65) av	207
L_0~180 (75) av	172
L_0~180 (85) av	453
L_90~270 (65) av	177
L_90~270 (75) av	104
L_90~270 (85) av	453
L_45 (65) av	187
L_45 (75) av	191
L_45 (85) av	561

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:

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