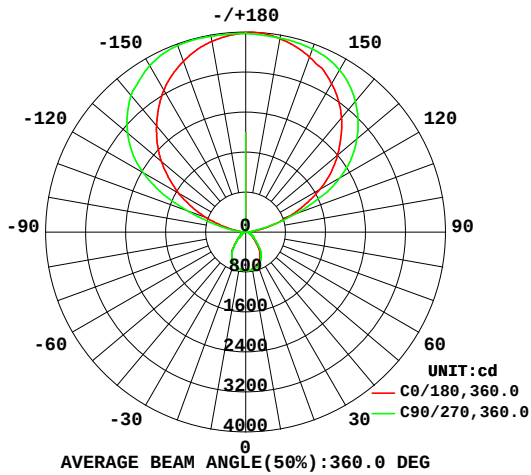


LUMINAIRE PHOTOMETRIC TEST REPORT

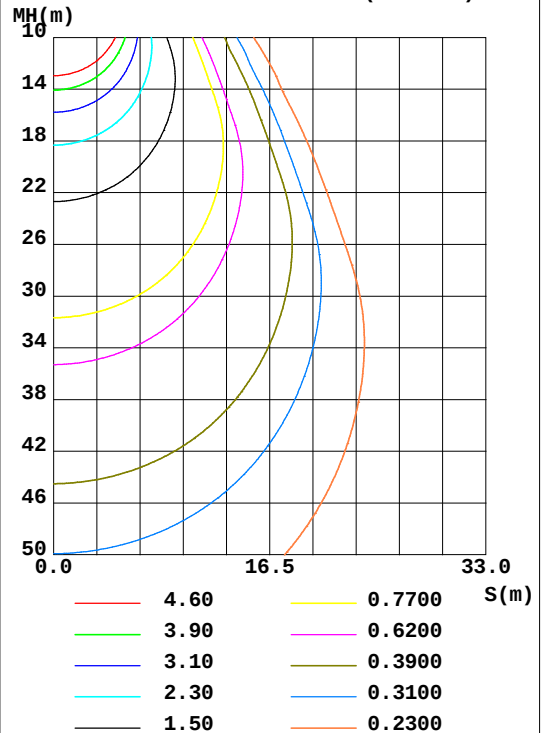
Test:U:220.8V I:0.4550A P:99.00W PF:0.9840 Lamp Flux:13682.7x1 lm		
NAME: UNIFY落地灯 上下 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 138.21 lm/W			
MODEL		I _{max} (cd)	3998	S/MH(C0/180)	1.14
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.19
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	13683	η UP, DN(C0-180)	45.5, 5.0
NOMINAL FLUX(lm)	13682.7	CIE CLASS	SEMI-IND.	η UP, DN(C180-360)	44.0, 5.5
LAMPS INSIDE	1	η up(%)	89.5	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220.0	η down(%)	10.5	CIBSE SHR MAX	1.25

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity: 65.0%
Test Distance: 9.460m [K=1.0571]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	ϕ zone	ϕ total	%lum,lamp
5	766.5	765.7	765.9	767.7	769.5	771.6	772.7	770.6	0- 5	18.43	18.43	0.13,0.13
10	750.0	749.2	750.4	752.9	756.6	761.7	764.7	758.9	5- 10	54.54	72.97	0.53,0.53
15	721.8	720.8	723.6	726.6	732.5	741.6	747.9	737.0	10- 15	88.25	161.2	1.18,1.18
20	680.1	677.4	681.7	685.6	695.3	708.8	719.2	701.9	15- 20	117.5	278.8	2.04,2.04
25	624.9	618.1	623.8	628.9	644.1	660.5	675.5	651.4	20- 25	140.1	418.8	3.06,3.06
30	558.4	548.8	553.5	561.3	581.2	598.4	616.5	587.3	25- 30	154.0	572.8	4.19,4.19
35	480.3	476.5	469.8	489.5	506.6	529.1	544.4	517.1	30- 35	158.7	731.5	5.35,5.35
40	368.8	388.7	351.5	403.1	405.2	454.8	456.4	442.3	35- 40	152.8	884.3	6.46,6.46
45	265.7	257.3	255.0	274.0	301.1	343.5	342.3	325.3	40- 45	130.7	1015	7.42,7.42
50	195.7	165.2	188.0	177.3	224.3	219.6	256.6	205.0	45- 50	99.47	1114	8.14,8.14
55	153.5	104.6	147.6	113.3	168.4	148.0	189.4	136.0	50- 55	74.50	1189	8.69,8.69
60	116.0	79.49	111.8	83.72	124.7	99.13	142.4	91.60	55- 60	56.44	1245	9.1,9.1
65	101.1	82.97	96.44	85.14	105.1	83.92	109.3	80.46	60- 65	46.80	1292	9.44,9.44
70	92.03	76.57	86.49	79.71	98.12	82.95	100.3	83.59	65- 70	45.95	1338	9.78,9.78
75	79.60	55.98	70.73	59.16	83.69	69.29	81.99	65.66	70- 75	41.25	1379	10.1,10.1
80	56.43	36.95	45.09	39.41	61.33	50.64	63.76	47.16	75- 80	32.16	1412	10.3,10.3
85	23.35	13.34	12.99	16.75	29.57	28.42	35.54	25.90	80- 85	19.96	1432	10.5,10.5
90	5.889	8.528	8.160	8.050	4.835	6.771	5.676	8.263	85- 90	6.090	1438	10.5,10.5
95	45.82	91.11	62.50	108.9	66.61	61.04	27.21	47.96	90- 95	13.05	1451	10.6,10.6
100	195.8	300.2	279.3	404.0	260.5	327.4	188.0	293.3	95-100	89.81	1540	11.3,11.3
105	468.9	768.8	676.6	825.8	555.8	735.0	533.1	688.0	100-105	250.2	1791	13.1,13.1
110	819.3	1249	1216	1348	925.5	1224	1040	1180	105-110	469.6	2260	16.5,16.5
115	1185	1692	1851	1809	1319	1657	1638	1611	110-115	696.6	2957	21.6,21.6
120	1547	2091	2362	2211	1721	2072	2180	2017	115-120	887.7	3845	28.1,28.1
125	1871	2453	2769	2585	2088	2441	2584	2393	120-125	1030	4875	35.6,35.6
130	2203	2775	3085	2902	2402	2791	2906	2723	125-130	1120	5995	43.8,43.8
135	2503	3052	3348	3170	2697	3090	3180	3010	130-135	1165	7160	52.3,52.3
140	2776	3282	3570	3393	2984	3312	3414	3247	135-140	1163	8323	60.8,60.8
145	3038	3469	3710	3569	3232	3501	3607	3440	140-145	1121	9444	69,69
150	3279	3616	3844	3703	3436	3633	3752	3593	145-150	1042	10486	76.6,76.6
155	3478	3729	3931	3804	3616	3713	3848	3677	150-155	929.5	11416	83.4,83.4
160	3642	3814	3974	3877	3730	3807	3900	3771	155-160	791.4	12207	89.2,89.2
165	3778	3875	3986	3927	3849	3874	3928	3846	160-165	634.8	12842	93.9,93.9
170	3878	3917	3978	3960	3932	3922	3942	3902	165-170	463.5	13306	97.2,97.2
175	3945	3946	3975	3985	3991	3959	3956	3944	170-175	282.2	13588	99.3,99.3
180	3989	3989	3989	3989	3989	3989	3989	3989	175-180	94.91	13683	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1015 lm

%lum = 7.4%
 %lamp = 7.4%

Conical surface Flux(120deg): 1245.4 lm

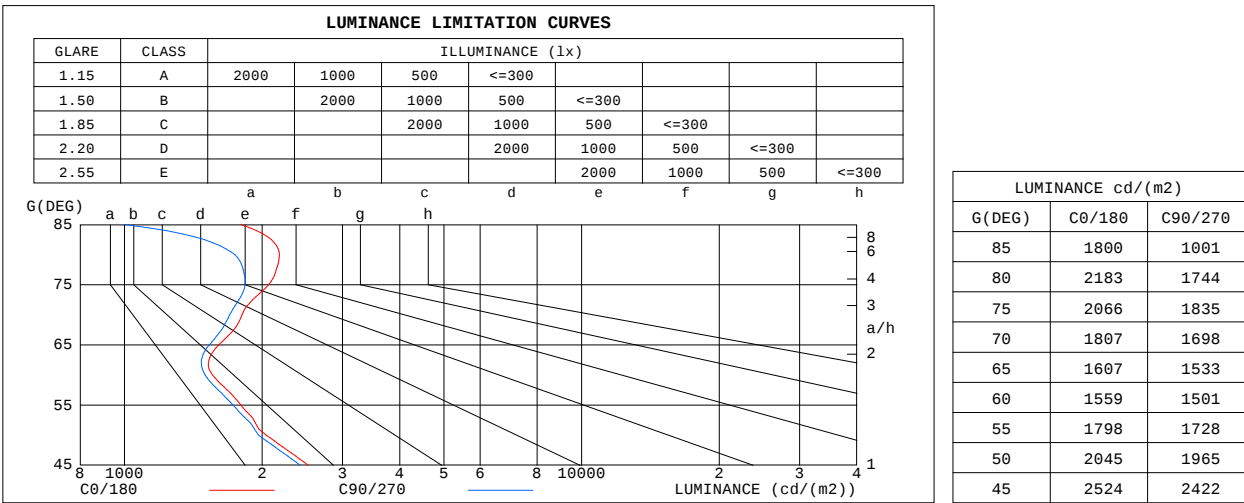
%lum = 9.1%
 %lamp = 9.1%

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0571]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.8V I:0.4550A P:99.00W PF:0.9840 Lamp Flux:13682.7x1 lm		
NAME: UNIFY落地灯 上下 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



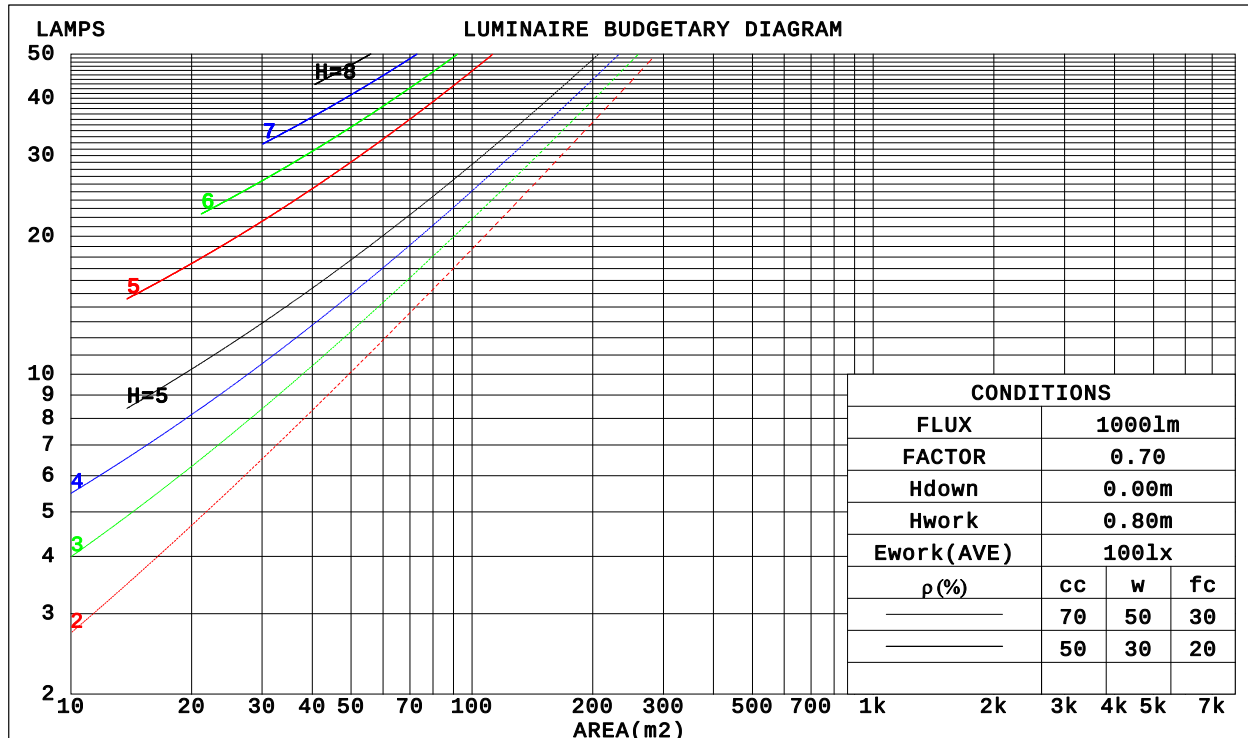
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0571]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.8V I:0.4550A P:99.00W PF:0.9840 Lamp Flux:13682.7x1 lm		
NAME: UNIFY落地灯 上下 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)										
0.0	.98	.98	.98	.85	.85	.85	.61	.61	.61	.40	.40	.40	.20	.20	.20	.11	
1.0	.85	.81	.78	.74	.71	.69	.54	.52	.50	.35	.34	.33	.18	.17	.17	.09	
2.0	.74	.69	.64	.65	.60	.56	.47	.44	.42	.31	.29	.28	.16	.15	.14	.08	
3.0	.65	.59	.53	.57	.52	.47	.42	.38	.35	.27	.25	.24	.14	.13	.13	.07	
4.0	.58	.51	.45	.51	.45	.40	.37	.33	.30	.24	.22	.20	.13	.12	.11	.06	
5.0	.51	.44	.38	.45	.39	.34	.33	.29	.26	.22	.20	.18	.11	.10	.10	.05	
6.0	.46	.39	.33	.40	.34	.30	.30	.26	.22	.20	.17	.15	.10	.09	.08	.05	
7.0	.41	.34	.29	.36	.30	.26	.27	.23	.20	.18	.15	.14	.10	.08	.08	.04	
8.0	.37	.30	.25	.33	.27	.23	.24	.20	.17	.16	.14	.12	.09	.08	.07	.04	
9.0	.34	.27	.22	.30	.24	.20	.22	.18	.15	.15	.12	.11	.08	.07	.06	.04	
10.0	.31	.24	.20	.27	.22	.18	.20	.16	.14	.14	.11	.10	.08	.06	.06	.03	



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE G0-2000_V1 SYSTEM V2.0.295T
 Humidity: 65.0%
 Test Distance: 9.460m [K=1.0571]
 Remarks:

WEC AND CCEC

Test:U:220.8V I:0.4550A P:99.00W PF:0.9840 Lamp Flux:13682.7x1 lm					
NAME: UNIFY落地灯 上下 2700K RA80			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:		Shielding Angle:

ρ_{CC}	80%			70%			50%			30%			10%			0	
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.259	.147	.047	.225	.128	.041	.161	.092	.029	.103	.059	.019	.049	.028	.009		
2.0	.238	.130	.040	.207	.114	.035	.149	.083	.026	.095	.053	.017	.046	.026	.008		
3.0	.220	.117	.035	.192	.103	.031	.138	.075	.023	.088	.048	.015	.042	.024	.007		
4.0	.204	.106	.031	.178	.093	.027	.128	.068	.020	.082	.044	.013	.040	.022	.007		
5.0	.190	.097	.028	.165	.085	.025	.120	.062	.018	.077	.041	.012	.037	.020	.006		
6.0	.177	.089	.025	.154	.078	.022	.112	.057	.017	.072	.037	.011	.035	.018	.005		
7.0	.165	.082	.023	.144	.072	.021	.105	.053	.015	.068	.035	.010	.033	.017	.005		
8.0	.155	.076	.021	.136	.067	.019	.099	.049	.014	.064	.032	.009	.031	.016	.005		
9.0	.146	.071	.020	.128	.062	.017	.093	.046	.013	.060	.030	.009	.029	.015	.004		
10.0	.137	.066	.018	.120	.058	.016	.088	.043	.012	.057	.028	.008	.028	.014	.004		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.872	.872	.872	.746	.746	.746	.509	.509	.509	.292	.292	.292	.093	.093	.093	
1.0	.864	.844	.826	.739	.724	.711	.506	.498	.492	.291	.288	.286	.093	.093	.092	
2.0	.857	.824	.797	.734	.710	.689	.503	.491	.480	.290	.286	.282	.093	.092	.092	
3.0	.851	.810	.777	.729	.699	.674	.501	.485	.473	.289	.283	.279	.093	.092	.091	
4.0	.845	.799	.764	.725	.690	.664	.498	.481	.467	.288	.282	.276	.093	.092	.091	
5.0	.839	.790	.755	.720	.684	.656	.496	.478	.464	.287	.280	.275	.093	.092	.091	
6.0	.833	.784	.748	.716	.679	.651	.494	.475	.461	.287	.279	.274	.092	.091	.090	
7.0	.828	.778	.743	.712	.674	.647	.492	.473	.459	.286	.279	.273	.092	.091	.090	
8.0	.823	.773	.739	.708	.671	.645	.490	.471	.457	.285	.278	.272	.092	.091	.090	
9.0	.818	.769	.736	.705	.668	.642	.488	.469	.456	.284	.277	.272	.092	.091	.090	
10.0	.814	.766	.734	.701	.665	.641	.487	.468	.455	.284	.277	.272	.092	.091	.090	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0571]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.8V I:0.4550A P:99.00W PF:0.9840 Lamp Flux:13682.7x1 lm											
NAME: UNIFY落地灯 上下 2700K RA80						TYPE:		WEIGHT:			
SPEC.:						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	3H	3.9	4.5	5.1	5.7	7.4	3.9	4.6	5.1	5.7	7.4
	3H	5.2	5.8	6.5	7.0	8.7	5.2	5.8	6.4	7.0	8.7
	4H	6.1	6.6	7.3	7.8	9.5	5.9	6.5	7.2	7.7	9.4
	6H	6.8	7.3	8.1	8.5	10.2	6.5	7.0	7.7	8.2	9.9
	8H	7.1	7.6	8.3	8.8	10.5	6.7	7.1	7.9	8.3	10.1
	12H	7.3	7.7	8.5	8.9	10.6	6.7	7.1	7.9	8.3	10.1
4H	2H	3.9	4.4	5.1	5.6	7.3	3.9	4.4	5.1	5.6	7.3
	3H	5.5	6.0	6.8	7.2	8.9	5.5	5.9	6.7	7.1	8.9
	4H	6.5	6.9	7.7	8.1	9.8	6.4	6.8	7.6	8.0	9.7
	6H	7.4	7.7	8.6	9.0	10.7	7.1	7.4	8.4	8.7	10.4
	8H	7.7	8.1	9.0	9.3	11.0	7.3	7.6	8.6	8.8	10.6
	12H	7.9	8.2	9.2	9.4	11.2	7.3	7.6	8.6	8.9	10.6
8H	4H	6.6	6.9	7.8	8.1	9.9	6.5	6.8	7.7	8.0	9.8
	6H	7.6	7.9	8.9	9.1	10.9	7.3	7.6	8.6	8.8	10.6
	8H	8.0	8.2	9.3	9.5	11.3	7.6	7.8	8.9	9.1	10.9
	12H	8.3	8.5	9.6	9.7	11.5	7.7	7.9	9.0	9.1	10.9
12H	4H	6.5	6.8	7.8	8.0	9.8	6.4	6.7	7.7	7.9	9.7
	6H	7.6	7.8	8.8	9.1	10.8	7.3	7.5	8.6	8.8	10.6
	8H	8.0	8.2	9.3	9.5	11.3	7.6	7.8	8.9	9.1	10.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.3					
1.5H	+ 0.4 / - 0.4					+ 0.4 / - 0.3					
2.0H	+ 0.7 / - 0.4					+ 0.7 / - 0.4					

CIE Pub.117 Corrected 13683 lm Total Lamp Luminous Flux.(8log(F/F0) = 9.1)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0571]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.8V I:0.4550A P:99.00W PF:0.9840 Lamp Flux:13682.7x1 lm		
NAME: UNIFY落地灯 上下 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

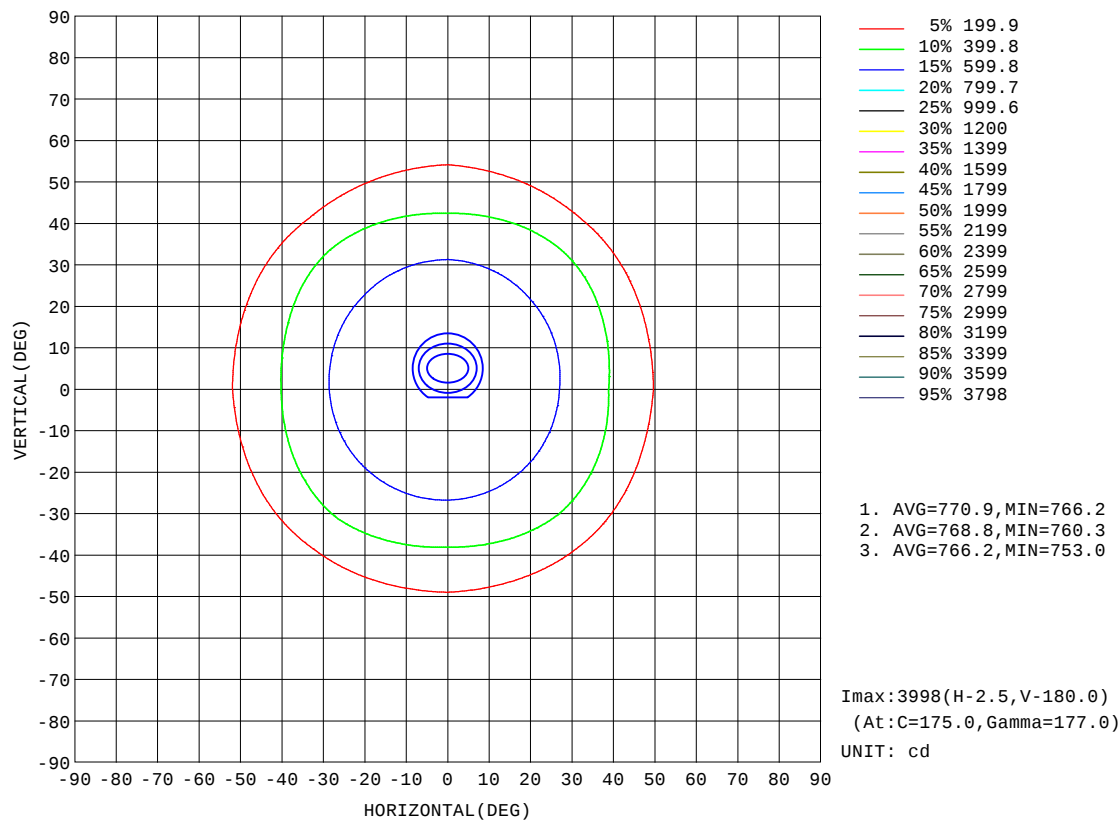
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	48	37	30	42	32	26	30	24	20	5
0.80	56	45	38	49	40	34	35	29	25	5
1.00	62	52	44	54	46	39	39	34	30	6
1.25	68	58	51	59	51	45	43	38	34	7
1.50	72	63	56	63	55	50	45	40	37	7
2.00	78	70	64	68	61	56	49	45	42	8
2.50	81	75	69	71	65	61	51	48	45	8
3.00	84	78	73	73	68	64	52	50	47	9
4.00	87	82	78	76	72	68	54	52	50	9
5.00	89	85	82	77	74	71	56	54	52	9
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Ceiling Mounted					SHRNOM = 1.00		

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0571]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.8V I:0.4550A P:99.00W PF:0.9840 Lamp Flux:13682.7x1 lm		
NAME: UNIFY落地灯 上下 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



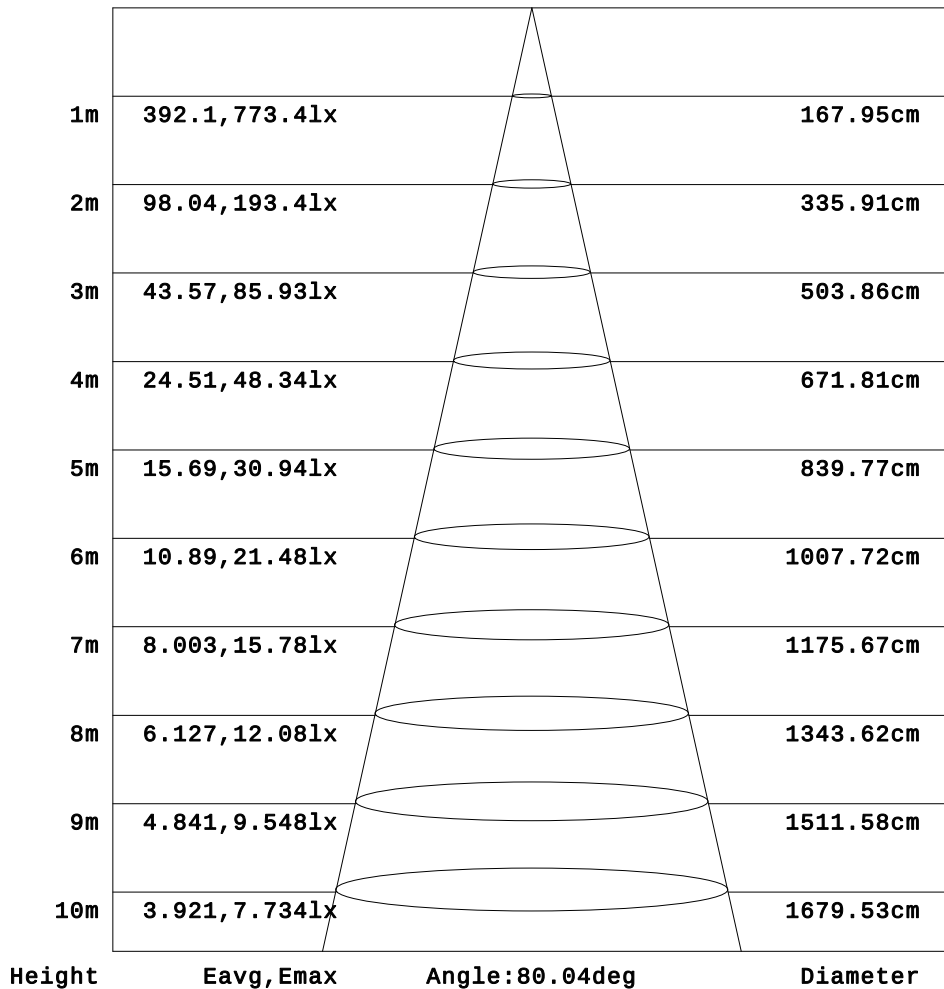
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity: 65.0%
Test Distance: 9.460m [K=1.0571]
Remarks:

AAI Figure

Test:U:220.8V I:0.4550A P:99.00W PF:0.9840 Lamp Flux:13682.7x1 lm		
NAME: UNIFY落地灯 上下 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:898.7 lm



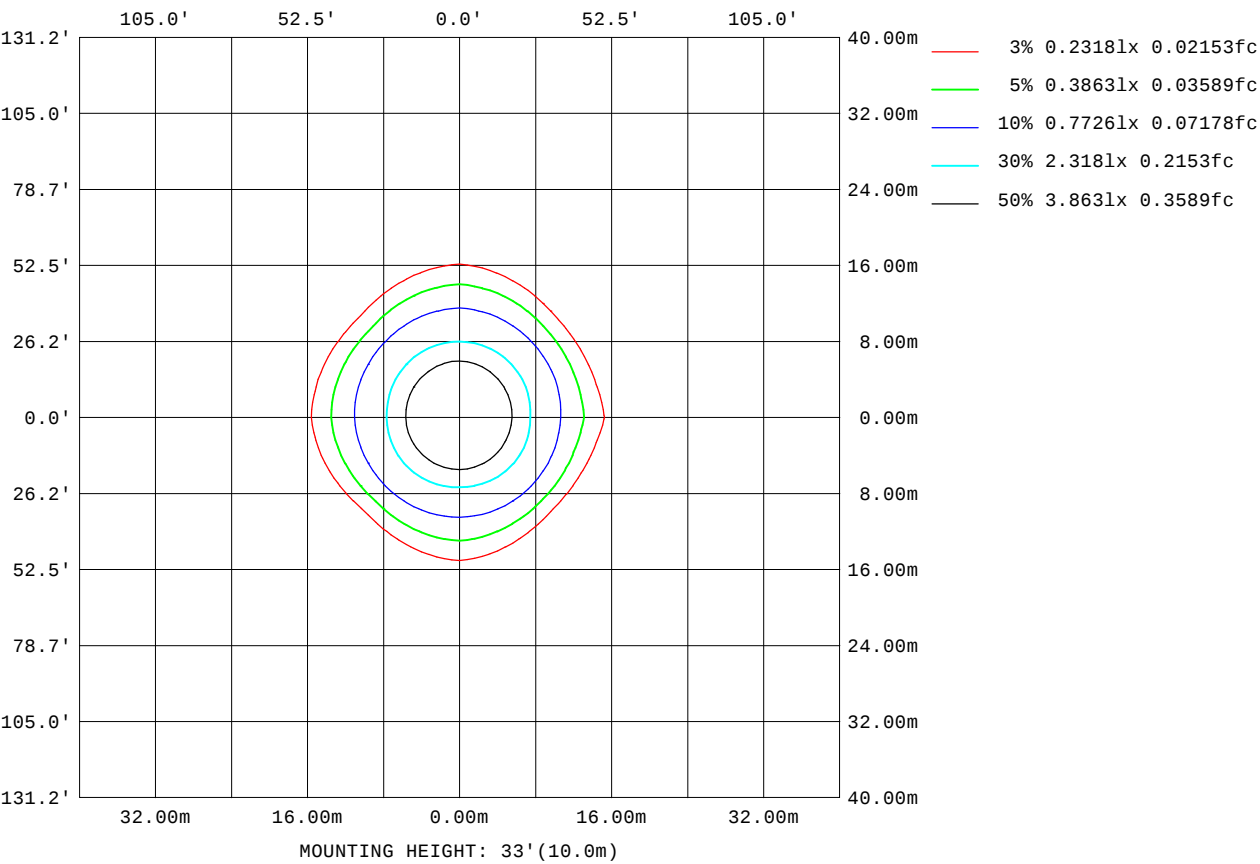
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0571]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.8V I:0.4550A P:99.00W PF:0.9840 Lamp Flux:13682.7x1 lm		
NAME: UNIFY落地灯 上下 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0571]
Remarks:

LED Avg.L Report

Test:U:220.8V I:0.4550A P:99.00W PF:0.9840 Lamp Flux:13682.7x1 lm		
NAME: UNIFY落地灯 上下 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

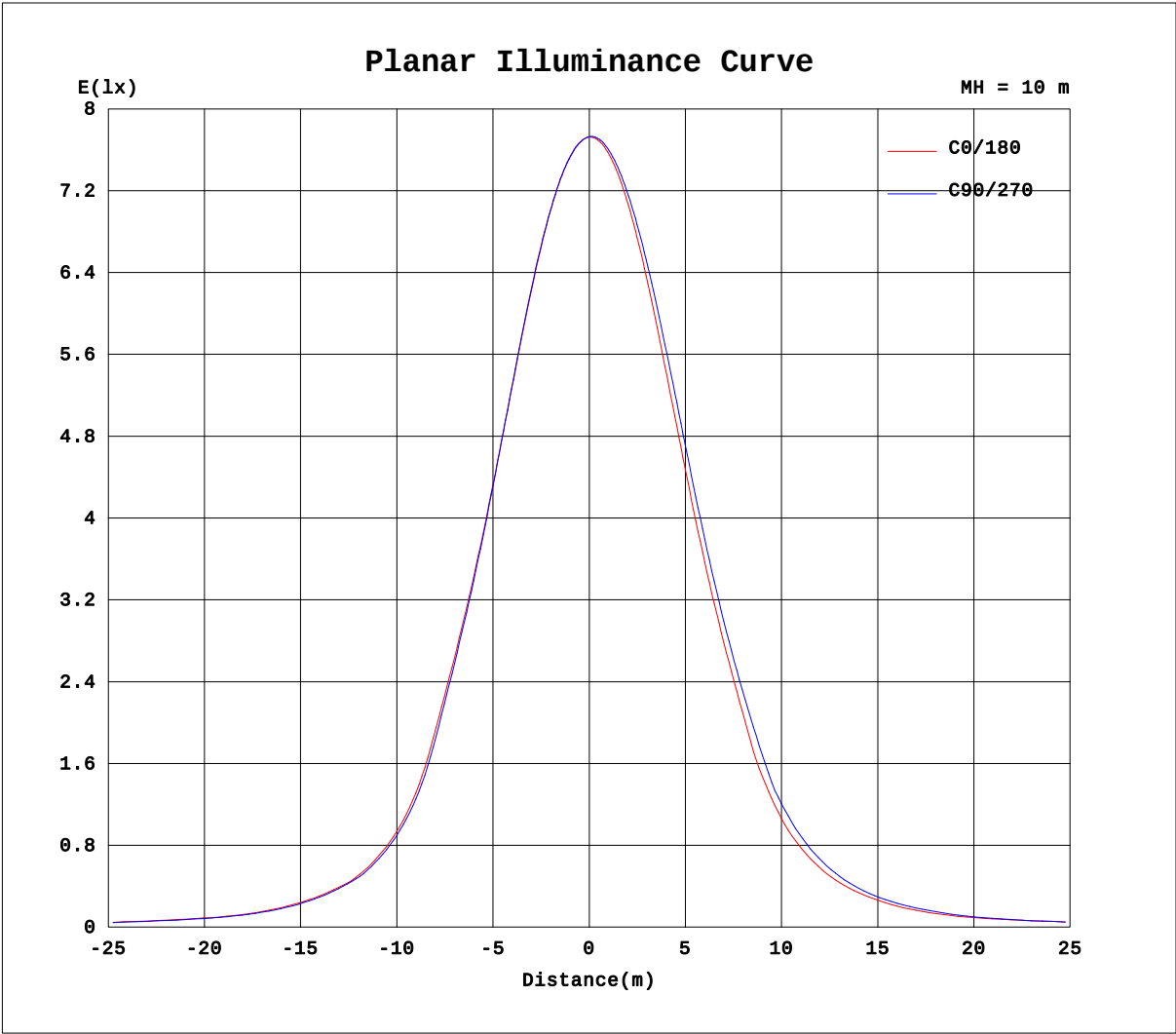
AvgL	cd/m2
L_0~180(65)av	1639
L_0~180(75)av	2119
L_0~180(85)av	2039
L_90~270(65)av	1635
L_90~270(75)av	1982
L_90~270(85)av	1870
L_45(65)av	1321
L_45(75)av	1622
L_45(85)av	1626

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0571]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0571]
Remarks: