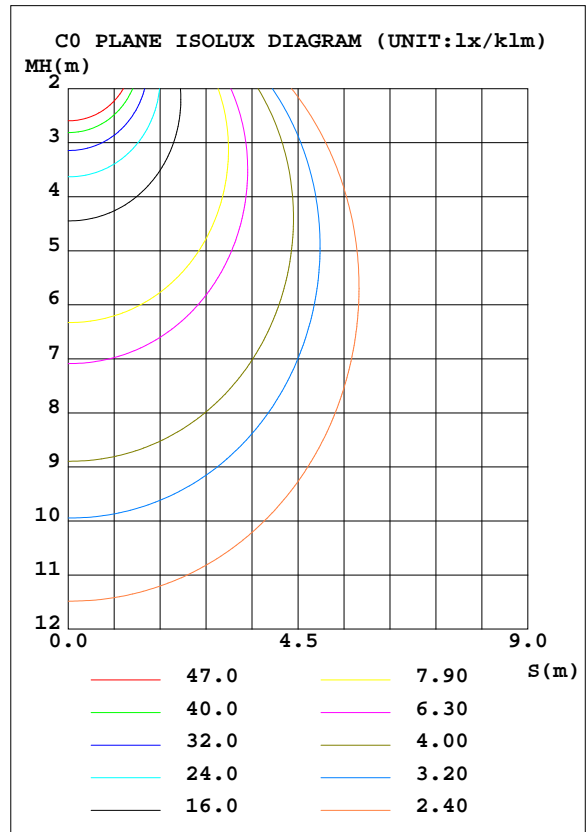
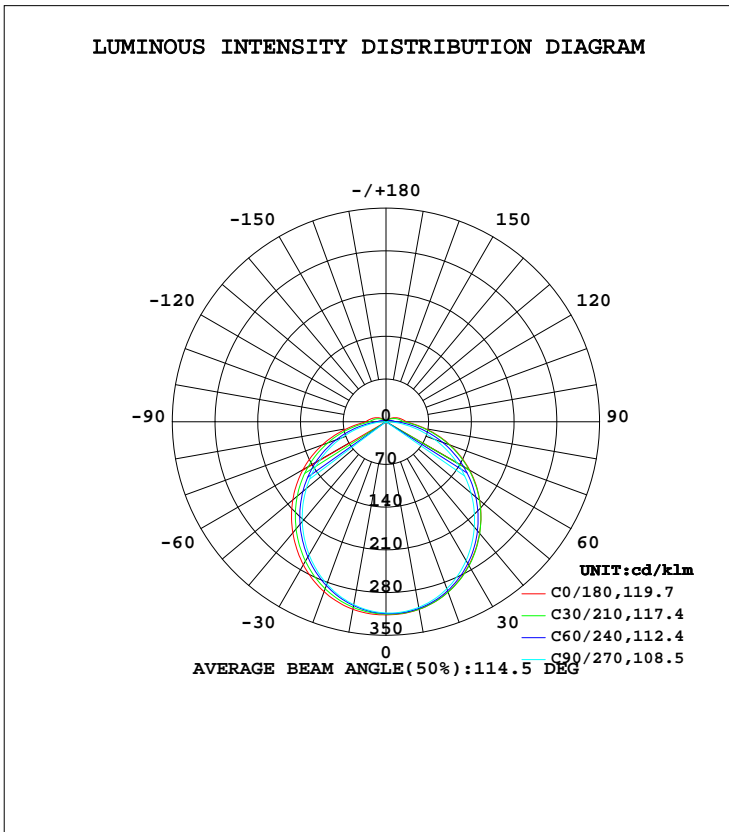


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.0V I:0.1740A P:38.70W PF:0.9610 Lamp Flux:3965.85x1 lm		
NAME: 三防灯40W1	TYPE:OBH-A	WEIGHT:
SPEC.:	DIM.:600mm	SERIAL No.:
MFR.:	SUR.:0.63*0.09	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 102.48 lm/W			
MODEL		I <sub>max</sub> (cd/klm)	316.5	S/MH(C0/180)	1.27
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.20
RATED VOLTAGE(V)	230	TOTAL FLUX(lm/klm)	1000.0	η UP, DN(C0-180)	2.6,47.6
NOMINAL FLUX(lm)	3965.85	CIE CLASS	DIRECT	η UP, DN(C180-360)	2.7,47.1
LAMPS INSIDE	1	η up(%)	5.4	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	94.6	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Zhong ql  
 Test Date:28 July 2020

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity:65.0%  
 Test Distance:7.640m [K=1.0000]  
 Remarks:None

## ZONAL FLUX DIAGRAM

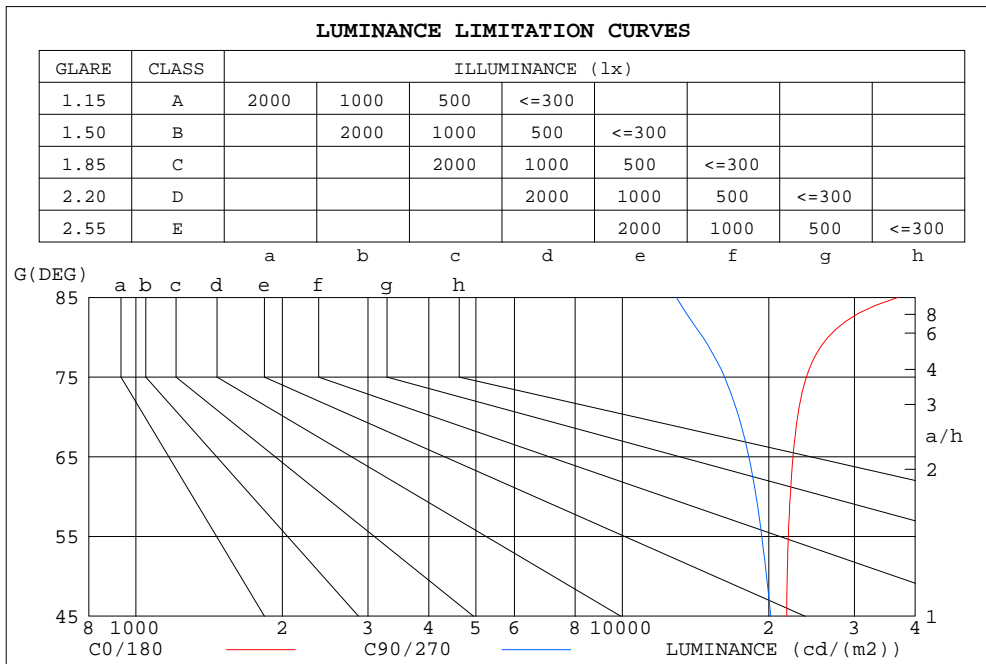
## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	312.2	311.2	308.9	306.2	312.1	307.4	304.4	307.1	0- 10	29.71	29.71	2.97,2.97
20	297.0	296.1	291.3	288.5	296.6	288.6	283.2	291.3	10- 20	85.02	114.7	11.5,11.5
30	271.6	270.3	262.5	260.6	270.8	259.9	251.9	265.4	20- 30	128.5	243.3	24.3,24.3
40	238.5	236.1	225.1	225.0	237.5	224.2	213.5	231.8	30- 40	154.8	398.0	39.8,39.8
50	200.5	196.0	181.9	184.3	199.4	183.8	170.6	192.9	40- 50	161.6	559.7	56,56
60	158.2	151.7	134.7	139.8	157.1	140.2	124.9	150.4	50- 60	149.6	709.3	70.9,70.9
70	112.1	104.4	84.92	92.58	111.2	94.42	77.61	105.1	60- 70	120.5	829.8	83,83
80	65.73	57.15	36.38	47.29	65.19	49.90	32.25	60.05	70- 80	79.07	908.9	90.9,90.9
90	33.52	23.38	1.977	21.33	33.52	21.21	1.309	25.14	80- 90	37.39	946.2	94.6,94.6
100	26.06	16.46	1.371	15.42	25.98	15.34	1.371	17.08	90-100	19.49	965.7	96.6,96.6
110	19.26	11.09	2.025	10.05	19.28	10.38	1.713	11.48	100-110	13.73	979.5	97.9,97.9
120	13.02	6.186	2.226	5.554	13.10	6.077	2.390	7.194	110-120	8.592	988.1	98.8,98.8
130	7.296	3.690	2.406	3.088	7.400	3.692	2.645	4.359	120-130	4.839	992.9	99.3,99.3
140	2.801	2.683	2.579	2.710	2.848	2.864	2.845	2.778	130-140	2.469	995.4	99.5,99.5
150	3.093	3.002	2.936	3.010	3.144	3.157	3.167	3.097	140-150	1.830	997.2	99.7,99.7
160	3.374	3.297	3.244	3.279	3.419	3.408	3.416	3.367	150-160	1.483	998.7	99.9,99.9
170	3.623	3.541	3.499	3.513	3.651	3.597	3.587	3.565	160-170	0.9789	999.7	100,100
180	3.758	3.662	3.631	3.630	3.768	3.662	3.624	3.630	170-180	0.3445	1000	100,100
DEG	LUMINOUS INTENSITY:cd/klm									UNIT:lm/klm		

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Zhong ql  
Test Date:28 July 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:7.640m [K=1.0000]  
Remarks:None

LUMINANCE LIMITATION CURVES



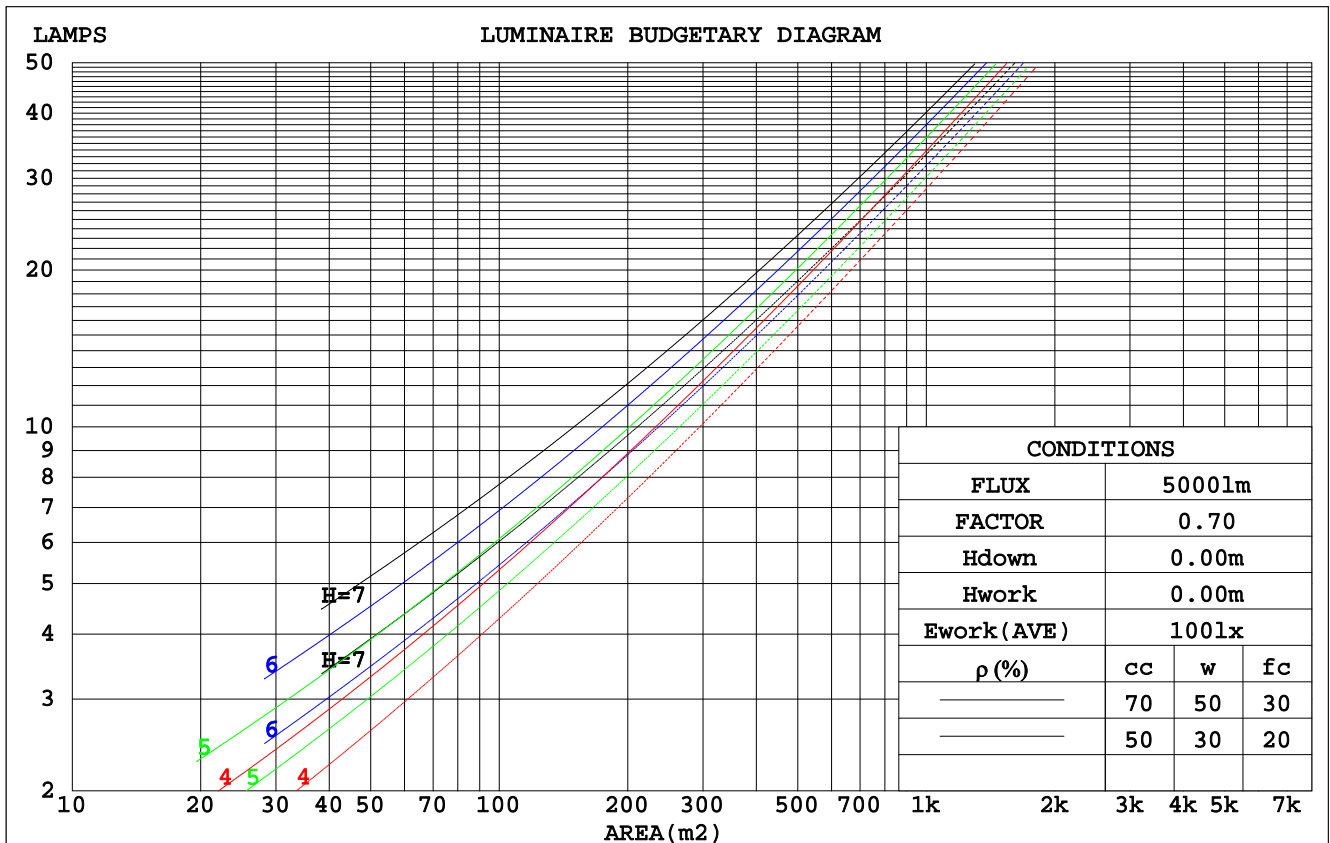
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	36884	12926
80	26477	14653
75	23898	16227
70	22929	17366
65	22428	18204
60	22135	18838
55	21941	19351
50	21820	19788
45	21770	20190

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Zhong ql  
 Test Date: 28 July 2020

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 7.640m [K=1.0000]  
 Remarks: None

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.97	.97	.97	.95
1.0	1.01	.97	.92	.98	.94	.90	.93	.90	.87	.88	.86	.83	.84	.82	.80	.77
2.0	.88	.81	.74	.85	.79	.73	.81	.75	.71	.77	.72	.68	.73	.69	.66	.63
3.0	.77	.68	.61	.75	.67	.61	.71	.64	.59	.67	.62	.57	.64	.59	.55	.53
4.0	.68	.59	.52	.66	.58	.51	.63	.56	.50	.60	.54	.49	.57	.52	.47	.45
5.0	.60	.51	.44	.59	.50	.44	.56	.49	.43	.54	.47	.42	.51	.46	.41	.39
6.0	.54	.45	.39	.53	.44	.38	.51	.43	.37	.48	.42	.37	.46	.41	.36	.34
7.0	.49	.40	.34	.48	.40	.34	.46	.39	.33	.44	.37	.32	.42	.36	.32	.30
8.0	.45	.36	.30	.44	.36	.30	.42	.35	.30	.40	.34	.29	.39	.33	.29	.27
9.0	.41	.33	.27	.40	.32	.27	.39	.32	.27	.37	.31	.26	.36	.30	.26	.24
10.0	.38	.30	.25	.37	.30	.24	.36	.29	.24	.35	.28	.24	.33	.28	.23	.22



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Zhong ql  
 Test Date: 28 July 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 7.640m [K=1.0000]  
 Remarks: None

WEC AND CCEC

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.335	.190	.060	.326	.186	.059	.310	.178	.057	.294	.170	.055	.281	.163	.052	
2.0	.306	.167	.051	.298	.164	.051	.283	.157	.049	.270	.151	.047	.257	.145	.046	
3.0	.279	.148	.044	.272	.146	.044	.259	.140	.043	.247	.135	.041	.235	.130	.040	
4.0	.255	.132	.039	.249	.130	.038	.237	.126	.038	.226	.121	.037	.216	.117	.036	
5.0	.234	.119	.035	.229	.117	.034	.218	.114	.033	.208	.110	.033	.199	.106	.032	
6.0	.216	.108	.031	.211	.107	.031	.202	.103	.030	.193	.100	.029	.185	.097	.029	
7.0	.201	.099	.028	.196	.098	.028	.188	.095	.027	.180	.092	.027	.172	.089	.026	
8.0	.187	.091	.026	.183	.090	.025	.175	.088	.025	.168	.085	.025	.161	.083	.024	
9.0	.175	.085	.024	.171	.083	.023	.164	.081	.023	.158	.079	.023	.151	.077	.022	
10.0	.164	.079	.022	.161	.078	.022	.154	.076	.021	.148	.074	.021	.143	.072	.021	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.231	.231	.231	.198	.198	.198	.135	.135	.135	.078	.078	.078	.025	.025	.025	
1.0	.223	.197	.174	.191	.169	.149	.131	.116	.103	.075	.067	.060	.024	.022	.019	
2.0	.216	.173	.138	.185	.149	.119	.127	.103	.083	.073	.060	.049	.023	.019	.016	
3.0	.208	.156	.115	.178	.135	.100	.122	.094	.070	.071	.055	.041	.023	.018	.013	
4.0	.200	.143	.099	.172	.124	.086	.118	.086	.061	.068	.050	.036	.022	.016	.012	
5.0	.193	.133	.089	.165	.115	.077	.114	.080	.054	.066	.047	.032	.021	.015	.011	
6.0	.185	.125	.081	.159	.108	.071	.110	.076	.050	.064	.044	.030	.021	.015	.010	
7.0	.178	.118	.075	.154	.102	.066	.106	.072	.046	.062	.042	.028	.020	.014	.009	
8.0	.172	.112	.071	.148	.097	.062	.102	.068	.044	.060	.040	.026	.019	.013	.009	
9.0	.166	.107	.068	.143	.093	.059	.099	.065	.042	.058	.039	.025	.019	.013	.008	
10.0	.160	.103	.065	.138	.089	.057	.096	.063	.040	.056	.037	.024	.018	.012	.008	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Zhong ql  
 Test Date: 28 July 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 7.640m [K=1.0000]  
 Remarks: None

## UGR(Unified Glare Rating) Table

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	18.7	20.2	19.1	20.5	20.8	18.1	19.6	18.5	19.9	20.2
3H	20.6	22.0	21.0	22.3	22.6	19.7	21.0	20.1	21.4	21.7
4H	21.5	22.8	21.9	23.1	23.5	20.3	21.6	20.7	22.0	22.3
6H	22.3	23.5	22.7	23.9	24.3	20.8	22.0	21.2	22.4	22.7
8H	22.7	23.9	23.1	24.2	24.7	20.9	22.1	21.3	22.5	22.9
12H	23.1	24.2	23.5	24.6	25.0	21.0	22.1	21.4	22.5	22.9
4H 2H	19.3	20.6	19.7	21.0	21.4	18.9	20.2	19.3	20.5	20.9
3H	21.4	22.6	21.9	23.0	23.4	20.7	21.8	21.1	22.2	22.6
4H	22.5	23.5	22.9	23.9	24.4	21.4	22.5	21.9	22.9	23.3
6H	23.5	24.4	23.9	24.8	25.3	22.0	23.0	22.5	23.4	23.9
8H	23.9	24.8	24.4	25.3	25.8	22.2	23.1	22.7	23.6	24.1
12H	24.4	25.2	24.9	25.7	26.2	22.4	23.2	22.9	23.7	24.2
8H 4H	22.8	23.7	23.3	24.1	24.6	21.9	22.8	22.4	23.2	23.7
6H	24.0	24.7	24.5	25.2	25.8	22.7	23.4	23.2	23.9	24.5
8H	24.6	25.3	25.2	25.8	26.4	23.1	23.7	23.6	24.2	24.8
12H	25.3	25.9	25.9	26.4	27.0	23.3	23.9	23.9	24.4	25.0
12H 4H	22.8	23.6	23.3	24.1	24.6	22.0	22.8	22.5	23.3	23.8
6H	24.1	24.7	24.6	25.3	25.8	22.9	23.5	23.4	24.1	24.6
8H	24.8	25.4	25.4	25.9	26.5	23.3	23.9	23.9	24.4	25.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.4				

CIE Pub.117 Corrected 1000 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.0)

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Zhong ql  
Test Date:28 July 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:7.640m [K=1.0000]  
Remarks:None

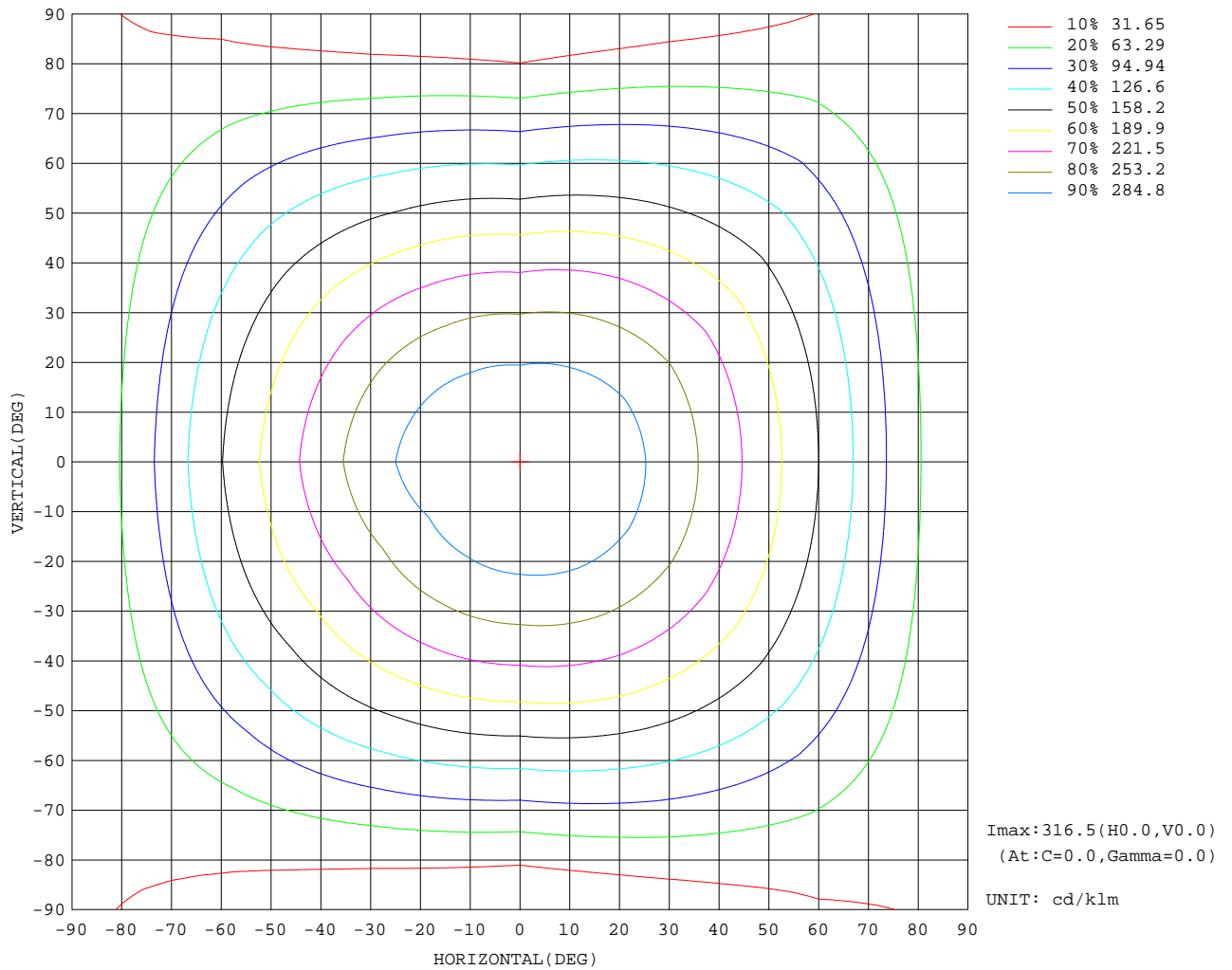
## UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	54	42	36	52	42	35	29
0.80	64	52	45	63	52	44	61	51	44	37
1.00	72	61	53	71	60	53	68	61	52	44
1.25	80	68	61	78	67	60	75	66	59	51
1.50	85	74	66	83	73	66	79	71	64	56
2.00	92	82	75	89	81	74	85	78	72	63
2.50	96	87	80	93	85	79	89	82	77	67
3.00	99	91	85	96	90	84	92	86	81	71
4.00	103	97	92	100	95	90	95	91	87	76
5.00	106	100	96	103	98	94	98	94	90	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: Zhong ql  
 Test Date: 28 July 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 7.640m [K=1.0000]  
 Remarks: None

ISOCANDELA DIAGRAM

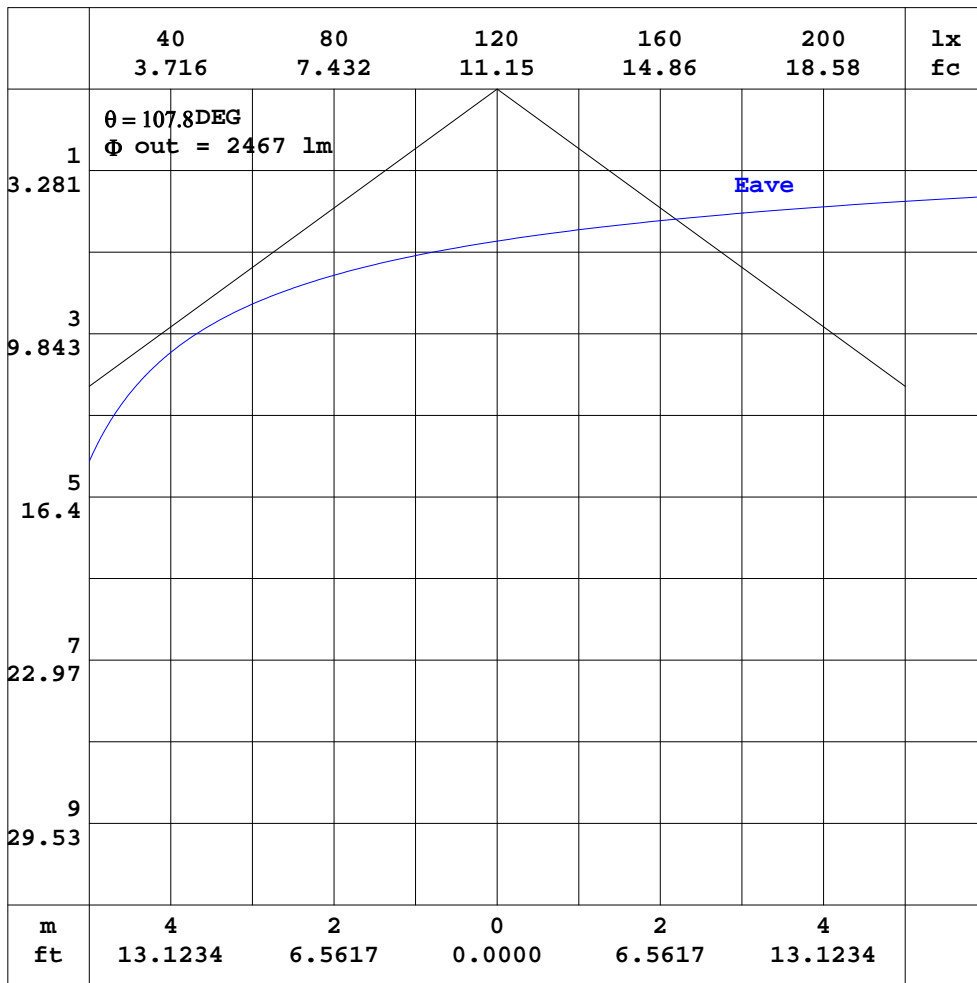


C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Zhong ql  
 Test Date: 28 July 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 7.640m [K=1.0000]  
 Remarks: None



AAI CURVES

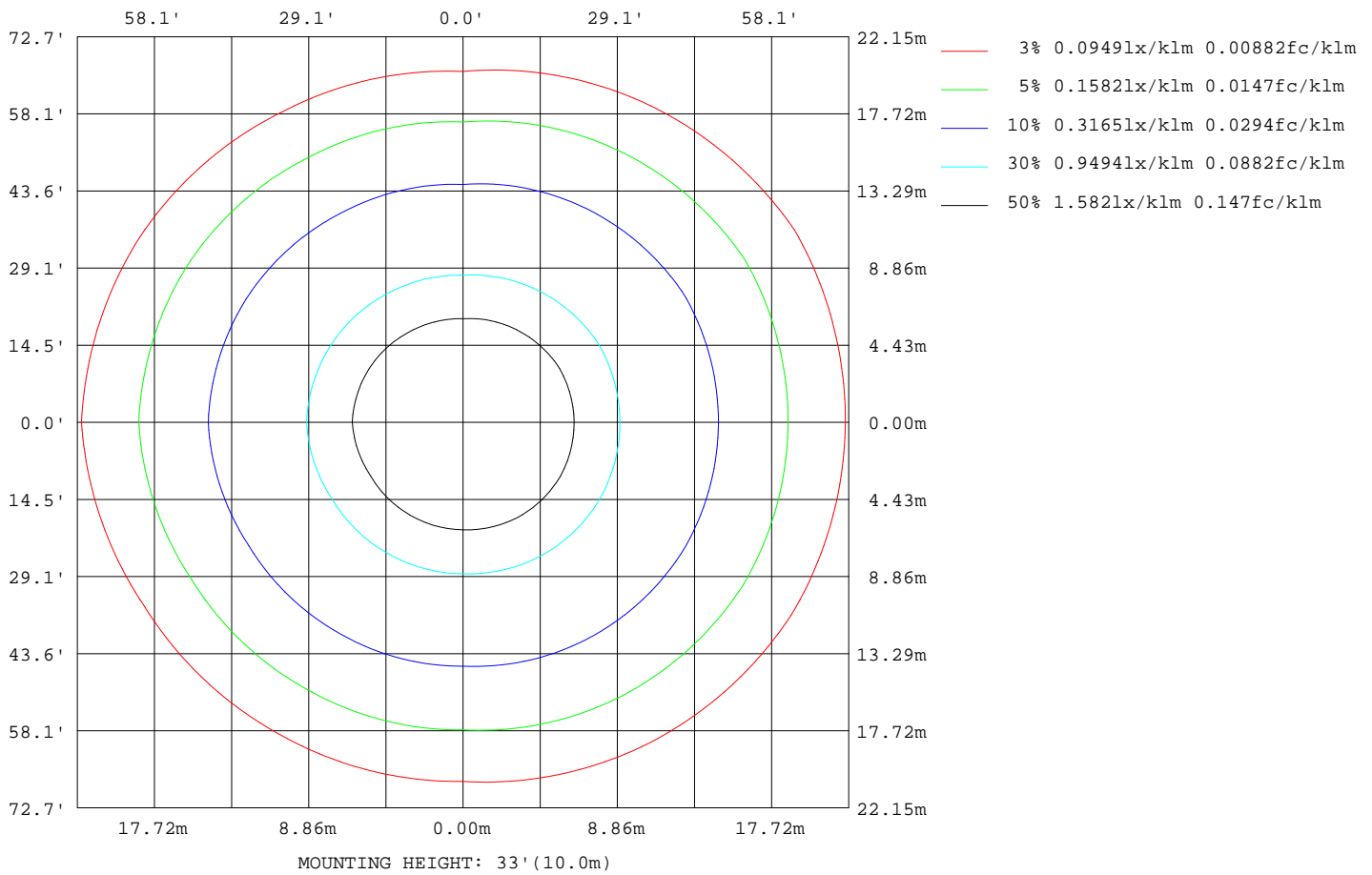


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Zhong ql  
 Test Date: 28 July 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 7.640m [K=1.0000]  
 Remarks: None

ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Zhong ql  
 Test Date: 28 July 2020

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 7.640m [K=1.0000]  
 Remarks: None

## LED Avg.L Report

Test:U:230.0V I:0.1740A P:38.70W PF:0.9610 Lamp Flux:3965.85x1 lm		
NAME: 三防灯40W1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:0.63*0.09	Shielding Angle:

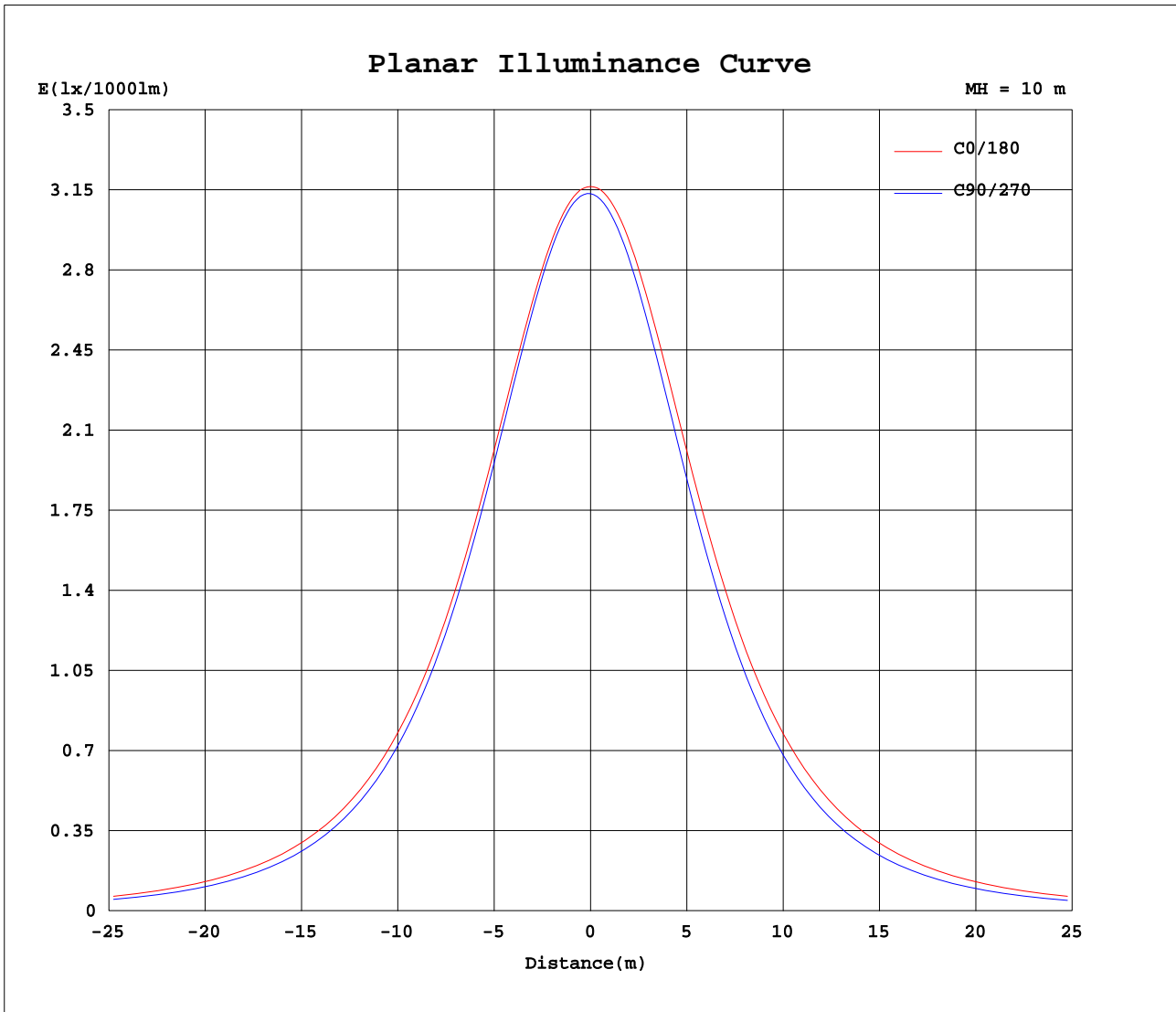
AvgL	cd/m2
L_0~180(65)av	22352
L_0~180(75)av	23805
L_0~180(85)av	36831
L_90~270(65)av	17487
L_90~270(75)av	15432
L_90~270(85)av	12097
L_45(65)av	20327
L_45(75)av	20588
L_45(85)av	28106

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Zhong ql  
 Test Date:28 July 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity:65.0%  
 Test Distance:7.640m [K=1.0000]  
 Remarks:None

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Zhong ql  
 Test Date: 28 July 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 7.640m [K=1.0000]  
 Remarks: None

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd/klm

C(DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	316	315	314	313	313	312	316	315	314	313	313	312							
5	316	315	314	313	311	310	316	313	312	311	311	311							
10	312	312	311	309	307	306	312	309	306	304	306	308							
15	306	306	304	302	299	298	306	301	297	295	299	303							
20	297	297	295	291	289	288	297	291	286	283	288	294							
25	286	286	283	278	276	275	285	279	272	269	276	283							
30	272	272	268	263	261	261	271	264	256	252	261	270							
35	256	257	252	245	243	244	255	247	238	233	244	255							
40	239	239	233	225	224	226	237	229	219	214	226	238							
45	220	220	213	204	204	206	219	210	199	193	206	219							
50	201	200	192	182	183	186	199	190	178	171	186	200							
55	180	179	170	159	160	165	179	169	156	148	164	180							
60	158	157	147	135	137	143	157	147	133	125	142	159							
65	136	134	123	110	113	120	135	125	110	101	119	137							
70	112	110	98.7	84.9	88.9	96.2	111	102	87.2	77.6	96.5	114							
75	88.4	86.3	74.4	60.0	65.0	73.0	87.7	78.7	64.3	54.2	73.7	90.9							
80	65.7	63.3	51.0	36.4	42.7	51.9	65.2	56.9	42.9	32.2	51.8	68.3							
85	46.0	43.1	30.5	16.1	24.7	34.7	45.8	38.3	24.9	14.0	32.2	47.7							
90	33.5	29.7	17.1	1.98	15.5	27.1	33.5	27.7	14.7	1.31	18.2	32.1							
95	29.6	25.5	13.2	1.55	12.8	23.8	29.6	24.0	12.1	1.57	13.8	26.2							
100	26.1	22.1	10.8	1.37	10.3	20.5	26.0	20.9	9.81	1.37	11.2	23.0							
105	22.6	18.9	8.54	1.32	7.96	17.4	22.6	17.9	7.74	1.39	8.64	19.9							
110	19.3	15.8	6.40	2.02	5.73	14.4	19.3	15.0	5.77	1.71	6.74	16.2							
115	16.1	12.8	4.38	2.10	3.67	11.5	16.1	12.2	3.91	2.04	5.34	13.1							
120	13.0	9.97	2.40	2.23	2.36	8.75	13.1	9.44	2.72	2.39	3.65	10.7							
125	10.1	7.34	2.45	2.32	2.43	6.18	10.2	6.91	2.77	2.52	2.65	8.28							
130	7.30	4.90	2.48	2.41	2.41	3.77	7.40	4.62	2.76	2.65	2.67	6.05							
135	4.75	2.61	2.47	2.43	2.50	2.61	4.85	2.74	2.70	2.73	2.61	3.80							
140	2.80	2.74	2.63	2.58	2.65	2.77	2.85	2.87	2.86	2.85	2.79	2.77							
145	2.95	2.90	2.79	2.77	2.82	2.92	3.00	3.02	3.01	3.01	2.95	2.93							
150	3.09	3.05	2.95	2.94	2.97	3.04	3.14	3.15	3.16	3.17	3.11	3.08							
155	3.23	3.20	3.11	3.10	3.12	3.18	3.29	3.28	3.29	3.30	3.25	3.23							
160	3.37	3.34	3.26	3.24	3.26	3.30	3.42	3.40	3.41	3.42	3.38	3.36							
165	3.51	3.47	3.40	3.39	3.40	3.43	3.54	3.51	3.52	3.52	3.49	3.48							
170	3.62	3.57	3.51	3.50	3.51	3.52	3.65	3.60	3.60	3.59	3.57	3.56							
175	3.71	3.65	3.59	3.58	3.58	3.59	3.73	3.65	3.64	3.62	3.61	3.61							
180	3.76	3.68	3.64	3.63	3.62	3.64	3.77	3.68	3.65	3.62	3.63	3.63							

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Zhong ql  
 Test Date:28 July 2020

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity:65.0%  
 Test Distance:7.640m [K=1.0000]  
 Remarks:None