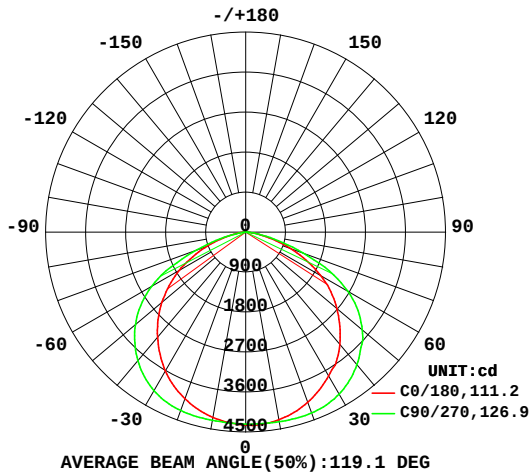


LUMINAIRE PHOTOMETRIC TEST REPORT

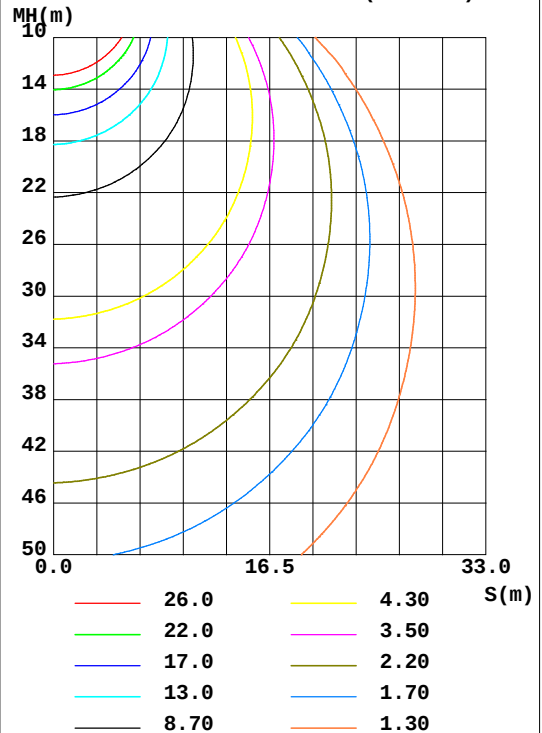
Test:U:220.7V I:0.3840A P:83.00W PF:0.9770 Lamp Flux:13524.4x1 lm		
NAME: UNIFY落地灯 上 5000K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 162.95 lm/W			
MODEL		I _{max} (cd)	4351	S/MH(C0/180)	1.28
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.45
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	13524	η UP, DN(C0-180)	0.0,48.8
NOMINAL FLUX(lm)	13524.4	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,51.2
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	4237	4264	4302	4273	4289	4314	4333	4268	0- 10	411.0	411.0	3.04, 3.04
20	3994	4144	4273	4165	4080	4232	4333	4169	10- 20	1199	1610	11.9, 11.9
30	3616	3926	4124	3965	3736	4057	4210	3969	20- 30	1882	3492	25.8, 25.8
40	3087	3605	3777	3640	3300	3739	3896	3626	30- 40	2369	5862	43.3, 43.3
50	2464	3047	3240	3128	2681	3226	3427	3092	40- 50	2571	8432	62.3, 62.3
60	1727	2282	2448	2342	1942	2501	2649	2355	50- 60	2396	10828	80.1, 80.1
70	914.9	1337	1168	1401	1057	1546	1378	1414	60- 70	1776	12604	93.2, 93.2
80	223.6	334.0	210.9	371.0	279.9	462.4	319.4	409.8	70- 80	805.7	13410	99.2, 99.2
90	6.379	8.989	5.976	7.266	5.221	8.845	8.603	9.151	80- 90	114.7	13524	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): 7143.2 lm

%lum = 52.8%

%lamp = 52.8%

Conical surface Flux(120deg): 10828 lm

%lum = 80.1%

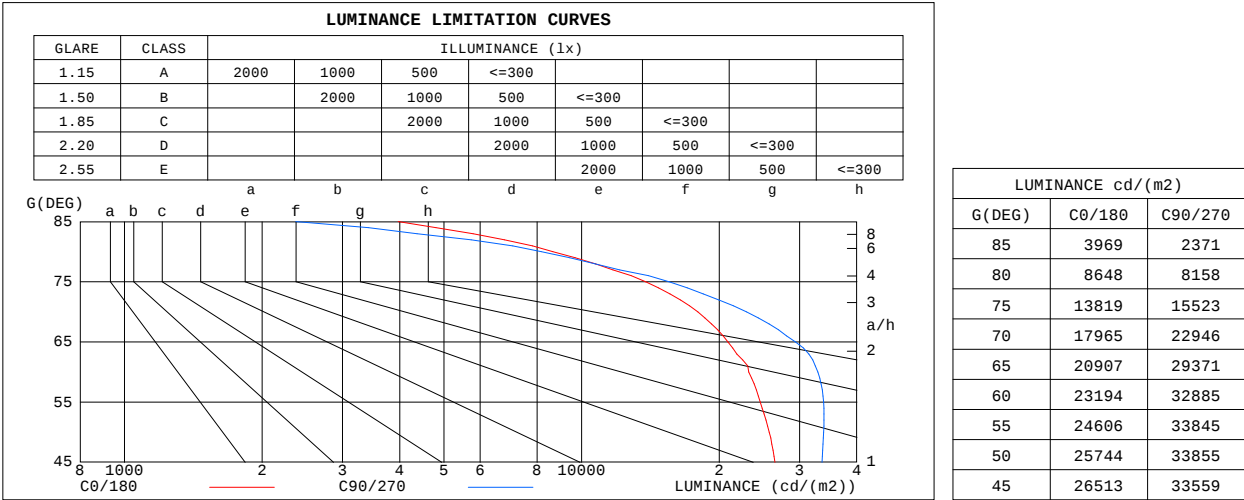
%lamp = 80.1%

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:0.3840A P:83.00W PF:0.9770 Lamp Flux:13524.4x1 lm		
NAME: UNIFY落地灯 上 5000K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



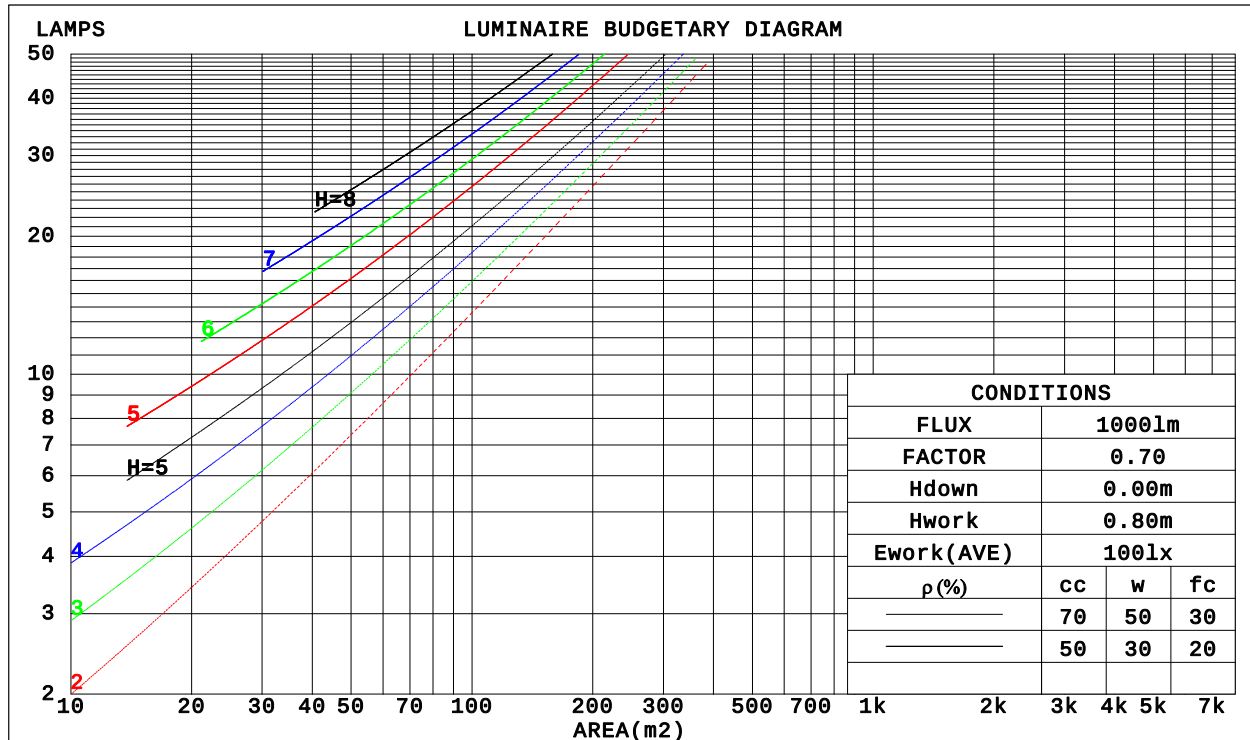
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-06-30

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:0.3840A P:83.00W PF:0.9770 Lamp Flux:13524.4x1 lm		
NAME: UNIFY落地灯 上 5000K 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	1.00
1.0	1.04	1.00	.97	1.02	.98	.95	.98	.95	.92	.94	.92	.89	.90	.88	.87	.84
2.0	.91	.84	.78	.89	.83	.78	.85	.80	.76	.82	.78	.74	.79	.76	.72	.70
3.0	.80	.71	.65	.78	.70	.64	.75	.69	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.70	.61	.55	.69	.61	.54	.66	.59	.54	.64	.58	.53	.62	.57	.52	.50
5.0	.63	.53	.47	.61	.53	.47	.59	.52	.46	.57	.51	.45	.55	.50	.45	.43
6.0	.56	.47	.41	.55	.47	.40	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.41	.36	.48	.41	.35	.47	.40	.35	.46	.39	.35	.33
8.0	.46	.38	.32	.45	.37	.32	.44	.37	.31	.43	.36	.31	.42	.36	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.41	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.36	.30	.25	.23



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:0.3840A P:83.00W PF:0.9770 Lamp Flux:13524.4x1 lm					
NAME: UNIFY落地灯 上 5000K 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	.299	.170	.054	.292	.166	.053	.278	.160	.051	.266	.154	.049	.255	.148	.048				
2.0	.287	.157	.048	.281	.155	.048	.269	.150	.046	.258	.145	.045	.249	.141	.044				
3.0	.268	.143	.043	.263	.141	.042	.253	.137	.042	.243	.133	.041	.234	.130	.040				
4.0	.249	.129	.038	.244	.128	.038	.235	.125	.037	.227	.122	.037	.219	.119	.036				
5.0	.231	.118	.034	.227	.116	.034	.219	.114	.034	.211	.111	.033	.204	.109	.033				
6.0	.215	.108	.031	.211	.107	.031	.204	.104	.030	.197	.102	.030	.190	.100	.030				
7.0	.200	.099	.028	.197	.098	.028	.190	.096	.028	.184	.094	.027	.178	.093	.027				
8.0	.187	.091	.026	.184	.091	.026	.178	.089	.025	.173	.087	.025	.167	.086	.025				
9.0	.175	.085	.024	.173	.084	.024	.167	.083	.023	.162	.081	.023	.158	.080	.023				
10.0	.165	.079	.022	.162	.078	.022	.158	.077	.022	.153	.076	.022	.149	.075	.022				

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	.180	.156	.135	.154	.134	.116	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.172	.132	.099	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.128	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.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	.015	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.074	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.102	.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:0.3840A P:83.00W PF:0.9770 Lamp Flux:13524.4x1 lm											
NAME: UNIFY落地灯 上 5000K 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	24.2	25.7	24.4	25.9	26.1	25.4	26.9	25.6	27.1	27.3	
	3H	25.3	26.7	25.6	27.0	27.2	26.6	28.0	26.9	28.2	28.5
	4H	25.6	27.0	25.9	27.2	27.5	26.8	28.2	27.1	28.4	28.7
	6H	25.7	27.0	26.0	27.2	27.5	26.9	28.1	27.2	28.4	28.7
	8H	25.7	26.9	26.0	27.2	27.5	26.8	28.0	27.2	28.3	28.6
	12H	25.6	26.8	26.0	27.1	27.4	26.8	27.9	27.1	28.2	28.5
4H	2H	25.0	26.3	25.3	26.6	26.8	25.9	27.2	26.2	27.5	27.8
	3H	26.3	27.5	26.7	27.8	28.1	27.3	28.4	27.6	28.7	29.0
	4H	26.7	27.7	27.1	28.1	28.4	27.6	28.7	28.0	29.0	29.3
	6H	26.8	27.8	27.2	28.1	28.5	27.7	28.6	28.1	29.0	29.4
	8H	26.8	27.7	27.2	28.1	28.5	27.7	28.6	28.1	28.9	29.3
	12H	26.8	27.6	27.2	28.0	28.4	27.6	28.4	28.1	28.8	29.2
8H	4H	26.9	27.8	27.3	28.1	28.5	27.7	28.6	28.1	29.0	29.4
	6H	27.1	27.9	27.6	28.3	28.7	27.9	28.6	28.3	29.0	29.4
	8H	27.2	27.8	27.6	28.2	28.7	27.9	28.5	28.4	29.0	29.4
	12H	27.1	27.7	27.6	28.1	28.6	27.9	28.4	28.4	28.9	29.3
12H	4H	26.9	27.7	27.3	28.1	28.5	27.7	28.5	28.1	28.9	29.3
	6H	27.1	27.8	27.6	28.2	28.6	27.9	28.5	28.3	29.0	29.4
	8H	27.2	27.7	27.6	28.2	28.6	27.9	28.4	28.4	28.9	29.4
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 13524 lm Total Lamp Luminous Flux.(8log(F/F0) = 9.0)

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:0.3840A P:83.00W PF:0.9770 Lamp Flux:13524.4x1 lm		
NAME: UNIFY落地灯 上 5000K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

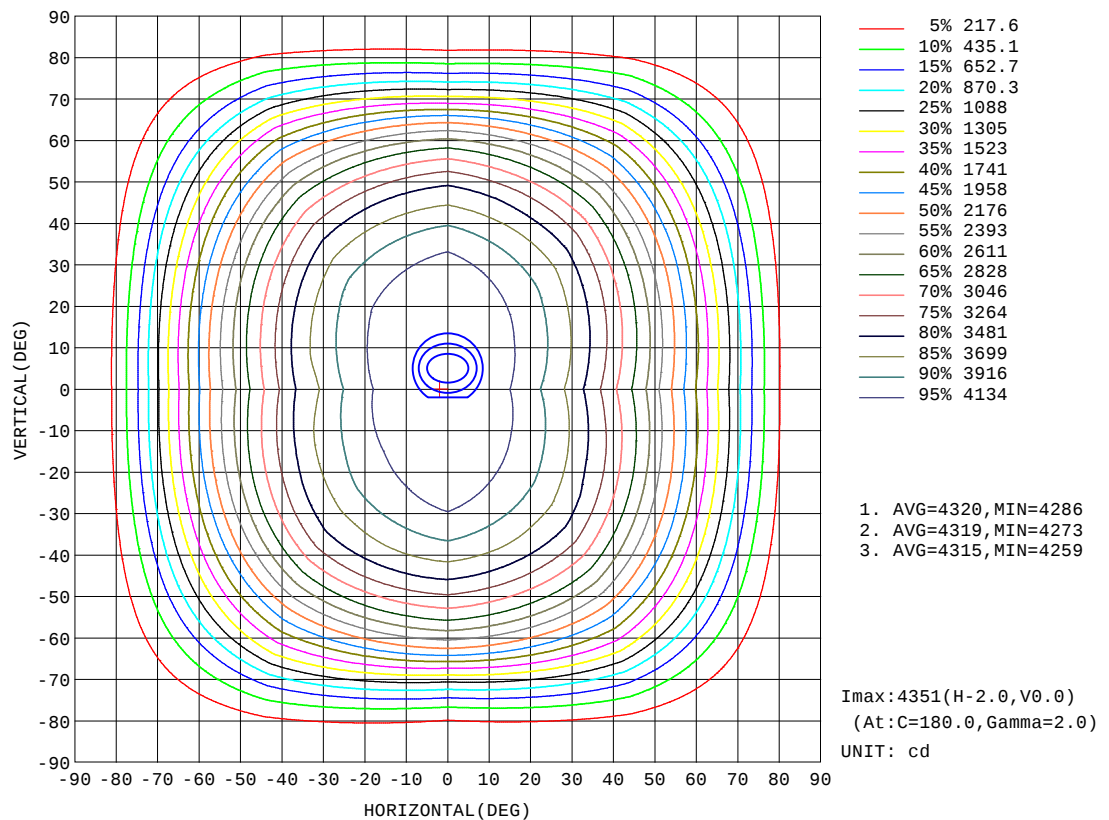
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	46	38	58	45	37	55	44	37	29
0.80	70	56	48	68	55	47	64	54	46	38
1.00	77	65	56	75	64	56	72	62	55	46
1.25	84	73	65	82	72	64	78	69	62	54
1.50	90	79	71	87	78	70	83	75	69	59
2.00	97	88	81	94	86	80	90	83	78	68
2.50	101	93	87	98	91	86	94	88	83	73
3.00	104	97	91	101	95	90	96	91	87	77
4.00	107	102	97	105	100	96	100	96	92	82
5.00	110	105	101	107	103	99	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:0.3840A P:83.00W PF:0.9770 Lamp Flux:13524.4x1 lm		
NAME: UNIFY落地灯 上 5000K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



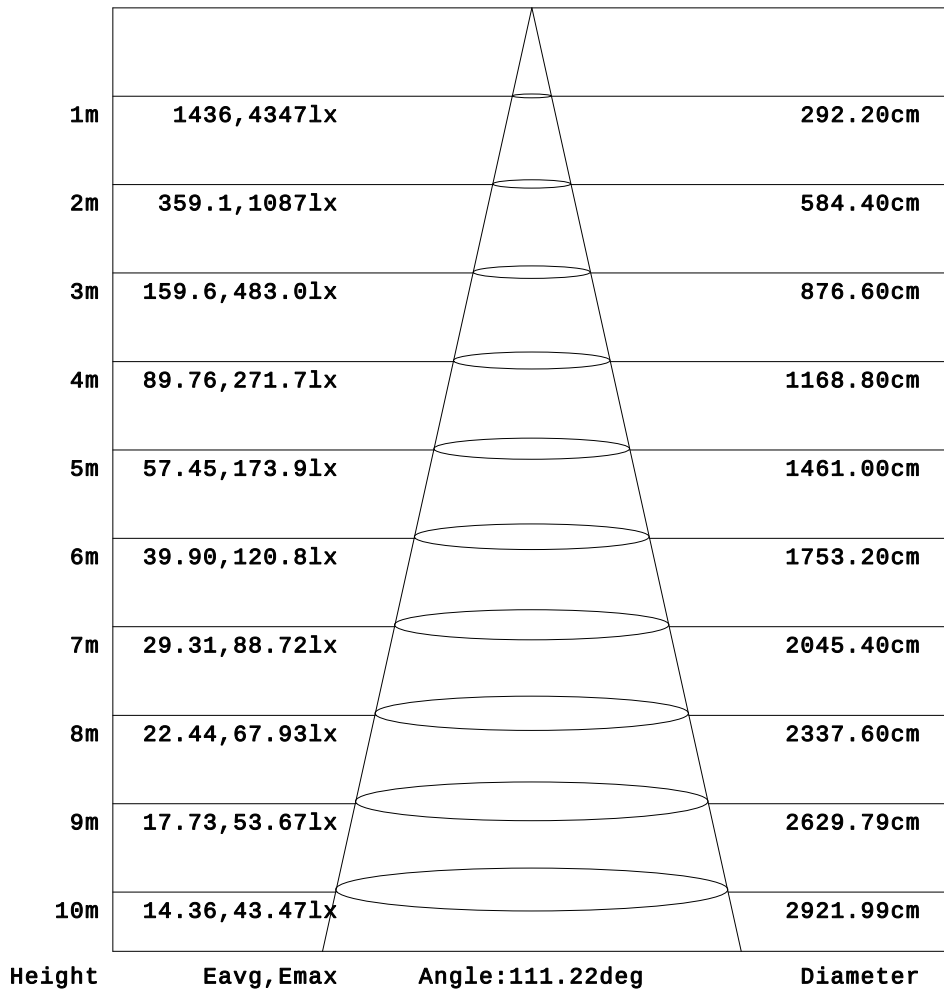
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-06-30

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:0.3840A P:83.00W PF:0.9770 Lamp Flux:13524.4x1 lm		
NAME: UNIFY落地灯 上 5000K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:9917 lm



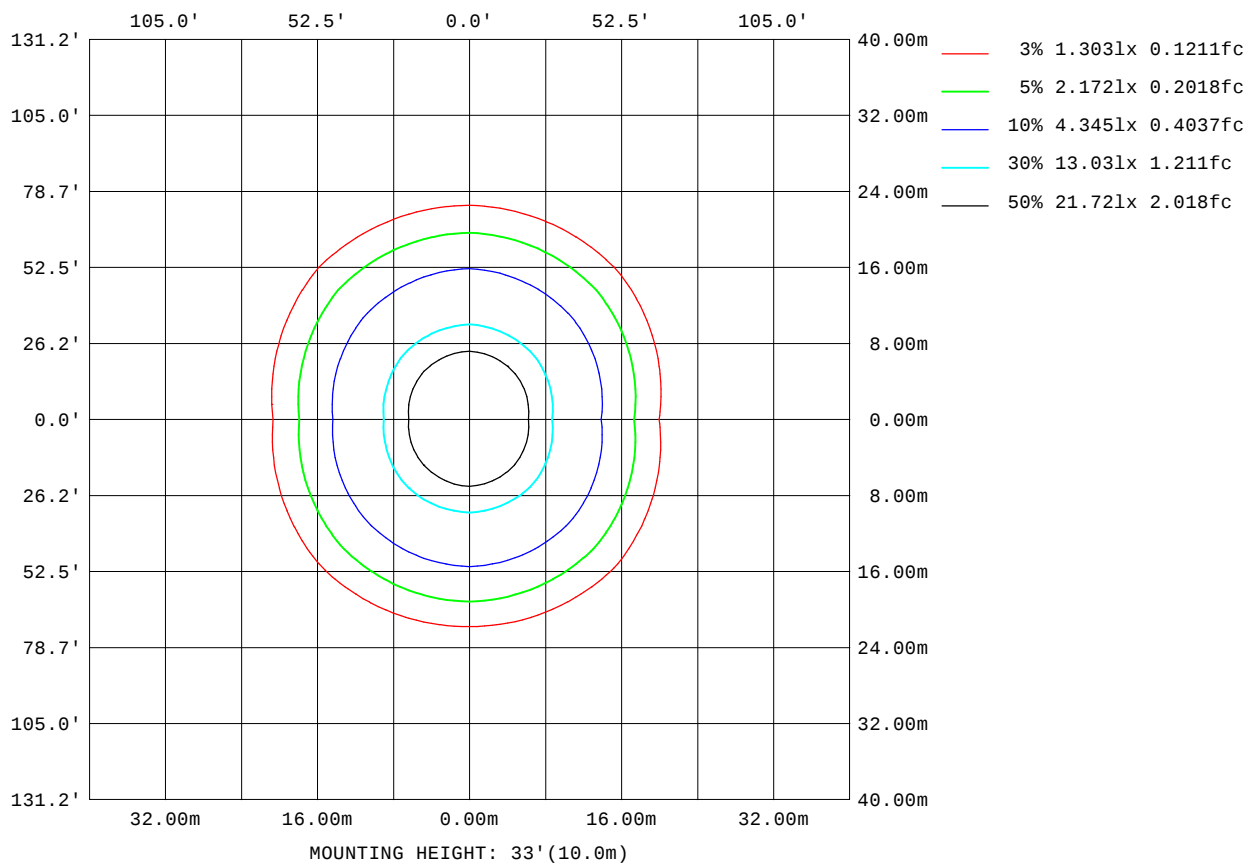
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.3840A P:83.00W PF:0.9770 Lamp Flux:13524.4x1 lm		
NAME: UNIFY落地灯 上 5000K 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:0.3840A P:83.00W PF:0.9770 Lamp Flux:13524.4x1 lm		
NAME: UNIFY落地灯 上 5000K RA80	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

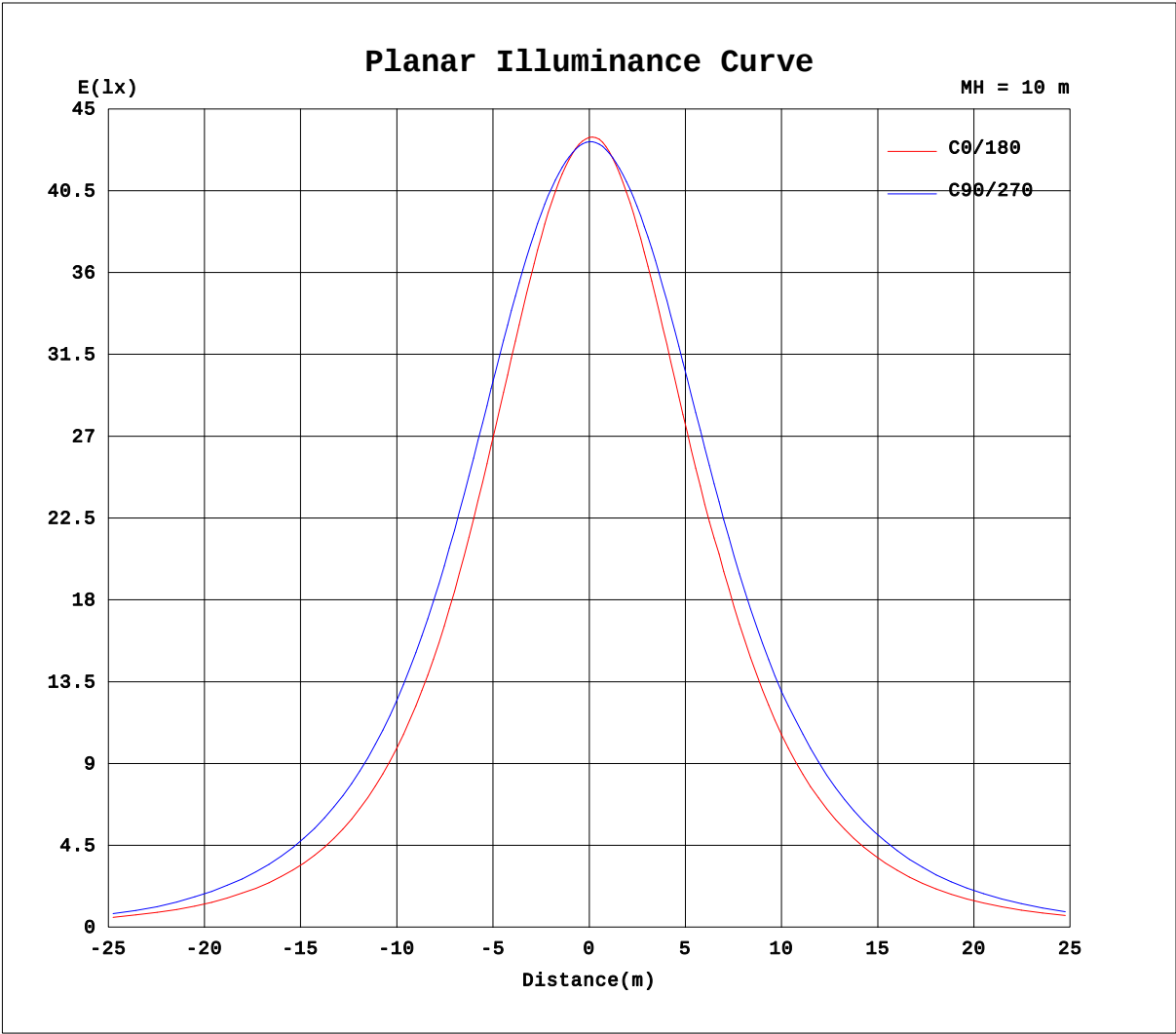
AvgL	cd/m2
L_0~180(65)av	22412
L_0~180(75)av	15041
L_0~180(85)av	4726
L_90~270(65)av	31274
L_90~270(75)av	17711
L_90~270(85)av	3897
L_45(65)av	30563
L_45(75)av	22280
L_45(85)av	6794

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: