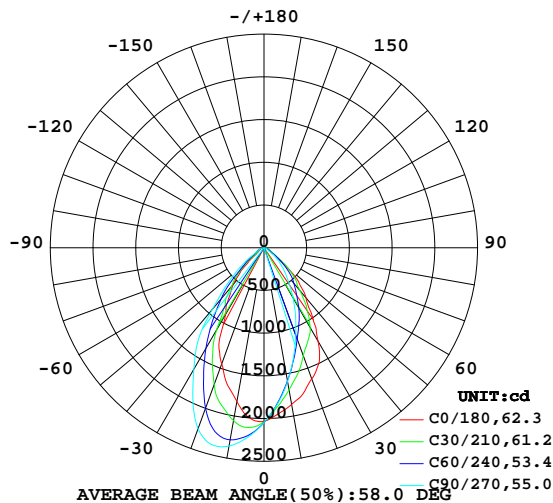


## LUMINAIRE PHOTOMETRIC TEST REPORT

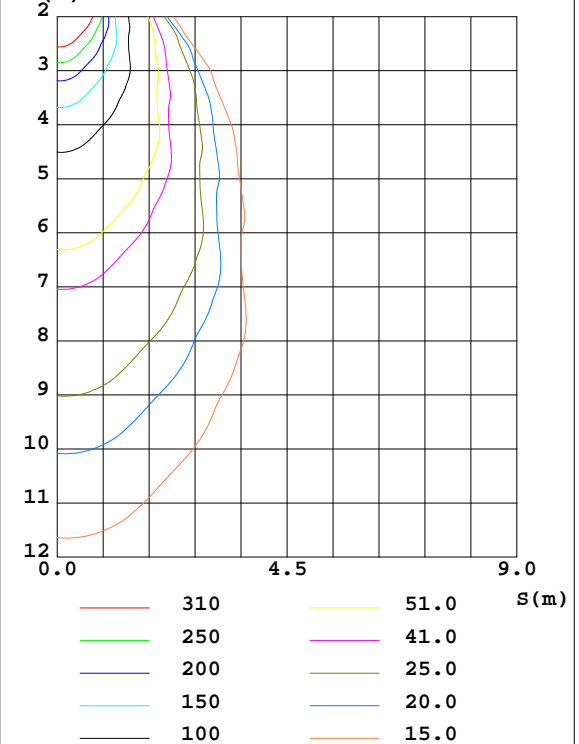
Test:U:86.400V I:0.1760A P:15.206W PF:1.0000 Freq:0Hz Lamp Flux:2542.52x1 lm		
NAME: B115 -日型-P	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:0.04*0.9	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 167.20 lm/W			
MODEL	B115 -日型-P	I <sub>max</sub> (cd)	2388	S/MH(C0/180)	1.02
NOMINAL POWER(W)	15.204	LOR(%)	100.0	S/MH(C90/270)	0.65
RATED VOLTAGE(V)	86.4	TOTAL FLUX(lm)	2542.5	η UP,DN(C0-180)	0.5,56.9
NOMINAL FLUX(lm)	2542.52	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.7,41.9
LAMPS INSIDE	1	η up(%)	1.2	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	86.4	η down(%)	98.8	CIBSE SHR MAX	0.95

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:1  
 Test Date:2021-11-09

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:9.886m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1829	2168	2356	2160	1863	1636	1591	1695	0- 10	188.7	188.7	7.42,7.42
20	1449	1854	2256	2035	1633	1242	1090	1217	10- 20	496.6	685.3	27,27
30	899.1	1235	1642	1571	1268	949.1	682.2	868.6	20- 30	632.8	1318	51.8,51.8
40	562.6	686.0	940.4	897.9	767.8	600.8	388.2	517.7	30- 40	558.4	1877	73.8,73.8
50	153.5	266.7	386.6	424.7	331.0	326.3	194.7	240.6	40- 50	369.3	2246	88.3,88.3
60	66.72	86.98	99.36	98.75	84.14	102.2	62.94	81.57	50- 60	146.3	2392	94.1,94.1
70	38.92	53.76	53.77	62.69	50.54	54.49	35.82	49.16	60- 70	67.95	2460	96.8,96.8
80	15.80	25.70	14.17	36.46	27.05	30.63	9.669	21.02	70- 80	39.35	2499	98.3,98.3
90	4.332	5.074	0.2432	6.601	6.998	5.891	0.4211	3.730	80- 90	13.88	2513	98.8,98.8
100	1.914	1.634	0.4148	1.743	2.508	1.827	0.7734	1.697	90-100	2.766	2516	99,99
110	2.022	1.570	0.8736	1.554	1.819	1.948	1.900	2.084	100-110	1.682	2518	99,99
120	2.891	2.150	1.676	2.112	2.770	3.212	3.917	3.627	110-120	2.193	2520	99.1,99.1
130	4.348	3.527	2.998	3.181	4.093	5.208	6.724	6.161	120-130	3.200	2523	99.2,99.2
140	6.652	5.461	4.800	4.856	6.226	8.038	9.748	9.038	130-140	4.355	2527	99.4,99.4
150	9.328	7.932	7.111	7.142	8.931	11.01	12.47	11.75	140-150	5.078	2533	99.6,99.6
160	12.23	10.77	9.786	9.836	11.76	13.41	14.45	13.84	150-160	4.939	2537	99.8,99.8
170	14.66	13.39	12.55	12.52	14.17	14.86	15.33	14.97	160-170	3.673	2541	99.9,99.9
180	15.54	15.10	14.83	14.71	15.46	15.13	14.90	14.76	170-180	1.380	2543	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 2089.5 lm

%lum = 82.2%

%lamp = 82.2%

Conical surface Flux(120deg): 2392.1 lm

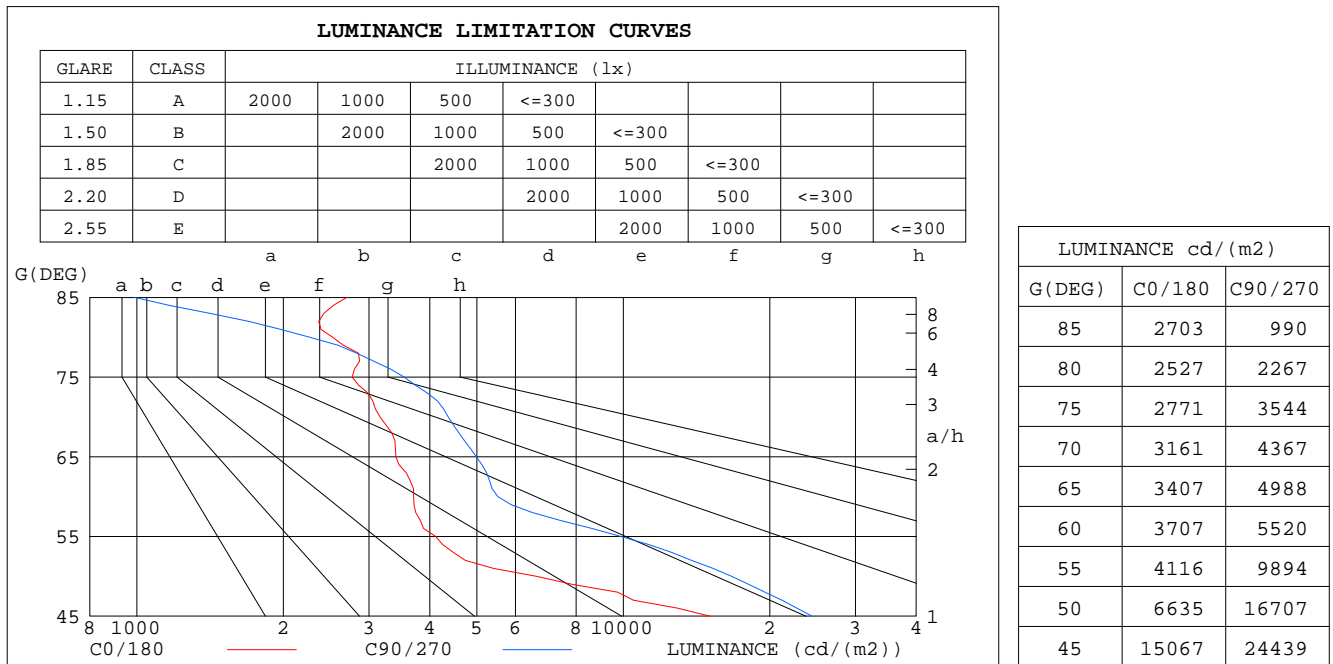
%lum = 94.1%

%lamp = 94.1%

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:1  
 Test Date:2021-11-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:9.886m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

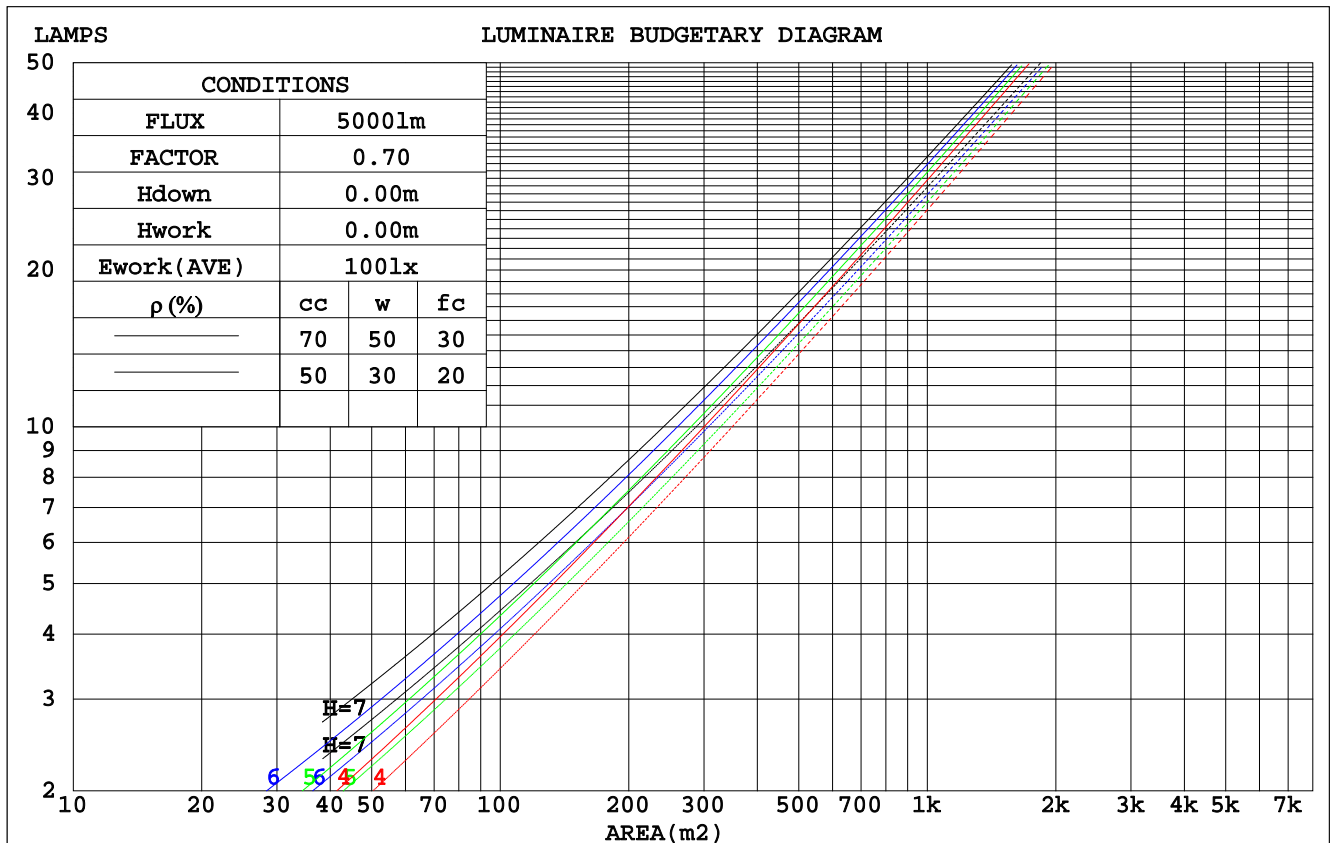


C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 1  
Test Date: 2021-11-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
Humidity: 65.0%  
Test Distance: 9.886m [K=1.0000]  
Remarks:

## 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	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.06	1.06	1.06	1.01	1.01	1.01	.99
1.0	1.08	1.05	1.03	1.06	1.03	1.01	1.02	.90	.98	.98	.96	.94	.94	.93	.91	.90
2.0	.99	.94	.90	.97	.92	.89	.93	.90	.87	.90	.87	.84	.87	.85	.83	.81
3.0	.90	.84	.80	.89	.83	.79	.86	.81	.77	.83	.79	.76	.81	.77	.75	.73
4.0	.83	.76	.71	.82	.75	.71	.79	.74	.70	.77	.72	.69	.75	.71	.68	.66
5.0	.76	.69	.64	.75	.69	.64	.73	.68	.63	.71	.66	.63	.70	.65	.62	.60
6.0	.71	.64	.58	.70	.63	.58	.68	.62	.58	.66	.61	.57	.65	.60	.57	.55
7.0	.65	.58	.54	.65	.58	.53	.63	.57	.53	.62	.57	.53	.61	.56	.52	.51
8.0	.61	.54	.49	.60	.54	.49	.59	.53	.49	.58	.52	.48	.57	.52	.48	.47
9.0	.57	.50	.46	.56	.50	.45	.55	.49	.45	.54	.49	.45	.53	.48	.45	.43
10.0	.53	.47	.42	.53	.46	.42	.52	.46	.42	.51	.46	.42	.50	.45	.42	.40



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: 1  
 Test Date: 2021-11-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
 Humidity: 65.0%  
 Test Distance: 9.886m [K=1.0000]  
 Remarks:

## WEC AND CCEC

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.218	.124	.039	.211	.120	.038	.197	.113	.036	.185	.107	.034	.173	.100	.032		
2.0	.209	.114	.035	.202	.111	.034	.191	.106	.033	.180	.101	.032	.170	.096	.030		
3.0	.198	.105	.031	.192	.103	.031	.182	.099	.030	.173	.095	.029	.164	.091	.028		
4.0	.187	.097	.029	.182	.095	.028	.173	.092	.027	.165	.089	.027	.158	.086	.026		
5.0	.177	.090	.026	.173	.089	.026	.165	.086	.025	.158	.083	.025	.151	.081	.024		
6.0	.167	.084	.024	.164	.083	.024	.157	.080	.023	.150	.078	.023	.144	.076	.023		
7.0	.159	.078	.022	.155	.077	.022	.149	.075	.022	.143	.073	.021	.138	.072	.021		
8.0	.151	.074	.021	.148	.073	.021	.142	.071	.020	.137	.069	.020	.132	.068	.020		
9.0	.143	.069	.019	.141	.068	.019	.136	.067	.019	.131	.066	.019	.126	.064	.019		
10.0	.136	.065	.018	.134	.065	.018	.129	.063	.018	.125	.062	.018	.121	.061	.017		

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	.199	.199	.199	.170	.170	.170	.116	.116	.116	.067	.067	.067	.021	.021	.021	
1.0	.183	.166	.150	.156	.142	.130	.107	.098	.090	.062	.057	.052	.020	.018	.017	
2.0	.170	.141	.117	.146	.122	.101	.100	.084	.071	.058	.049	.041	.018	.016	.013	
3.0	.159	.123	.093	.137	.106	.081	.094	.074	.057	.054	.043	.034	.017	.014	.011	
4.0	.150	.109	.077	.129	.094	.067	.089	.065	.047	.051	.038	.028	.017	.012	.009	
5.0	.143	.097	.064	.122	.084	.056	.084	.059	.039	.049	.035	.023	.016	.011	.008	
6.0	.136	.089	.055	.117	.077	.048	.080	.054	.034	.047	.032	.020	.015	.010	.007	
7.0	.129	.081	.048	.111	.071	.042	.077	.049	.029	.045	.029	.018	.014	.010	.006	
8.0	.124	.075	.042	.106	.065	.037	.074	.046	.026	.043	.027	.016	.014	.009	.005	
9.0	.118	.070	.038	.102	.061	.033	.071	.043	.023	.041	.025	.014	.013	.008	.005	
10.0	.113	.066	.034	.098	.057	.030	.068	.040	.021	.040	.024	.013	.013	.008	.004	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: 1  
 Test Date: 2021-11-09

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
 Humidity: 65.0%  
 Test Distance: 9.886m [K=1.0000]  
 Remarks:

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	17.7	18.8	17.9	19.0	19.2	20.1	21.3	20.4	21.5	21.7
3H	17.9	18.9	18.2	19.2	19.4	20.2	21.3	20.5	21.5	21.8
4H	18.0	19.0	18.3	19.2	19.5	20.3	21.3	20.6	21.5	21.8
6H	18.0	19.0	18.4	19.2	19.5	20.3	21.2	20.6	21.5	21.8
8H	18.0	18.9	18.4	19.2	19.5	20.3	21.1	20.6	21.4	21.7
12H	18.0	18.9	18.4	19.2	19.5	20.2	21.1	20.6	21.4	21.7
4H 2H	17.7	18.7	18.0	19.0	19.2	20.0	21.0	20.3	21.2	21.5
3H	18.1	18.9	18.4	19.2	19.5	20.2	21.1	20.6	21.4	21.7
4H	18.3	19.1	18.7	19.4	19.7	20.4	21.1	20.7	21.5	21.8
6H	18.5	19.1	18.9	19.5	19.9	20.4	21.1	20.8	21.5	21.9
8H	18.5	19.2	18.9	19.5	19.9	20.4	21.1	20.8	21.4	21.8
12H	18.6	19.1	19.0	19.5	19.9	20.4	21.0	20.8	21.4	21.8
8H 4H	18.4	19.0	18.8	19.4	19.8	20.4	21.0	20.8	21.4	21.8
6H	18.7	19.2	19.2	19.6	20.1	20.5	21.0	21.0	21.5	21.9
8H	18.8	19.3	19.3	19.7	20.2	20.5	21.0	21.0	21.4	21.9
12H	18.9	19.3	19.4	19.8	20.3	20.5	20.9	21.0	21.4	21.9
12H 4H	18.4	19.0	18.8	19.4	19.8	20.3	20.9	20.8	21.3	21.7
6H	18.7	19.2	19.2	19.6	20.1	20.5	21.0	21.0	21.4	21.9
8H	18.9	19.3	19.4	19.7	20.2	20.6	20.9	21.0	21.4	21.9
Variations with the observer position at spacings:										
S = 1.0H	+ 1.5 / - 2.1					+ 2.0 / - 2.6				
1.5H	+ 1.7 / - 2.6					+ 3.0 / - 3.0				
2.0H	+ 3.2 / - 1.8					+ 4.2 / - 2.5				

CIE Pub.117, 2543 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 3.2$ )Area: 0.036 m<sup>2</sup>

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: 1  
 Test Date: 2021-11-09

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
 Humidity: 65.0%  
 Test Distance: 9.886m [K=1.0000]  
 Remarks:

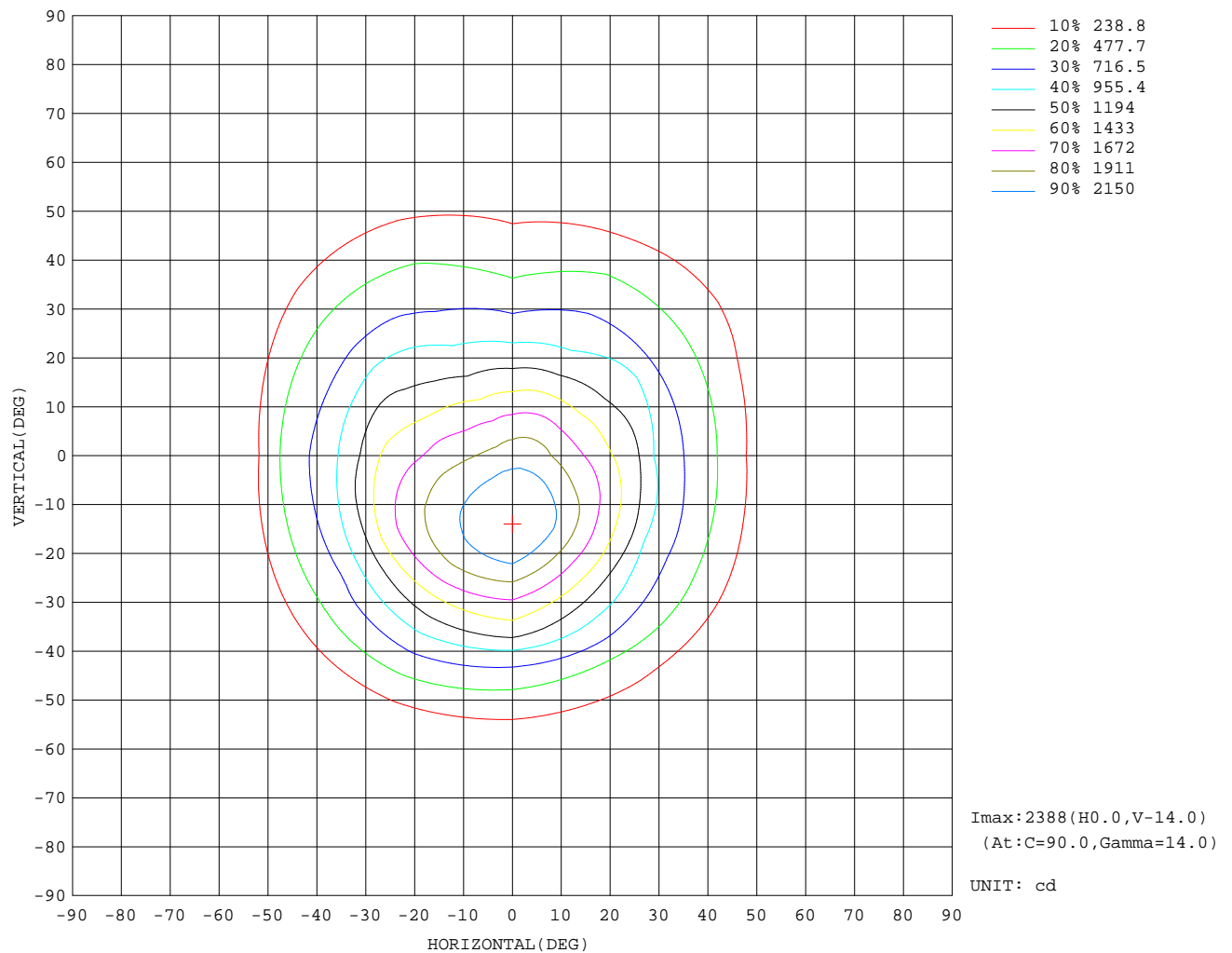
## UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	75	67	62	74	66	61	73	66	61	57
0.80	84	76	71	83	76	71	82	75	70	65
1.00	91	83	78	90	82	78	88	83	77	72
1.25	96	89	84	95	88	84	92	87	83	77
1.50	100	93	88	98	92	88	95	91	87	81
2.00	104	98	94	102	97	93	99	95	92	85
2.50	106	101	97	104	100	96	101	97	94	87
3.00	108	104	100	106	102	99	103	99	97	89
4.00	111	107	104	109	105	103	105	102	100	92
5.00	112	109	107	110	107	105	106	104	102	93
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: 1  
 Test Date: 2021-11-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
 Humidity: 65.0%  
 Test Distance: 9.886m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

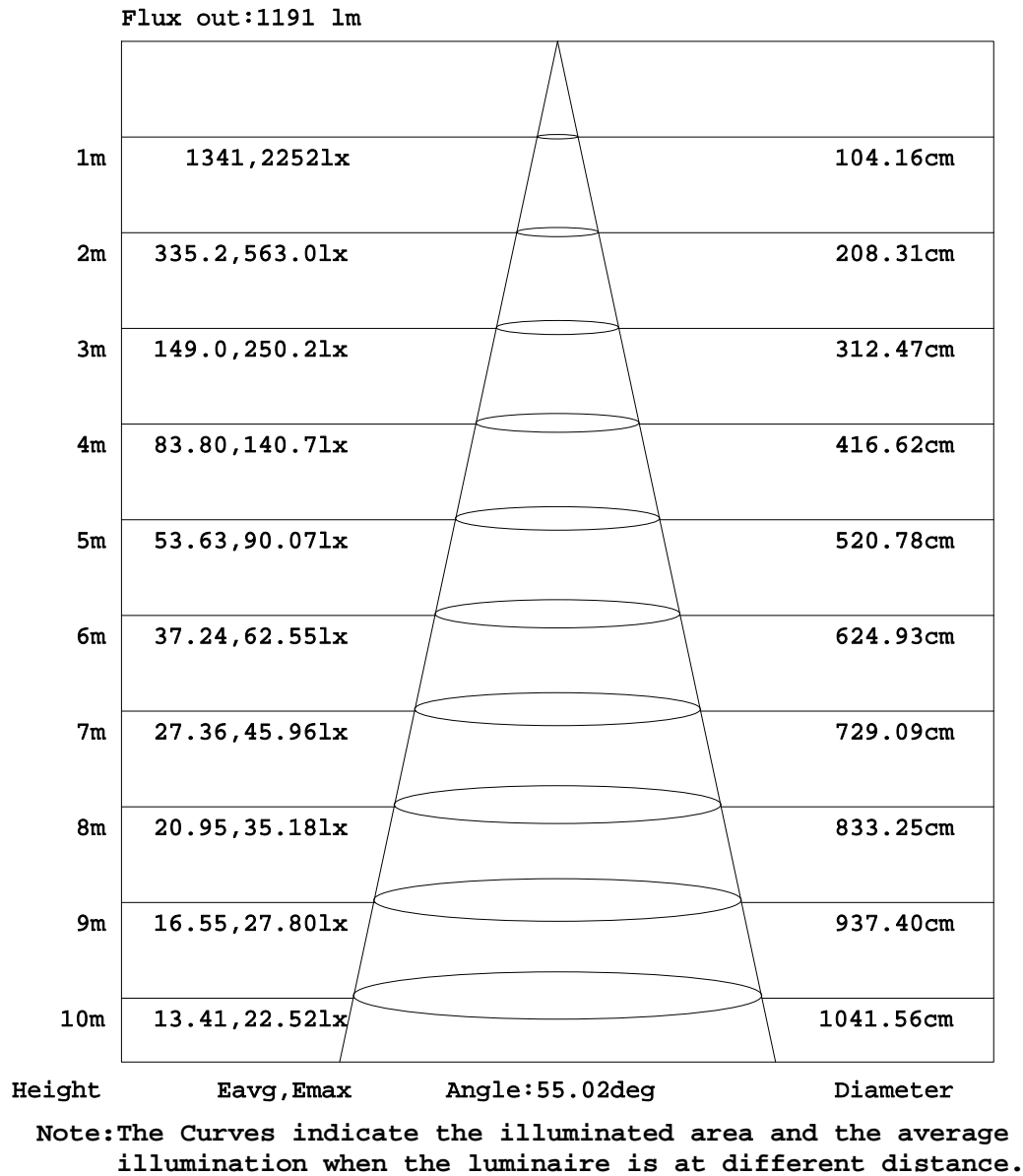


C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 1  
Test Date: 2021-11-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
Humidity: 65.0%  
Test Distance: 9.886m [K=1.0000]  
Remarks:



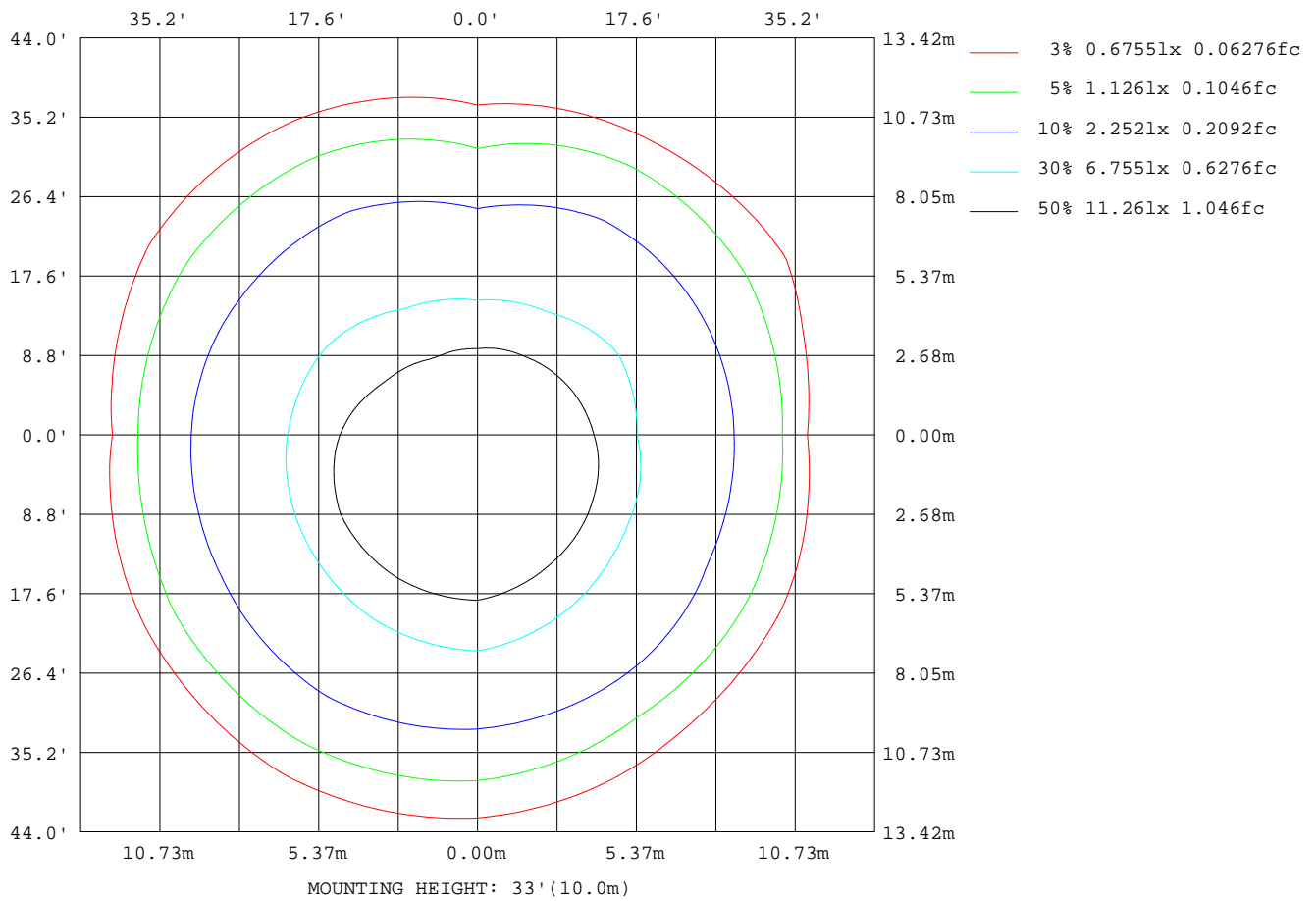
## AAI Figure



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: 1  
 Test Date: 2021-11-09

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
 Humidity: 65.0%  
 Test Distance: 9.886m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 1  
Test Date: 2021-11-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
Humidity: 65.0%  
Test Distance: 9.886m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:86.400V I:0.1760A P:15.206W PF:1.0000 Freq:0Hz Lamp Flux:2542.52x1 lm		
NAME: B115 -日亚-P	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:0.04*0.9	Shielding Angle:

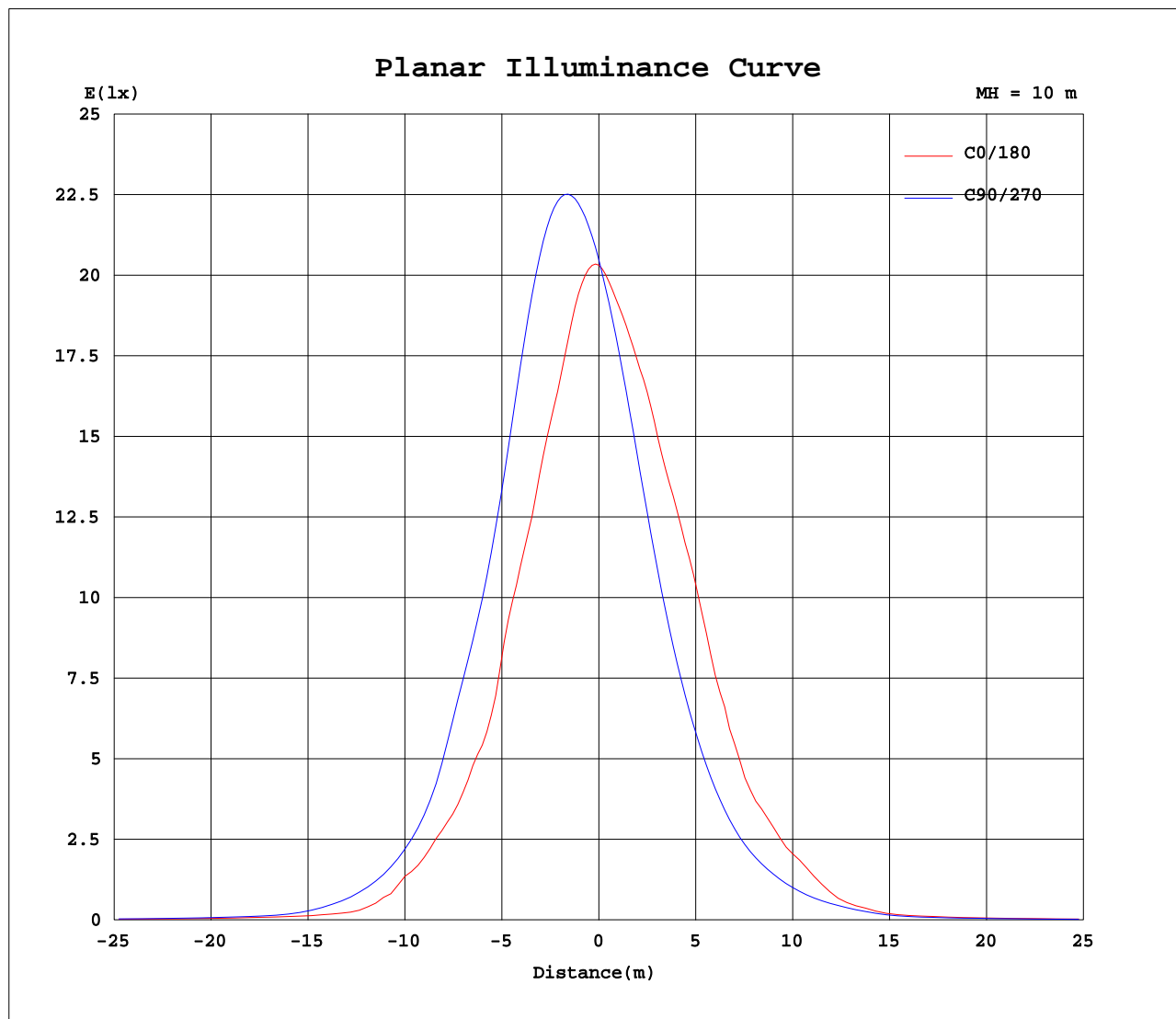
AvgL	cd/m2
L_0~180(65)av	3784
L_0~180(75)av	3588
L_0~180(85)av	3873
L_90~270(65)av	4104
L_90~270(75)av	2975
L_90~270(85)av	892
L_45(65)av	4876
L_45(75)av	4465
L_45(85)av	4782

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:1  
 Test Date:2021-11-09

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
 Humidity:65.0%  
 Test Distance:9.886m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 1  
Test Date: 2021-11-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
Humidity: 65.0%  
Test Distance: 9.886m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	2031	2038	2048	2048	2056	2063	2031	2038	2048	2048	2056	2063						
5	1996	2112	2207	2228	2175	2082	1950	1863	1826	1834	1882	1943						
10	1829	2054	2282	2356	2241	2080	1863	1690	1582	1591	1661	1729						
15	1660	1913	2226	2383	2240	2048	1769	1528	1348	1334	1404	1486						
20	1449	1708	2000	2256	2138	1933	1633	1345	1138	1090	1139	1294						
25	1251	1434	1674	1969	1929	1784	1510	1212	970	873	938	1113						
30	899	1109	1361	1642	1610	1533	1268	1082	816	682	795	943						
35	720	790	1056	1357	1284	1135	995	873	664	515	639	678						
40	563	594	778	940	976	820	768	656	546	388	503	533						
45	384	427	505	622	685	620	581	518	431	284	387	399						
50	154	244	289	387	431	418	331	365	288	195	214	267						
55	85.0	99.8	151	204	214	167	146	184	167	111	128	135						
60	66.7	75.2	98.8	99.4	109	88.8	84.1	110	94.5	62.9	77.8	85.3						
65	51.8	66.8	77.3	75.9	87.2	74.7	63.3	76.7	67.8	49.0	60.6	69.7						
70	38.9	51.3	56.3	53.8	65.3	60.1	50.5	60.7	48.3	35.8	44.7	53.6						
75	25.8	36.4	42.0	33.0	48.7	49.2	41.0	49.1	32.7	22.4	30.8	34.0						
80	15.8	24.6	26.8	14.2	32.4	40.5	27.0	38.7	22.6	9.67	18.1	23.9						
85	8.48	10.9	11.0	3.11	20.2	22.4	15.8	17.0	13.6	2.49	8.84	9.30						
90	4.33	4.62	5.53	0.24	5.80	7.40	7.00	6.91	4.87	0.42	3.00	4.46						
95	2.74	2.57	1.90	0.29	2.49	3.21	4.01	3.27	2.09	0.50	1.70	2.56						
100	1.91	1.82	1.45	0.41	1.30	2.18	2.51	2.16	1.49	0.77	1.54	1.85						
105	1.70	1.78	1.54	0.59	1.35	1.60	1.90	1.69	1.69	1.22	1.85	1.80						
110	2.02	1.98	1.16	0.87	1.31	1.80	1.82	1.84	2.06	1.90	1.99	2.18						
115	2.25	2.49	1.45	1.20	1.36	2.10	2.33	2.33	2.39	2.77	2.76	3.06						
120	2.89	2.39	1.91	1.68	1.73	2.49	2.77	3.17	3.26	3.92	3.82	3.43						
125	3.36	2.99	2.54	2.27	2.27	2.73	3.56	3.61	4.35	5.25	5.12	4.53						
130	4.35	3.77	3.29	3.00	3.00	3.36	4.09	4.66	5.76	6.72	6.55	5.77						
135	5.42	4.69	4.14	3.83	3.81	4.17	5.09	5.95	7.27	8.23	8.03	7.14						
140	6.65	5.76	5.16	4.80	4.73	4.98	6.23	7.29	8.79	9.75	9.52	8.56						
145	7.93	6.94	6.29	5.89	5.80	6.07	7.44	8.79	10.3	11.2	10.9	9.94						
150	9.33	8.27	7.59	7.11	7.02	7.26	8.93	10.3	11.7	12.5	12.2	11.3						
155	10.8	9.71	8.93	8.41	8.36	8.58	10.4	11.7	13.0	13.6	13.3	12.5						
160	12.2	11.2	10.3	9.79	9.76	9.91	11.8	12.9	14.0	14.4	14.2	13.5						
165	13.6	12.6	11.7	11.2	11.1	11.2	13.1	13.8	14.7	15.1	14.9	14.2						
170	14.7	13.7	13.0	12.5	12.5	12.5	14.2	14.6	15.1	15.3	15.2	14.7						
175	15.3	14.7	14.2	13.8	13.7	13.7	15.0	15.1	15.2	15.3	15.3	14.9						
180	15.5	15.2	15.0	14.8	14.8	14.6	15.5	15.3	15.0	14.9	14.8	14.7						

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: 1  
 Test Date: 2021-11-09

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.421  
 Humidity: 65.0%  
 Test Distance: 9.886m [K=1.0000]  
 Remarks: