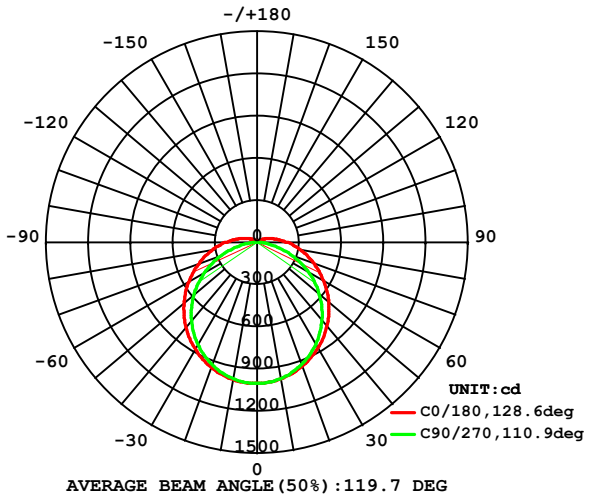
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.4V I:0.2506A P:30.06W PF:0.9901 Lamp Flux:3422.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION ANGLE:

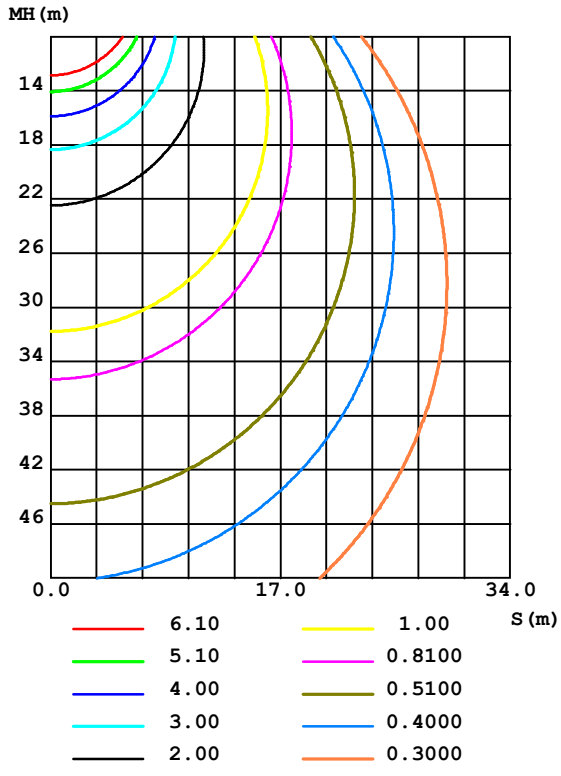
DATA OF LAMP		PHOTOMETRIC DATA Eff: 113.84 lm/W			
MODEL ASD-LVP2SM-4N3135HE		Imax(cd)	1005	S/MH(C0/180)	1.29
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	3422.4	η UP,DN(C0-180)	3.0,46.2
NOMINAL FLUX(lm)	3422.4	CIE CLASS	DIRECT	η UP,DN(C180-360)	3.3,47.5
LAMPS INSIDE	1	η up(%)	6.4	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120.4	η down(%)	93.6	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):119.7 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2015-09-26

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

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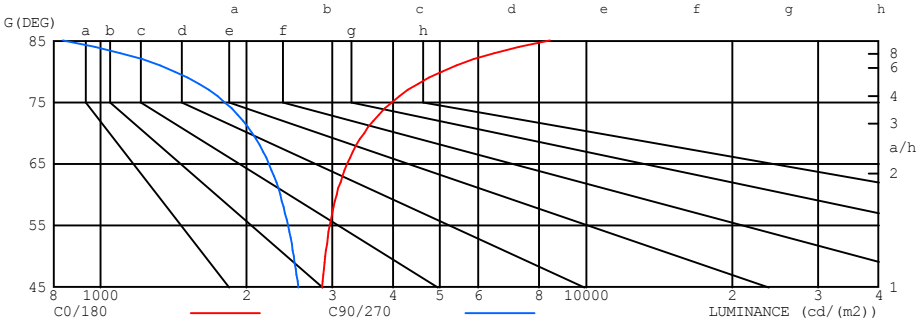
ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	985.9	989.7	983.8	978.5	991.5	983.4	985.3	994.6	0- 10	95.00	95.00	2.76,2.76
20	939.4	942.4	926.7	920.2	949.3	929.6	930.0	951.9	10- 20	272.5	367.5	10.7,10.7
30	868.8	865.3	837.0	832.4	880.7	846.3	842.1	879.0	20- 30	414.8	782.3	22.7,22.7
40	776.2	763.2	719.9	721.0	789.2	738.2	726.7	780.4	30- 40	505.0	1287	37.4,37.4
50	667.2	641.3	580.8	592.4	680.6	612.4	589.2	661.7	40- 50	534.1	1821	52.9,52.9
60	547.5	507.5	423.6	455.3	561.2	476.7	433.9	529.7	50- 60	502.0	2323	67.4,67.4
70	426.4	371.0	254.0	321.5	440.0	341.8	266.1	393.5	60- 70	417.8	2741	79.6,79.6
80	313.1	246.1	89.25	204.0	325.1	221.2	100.9	266.8	70- 80	301.0	3042	88.3,88.3
90	216.5	147.7	0.6011	116.0	225.6	128.3	3.943	164.2	80- 90	183.8	3226	93.6,93.6
100	140.1	81.67	0.5405	61.27	146.8	68.64	1.049	91.69	90-100	107.1	3333	96.7,96.7
110	84.23	41.02	0.5678	30.67	89.71	34.85	0.6409	45.74	100-110	59.67	3393	98.5,98.5
120	46.39	17.95	0.8263	14.39	51.06	16.88	0.9182	20.26	110-120	30.32	3423	99.3,99.3
130	22.63	7.351	1.046	5.998	26.42	7.349	1.175	8.740	120-130	13.62	3437	99.7,99.7
140	9.230	2.987	1.210	2.497	11.08	3.335	1.494	3.911	130-140	5.449	3442	99.9,99.9
150	3.276	1.705	1.430	1.719	4.412	1.825	1.704	2.200	140-150	2.038	3444	100,100
160	1.732	1.682	1.508	1.696	1.824	1.709	1.766	1.751	150-160	0.8894	3445	100,100
170	1.708	1.773	1.644	1.787	1.798	1.728	1.821	1.742	160-170	0.4869	3446	100,100
180	1.774	1.824	1.793	1.837	1.837	1.824	1.836	1.815	170-180	0.1689	3446	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	8420	837
80	5042	1422
75	3976	1804
70	3486	2054
65	3220	2223
60	3062	2343
55	2964	2431
50	2902	2500
45	2861	2553

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2015-09-26

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

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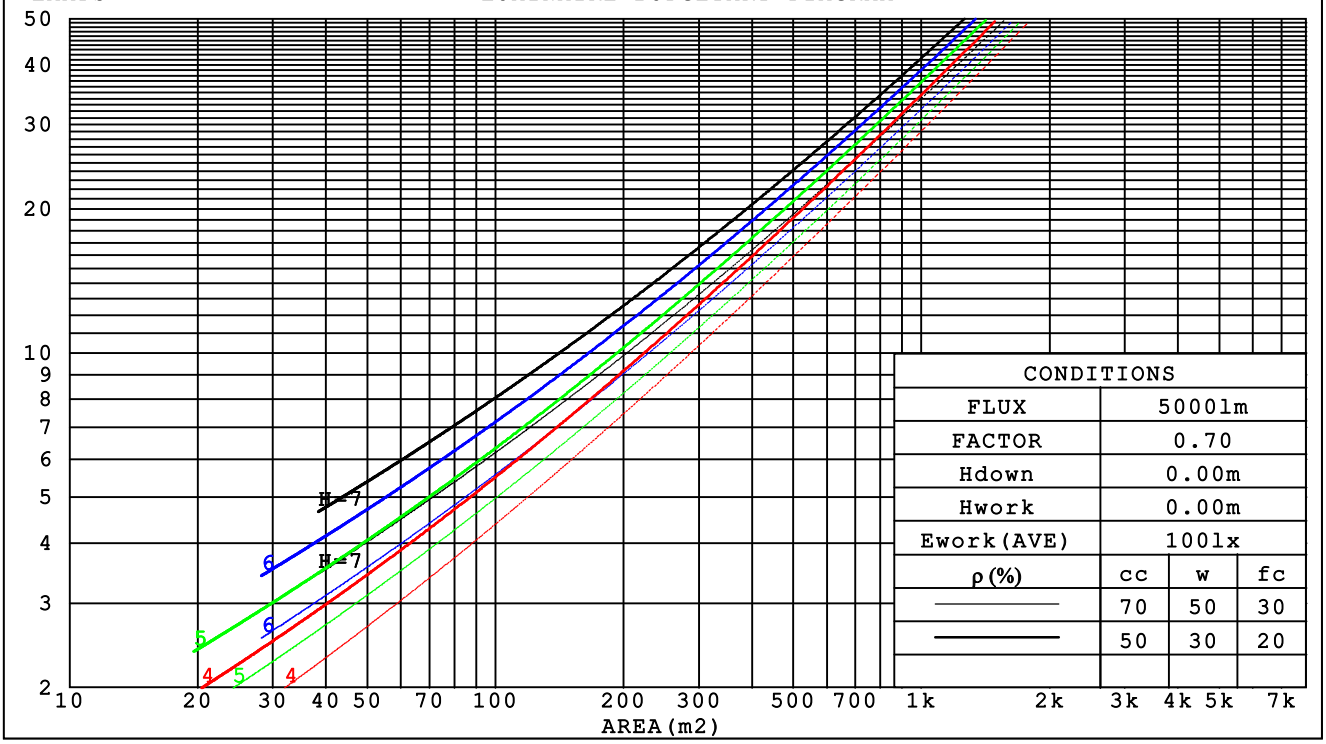
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.4V I:0.2506A P:30.06W PF:0.9901 Lamp Flux:3422.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION 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			Coefficients of Utilization(CU)												
0.0	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.96	.96	.96	.94
1.0	.00	.95	.90	.97	.92	.88	.91	.88	.84	.86	.83	.81	.82	.79	.77	.75
2.0	.86	.79	.72	.84	.77	.71	.79	.73	.68	.75	.70	.66	.71	.67	.63	.61
3.0	.75	.66	.59	.73	.65	.58	.69	.62	.57	.65	.60	.55	.62	.57	.53	.50
4.0	.66	.57	.50	.64	.56	.49	.61	.54	.48	.58	.52	.46	.55	.50	.45	.43
5.0	.59	.50	.43	.57	.49	.42	.55	.47	.41	.52	.45	.40	.49	.44	.39	.37
6.0	.53	.44	.37	.52	.43	.37	.49	.42	.36	.47	.40	.35	.45	.39	.34	.32
7.0	.48	.39	.33	.47	.38	.32	.45	.37	.32	.43	.36	.31	.41	.35	.30	.28
8.0	.44	.35	.29	.43	.34	.29	.41	.33	.28	.39	.32	.28	.37	.31	.27	.25
9.0	.40	.32	.26	.39	.31	.26	.38	.30	.25	.36	.29	.25	.35	.29	.24	.22
10.0	.37	.29	.23	.36	.28	.23	.35	.28	.23	.33	.27	.22	.32	.26	.22	.20



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2015-09-26

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.4V I:0.2506A P:30.06W PF:0.9901 Lamp Flux:3422.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION 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 Coeffcients(WEC)									
0.0																
1.0	.356	.203	.064	.347	.198	.063	.330	.189	.060	.314	.181	.058	.300	.174	.056	
2.0	.318	.174	.054	.310	.171	.053	.295	.164	.051	.281	.157	.049	.268	.151	.048	
3.0	.287	.153	.046	.280	.150	.045	.266	.144	.044	.254	.139	.043	.242	.134	.041	
4.0	.261	.136	.040	.254	.133	.039	.242	.128	.038	.231	.124	.037	.220	.120	.036	
5.0	.239	.122	.035	.233	.120	.035	.222	.116	.034	.212	.112	.033	.202	.108	.032	
6.0	.220	.110	.032	.215	.108	.031	.205	.105	.031	.195	.102	.030	.187	.098	.029	
7.0	.203	.101	.029	.199	.099	.028	.190	.096	.028	.181	.093	.027	.174	.090	.026	
8.0	.189	.092	.026	.185	.091	.026	.177	.088	.025	.169	.086	.025	.162	.083	.024	
9.0	.177	.086	.024	.173	.084	.024	.165	.082	.023	.159	.079	.023	.152	.077	.022	
10.0	.166	.079	.022	.162	.078	.022	.155	.076	.021	.149	.074	.021	.143	.072	.021	

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	.239	.239	.239	.204	.204	.204	.139	.139	.139	.080	.080	.080	.026	.026	.026	
1.0	.233	.205	.180	.199	.176	.155	.136	.121	.107	.078	.070	.062	.025	.023	.020	
2.0	.225	.181	.144	.193	.156	.125	.132	.108	.087	.076	.063	.051	.024	.020	.017	
3.0	.217	.164	.121	.186	.141	.105	.128	.098	.074	.074	.057	.044	.024	.019	.014	
4.0	.210	.151	.106	.180	.131	.092	.124	.091	.065	.072	.053	.038	.023	.017	.013	
5.0	.202	.141	.096	.173	.122	.083	.119	.085	.059	.069	.050	.035	.022	.016	.012	
6.0	.194	.133	.088	.167	.115	.077	.115	.080	.054	.067	.047	.032	.022	.015	.011	
7.0	.187	.126	.083	.161	.109	.072	.111	.077	.051	.065	.045	.030	.021	.015	.010	
8.0	.181	.120	.079	.156	.104	.069	.108	.073	.049	.063	.043	.029	.020	.014	.010	
9.0	.175	.115	.075	.150	.100	.066	.104	.070	.047	.061	.042	.028	.020	.014	.009	
10.0	.169	.111	.073	.145	.096	.063	.101	.068	.045	.059	.040	.027	.019	.013	.009	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2015-09-26

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

Uncorrected UGR Table

Test:U:120.4V I:0.2506A P:30.06W PF:0.9901 Lamp Flux:3422.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION 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	16.4	17.9	16.8	18.2	18.6	15.5	17.0	15.9	17.3	17.7
3H	18.6	19.9	19.0	20.3	20.7	17.0	18.4	17.4	18.7	19.1
4H	19.7	21.0	20.1	21.4	21.8	17.6	18.9	18.0	19.2	19.6
6H	20.9	22.2	21.3	22.6	23.0	17.9	19.1	18.3	19.5	20.0
8H	21.6	22.8	22.0	23.2	23.6	18.0	19.2	18.4	19.6	20.0
12H	22.4	23.5	22.8	23.9	24.4	18.0	19.2	18.4	19.6	20.0
4H 2H	17.0	18.3	17.4	18.7	19.1	16.4	17.7	16.8	18.0	18.4
3H	19.4	20.6	19.8	21.0	21.4	18.1	19.3	18.5	19.7	20.1
4H	20.7	21.8	21.2	22.2	22.7	18.8	19.9	19.3	20.3	20.8
6H	22.1	23.1	22.6	23.5	24.0	19.4	20.3	19.9	20.8	21.3
8H	22.9	23.8	23.4	24.3	24.8	19.5	20.4	20.0	20.9	21.4
12H	23.8	24.6	24.3	25.1	25.6	19.6	20.4	20.1	20.9	21.5
8H 4H	21.0	21.9	21.6	22.4	22.9	19.5	20.4	20.0	20.9	21.4
6H	22.7	23.5	23.3	24.0	24.5	20.3	21.1	20.9	21.6	22.2
8H	23.7	24.3	24.2	24.9	25.5	20.7	21.3	21.2	21.9	22.5
12H	24.8	25.4	25.4	25.9	26.6	20.9	21.5	21.5	22.0	22.7
12H 4H	21.1	21.9	21.6	22.4	22.9	19.7	20.5	20.2	21.0	21.5
6H	22.8	23.5	23.4	24.0	24.6	20.7	21.3	21.2	21.9	22.5
8H	23.9	24.5	24.5	25.0	25.6	21.1	21.7	21.7	22.3	22.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 3446 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.3)

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Operators:
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γ Range: 0 - 180DEG
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Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.4V I:0.2506A P:30.06W PF:0.9901 Lamp Flux:3422.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION 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) x RCR = 5									
k = 0.60	53	41	34	52	41	34	51	40	34	27
0.80	63	50	43	62	50	42	59	49	42	35
1.00	71	59	51	69	58	50	67	59	50	42
1.25	78	66	58	76	65	58	73	63	57	48
1.50	83	72	64	81	71	63	77	68	62	53
2.00	90	80	72	88	78	71	83	76	70	60
2.50	94	85	78	92	83	77	87	80	74	64
3.00	98	89	83	95	87	81	90	84	79	68
4.00	102	95	89	99	93	88	94	89	84	73
5.00	105	99	94	102	96	92	96	92	88	77
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

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Humidity:65.0%
Test Distance:18.400m [K=1.0000]
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D:\卜礼佳\ASD-LVP2SM-4N3135HE.GOS

ISOCANDELA DIAGRAM

Test:U:120.4V I:0.2506A P:30.06W PF:0.9901 Lamp Flux:3422.4x1 lm		
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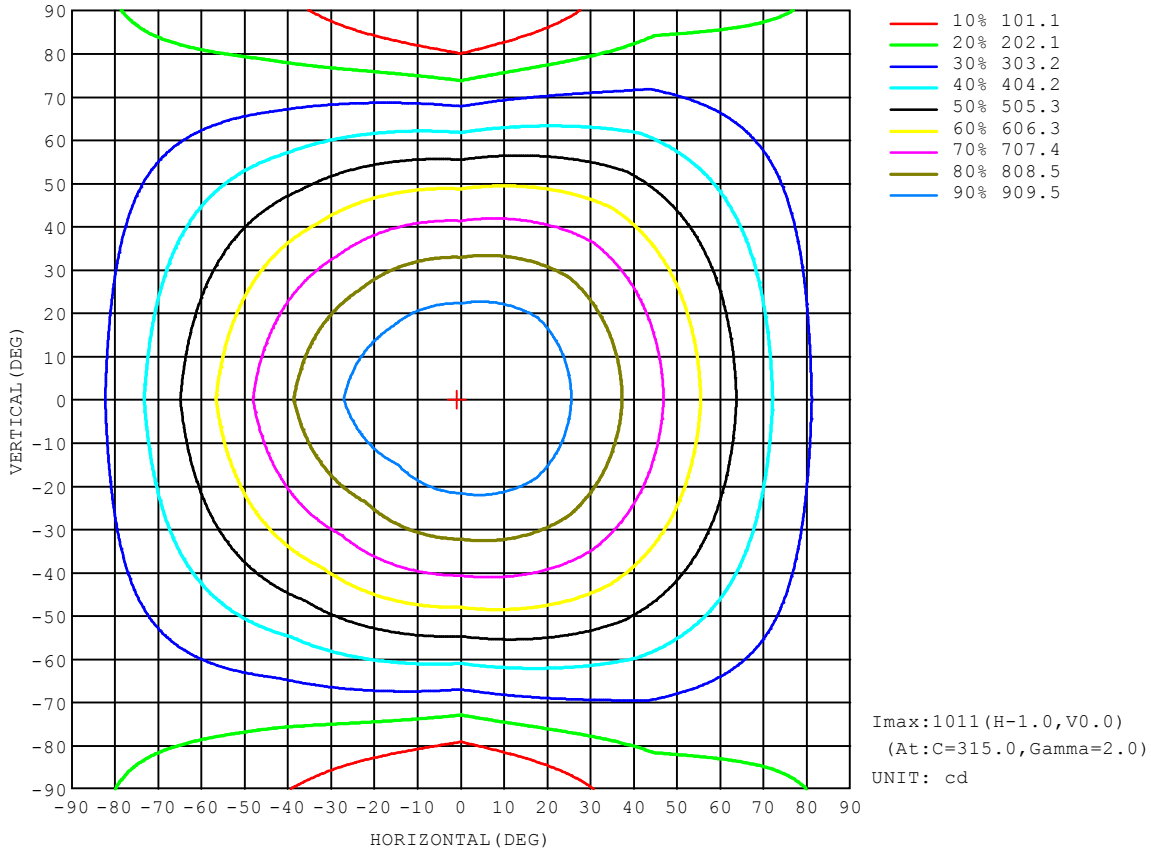

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Humidity:65.0%
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AAI Figure

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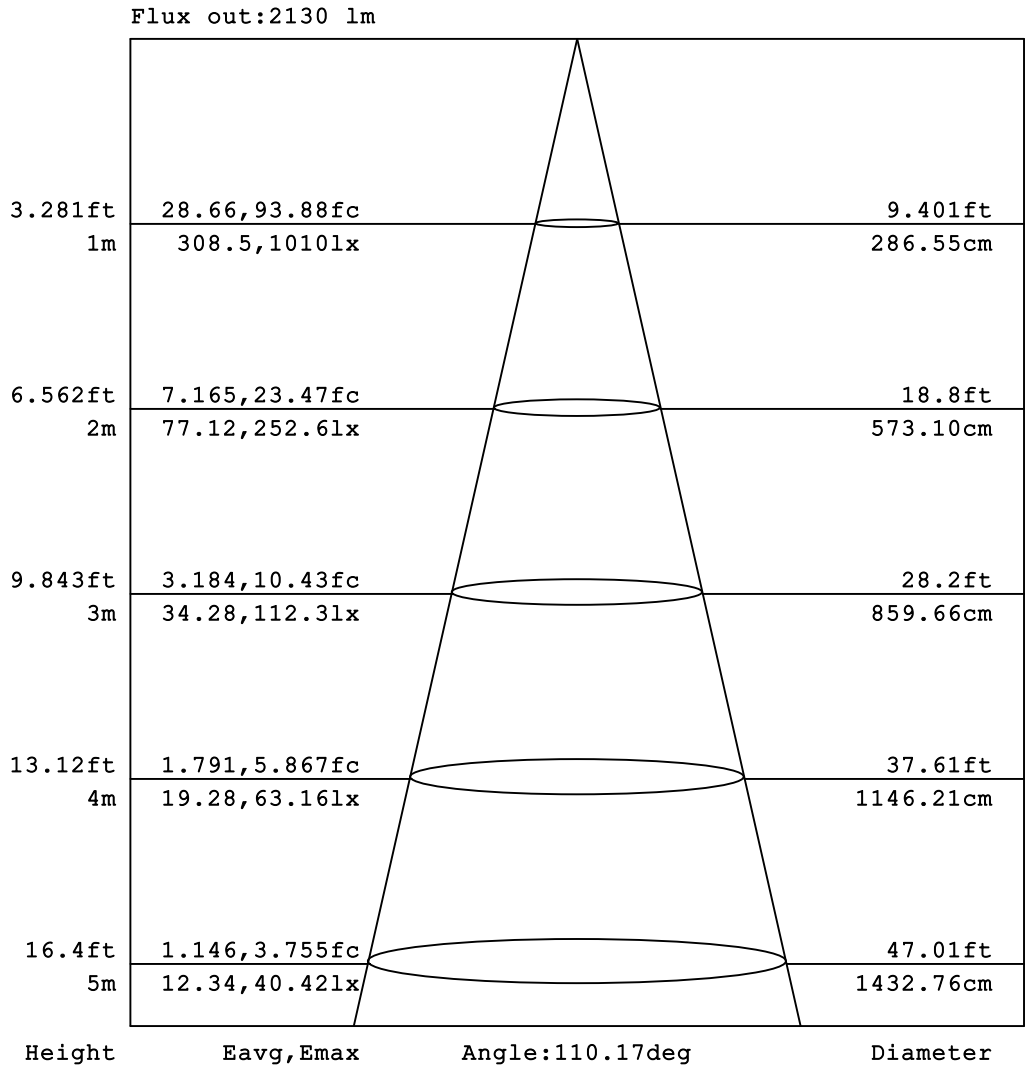

Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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ISOLUX DIAGRAM

Test:U:120.4V I:0.2506A P:30.06W PF:0.9901 Lamp Flux:3422.4x1 lm		
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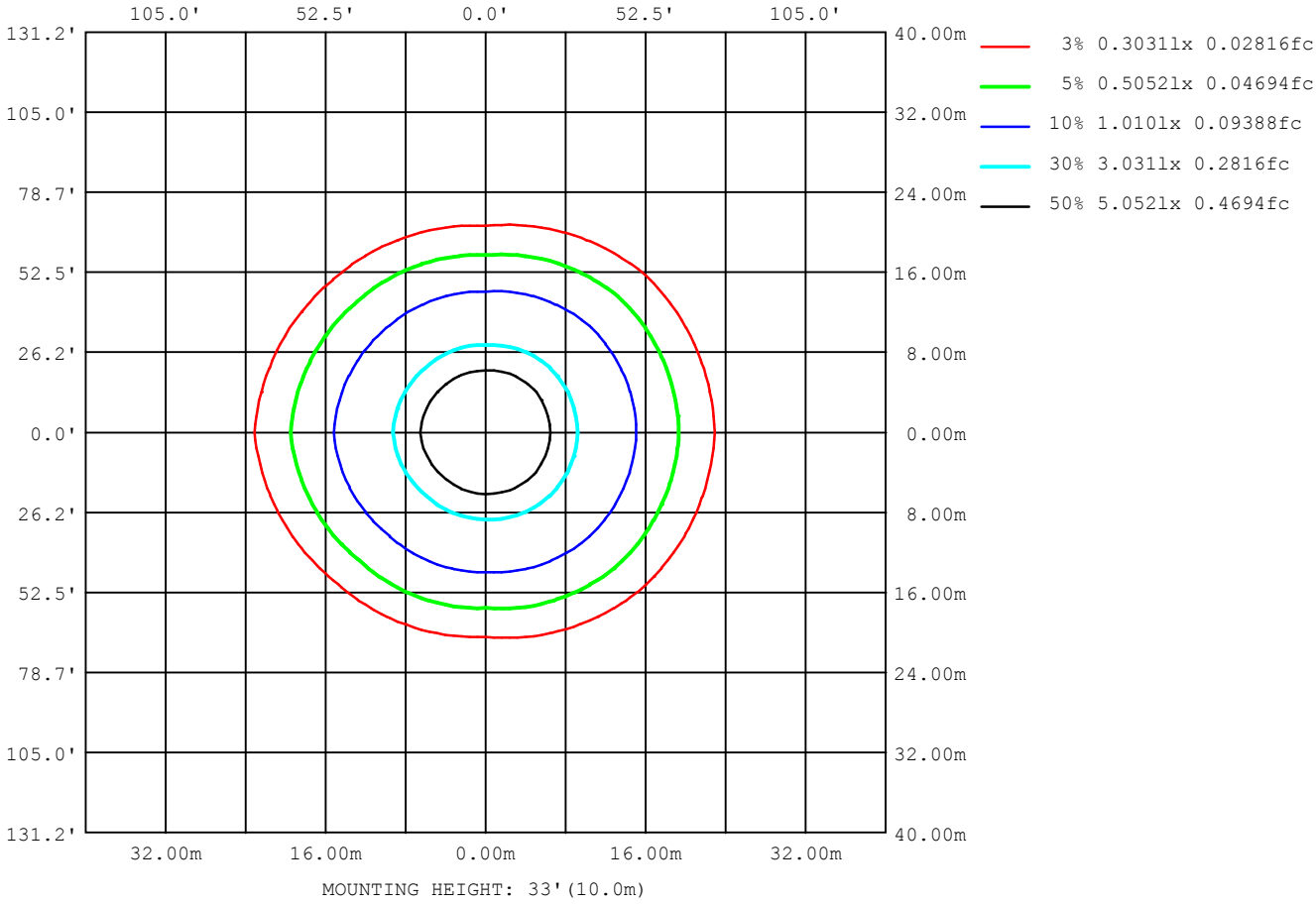
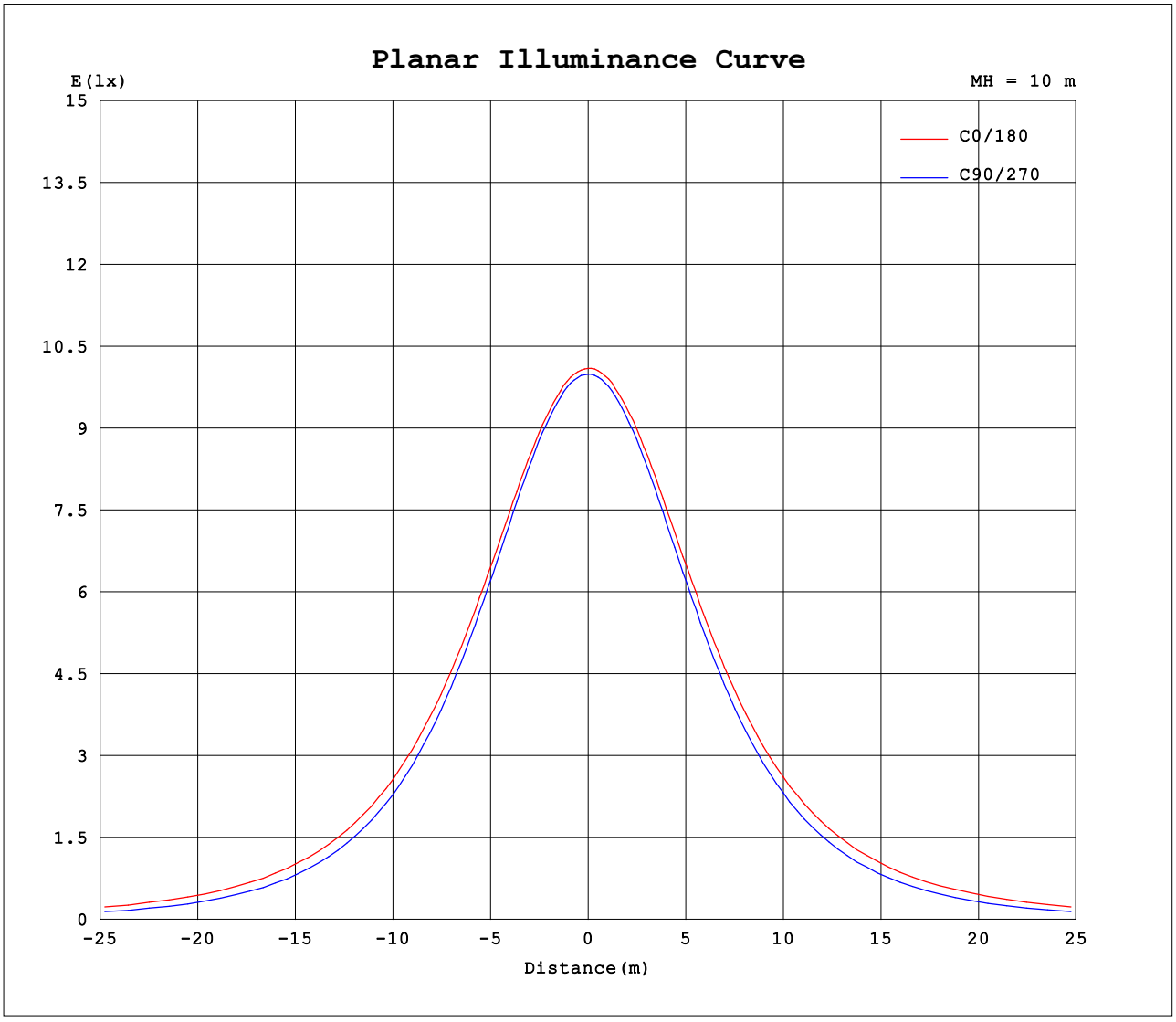


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2015-09-26

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

D:\卜礼佳\ASD-LVP2SM-4N3135HE.GOS

Planar Illuminance Curve



C Range: 0 - 360DEG
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LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.4V I:0.2506A P:30.06W PF:0.9901 Lamp Flux:3422.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION ANGLE:

Table--1 UNIT: cd

γ (DEG) \ C (DEG)	0	45	90	135	180	225	270	315											
0	1004	1004	1004	1004	1004	1004	1004	1004											
5	999	1001	998	996	1001	998	999	1004											
10	986	990	984	978	992	983	985	995											
15	966	970	959	953	974	961	962	978											
20	939	942	927	920	949	930	930	952											
25	907	907	886	879	918	891	890	919											
30	869	865	837	832	881	846	842	879											
35	825	817	781	779	837	795	787	833											
40	776	763	720	721	789	738	727	780											
45	723	704	653	658	737	677	661	723											
50	667	641	581	592	681	612	589	662											
55	608	575	504	524	622	545	514	597											
60	548	508	424	455	561	477	434	530											
65	487	439	340	387	500	408	351	461											
70	426	371	254	321	440	342	266	394											
75	368	306	169	260	381	279	181	328											
80	313	246	89.2	204	325	221	101	267											
85	262	193	26.4	156	273	171	34.8	212											
90	217	148	0.60	116	226	128	3.94	164											
95	176	111	0.57	84.9	183	94.4	2.50	123											
100	140	81.7	0.54	61.3	147	68.6	1.05	91.7											
105	110	56.6	0.55	43.6	116	49.0	0.53	66.5											
110	84.2	41.0	0.57	30.7	89.7	34.8	0.64	45.7											
115	63.2	28.3	0.75	21.2	68.3	24.5	0.77	33.1											
120	46.4	17.9	0.83	14.4	51.1	16.9	0.92	20.3											
125	33.1	11.5	0.90	9.50	37.3	11.4	1.05	13.0											
130	22.6	7.35	1.05	6.00	26.4	7.35	1.17	8.74											
135	14.8	4.66	1.14	3.88	17.5	4.94	1.30	5.75											
140	9.23	2.99	1.21	2.50	11.1	3.34	1.49	3.91											
145	5.60	2.12	1.30	1.81	7.31	2.31	1.63	2.76											
150	3.28	1.71	1.43	1.72	4.41	1.82	1.70	2.20											
155	2.09	1.67	1.47	1.64	2.55	1.70	1.74	1.90											
160	1.73	1.68	1.51	1.70	1.82	1.71	1.77	1.75											
165	1.70	1.72	1.56	1.75	1.76	1.72	1.79	1.74											
170	1.71	1.77	1.64	1.79	1.80	1.73	1.82	1.74											
175	1.71	1.82	1.73	1.83	1.82	1.74	1.84	1.75											
180	1.77	1.82	1.79	1.84	1.84	1.82	1.84	1.82											

C Range: 0 - 360DEG
C Interval: 45.0DEG
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