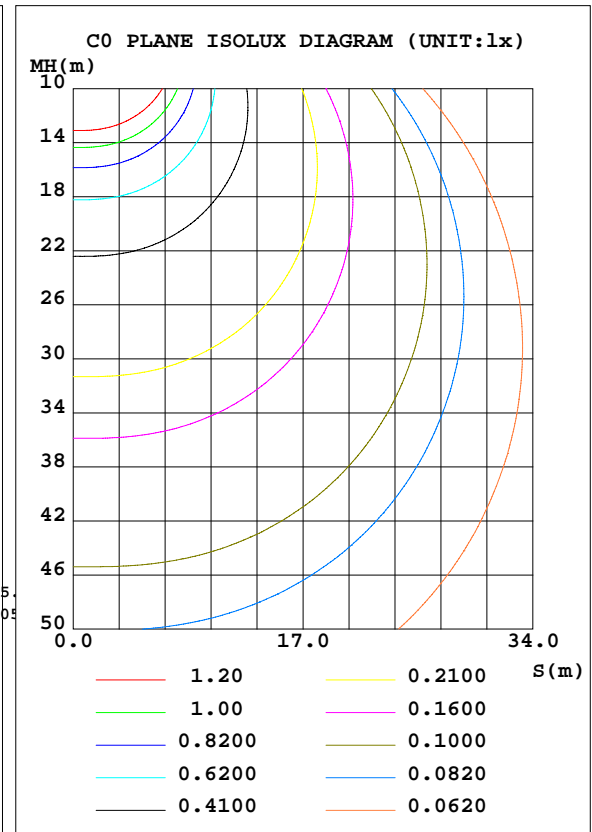
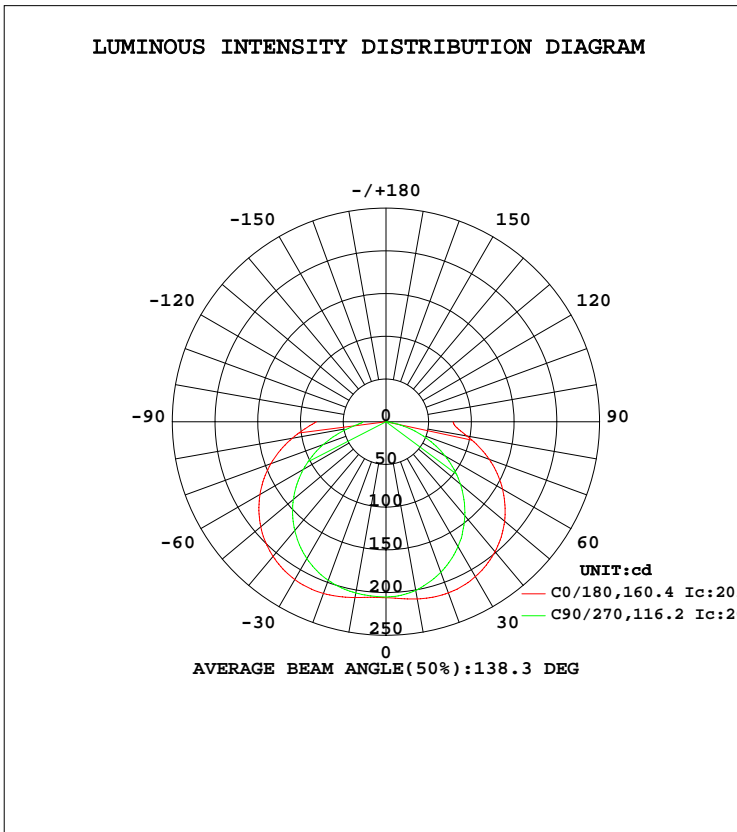


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.08V I:0.0936A P:19.753W PF:0.9587 Freq:49.99Hz Lamp Flux:840.463x1 lm		
NAME: SEW5121500L30MVTG	TYPE:	WEIGHT:2
SPEC.:	DIM.:	SERIAL No.:20160718001
MFR.: 银河照明	SUR.:0.165*0.105	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 42.55 lm/W			
MODEL	LED	I _{max} (cd)	214.5	S/MH(C0/180)	1.55
NOMINAL POWER(W)	19	LOR(%)	100.0	S/MH(C90/270)	1.34
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	840.46	η UP, DN(C0-180)	0.0,46.7
NOMINAL FLUX(lm)	840.463	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,53.3
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: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2016-11-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:7.400m [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	210.5	205.6	200.5	203.7	208.9	205.7	203.5	206.6	0- 10	19.61	19.61	2.33,2.33
20	213.1	201.6	187.6	200.7	213.9	206.6	197.6	206.6	10- 20	58.07	77.68	9.24,9.24
30	209.3	191.5	168.6	192.9	213.4	202.7	185.1	201.1	20- 30	92.64	170.3	20.3,20.3
40	198.5	175.2	143.6	178.9	205.7	192.5	166.1	188.7	30- 40	118.9	289.2	34.4,34.4
50	181.2	153.2	113.7	159.4	191.4	176.0	141.5	170.4	40- 50	133.5	422.7	50.3,50.3
60	157.5	125.8	79.72	134.2	170.4	153.4	111.8	145.7	50- 60	134.1	556.8	66.2,66.2
70	128.6	94.53	43.03	104.6	143.3	125.4	78.24	116.3	60- 70	120.6	677.3	80.6,80.6
80	96.36	62.33	7.818	72.39	111.4	94.18	44.85	85.45	70- 80	95.09	772.4	91.9,91.9
90	78.59	45.38	0	47.88	81.33	70.02	26.87	68.92	80- 90	68.02	840.5	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): 354.96 lm

%lum = 42.2%
 %lamp = 42.2%

Conical surface Flux(120deg): 556.75 lm

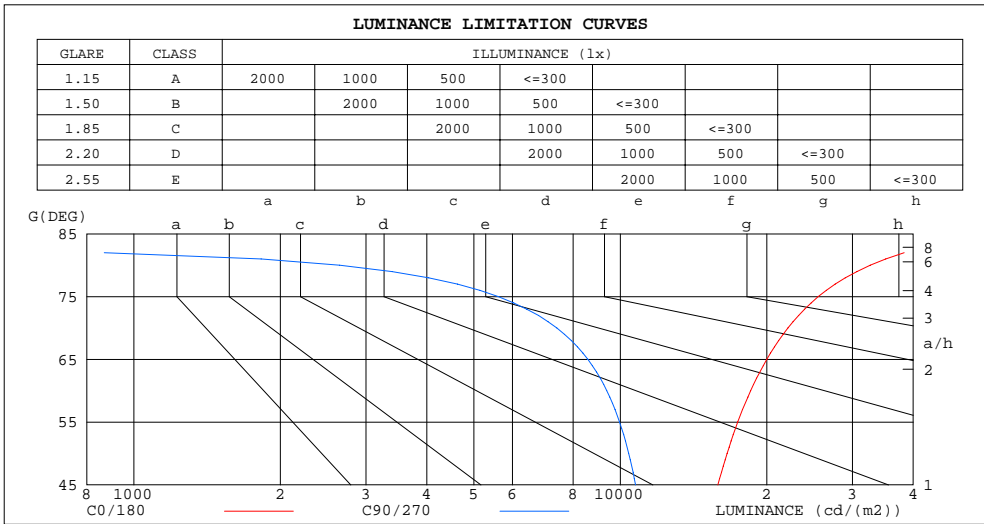
%lum = 66.2%
 %lamp = 66.2%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2016-11-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:7.400m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.08V I:0.0936A P:19.753W PF:0.9587 Freq:49.99Hz Lamp Flux:840.463x1 lm		
NAME: SEW5121500L30MVTG	TYPE:	WEIGHT:2
SPEC.:	DIM.:	SERIAL No.:20160718001
MFR.: 银河照明	SUR.:0.165*0.105	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	56353	0
80	32641	2648
75	25522	5611
70	22115	7401
65	20006	8575
60	18529	9378
55	17433	9965
50	16580	10404
45	15867	10747

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 袁冠彬
 Test Date: 2016-11-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 7.400m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.08V I:0.0936A P:19.753W PF:0.9587 Freq:49.99Hz Lamp Flux:840.463x1 lm		
NAME: SEW5121500L30MVTG	TYPE:	WEIGHT:2
SPEC.:	DIM.:	SERIAL No.:20160718001
MFR.: 银河照明	SUR.:0.165*0.105	Shielding 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 Coefficients(WEC)									
0.0																
1.0	.404	.230	.073	.397	.226	.072	.383	.220	.070	.370	.214	.069	.359	.208	.067	
2.0	.351	.192	.059	.344	.190	.058	.332	.185	.057	.321	.180	.056	.311	.176	.055	
3.0	.312	.166	.050	.306	.164	.049	.295	.160	.049	.285	.156	.048	.276	.153	.047	
4.0	.280	.146	.043	.275	.144	.043	.266	.141	.042	.257	.138	.042	.248	.135	.041	
5.0	.254	.130	.038	.250	.128	.037	.241	.126	.037	.233	.123	.037	.226	.121	.036	
6.0	.233	.117	.033	.229	.115	.033	.221	.113	.033	.214	.111	.033	.207	.109	.032	
7.0	.214	.106	.030	.211	.105	.030	.204	.103	.030	.198	.101	.029	.192	.100	.029	
8.0	.198	.097	.027	.195	.096	.027	.189	.095	.027	.184	.093	.027	.178	.091	.027	
9.0	.185	.089	.025	.182	.089	.025	.176	.087	.025	.171	.086	.025	.167	.085	.024	
10.0	.173	.083	.023	.170	.082	.023	.165	.081	.023	.161	.080	.023	.156	.079	.023	

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	.187	.155	.127	.160	.133	.109	.109	.092	.076	.063	.053	.044	.020	.017	.014	
2.0	.180	.132	.091	.154	.113	.079	.106	.078	.055	.061	.046	.032	.020	.015	.010	
3.0	.173	.115	.068	.148	.099	.059	.102	.069	.042	.059	.040	.025	.019	.013	.008	
4.0	.165	.102	.054	.141	.088	.047	.097	.061	.033	.056	.036	.019	.018	.012	.006	
5.0	.156	.092	.044	.134	.079	.038	.093	.055	.027	.054	.032	.016	.017	.011	.005	
6.0	.149	.083	.036	.128	.072	.032	.088	.051	.022	.051	.030	.013	.017	.010	.004	
7.0	.141	.076	.031	.121	.066	.027	.084	.046	.019	.049	.027	.011	.016	.009	.004	
8.0	.134	.071	.027	.116	.061	.024	.080	.043	.017	.047	.025	.010	.015	.008	.003	
9.0	.128	.066	.024	.110	.057	.021	.076	.040	.015	.044	.024	.009	.014	.008	.003	
10.0	.121	.061	.021	.105	.053	.019	.073	.038	.013	.042	.022	.008	.014	.007	.003	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2016-11-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:7.400m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.08V I:0.0936A P:19.753W PF:0.9587 Freq:49.99Hz Lamp Flux:840.463x1 lm										
NAME: SEW5121500L30MVTG					TYPE:			WEIGHT:2		
SPEC.:					DIM.:			SERIAL No.:20160718001		
MFR.: 银河照明					SUR.:0.165*0.105			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	23.5	25.2	23.8	25.4	25.7	21.0	22.7	21.3	22.9	23.1
3H	26.0	27.6	26.3	27.8	28.1	22.3	23.9	22.6	24.1	24.4
4H	27.3	28.8	27.6	29.0	29.3	22.7	24.2	23.1	24.5	24.8
6H	28.6	30.1	29.0	30.3	30.6	22.9	24.3	23.2	24.6	24.9
8H	29.4	30.8	29.7	31.0	31.3	22.9	24.3	23.2	24.6	24.9
12H	30.2	31.6	30.6	31.9	32.2	22.8	24.2	23.2	24.5	24.8
4H 2H	24.1	25.6	24.4	25.8	26.1	22.3	23.8	22.6	24.0	24.3
3H	26.8	28.1	27.2	28.4	28.7	23.8	25.2	24.2	25.5	25.8
4H	28.3	29.5	28.6	29.8	30.2	24.4	25.7	24.8	26.0	26.3
6H	29.8	30.9	30.2	31.3	31.7	24.8	25.9	25.2	26.3	26.6
8H	30.7	31.7	31.1	32.1	32.5	24.8	25.9	25.2	26.2	26.6
12H	31.7	32.7	32.1	33.1	33.5	24.8	25.8	25.3	26.2	26.6
8H 4H	28.6	29.6	29.0	30.0	30.4	25.4	26.5	25.9	26.9	27.3
6H	30.4	31.3	30.9	31.7	32.1	26.1	27.0	26.6	27.4	27.9
8H	31.5	32.3	31.9	32.7	33.2	26.4	27.2	26.8	27.6	28.0
12H	32.7	33.4	33.2	33.9	34.4	26.5	27.2	27.0	27.7	28.2
12H 4H	28.6	29.5	29.0	29.9	30.3	25.7	26.7	26.2	27.1	27.5
6H	30.5	31.3	31.0	31.7	32.2	26.6	27.4	27.1	27.9	28.3
8H	31.7	32.4	32.2	32.8	33.3	27.0	27.7	27.5	28.2	28.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.5				

CIE Pub.117, 840.5 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.6)

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2016-11-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:7.400m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.08V I:0.0936A P:19.753W PF:0.9587 Freq:49.99Hz Lamp Flux:840.463x1 lm		
NAME: SEW5121500L30MVTG	TYPE:	WEIGHT:2
SPEC.:	DIM.:	SERIAL No.:20160718001
MFR.: 银河照明	SUR.:0.165*0.105	Shielding Angle:

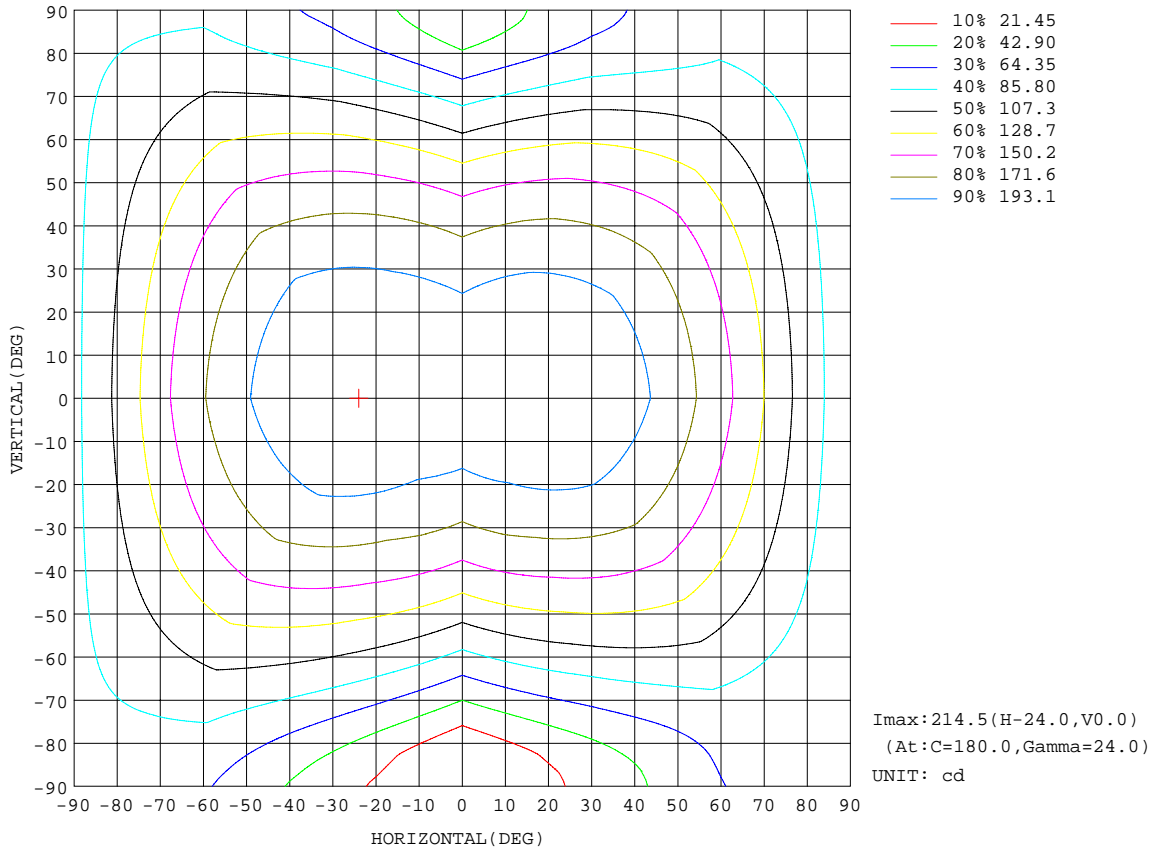
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	52	39	32	51	39	32	50	39	32	25
0.80	62	49	40	60	48	40	59	47	40	32
1.00	70	57	49	68	56	48	66	58	48	40
1.25	77	65	56	75	64	56	72	62	55	47
1.50	82	70	62	80	69	61	77	67	60	52
2.00	89	79	71	87	78	70	83	75	69	60
2.50	94	84	77	91	83	76	87	80	74	64
3.00	97	89	82	95	87	81	91	84	79	69
4.00	102	95	89	99	93	87	95	89	85	75
5.00	105	99	93	102	97	92	97	93	89	79
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:袁冠彬
 Test Date:2016-11-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:7.400m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.08V I:0.0936A P:19.753W PF:0.9587 Freq:49.99Hz Lamp Flux:840.463x1 lm		
NAME: SEW5121500L30MVTG	TYPE:	WEIGHT:2
SPEC.:	DIM.:	SERIAL No.:20160718001
MFR.: 银河照明	SUR.:0.165*0.105	Shielding Angle:

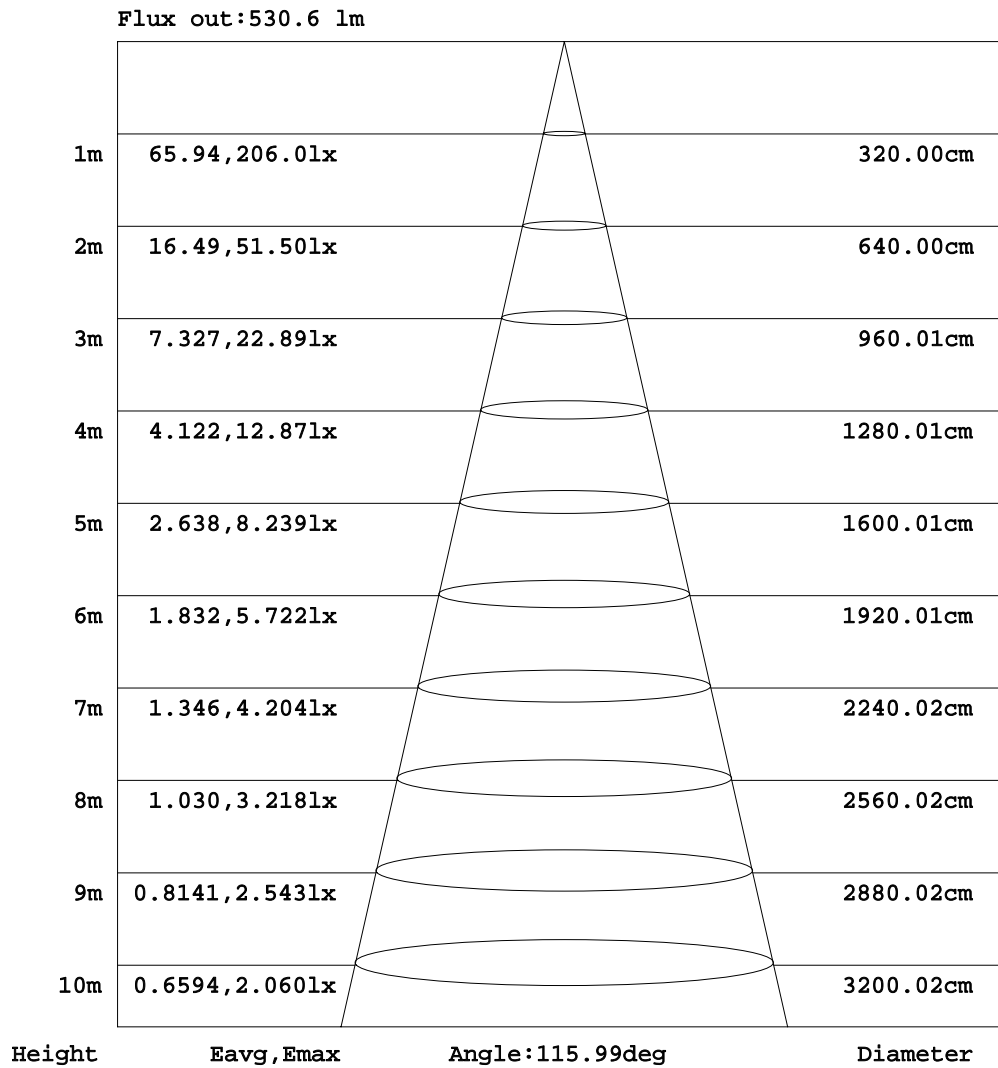


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 袁冠彬
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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 7.400m [K=1.0000]
 Remarks:

AAI Figure

Test:U:220.08V I:0.0936A P:19.753W PF:0.9587 Freq:49.99Hz Lamp Flux:840.463x1 lm		
NAME: SEW5121500L30MVTG	TYPE:	WEIGHT:2
SPEC.:	DIM.:	SERIAL No.:20160718001
MFR.: 银河照明	SUR.:0.165*0.105	Shielding Angle:

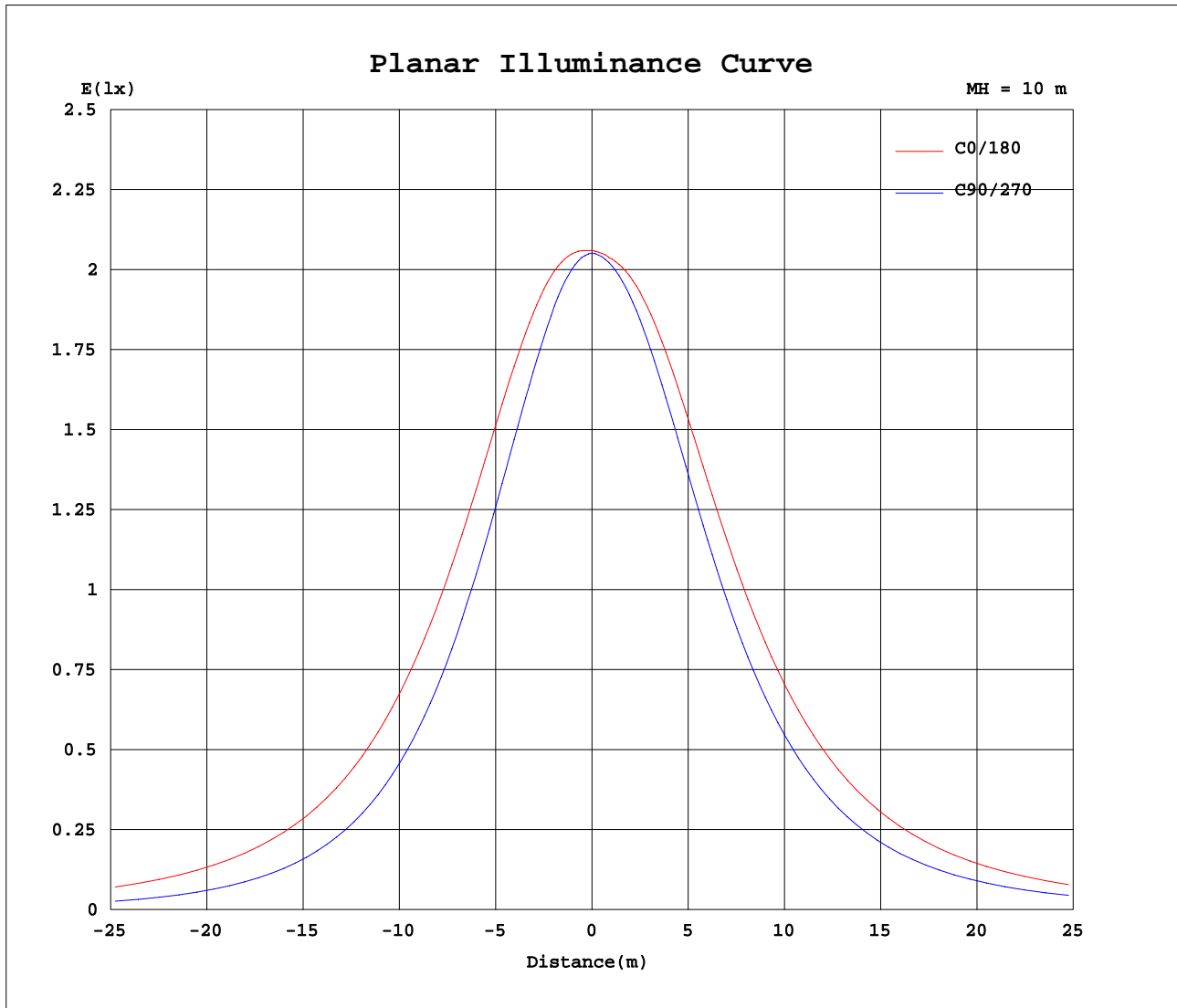


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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 Humidity:65.0%
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 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 30.0DEG
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 Test Date: 2016-11-11

γ Range: 0 - 90DEG
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 Humidity: 65.0%
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