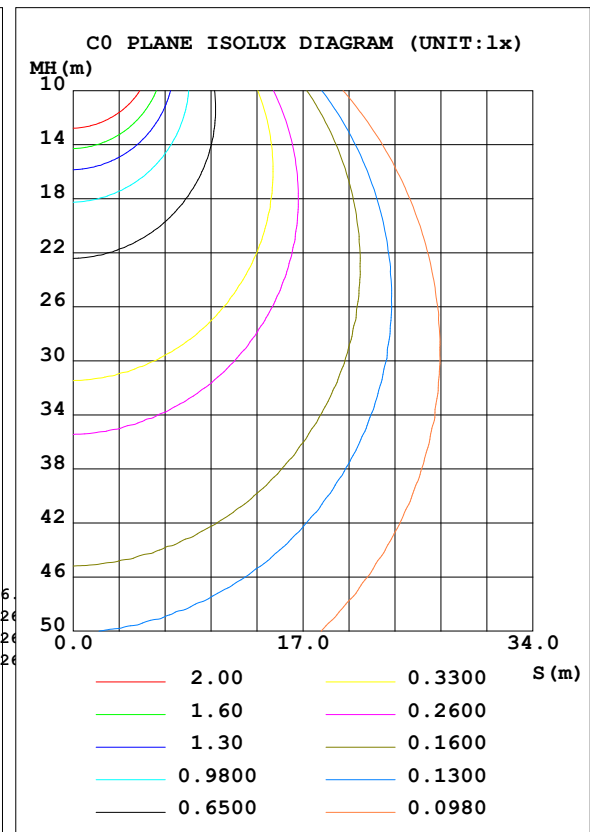
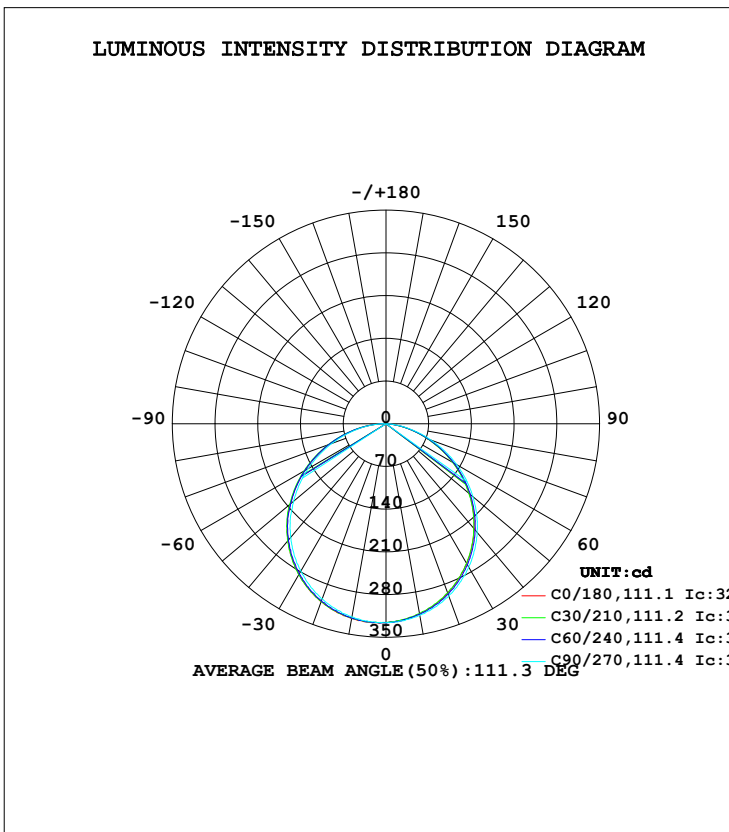


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.1V I:0.0562A P:11.68W PF:0.9031 Freq:50.00Hz Lamp Flux:922.35x1 lm		
NAME: 1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:Shada BV	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 79.00 lm/W
MODEL	0800355	I _{max} (cd)	327.1	S/MH (C0/180)	1.30	
NOMINAL POWER (W)	12	LOR (%)	100.0	S/MH (C90/270)	1.27	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	922.35	η UP, DN (C0-180)	0.0, 48.5	
NOMINAL FLUX (lm)	922.35	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.5	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Wilson
 Test Date: 2020-12-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity: 60.5%
 Test Distance: 2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

Assessor: Akin Xu

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	322.6	323.4	324.1	325.4	326.4	326.6	325.3	323.4	0- 5	7.776	7.776	0.84,0.84
10	316.7	317.2	318.8	322.0	324.2	324.1	321.7	318.4	5- 10	23.06	30.83	3.34,3.34
15	307.4	308.6	311.0	315.7	318.5	318.6	315.0	310.6	10- 15	37.55	68.39	7.41,7.41
20	295.9	296.8	300.3	306.2	310.3	310.1	305.1	299.5	15- 20	50.76	119.1	12.9,12.9
25	280.7	282.8	286.9	294.3	299.4	299.2	293.9	286.4	20- 25	62.23	181.4	19.7,19.7
30	264.6	266.5	271.3	279.4	285.4	284.8	279.0	270.0	25- 30	71.54	252.9	27.4,27.4
35	245.4	247.4	253.2	262.2	268.7	268.9	262.5	252.7	30- 35	78.41	331.3	35.9,35.9
40	225.2	226.3	232.3	242.5	250.1	249.4	243.0	231.8	35- 40	82.59	413.9	44.9,44.9
45	201.9	202.7	210.2	221.2	228.9	229.1	222.1	209.8	40- 45	83.92	497.8	54.54
50	178.3	178.7	186.0	196.1	204.6	206.2	197.5	186.4	45- 50	82.28	580.1	62.9,62.9
55	153.1	153.4	160.7	171.3	179.6	181.5	173.4	161.7	50- 55	77.91	658.0	71.3,71.3
60	126.8	126.6	133.7	144.5	153.7	155.6	147.6	135.8	55- 60	70.99	729.0	79.79
65	100.3	99.92	106.6	117.2	126.5	128.6	121.0	109.6	60- 65	61.74	790.8	85.7,85.7
70	73.96	73.55	79.02	89.43	98.62	101.0	94.13	82.69	65- 70	50.64	841.4	91.2,91.2
75	49.13	48.36	53.16	62.60	71.57	73.46	68.00	57.44	70- 75	38.32	879.7	95.4,95.4
80	26.45	25.17	29.16	37.45	45.69	47.84	43.01	32.54	75- 80	25.67	905.4	98.2,98.2
85	6.683	5.000	8.119	14.91	22.29	24.24	20.48	12.68	80- 85	13.53	918.9	99.6,99.6
90	0.0379	0.0364	0.0332	0.0310	2.269	3.898	1.081	0.0603	85- 90	3.424	922.4	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 497.84 lm

%lum = 54.0%
 %lamp = 54.0%

Conical surface Flux(120deg): 729.03 lm

%lum = 79.0%
 %lamp = 79.0%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Wilson
 Test Date:2020-12-22

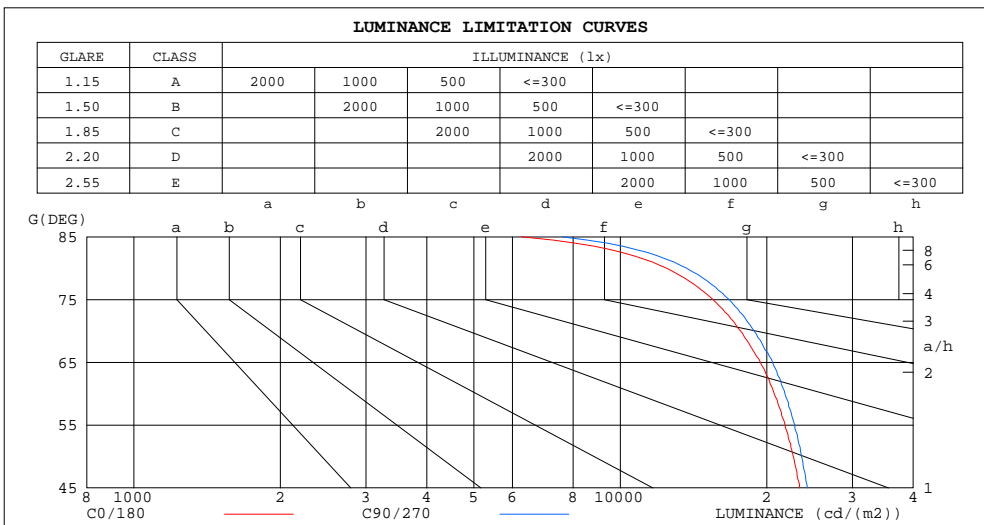
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity:60.5%
 Test Distance:2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

Assessor: Akin Xu

LUMINANCE LIMITATION CURVES

Test:U:230.1V I:0.0562A P:11.68W PF:0.9031 Freq:50.00Hz Lamp Flux:922.35x1 lm		
NAME: 1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Wilson
 Test Date: 2020-12-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity: 60.5%
 Test Distance: 2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

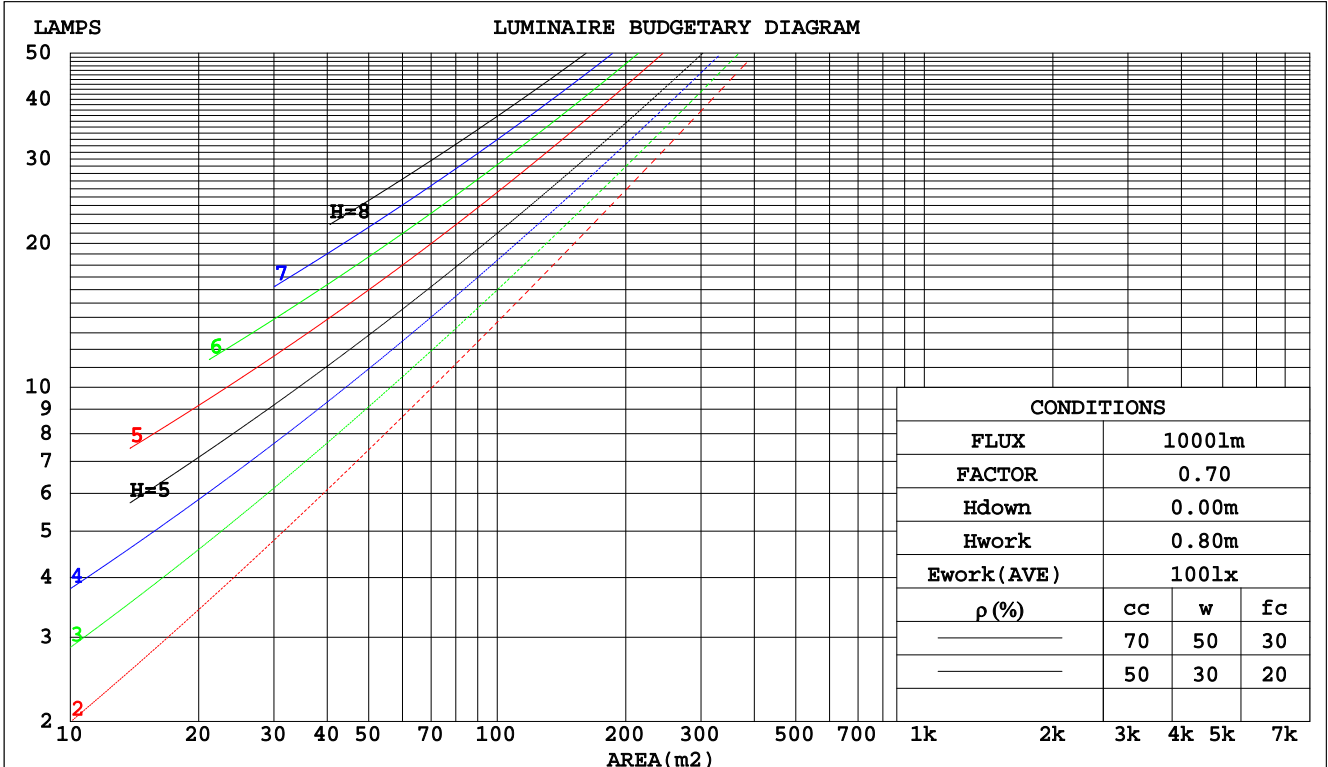
Checker: Near Gao

Assessor: Akin Xu

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.1V I:0.0562A P:11.68W PF:0.9031 Freq:50.00Hz Lamp Flux:922.35x1 lm		
NAME: 1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc	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	1.04	.00	.96	1.02	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.82	.77	.85	.80	.75	.82	.77	.73	.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	.62	.55	.69	.61	.54	.67	.59	.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	.57	.48	.41	.56	.47	.41	.54	.46	.41	.52	.45	.40	.51	.45	.40	.38
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.41	.36	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.44	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.27
10.0	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Wilson
 Test Date:2020-12-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity:60.5%
 Test Distance:2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

Assessor: Akin Xu

WEC AND CCEC

Test:U:230.1V I:0.0562A P:11.68W PF:0.9031 Freq:50.00Hz Lamp Flux:922.35x1 lm		
NAME: 1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	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	.309	.175	.056	.301	.172	.055	.288	.165	.053	.276	.159	.051	.265	.153	.049	
2.0	.291	.159	.049	.284	.157	.048	.273	.152	.047	.262	.147	.046	.252	.143	.045	
3.0	.269	.143	.043	.264	.141	.043	.253	.137	.042	.244	.134	.041	.235	.130	.040	
4.0	.249	.129	.038	.244	.128	.038	.235	.124	.037	.226	.121	.037	.218	.119	.036	
5.0	.230	.117	.034	.226	.116	.034	.217	.113	.033	.210	.111	.033	.203	.108	.033	
6.0	.213	.107	.031	.209	.106	.030	.202	.104	.030	.195	.102	.030	.189	.100	.030	
7.0	.199	.098	.028	.195	.097	.028	.189	.095	.027	.183	.094	.027	.177	.092	.027	
8.0	.185	.091	.025	.182	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.174	.084	.023	.171	.083	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.163	.078	.022	.161	.078	.022	.156	.077	.022	.152	.075	.021	.148	.074	.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	.180	.156	.134	.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	.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	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Wilson
 Test Date:2020-12-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity:60.5%
 Test Distance:2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

Assessor: Akin Xu

UGR(Unified Glare Rating) Table

Test:U:230.1V I:0.0562A P:11.68W PF:0.9031 Freq:50.00Hz Lamp Flux:922.35x1 lm										
NAME: 1					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	23.5	25.0	23.8	25.2	25.4	23.7	25.2	24.0	25.4	25.6
3H	24.8	26.2	25.1	26.5	26.7	25.1	26.5	25.4	26.7	27.0
4H	25.3	26.6	25.6	26.9	27.2	25.6	26.9	25.9	27.2	27.4
6H	25.6	26.9	25.9	27.1	27.4	25.9	27.2	26.2	27.4	27.7
8H	25.7	26.9	26.0	27.2	27.4	26.0	27.2	26.3	27.5	27.8
12H	25.7	26.8	26.0	27.1	27.4	26.0	27.2	26.3	27.5	27.8
4H 2H	24.1	25.4	24.4	25.6	25.9	24.2	25.6	24.5	25.8	26.1
3H	25.5	26.7	25.9	27.0	27.3	25.8	26.9	26.1	27.2	27.5
4H	26.1	27.2	26.5	27.5	27.9	26.4	27.4	26.8	27.8	28.1
6H	26.5	27.5	26.9	27.8	28.2	26.8	27.8	27.2	28.1	28.5
8H	26.6	27.5	27.0	27.9	28.3	26.9	27.8	27.3	28.2	28.5
12H	26.6	27.4	27.1	27.8	28.2	26.9	27.8	27.4	28.1	28.5
8H 4H	26.3	27.2	26.7	27.6	28.0	26.6	27.4	27.0	27.8	28.2
6H	26.8	27.6	27.3	28.0	28.4	27.1	27.8	27.5	28.2	28.6
8H	27.0	27.6	27.4	28.0	28.5	27.2	27.9	27.7	28.3	28.8
12H	27.0	27.6	27.5	28.0	28.5	27.3	27.9	27.8	28.3	28.8
12H 4H	26.3	27.1	26.8	27.5	27.9	26.5	27.4	27.0	27.7	28.1
6H	26.8	27.5	27.3	27.9	28.4	27.1	27.7	27.6	28.2	28.6
8H	27.0	27.6	27.5	28.0	28.5	27.3	27.8	27.7	28.3	28.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117, 922.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.3)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Wilson
 Test Date:2020-12-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity:60.5%
 Test Distance:2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

Assessor: Akin Xu

UTILIZATION FACTORS TABLE

Test:U:230.1V I:0.0562A P:11.68W PF:0.9031 Freq:50.00Hz Lamp Flux:922.35x1 lm		
NAME: 1	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	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	49	65	55	48	41
1.00	76	65	58	75	64	57	73	66	57	50
1.25	83	73	66	82	72	65	79	71	64	57
1.50	88	78	71	87	77	71	84	76	70	62
2.00	95	87	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	100	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Wilson
 Test Date:2020-12-22

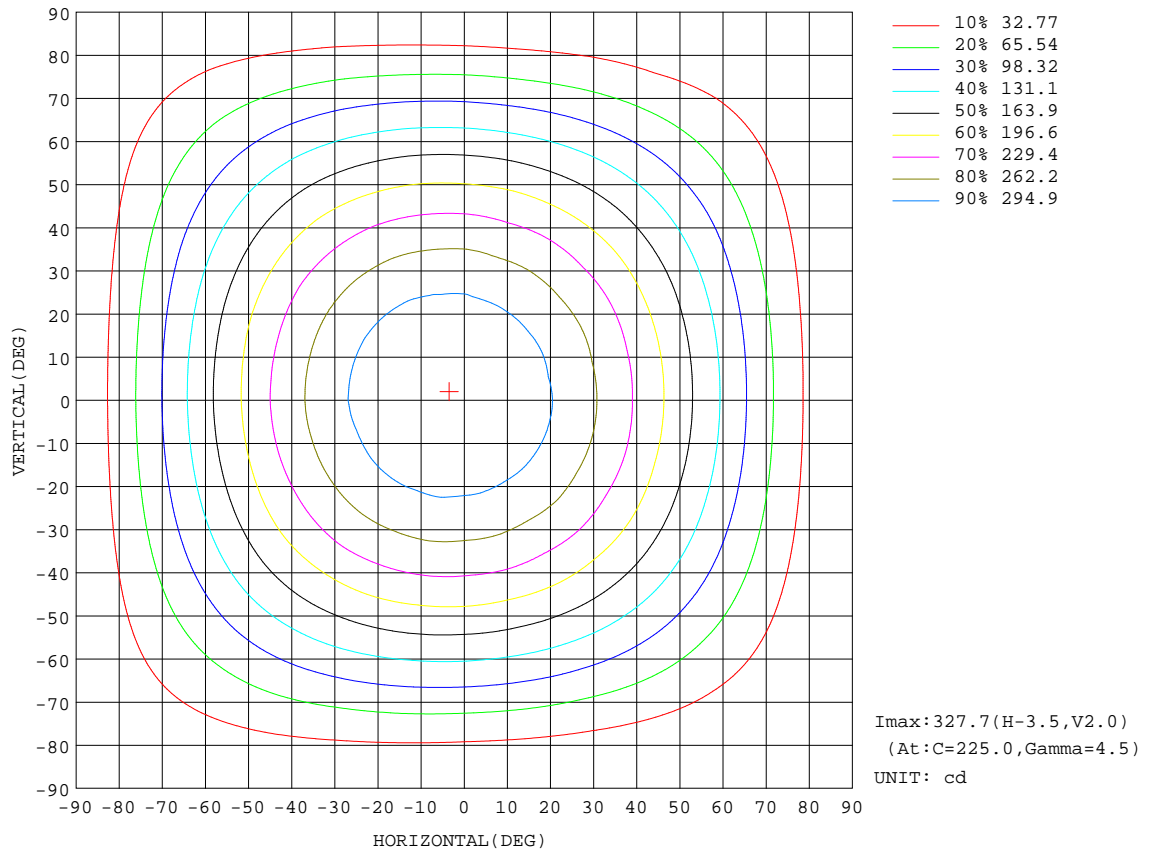
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity:60.5%
 Test Distance:2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

Assessor: Akin Xu

ISOCANDELA DIAGRAM

Test:U:230.1V I:0.0562A P:11.68W PF:0.9031 Freq:50.00Hz Lamp Flux:922.35x1 lm		
NAME: 1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Wilson
 Test Date: 2020-12-22

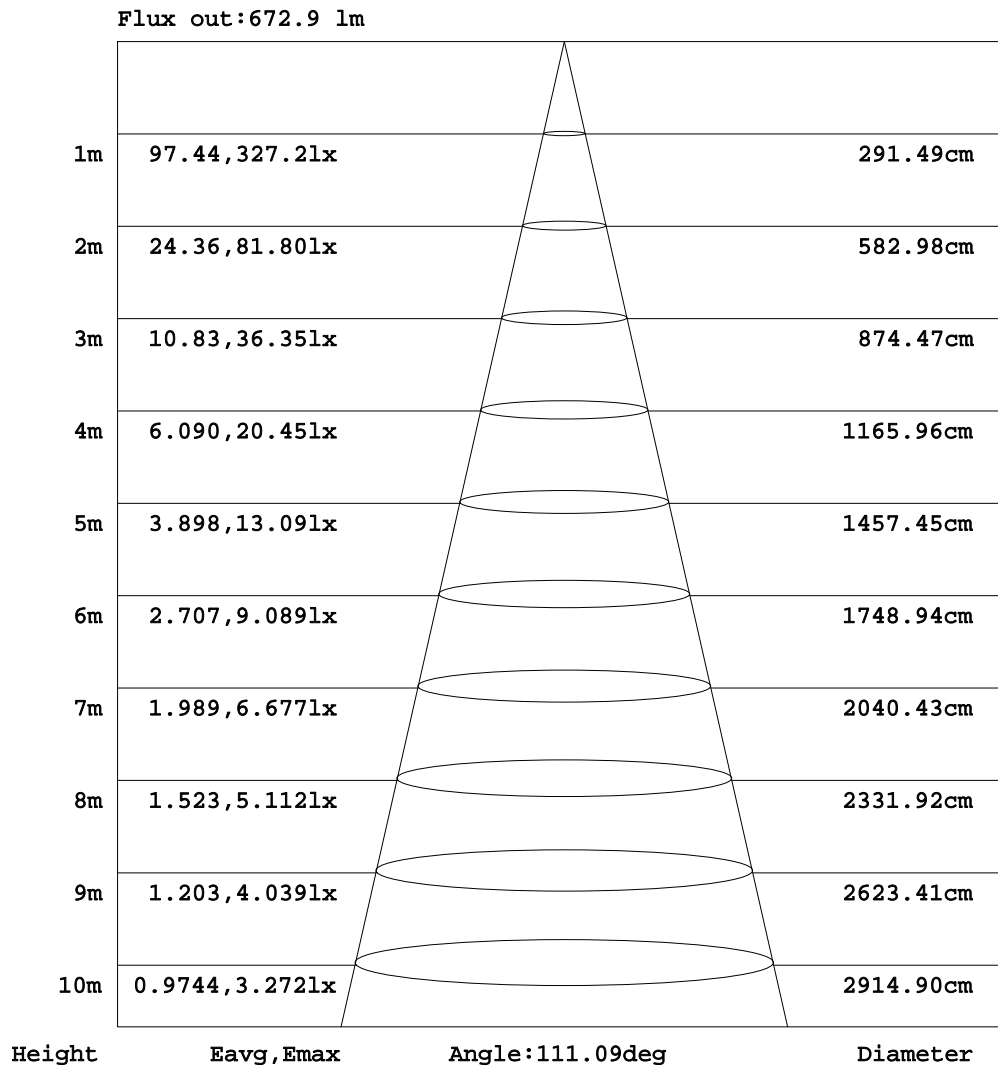
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity: 60.5%
 Test Distance: 2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

Assessor: Akin Xu

AAI Figure

Test:U:230.1V I:0.0562A P:11.68W PF:0.9031 Freq:50.00Hz Lamp Flux:922.35x1 lm		
NAME: 1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



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

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Wilson
 Test Date:2020-12-22

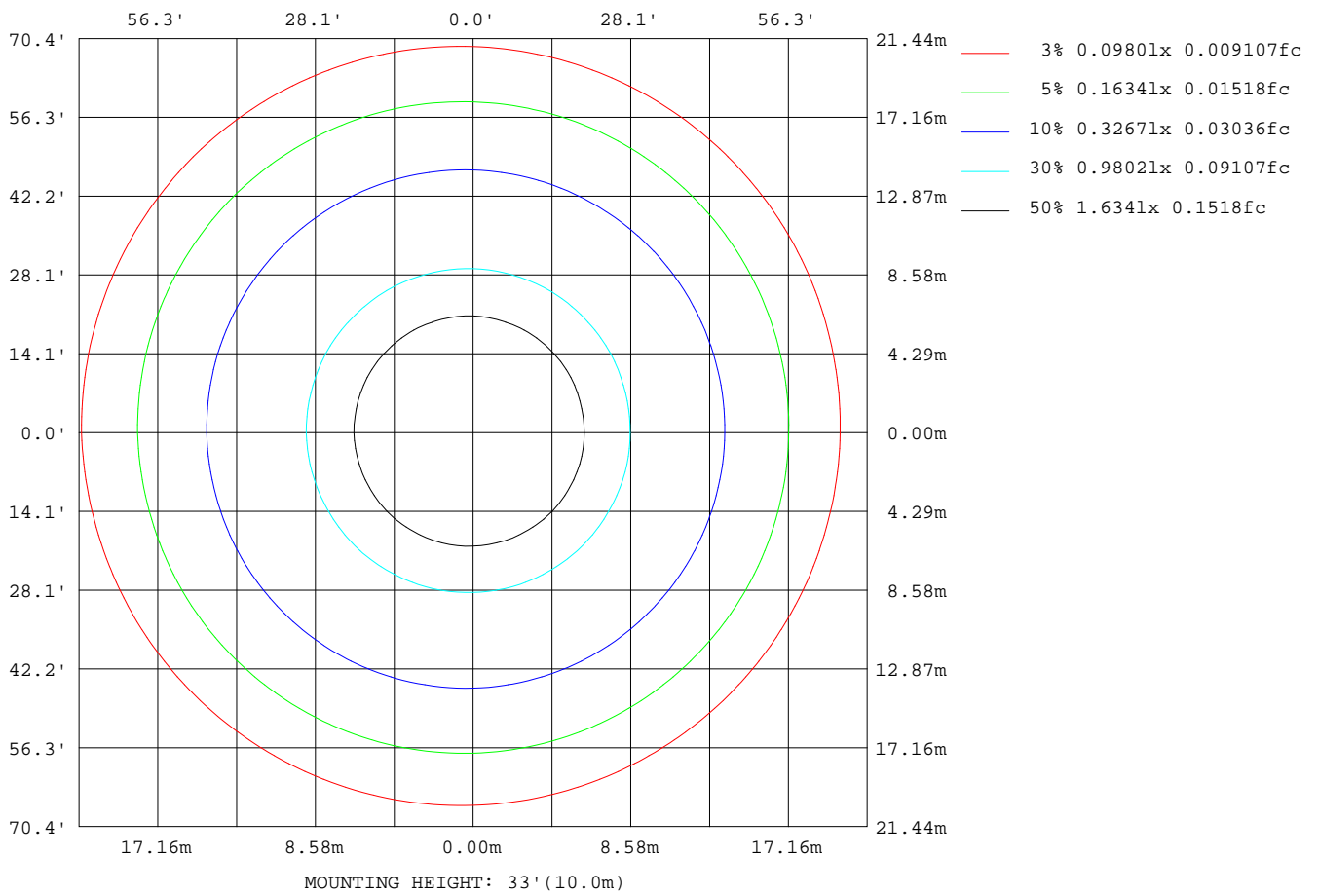
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity:60.5%
 Test Distance:2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

Assessor: Akin Xu

ISOLUX DIAGRAM

Test:U:230.1V I:0.0562A P:11.68W PF:0.9031 Freq:50.00Hz Lamp Flux:922.35x1 lm		
NAME: 1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Wilson
 Test Date: 2020-12-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity: 60.5%
 Test Distance: 2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

Assessor: Akin Xu

LED Avg.L Report

Test:U:230.1V I:0.0562A P:11.68W PF:0.9031 Freq:50.00Hz Lamp Flux:922.35x1 lm		
NAME: 1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180 (65) av	21878
L_0~180 (75) av	19010
L_0~180 (85) av	13553
L_90~270 (65) av	21951
L_90~270 (75) av	19083
L_90~270 (85) av	13377
L_45 (65) av	21959
L_45 (75) av	19046
L_45 (85) av	13291

Standard: GB/T 29293-2012

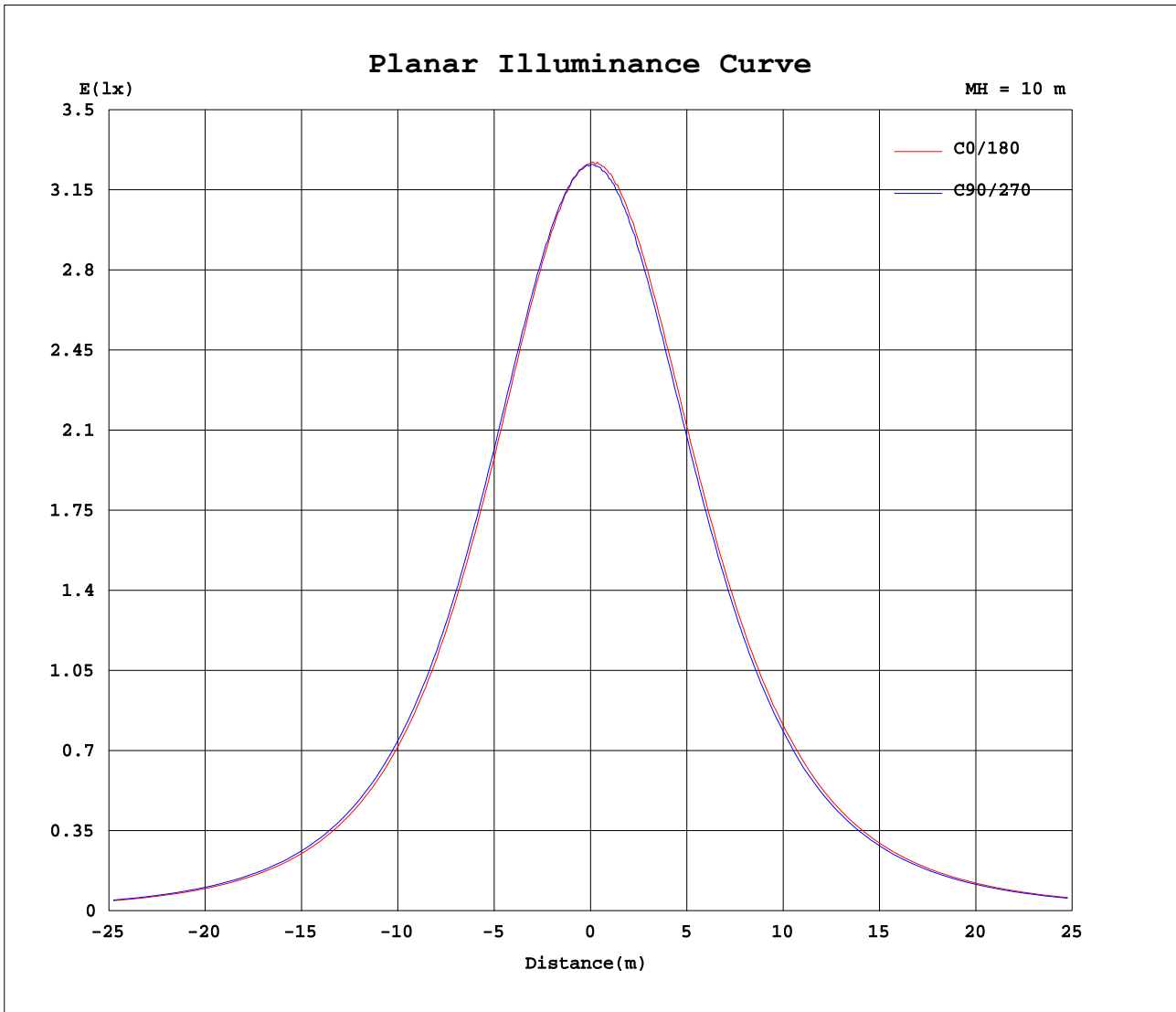
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Wilson
 Test Date:2020-12-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity:60.5%
 Test Distance:2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

Assessor: Akin Xu

Planar Illuminance Curve



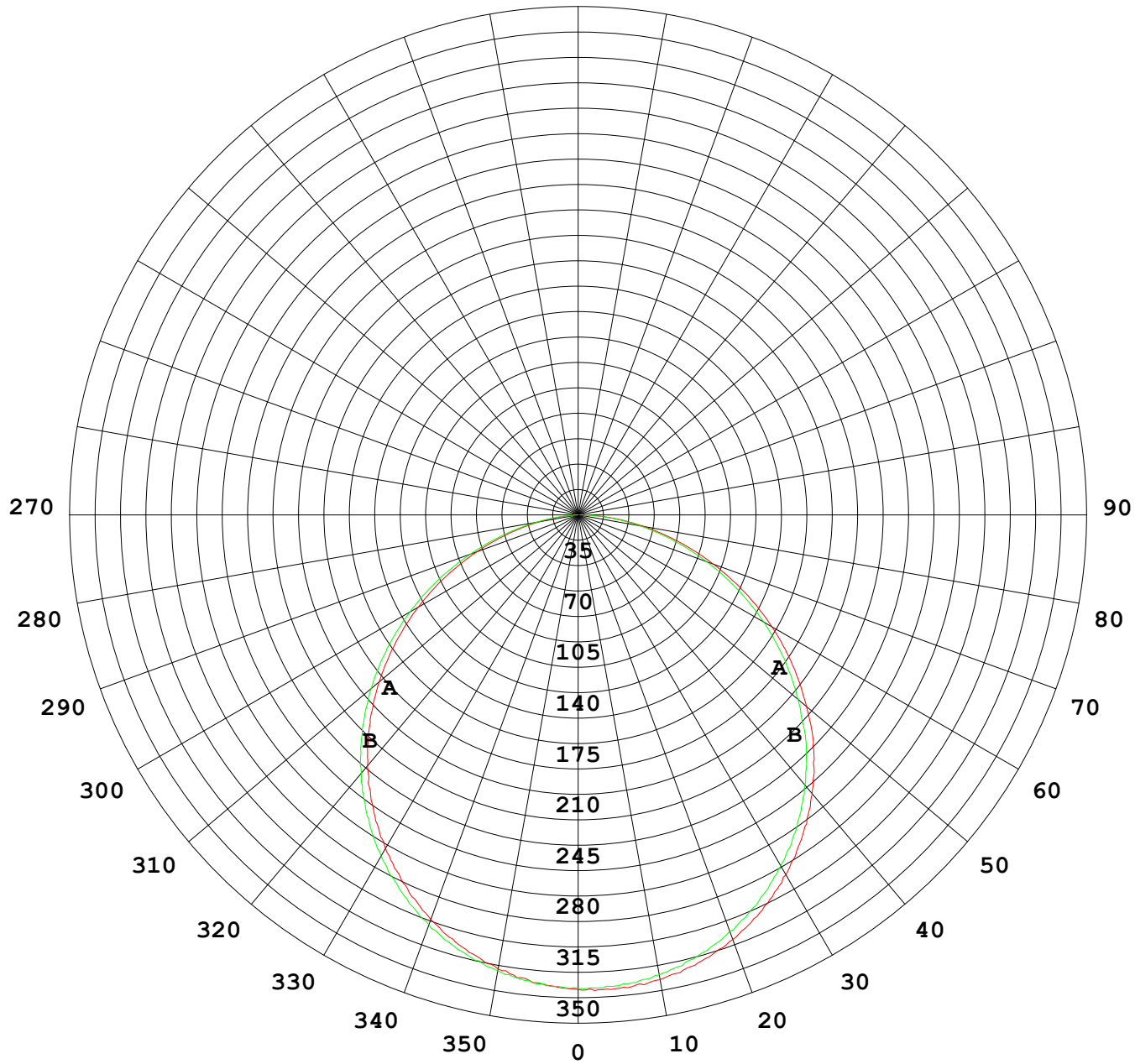
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Wilson
 Test Date: 2020-12-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.354
 Humidity: 60.5%
 Test Distance: 2.587m [K=1.0000]
 Remarks: File No.: WT-F-504-3206-01-A

Checker: Near Gao

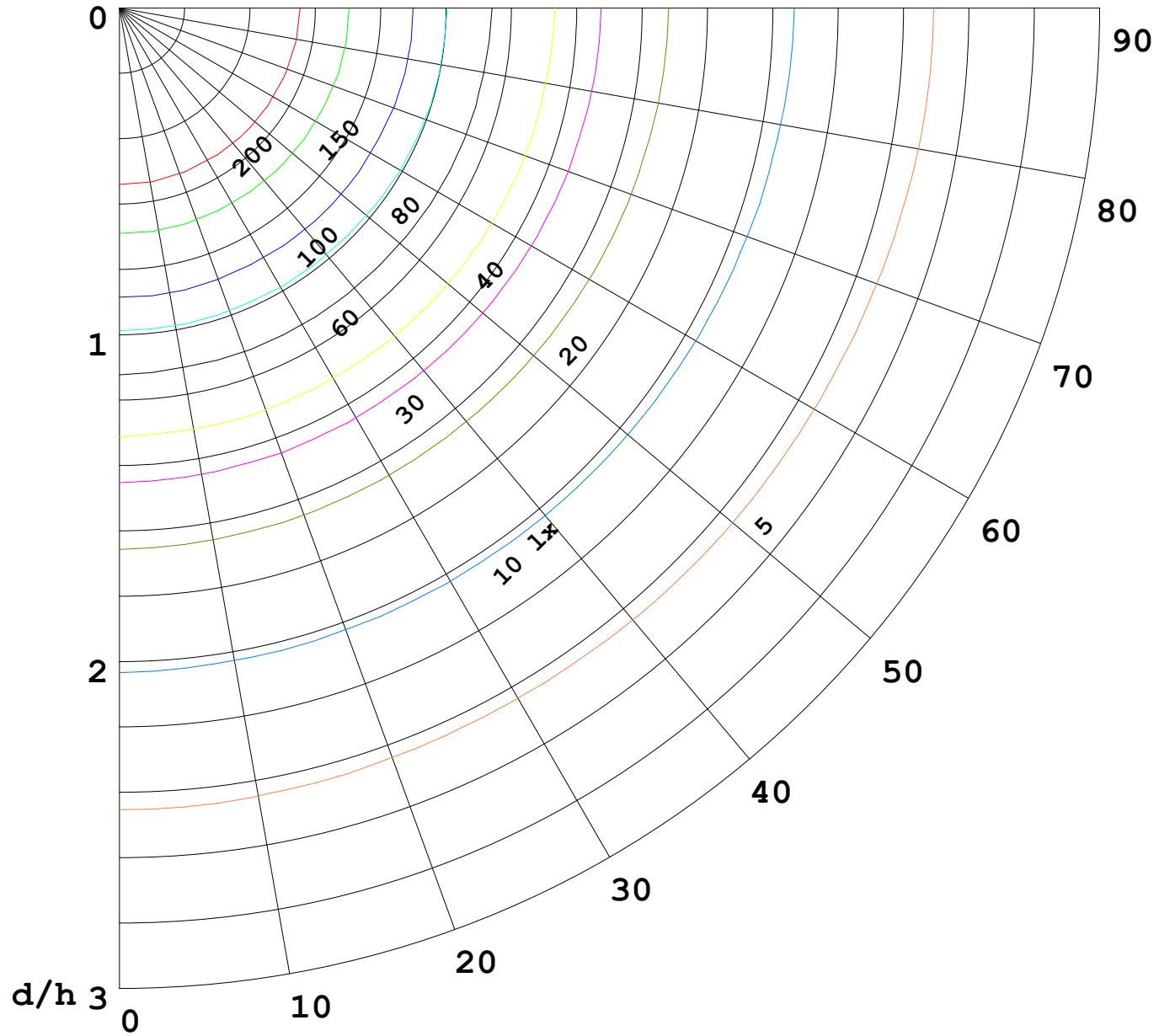
Assessor: Akin Xu

I (cd)



1000 lm

$K = 1$



F = 1000 lm
K = 0.7
Hcc = 0.8 m
Hfc = 0.0 m
Eave = 100 lx

	Pcc	Pw	Pfc
—————	70	50	30
—————	50	30	20

