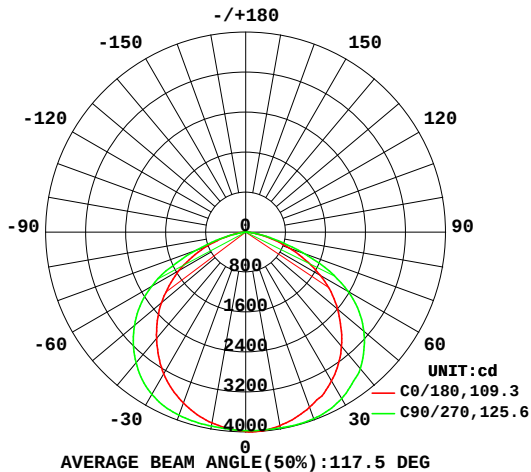


LUMINAIRE PHOTOMETRIC TEST REPORT

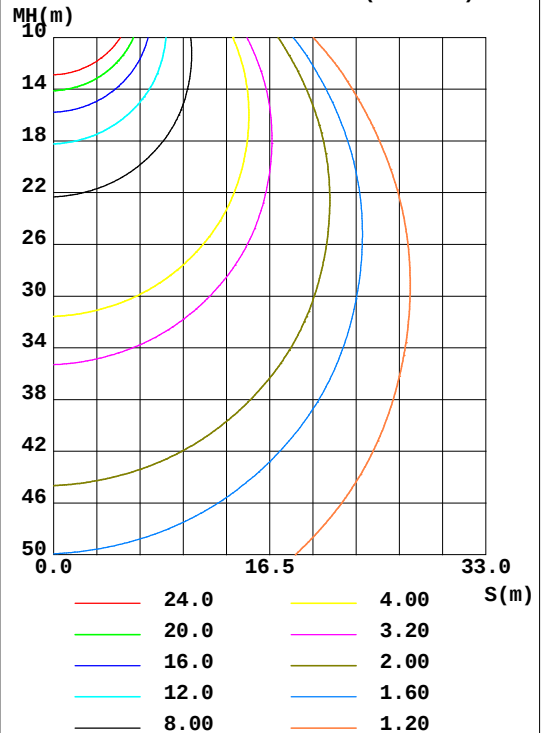
Test:U:220.7V I:0.3870A P:83.60W PF:0.9780 Lamp Flux:12187.6x1 lm		
NAME: UNIFY落地灯 上 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 145.78 lm/W			
MODEL		I _{max} (cd)	3998	S/MH(C0/180)	1.28
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.43
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	12188	η UP, DN(C0-180)	0.0,48.7
NOMINAL FLUX(lm)	12187.6	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,51.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	220.0	η down(%)	100.0	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-06-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [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	3878	3902	3942	3922	3932	3960	3978	3917	0- 10	377.1	377.1	3.09, 3.09
20	3642	3771	3900	3807	3730	3877	3974	3814	10- 20	1098	1475	12.1, 12.1
30	3279	3593	3752	3633	3436	3703	3844	3616	20- 30	1718	3193	26.2, 26.2
40	2776	3247	3414	3312	2984	3393	3570	3282	30- 40	2157	5350	43.9, 43.9
50	2203	2723	2906	2791	2402	2902	3085	2775	40- 50	2317	7667	62.9, 62.9
60	1547	2017	2180	2072	1721	2211	2362	2091	50- 60	2138	9805	80.4, 80.4
70	819.3	1180	1040	1224	925.5	1348	1216	1249	60- 70	1571	11376	93.3, 93.3
80	195.8	293.3	188.0	327.4	260.5	404.0	279.3	360.2	70- 80	710.2	12086	99.2, 99.2
90	5.889	8.263	5.676	6.771	4.835	8.050	8.160	8.528	80- 90	101.7	12188	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): 6508.2 lm

%lum = 53.4%
 %lamp = 53.4%

Conical surface Flux(120deg): 9804.7 lm

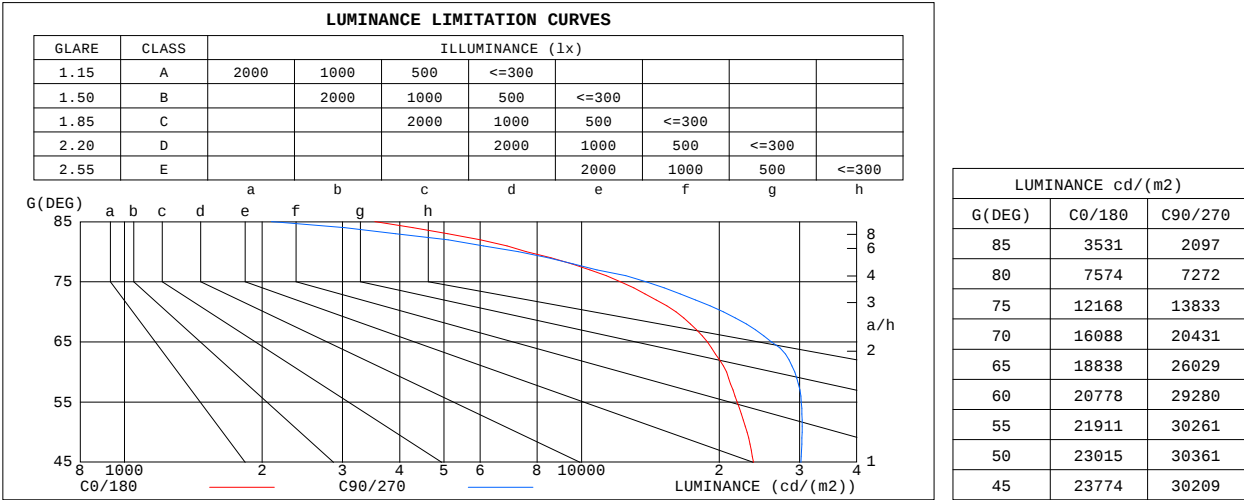
%lum = 80.4%
 %lamp = 80.4%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
 Humidity: 65.0%
 Test Distance: 9.460m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.7V I:0.3870A P:83.60W PF:0.9780 Lamp Flux:12187.6x1 lm		
NAME: UNIFY落地灯 上 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



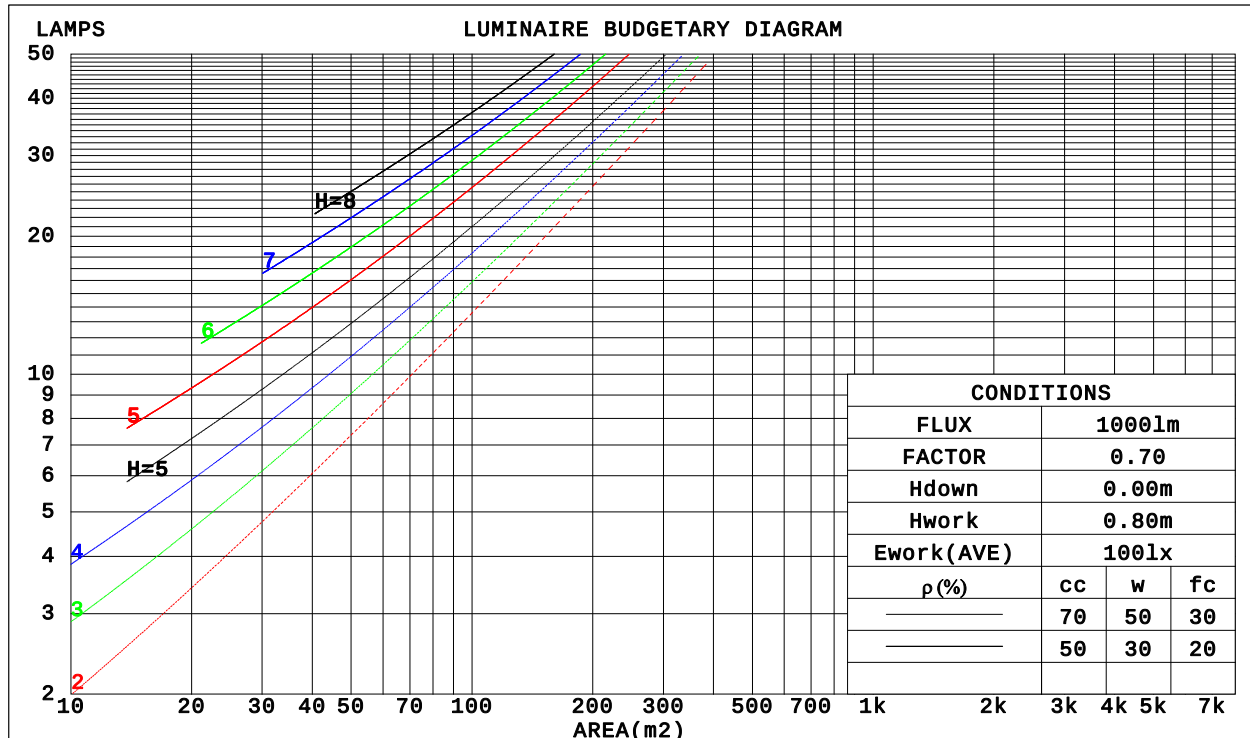
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-06-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.7V I:0.3870A P:83.60W PF:0.9780 Lamp Flux:12187.6x1 lm		
NAME: UNIFY落地灯 上 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	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	1.05	1.00	.97	1.02	.99	.95	.98	.95	.92	.94	.92	.89	.91	.89	.87	.85	
2.0	.91	.84	.79	.89	.83	.78	.86	.80	.76	.82	.78	.74	.79	.76	.73	.70	
3.0	.80	.72	.65	.78	.71	.65	.75	.69	.63	.73	.67	.62	.70	.65	.61	.59	
4.0	.71	.62	.55	.69	.61	.55	.67	.60	.54	.64	.58	.53	.62	.57	.52	.50	
5.0	.63	.54	.47	.62	.53	.47	.60	.52	.46	.58	.51	.46	.56	.50	.45	.43	
6.0	.56	.47	.41	.55	.47	.41	.54	.46	.40	.52	.45	.40	.50	.44	.40	.38	
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.40	.35	.46	.40	.35	.33	
8.0	.46	.38	.32	.46	.38	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.29	
9.0	.43	.34	.29	.42	.34	.29	.41	.33	.28	.40	.33	.28	.39	.33	.28	.26	
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.25	.24	



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.7V I:0.3870A P:83.60W PF:0.9780 Lamp Flux:12187.6x1 lm					
NAME: UNIFY落地灯 上 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	.297	.169	.053	.290	.165	.053	.277	.159	.051	.264	.153	.049	.253	.147	.047				
2.0	.285	.156	.048	.279	.154	.047	.268	.149	.046	.257	.144	.045	.247	.140	.044				
3.0	.267	.142	.043	.261	.140	.042	.251	.136	.041	.242	.132	.041	.233	.129	.040				
4.0	.248	.129	.038	.243	.127	.038	.234	.124	.037	.225	.121	.037	.217	.118	.036				
5.0	.230	.117	.034	.226	.116	.034	.218	.113	.033	.210	.111	.033	.203	.108	.033				
6.0	.214	.107	.031	.210	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030				
7.0	.199	.099	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.178	.092	.027				
8.0	.186	.091	.026	.183	.090	.026	.177	.089	.025	.172	.087	.025	.167	.086	.025				
9.0	.175	.085	.024	.172	.084	.024	.167	.082	.023	.162	.081	.023	.157	.080	.023				
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.149	.075	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.179	.156	.135	.154	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.147	.114	.085	.101	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.096	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.074	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.101	.052	.019	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.7V I:0.3870A P:83.60W PF:0.9780 Lamp Flux:12187.6x1 lm											
NAME: UNIFY落地灯 上 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	2H	23.7	25.3	24.0	25.5	25.7	24.9	26.5	25.2	26.7	26.9
	3H	24.9	26.3	25.2	26.5	26.8	26.1	27.5	26.4	27.8	28.0
	4H	25.2	26.5	25.5	26.8	27.0	26.4	27.7	26.7	28.0	28.2
	6H	25.3	26.5	25.6	26.8	27.1	26.4	27.7	26.7	27.9	28.2
	8H	25.2	26.4	25.6	26.7	27.0	26.4	27.6	26.7	27.9	28.2
	12H	25.2	26.4	25.6	26.7	27.0	26.3	27.5	26.7	27.8	28.1
4H	2H	24.5	25.9	24.9	26.1	26.4	25.5	26.8	25.8	27.0	27.3
	3H	25.8	27.0	26.2	27.3	27.6	26.8	28.0	27.2	28.3	28.6
	4H	26.2	27.3	26.6	27.6	27.9	27.1	28.2	27.5	28.5	28.9
	6H	26.4	27.3	26.8	27.7	28.0	27.2	28.2	27.6	28.5	28.9
	8H	26.4	27.2	26.8	27.6	28.0	27.2	28.1	27.6	28.5	28.8
	12H	26.3	27.1	26.8	27.5	27.9	27.2	28.0	27.6	28.4	28.8
8H	4H	26.4	27.3	26.8	27.7	28.1	27.3	28.1	27.7	28.5	28.9
	6H	26.7	27.4	27.1	27.8	28.2	27.4	28.2	27.9	28.6	29.0
	8H	26.7	27.3	27.1	27.7	28.2	27.4	28.1	27.9	28.5	28.9
	12H	26.7	27.2	27.2	27.7	28.1	27.4	28.0	27.9	28.4	28.9
12H	4H	26.4	27.2	26.8	27.6	28.0	27.2	28.0	27.7	28.4	28.8
	6H	26.7	27.3	27.1	27.7	28.2	27.4	28.1	27.9	28.5	28.9
	8H	26.7	27.2	27.2	27.7	28.2	27.4	28.0	27.9	28.4	28.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.3					+ 0.2 / - 0.3					
1.5H	+ 0.3 / - 0.6					+ 0.2 / - 0.4					
2.0H	+ 0.3 / - 0.7					+ 0.3 / - 0.5					

CIE Pub.117 Corrected 12188 lm Total Lamp Luminous Flux.(8log(F/F0) = 8.7)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.7V I:0.3870A P:83.60W PF:0.9780 Lamp Flux:12187.6x1 lm		
NAME: UNIFY落地灯 上 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

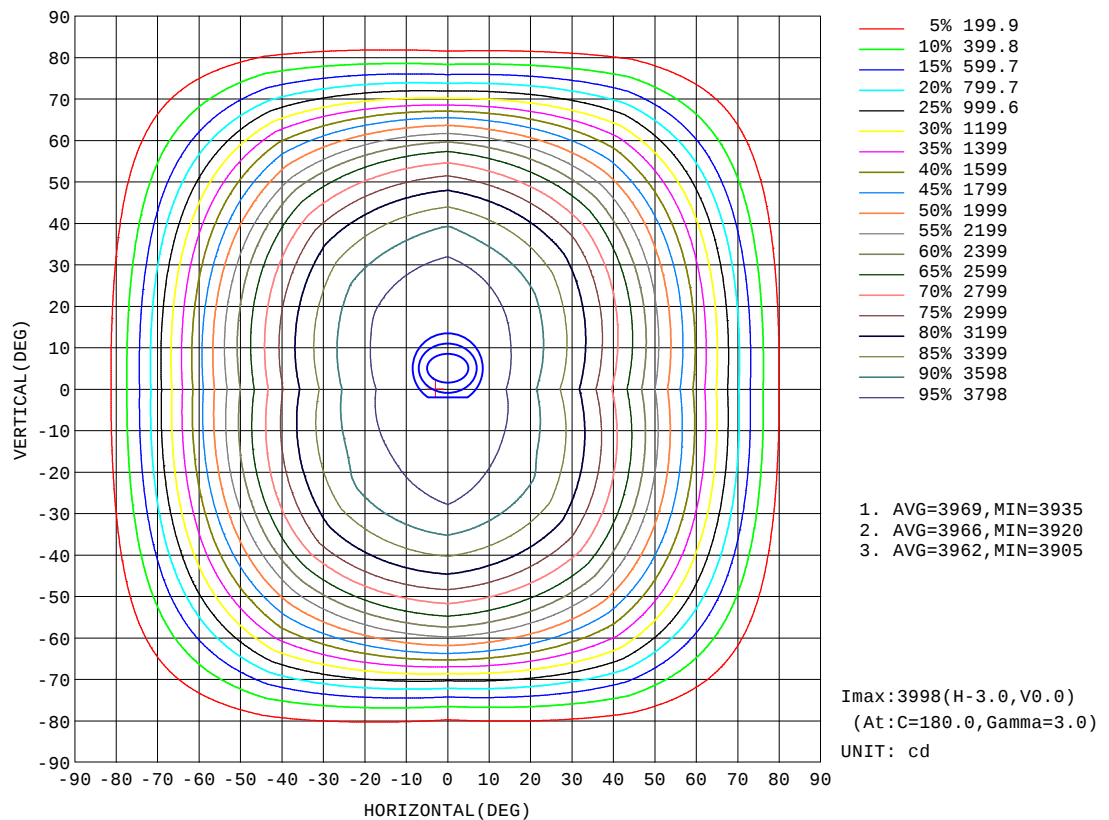
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	60	46	38	58	46	38	55	44	37	30
0.80	70	57	48	68	56	48	65	54	47	39
1.00	78	65	57	76	64	56	72	62	55	46
1.25	85	73	65	82	72	64	78	70	63	54
1.50	90	79	72	87	78	71	83	75	69	60
2.00	97	88	81	94	87	80	90	83	78	69
2.50	101	93	87	98	92	86	94	88	83	74
3.00	104	97	92	101	95	90	96	92	87	77
4.00	108	102	98	105	100	96	100	96	93	83
5.00	110	105	101	107	103	100	102	99	96	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Ceiling Mounted					SHRNOM = 1.00		

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
 Humidity: 65.0%
 Test Distance: 9.460m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.7V I:0.3870A P:83.60W PF:0.9780 Lamp Flux:12187.6x1 lm		
NAME: UNIFY落地灯 上 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



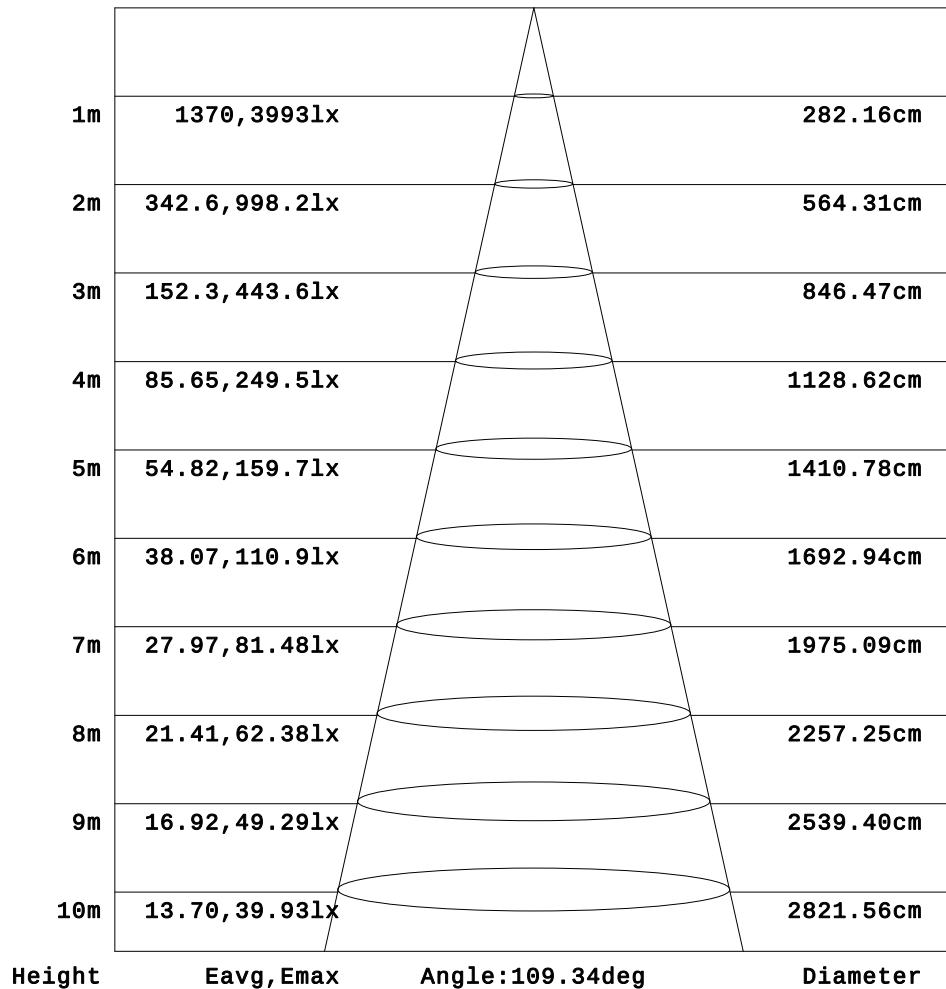
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity: 65.0%
Test Distance: 9.460m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.7V I:0.3870A P:83.60W PF:0.9780 Lamp Flux:12187.6x1 lm		
NAME: UNIFY落地灯 上 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:8781 lm



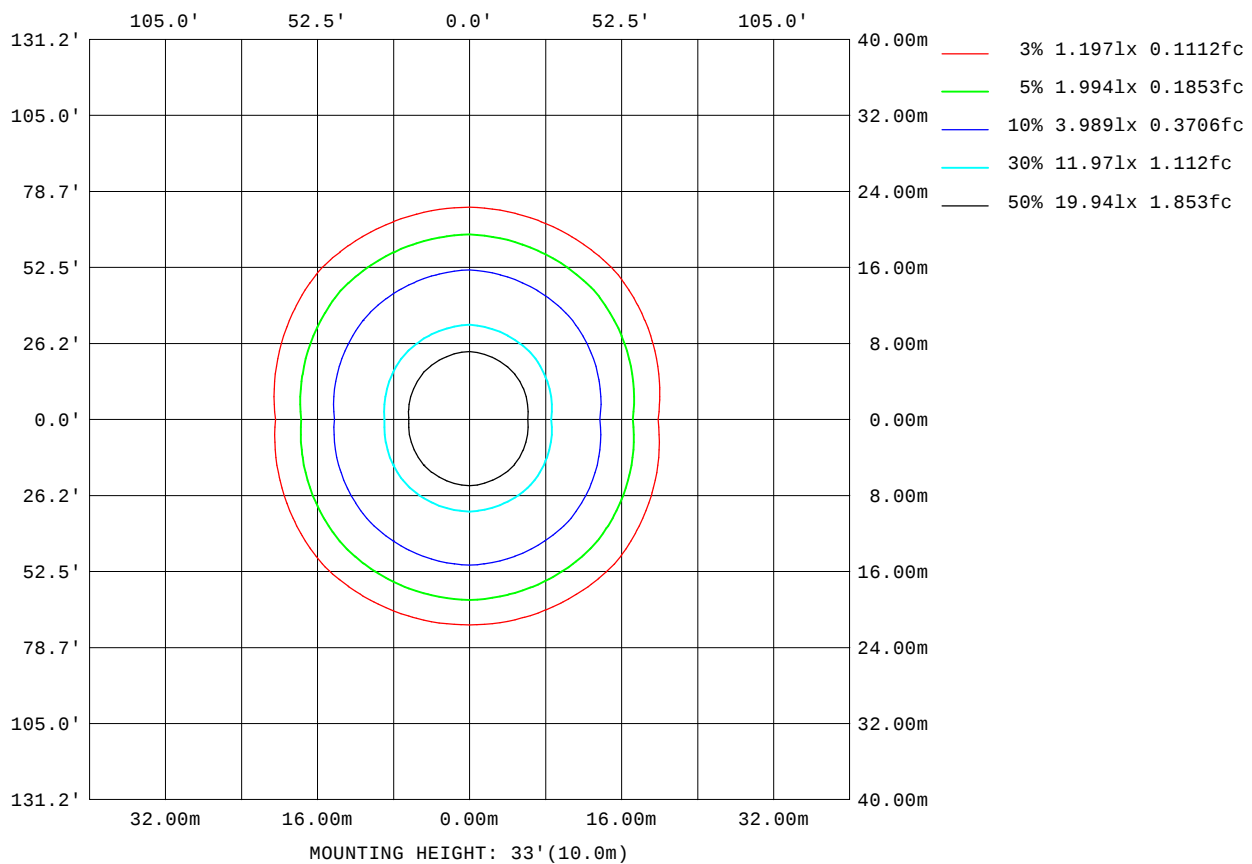
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
 Humidity: 65.0%
 Test Distance: 9.460m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.7V I:0.3870A P:83.60W PF:0.9780 Lamp Flux:12187.6x1 lm		
NAME: UNIFY落地灯 上 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity: 65.0%
Test Distance: 9.460m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.7V I:0.3870A P:83.60W PF:0.9780 Lamp Flux:12187.6x1 lm		
NAME: UNIFY落地灯 上 2700K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

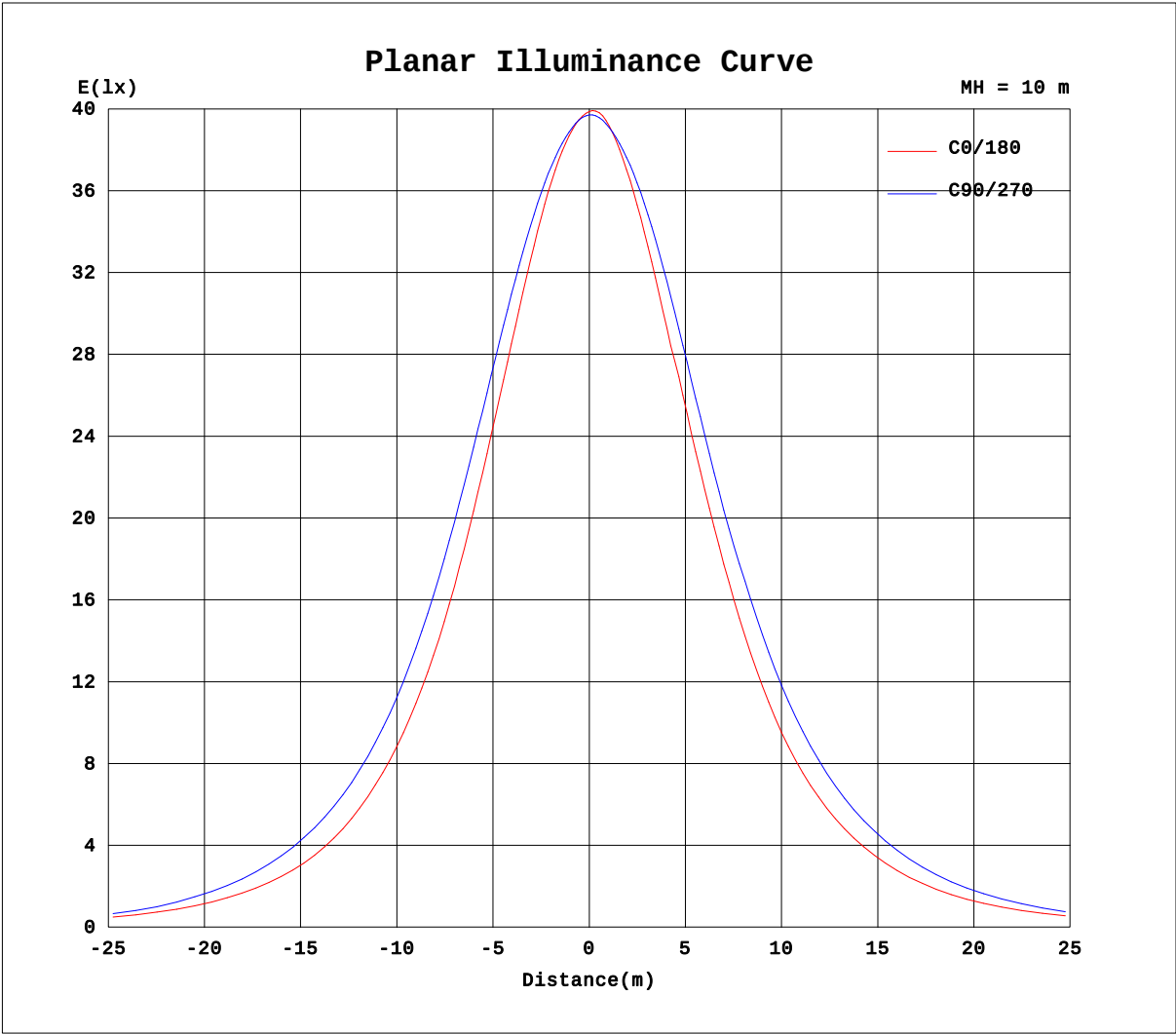
AvgL	cd/m2
L_0~180(65)av	19899
L_0~180(75)av	13295
L_0~180(85)av	4332
L_90~270(65)av	27721
L_90~270(75)av	15695
L_90~270(85)av	3457
L_45(65)av	26892
L_45(75)av	19577
L_45(85)av	5952

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0000]
Remarks: