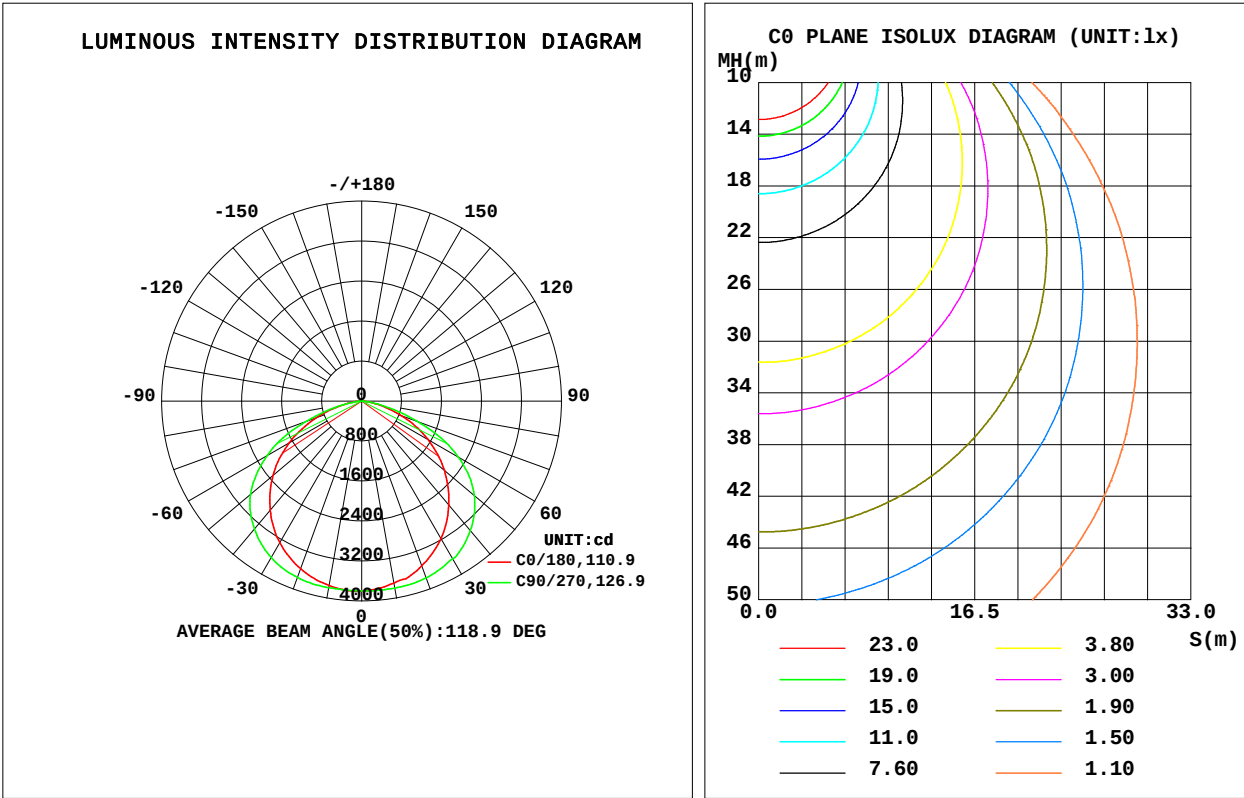


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.8V I:0.3960A P:86.20W PF:0.9860 Lamp Flux:11880.6x1 lm		
NAME: UNF-20210015-TDC 单上 5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 137.83 lm/W			
MODEL		I _{max} (cd)	3805	S/MH(C0/180)	1.24
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.43
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	11881	η UP, DN(C0-180)	0.0,50.4
NOMINAL FLUX(lm)	11880.6	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,49.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-12-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [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	3748	3780	3791	3731	3699	3746	3798	3781	0- 10	360.6	360.6	3.04, 3.04
20	3572	3706	3758	3649	3512	3639	3766	3699	10- 20	1052	1413	11.9, 11.9
30	3276	3570	3617	3436	3176	3437	3646	3517	20- 30	1649	3062	25.8, 25.8
40	2848	3276	3341	3114	2712	3118	3383	3216	30- 40	2072	5134	43.2, 43.2
50	2316	2833	2906	2657	2165	2650	2941	2773	40- 50	2243	7376	62.1, 62.1
60	1673	2199	2187	2020	1523	1991	2228	2145	50- 60	2096	9473	79.7, 79.7
70	951.3	1336	1170	1173	827.9	1164	1173	1313	60- 70	1563	11036	92.9, 92.9
80	288.8	425.5	242.7	324.3	234.6	293.7	258.4	406.7	70- 80	740.9	11777	99.1, 99.1
90	7.811	6.123	4.651	7.741	3.926	8.095	4.361	6.842	80- 90	104.1	11881	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): 6251.5 lm

%lum = 52.6%
 %lamp = 52.6%

Conical surface Flux(120deg): 9472.7 lm

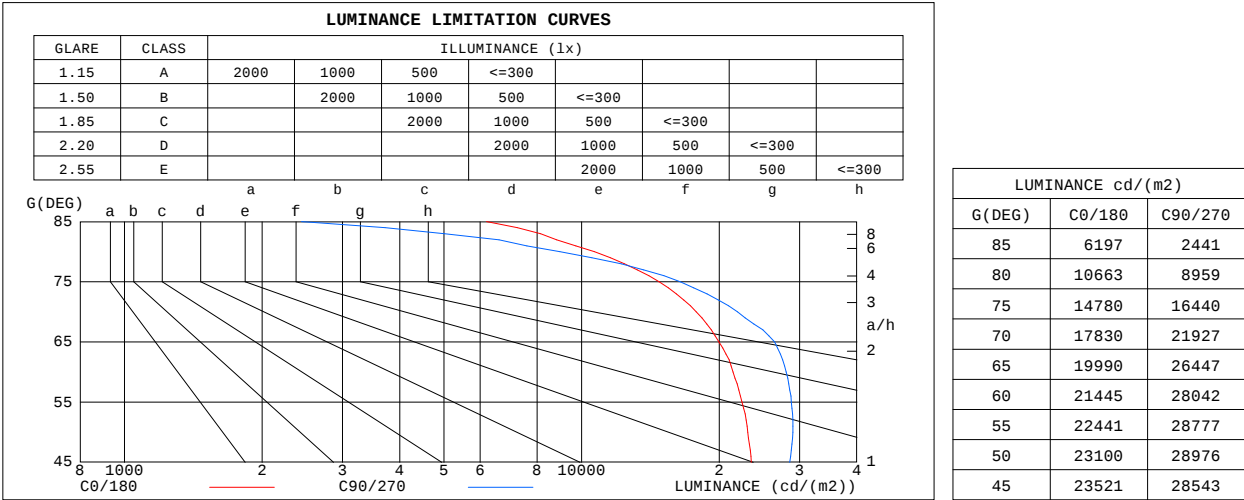
%lum = 79.7%
 %lamp = 79.7%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2024-12-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
 Humidity: 65.0%
 Test Distance: 9.526m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.8V I:0.3960A P:86.20W PF:0.9860 Lamp Flux:11880.6x1 lm		
NAME: UNF-20210015-TDC 单上 5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



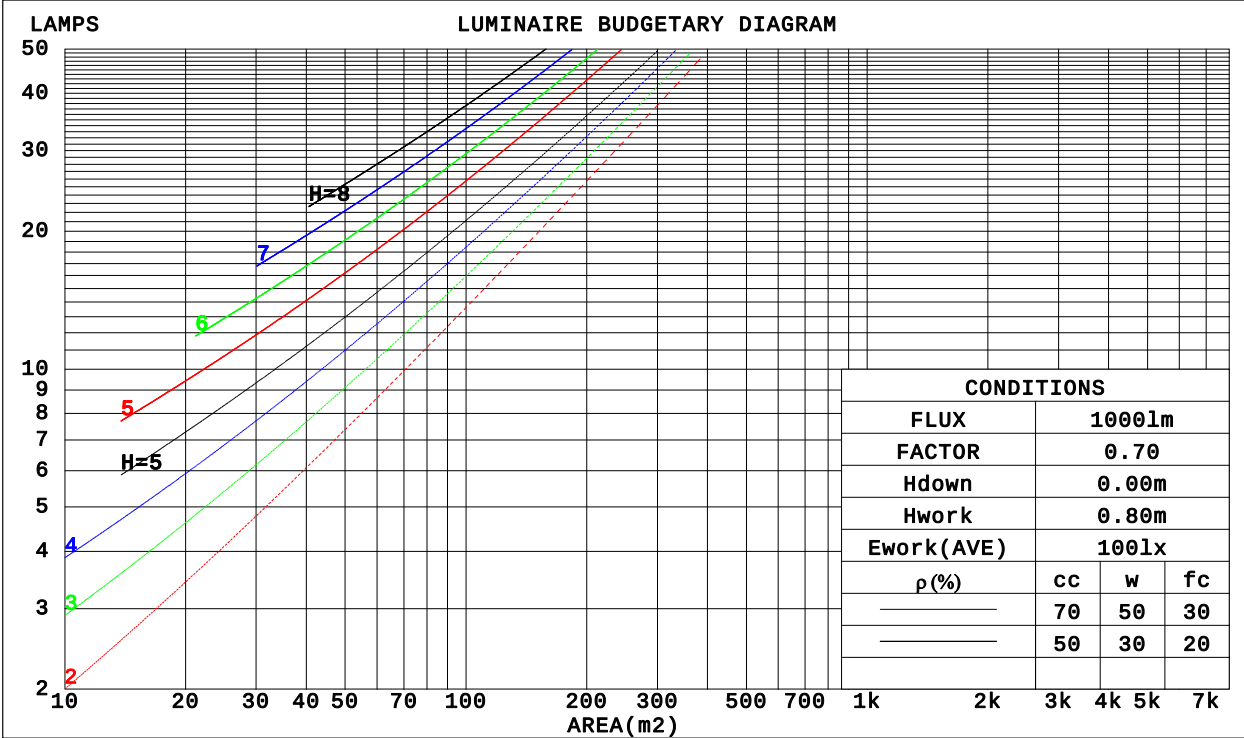
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-12-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.8V I:0.3960A P:86.20W PF:0.9860 Lamp Flux:11880.6x1 lm														
NAME: UNF-20210015-TDC 单上 5000K							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	.96	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.77	.85	.80	.76	.82	.78	.74	.79	.75	.72	.70
3.0	.79	.71	.65	.78	.70	.64	.75	.68	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.70	.61	.55	.69	.61	.54	.66	.59	.53	.64	.58	.53	.62	.56	.52	.50
5.0	.62	.53	.47	.61	.53	.46	.59	.52	.46	.57	.51	.45	.55	.50	.45	.43
6.0	.56	.47	.40	.55	.47	.40	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.41	.35	.48	.41	.35	.47	.40	.35	.45	.39	.35	.33
8.0	.46	.37	.32	.45	.37	.31	.44	.37	.31	.43	.36	.31	.42	.35	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.38	.31	.25	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2024-12-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295T
 Humidity: 65.0%
 Test Distance: 9.526m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.8V I:0.3960A P:86.20W PF:0.9860 Lamp Flux:11880.6x1 lm					
NAME: UNF-20210015-TDC 单上 5000K			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	.300	.171	.054	.293	.167	.053	.280	.161	.051	.268	.155	.050	.257	.149	.048		
2.0	.288	.158	.048	.282	.155	.048	.270	.150	.047	.260	.146	.046	.250	.141	.045		
3.0	.269	.143	.043	.264	.141	.043	.253	.137	.042	.244	.134	.041	.235	.130	.040		
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.227	.122	.037	.219	.119	.036		
5.0	.231	.118	.034	.227	.117	.034	.219	.114	.034	.211	.112	.033	.204	.109	.033		
6.0	.215	.108	.031	.211	.107	.031	.204	.105	.030	.197	.102	.030	.191	.100	.030		
7.0	.200	.099	.028	.197	.098	.028	.190	.096	.028	.184	.094	.027	.179	.093	.027		
8.0	.187	.091	.026	.184	.091	.026	.178	.089	.025	.173	.088	.025	.168	.086	.025		
9.0	.175	.085	.024	.173	.084	.024	.167	.083	.023	.163	.081	.023	.158	.080	.023		
10.0	.165	.079	.022	.162	.078	.022	.158	.077	.022	.153	.076	.022	.149	.075	.022		

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	.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	.080	.061	.053	.047	.019	.017	.015		
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011		
3.0	.164	.114	.074	.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	.129	.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	.130	.070	.029	.112	.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:2024-12-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.526m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.8V I:0.3960A P:86.20W PF:0.9860 Lamp Flux:11880.6x1 lm											
NAME: UNF-20210015-TDC 单上 5000K						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	24.1	25.7	24.4	25.9	26.1	25.1	26.6	25.3	26.8	27.0	
	3H	25.4	26.8	25.7	27.0	27.3	26.4	27.8	26.7	28.1	28.3
	4H	25.8	27.1	26.1	27.4	27.7	26.8	28.1	27.1	28.4	28.6
	6H	26.0	27.2	26.3	27.5	27.8	26.9	28.1	27.2	28.4	28.7
	8H	26.0	27.2	26.3	27.5	27.8	26.9	28.1	27.2	28.4	28.7
	12H	26.0	27.2	26.3	27.4	27.8	26.8	28.0	27.2	28.3	28.6
4H	2H	25.0	26.3	25.3	26.6	26.8	25.7	27.0	26.0	27.3	27.5
	3H	26.4	27.6	26.8	27.9	28.2	27.2	28.4	27.6	28.7	29.0
	4H	26.9	28.0	27.3	28.3	28.7	27.7	28.7	28.0	29.1	29.4
	6H	27.2	28.1	27.6	28.5	28.9	27.8	28.8	28.2	29.1	29.5
	8H	27.2	28.1	27.6	28.5	28.9	27.8	28.7	28.3	29.1	29.5
	12H	27.2	28.0	27.7	28.4	28.8	27.8	28.6	28.2	29.0	29.4
8H	4H	27.2	28.1	27.6	28.5	28.8	27.9	28.7	28.3	29.1	29.5
	6H	27.6	28.3	28.0	28.7	29.1	28.1	28.9	28.6	29.3	29.7
	8H	27.7	28.3	28.1	28.7	29.2	28.2	28.8	28.6	29.2	29.7
	12H	27.7	28.2	28.2	28.7	29.2	28.2	28.7	28.6	29.2	29.6
12H	4H	27.2	28.0	27.6	28.4	28.8	27.9	28.7	28.3	29.0	29.4
	6H	27.6	28.3	28.1	28.7	29.1	28.2	28.8	28.6	29.2	29.7
	8H	27.7	28.3	28.2	28.7	29.2	28.2	28.8	28.7	29.2	29.7
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.2					
1.5H	+ 0.3 / - 0.5					+ 0.2 / - 0.4					
2.0H	+ 0.3 / - 0.7					+ 0.2 / - 0.5					

CIE Pub.117 Corrected 11881 lm Total Lamp Luminous Flux.(8log(F/F0) = 8.6)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-12-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.526m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.8V I:0.3960A P:86.20W PF:0.9860 Lamp Flux:11880.6x1 lm		
NAME: UNF-20210015-TDC 单上 5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

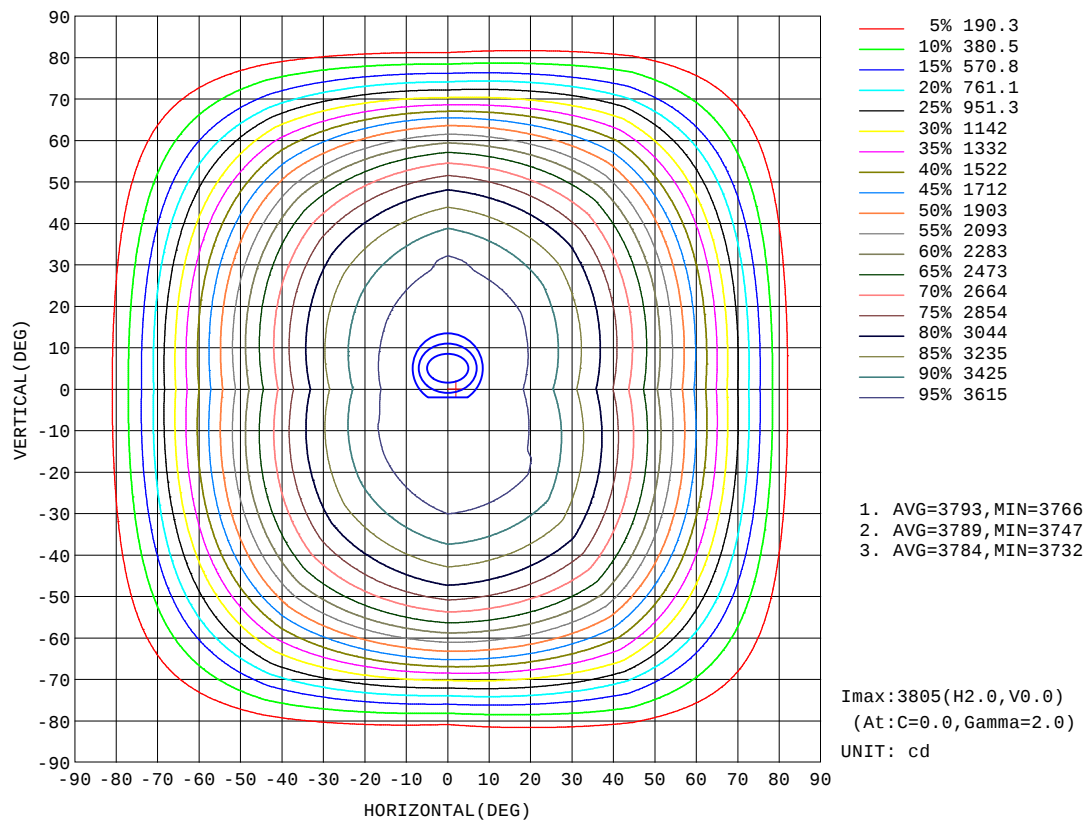
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	46	38	58	45	37	55	44	37	29
0.80	70	56	48	68	55	47	64	54	46	38
1.00	77	65	56	75	64	56	71	62	54	46
1.25	84	73	65	82	72	64	78	69	62	53
1.50	90	79	71	87	78	70	83	75	68	59
2.00	97	88	81	94	86	80	90	83	78	68
2.50	101	93	87	98	91	86	93	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	85
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:2024-12-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.526m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.8V I:0.3960A P:86.20W PF:0.9860 Lamp Flux:11880.6x1 lm		
NAME: UNF-20210015-TDC 单上 5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



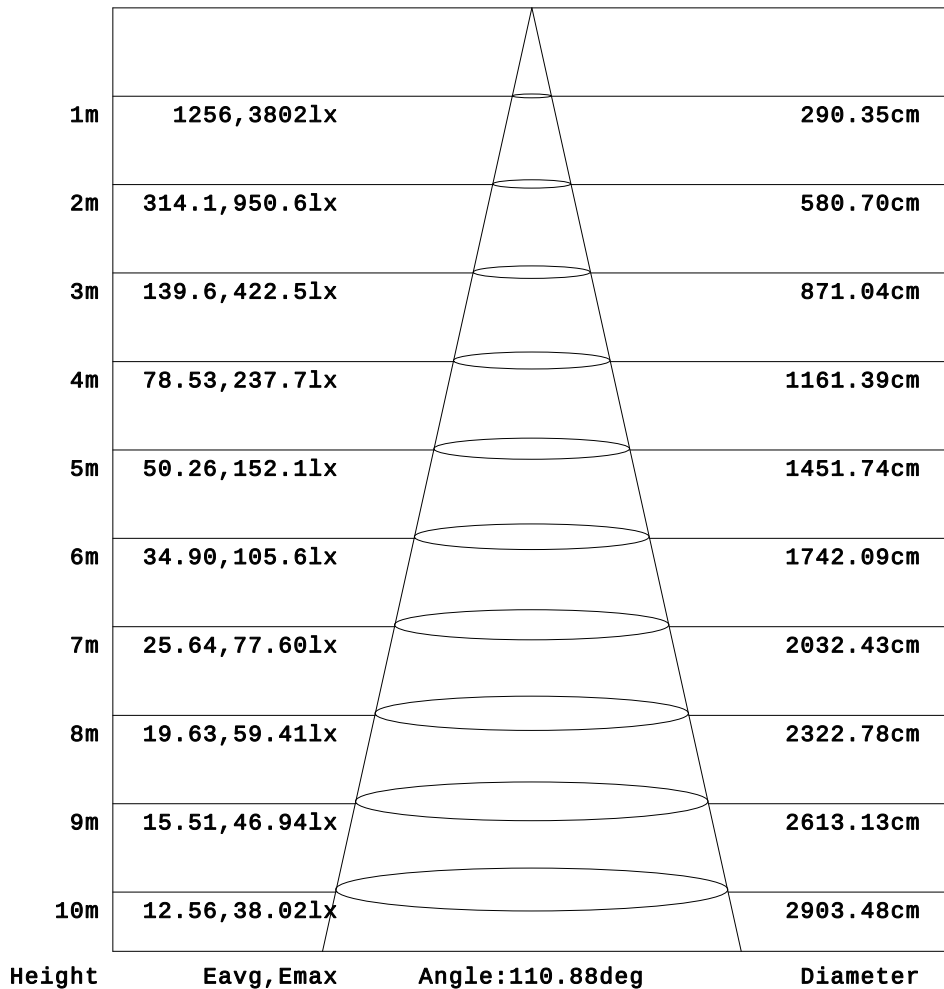
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-12-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity: 65.0%
Test Distance: 9.526m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.8V I:0.3960A P:86.20W PF:0.9860 Lamp Flux:11880.6x1 lm		
NAME: UNF-20210015-TDC 单上 5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:8676 lm



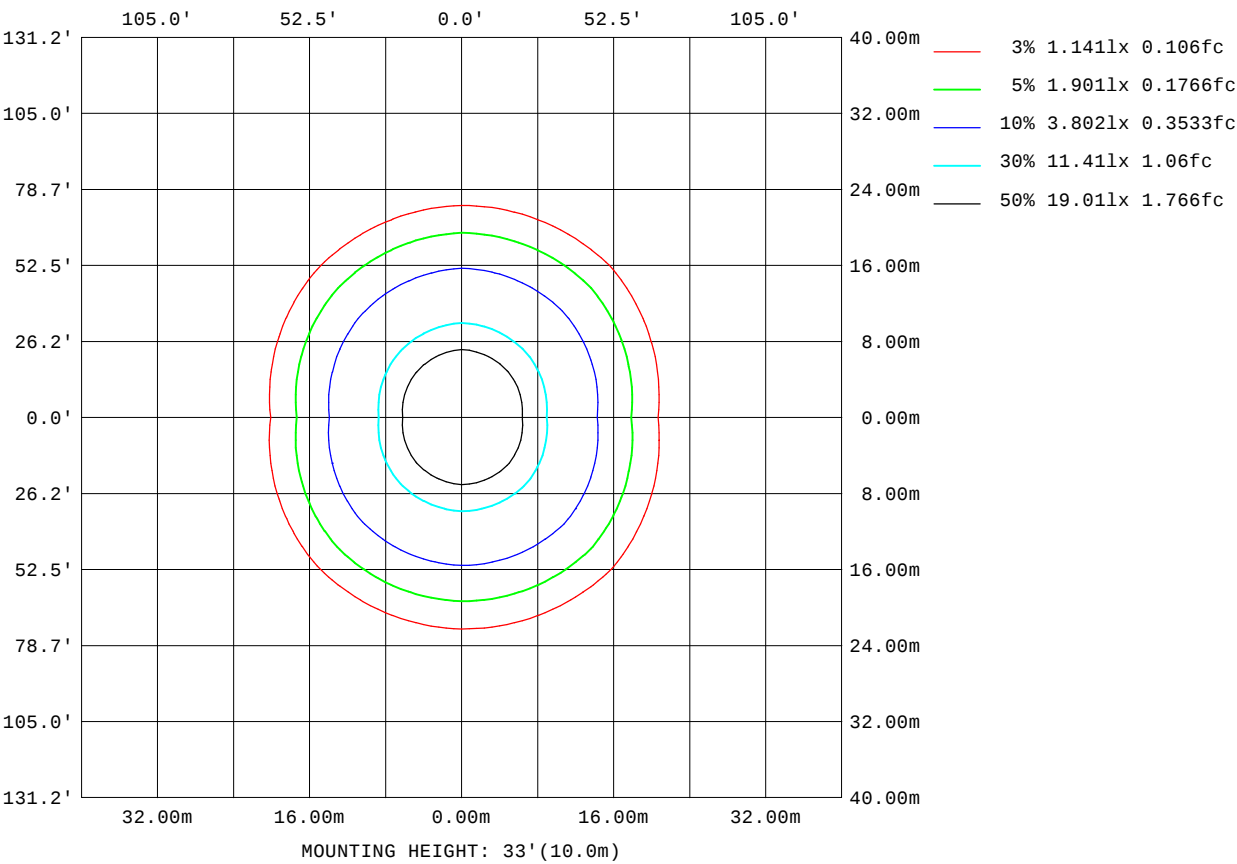
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-12-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:220.8V I:0.3960A P:86.20W PF:0.9860 Lamp Flux:11880.6x1 lm		
NAME: UNF-20210015-TDC 单上 5000K	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:2024-12-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.8V I:0.3960A P:86.20W PF:0.9860 Lamp Flux:11880.6x1 lm		
NAME: UNF-20210015-TDC 单上 5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

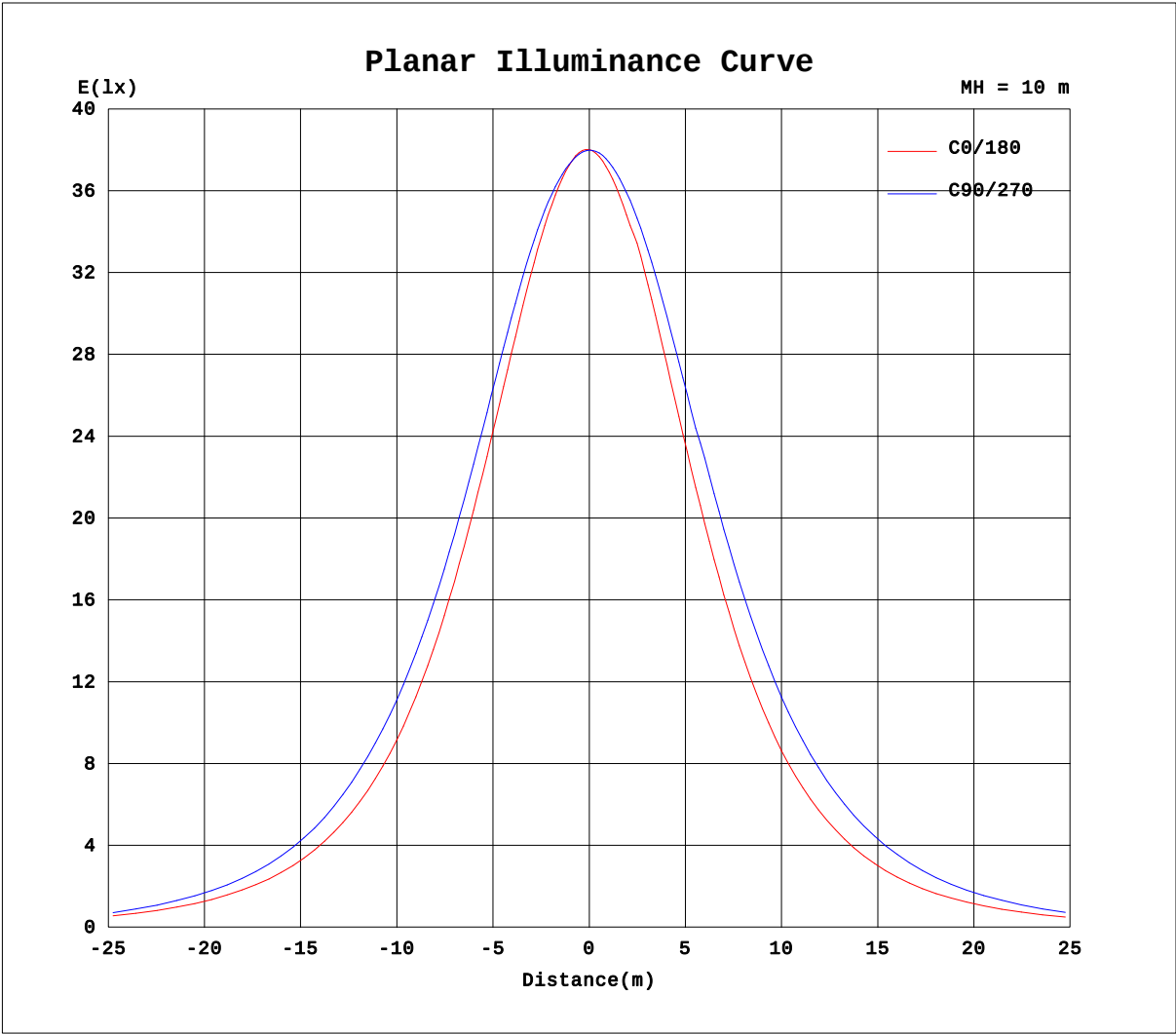
AvgL	cd/m2
L_0~180(65)av	18987
L_0~180(75)av	13583
L_0~180(85)av	5033
L_90~270(65)av	26597
L_90~270(75)av	16614
L_90~270(85)av	2517
L_45(65)av	25441
L_45(75)av	19150
L_45(85)av	5042

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-12-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-12-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [K=1.0000]
Remarks: