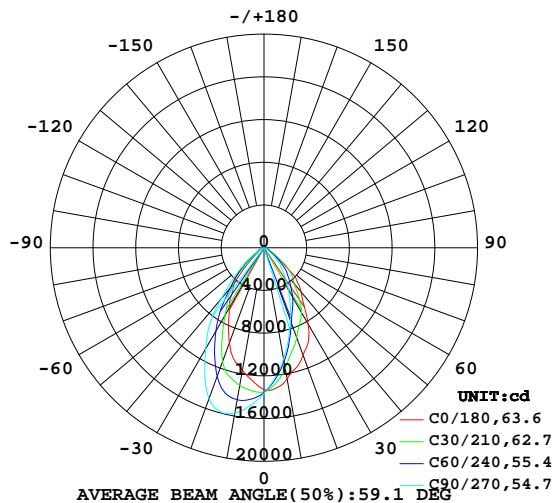


LUMINAIRE PHOTOMETRIC TEST REPORT

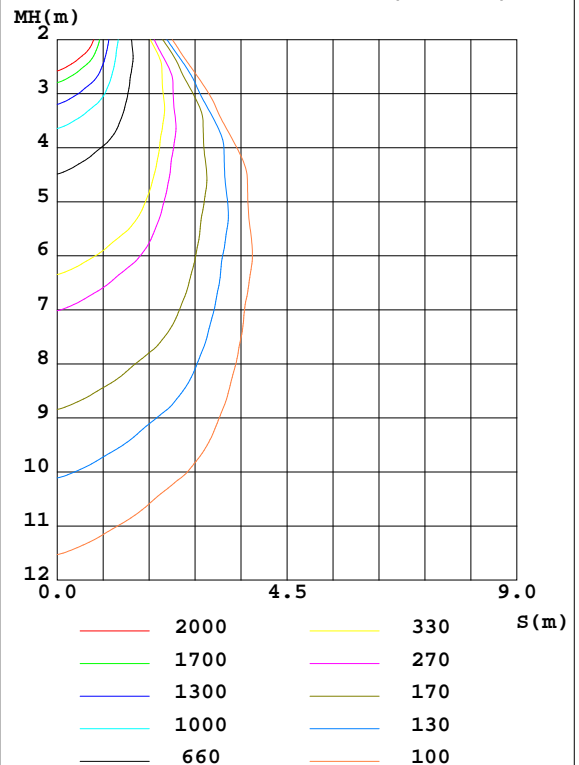
Test:U:87.600V I:1.0560A P:92.500W PF:1.0000 Freq:0Hz Lamp Flux:16611.7x1 lm		
NAME: B115 -日型-R	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:0.04*0.9	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 179.59 lm/W			
MODEL	B115 -日型-R	I _{max} (cd)	15938	S/MH(C0/180)	1.01
NOMINAL POWER(W)	92.5	LOR(%)	100.0	S/MH(C90/270)	0.65
RATED VOLTAGE(V)	87.6	TOTAL FLUX(lm)	16612	η UP,DN(C0-180)	0.7,56.4
NOMINAL FLUX(lm)	16611.7	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.9,42.1
LAMPS INSIDE	1	η up(%)	1.5	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	87.6	η down(%)	98.5	CIBSE SHR MAX	0.90

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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1163	1378	1571	1312	1246	1115	1058	960.4	0- 10	1199	1199	7.22,7.22
20	947.9	1208	1504	1223	1069	823.6	722.8	711.5	10- 20	3157	4356	26.2,26.2
30	651.2	815.8	1091	924.7	829.3	619.9	460.3	506.8	20- 30	4003	8359	50.3,50.3
40	432.8	471.0	623.2	532.8	542.6	398.9	269.1	329.1	30- 40	3633	11992	72.2,72.2
50	114.1	188.7	251.5	269.4	255.5	238.1	134.2	149.9	40- 50	2472	14464	87.1,87.1
60	49.33	63.48	59.29	65.39	69.07	71.95	39.12	49.20	50- 60	1022	15486	93.2,93.2
70	34.44	39.30	32.71	40.48	42.48	37.38	23.16	30.39	60- 70	457.7	15943	96,96
80	22.38	20.24	8.415	23.70	28.18	21.07	6.387	14.74	70- 80	281.3	16225	97.7,97.7
90	16.13	8.613	0.1903	7.865	16.16	7.402	0.2854	5.486	80- 90	134.2	16359	98.5,98.5
100	6.779	2.574	0.2478	5.843	16.27	4.807	0.5264	1.847	90-100	67.66	16426	98.9,98.9
110	2.464	1.379	0.5216	1.214	1.684	1.662	1.293	1.539	100-110	22.94	16449	99,99
120	2.374	1.590	1.059	1.448	2.232	2.351	2.652	2.318	110-120	16.55	16466	99.1,99.1
130	3.004	2.367	1.922	1.931	2.936	3.560	4.530	3.727	120-130	21.59	16488	99.3,99.3
140	4.411	3.616	3.092	2.873	4.148	5.364	6.512	5.411	130-140	28.15	16516	99.4,99.4
150	6.245	5.239	4.603	4.175	5.760	7.255	8.289	6.975	140-150	32.40	16548	99.6,99.6
160	8.079	7.045	6.347	5.758	7.664	8.857	9.573	8.293	150-160	31.48	16580	99.8,99.8
170	9.510	8.707	8.153	7.315	9.200	9.785	10.10	9.049	160-170	23.30	16603	99.9,99.9
180	10.04	9.870	9.685	8.575	9.964	9.866	9.725	9.109	170-180	8.752	16612	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 13407 lm

%lum = 80.7%

%lamp = 80.7%

Conical surface Flux(120deg): 15486 lm

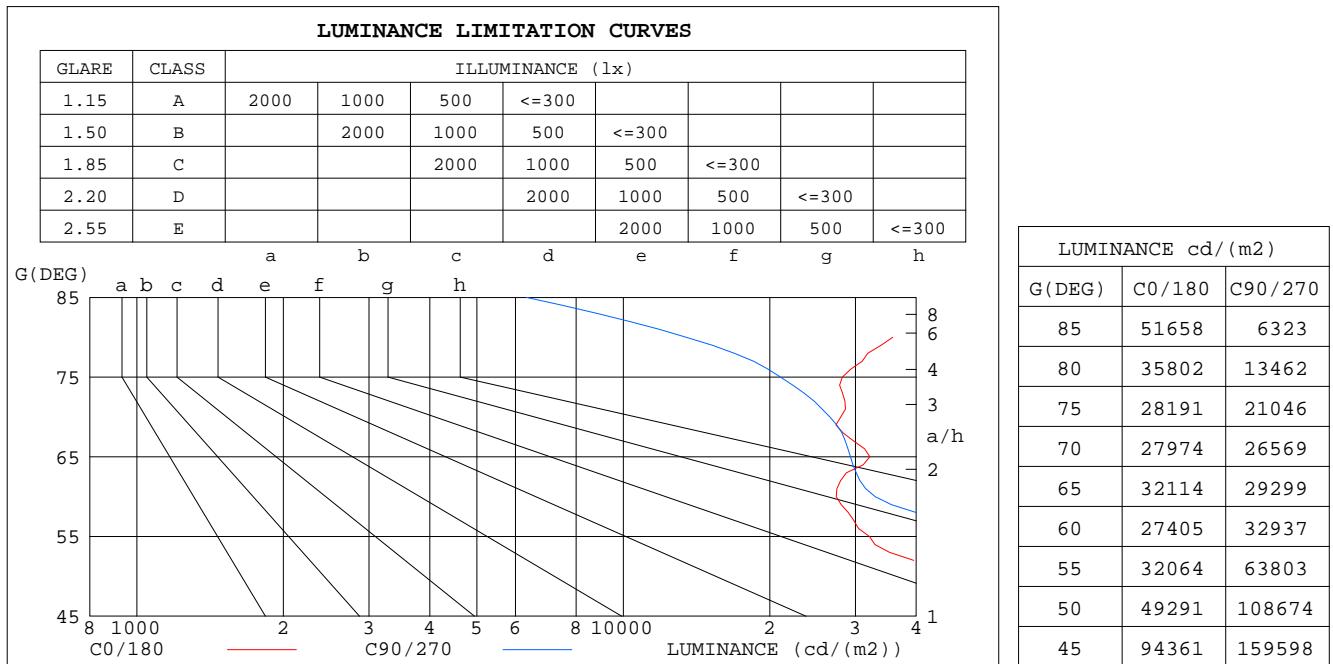
%lum = 93.2%

%lamp = 93.2%

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
 γ Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:9.886m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

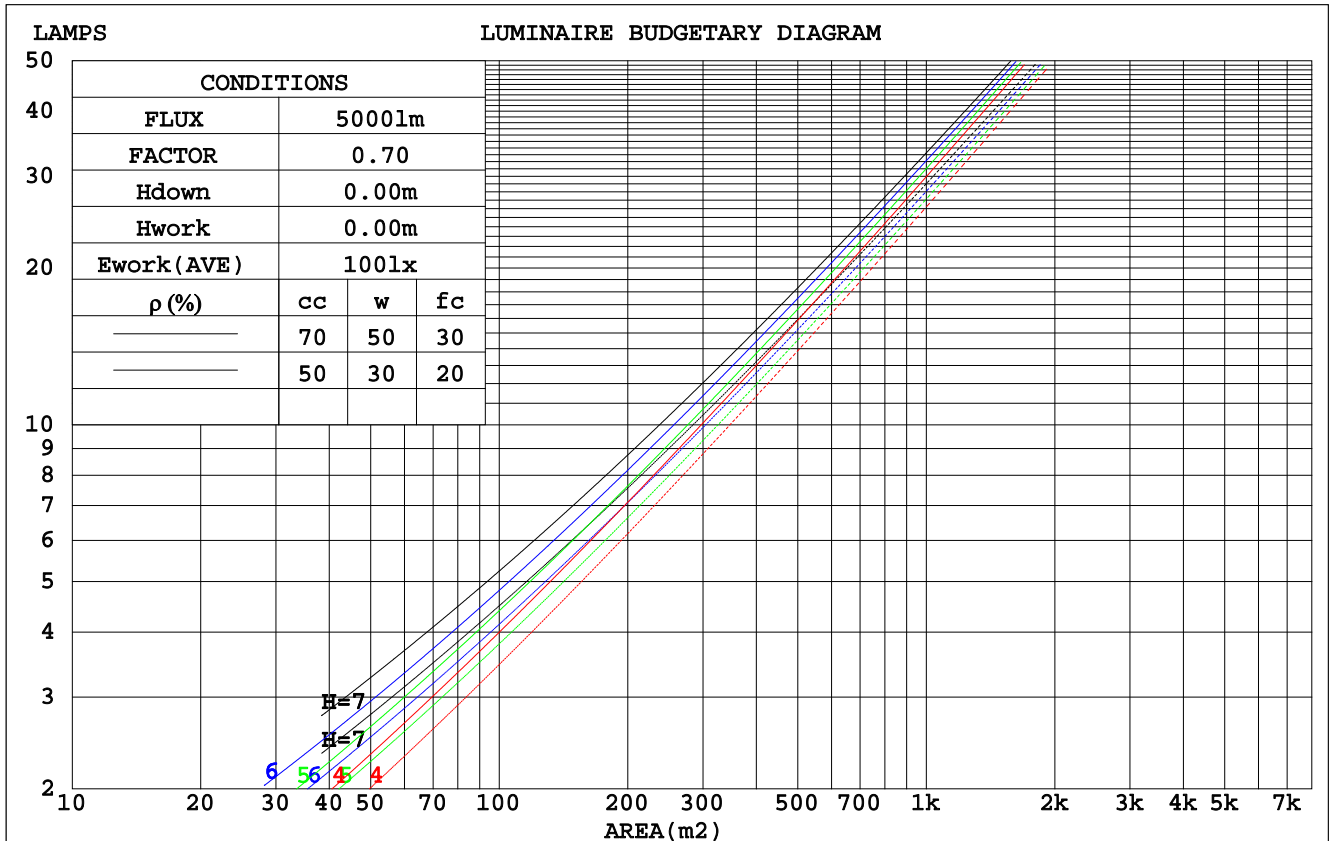


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 1
Test Date: 2021-11-09

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

pcc	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						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.98
1.0	1.08	1.05	1.02	1.06	1.03	1.00	1.01	.99	.97	.97	.95	.94	.94	.92	.91	.89
2.0	.98	.93	.89	.96	.92	.88	.93	.89	.86	.90	.86	.84	.86	.84	.82	.80
3.0	.90	.84	.79	.88	.83	.78	.85	.80	.77	.82	.78	.75	.80	.77	.74	.72
4.0	.82	.76	.70	.81	.75	.70	.78	.73	.69	.76	.72	.68	.74	.70	.67	.65
5.0	.76	.69	.63	.75	.68	.63	.72	.67	.62	.71	.66	.62	.69	.64	.61	.59
6.0	.70	.63	.58	.69	.62	.57	.67	.61	.57	.66	.60	.56	.64	.59	.56	.54
7.0	.65	.58	.53	.64	.57	.52	.62	.56	.52	.61	.56	.52	.60	.55	.51	.50
8.0	.60	.53	.48	.60	.53	.48	.58	.52	.48	.57	.52	.48	.56	.51	.47	.46
9.0	.56	.49	.45	.56	.49	.45	.54	.48	.44	.53	.48	.44	.52	.47	.44	.42
10.0	.53	.46	.41	.52	.46	.41	.51	.45	.41	.50	.45	.41	.49	.44	.41	.39



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:

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	.223	.127	.040	.216	.123	.039	.202	.116	.037	.189	.109	.035	.178	.103	.033	
2.0	.212	.116	.036	.206	.114	.035	.194	.108	.034	.184	.103	.032	.174	.098	.031	
3.0	.201	.107	.032	.195	.105	.031	.185	.100	.030	.176	.096	.030	.167	.092	.029	
4.0	.190	.098	.029	.185	.097	.029	.176	.093	.028	.167	.090	.027	.160	.087	.026	
5.0	.179	.091	.026	.175	.090	.026	.167	.087	.026	.159	.084	.025	.152	.081	.024	
6.0	.169	.085	.024	.166	.084	.024	.158	.081	.024	.152	.079	.023	.146	.077	.023	
7.0	.160	.079	.022	.157	.078	.022	.151	.076	.022	.145	.074	.022	.139	.072	.021	
8.0	.152	.074	.021	.149	.073	.021	.143	.072	.020	.138	.070	.020	.133	.068	.020	
9.0	.145	.070	.020	.142	.069	.019	.137	.068	.019	.132	.066	.019	.127	.065	.019	
10.0	.138	.066	.018	.135	.065	.018	.130	.064	.018	.126	.063	.018	.122	.061	.018	

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	.202	.202	.202	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.186	.169	.153	.159	.145	.132	.109	.100	.091	.063	.058	.053	.020	.019	.017	
2.0	.173	.144	.119	.149	.124	.103	.102	.086	.072	.059	.050	.042	.019	.016	.014	
3.0	.163	.126	.096	.140	.108	.083	.096	.075	.058	.055	.044	.034	.018	.014	.011	
4.0	.154	.112	.079	.132	.096	.069	.091	.067	.048	.053	.039	.029	.017	.013	.009	
5.0	.146	.100	.067	.126	.087	.058	.086	.061	.041	.050	.036	.024	.016	.012	.008	
6.0	.139	.092	.057	.120	.079	.050	.083	.056	.035	.048	.033	.021	.015	.011	.007	
7.0	.133	.084	.050	.114	.073	.044	.079	.051	.031	.046	.030	.019	.015	.010	.006	
8.0	.127	.078	.045	.109	.068	.039	.076	.048	.028	.044	.028	.017	.014	.009	.005	
9.0	.122	.073	.041	.105	.064	.036	.073	.045	.025	.042	.026	.015	.014	.009	.005	
10.0	.117	.069	.037	.101	.060	.033	.070	.042	.023	.041	.025	.014	.013	.008	.005	

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	24.9	26.0	25.2	26.3	26.5	26.9	28.0	27.1	28.2	28.4
3H	25.2	26.3	25.5	26.5	26.8	26.9	28.0	27.2	28.2	28.5
4H	25.4	26.4	25.7	26.7	26.9	27.0	28.0	27.3	28.2	28.5
6H	25.7	26.6	26.0	26.9	27.2	26.9	27.9	27.3	28.2	28.4
8H	25.9	26.8	26.2	27.1	27.4	26.9	27.8	27.3	28.1	28.4
12H	26.1	26.9	26.4	27.2	27.6	26.9	27.7	27.2	28.0	28.3
4H 2H	24.9	25.9	25.2	26.2	26.5	26.7	27.7	27.0	28.0	28.3
3H	25.5	26.3	25.8	26.6	26.9	26.9	27.8	27.3	28.1	28.4
4H	25.8	26.6	26.2	26.9	27.3	27.0	27.8	27.4	28.1	28.5
6H	26.3	26.9	26.7	27.3	27.7	27.1	27.8	27.5	28.1	28.5
8H	26.6	27.2	27.0	27.6	28.0	27.1	27.7	27.5	28.1	28.5
12H	26.9	27.4	27.3	27.8	28.3	27.0	27.6	27.5	28.0	28.5
8H 4H	25.9	26.6	26.3	26.9	27.3	27.1	27.7	27.5	28.1	28.5
6H	26.5	27.1	27.0	27.5	27.9	27.2	27.7	27.7	28.2	28.6
8H	27.0	27.5	27.5	27.9	28.4	27.3	27.7	27.7	28.2	28.6
12H	27.4	27.8	27.9	28.3	28.8	27.2	27.6	27.7	28.1	28.6
12H 4H	25.9	26.5	26.3	26.9	27.3	27.1	27.6	27.5	28.0	28.5
6H	26.6	27.0	27.1	27.5	28.0	27.2	27.7	27.7	28.2	28.6
8H	27.1	27.5	27.6	28.0	28.5	27.3	27.7	27.8	28.2	28.7
Variations with the observer position at spacings:										
S = 1.0H	+ 1.3 / - 1.5					+ 2.0 / - 2.4				
1.5H	+ 1.6 / - 1.6					+ 2.8 / - 2.7				
2.0H	+ 2.2 / - 1.0					+ 3.8 / - 2.8				

CIE Pub.117, 16612 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 9.8)

Area: 0.036 m2

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:

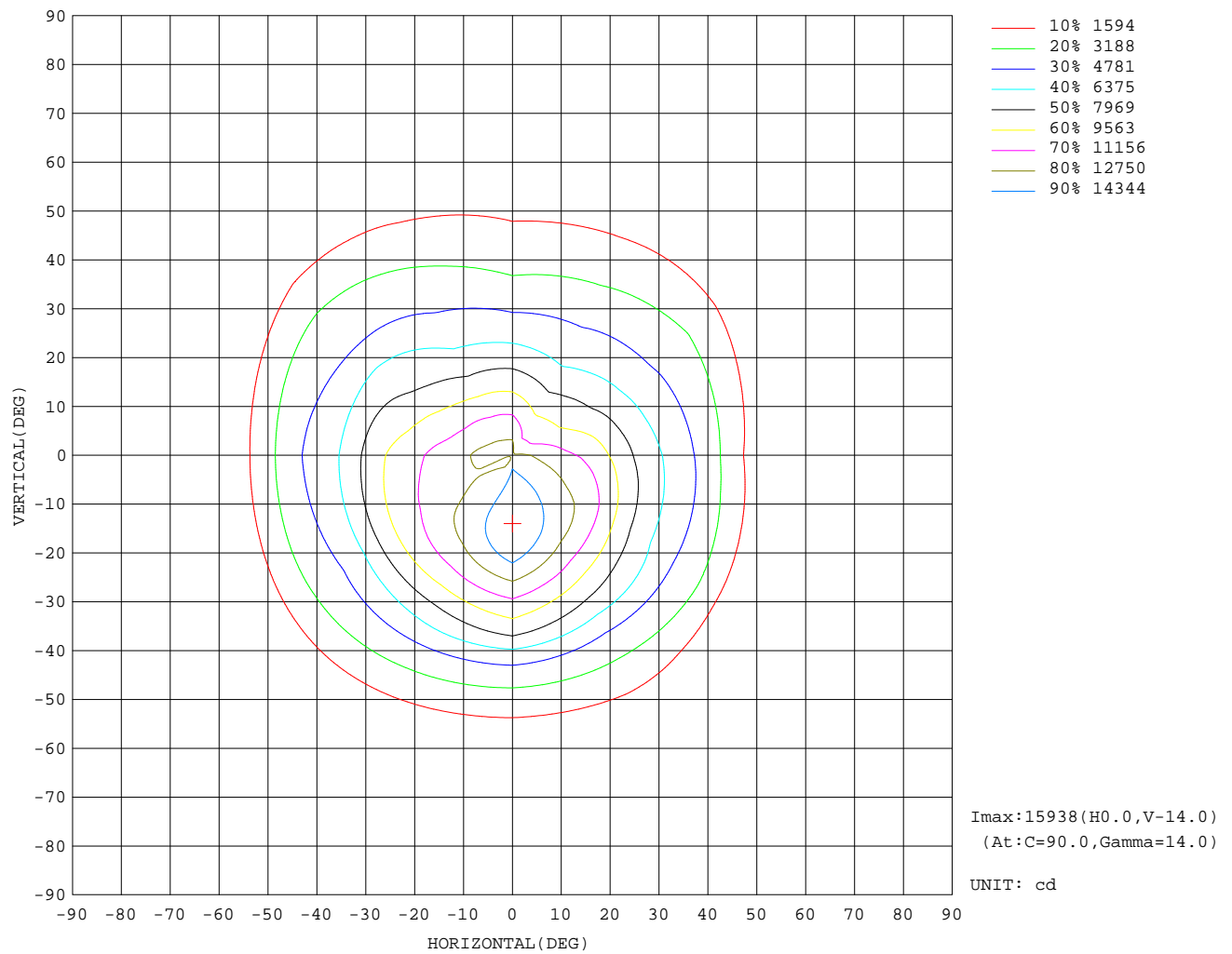
UTILIZATION FACTORS TABLE

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	74	65	60	73	65	60	72	65	60	55
0.80	83	75	70	82	74	69	81	74	69	64
1.00	90	82	77	89	81	77	87	82	76	71
1.25	95	88	83	94	87	83	92	86	82	76
1.50	99	92	87	97	91	87	95	90	86	80
2.00	103	97	93	102	96	92	98	94	91	84
2.50	106	100	96	104	99	95	100	96	93	86
3.00	108	103	99	106	102	98	102	99	96	88
4.00	110	107	103	108	105	102	104	101	99	91
5.00	112	109	106	110	107	104	105	103	101	92
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

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:

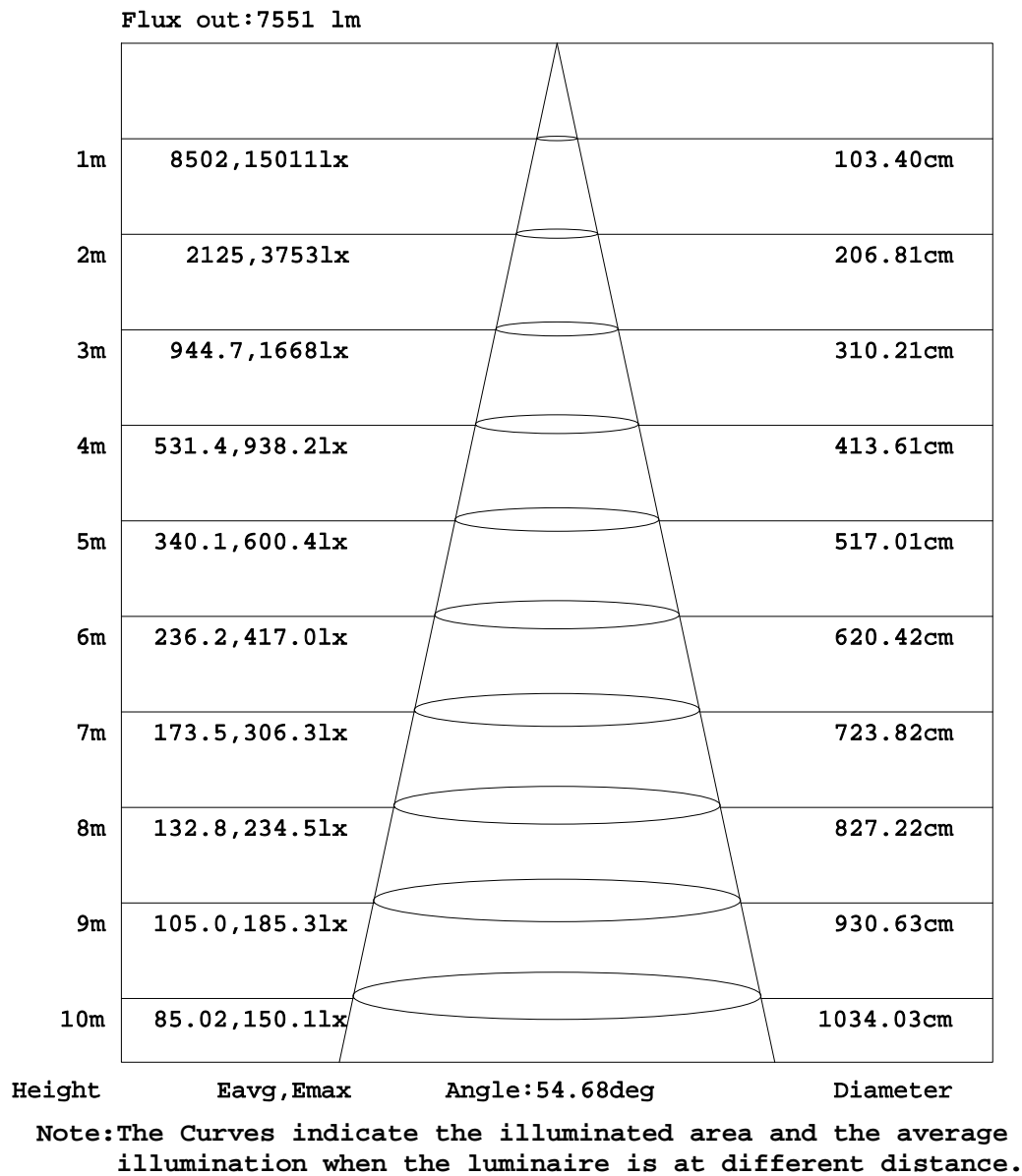
ISOCANDELA DIAGRAM



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:

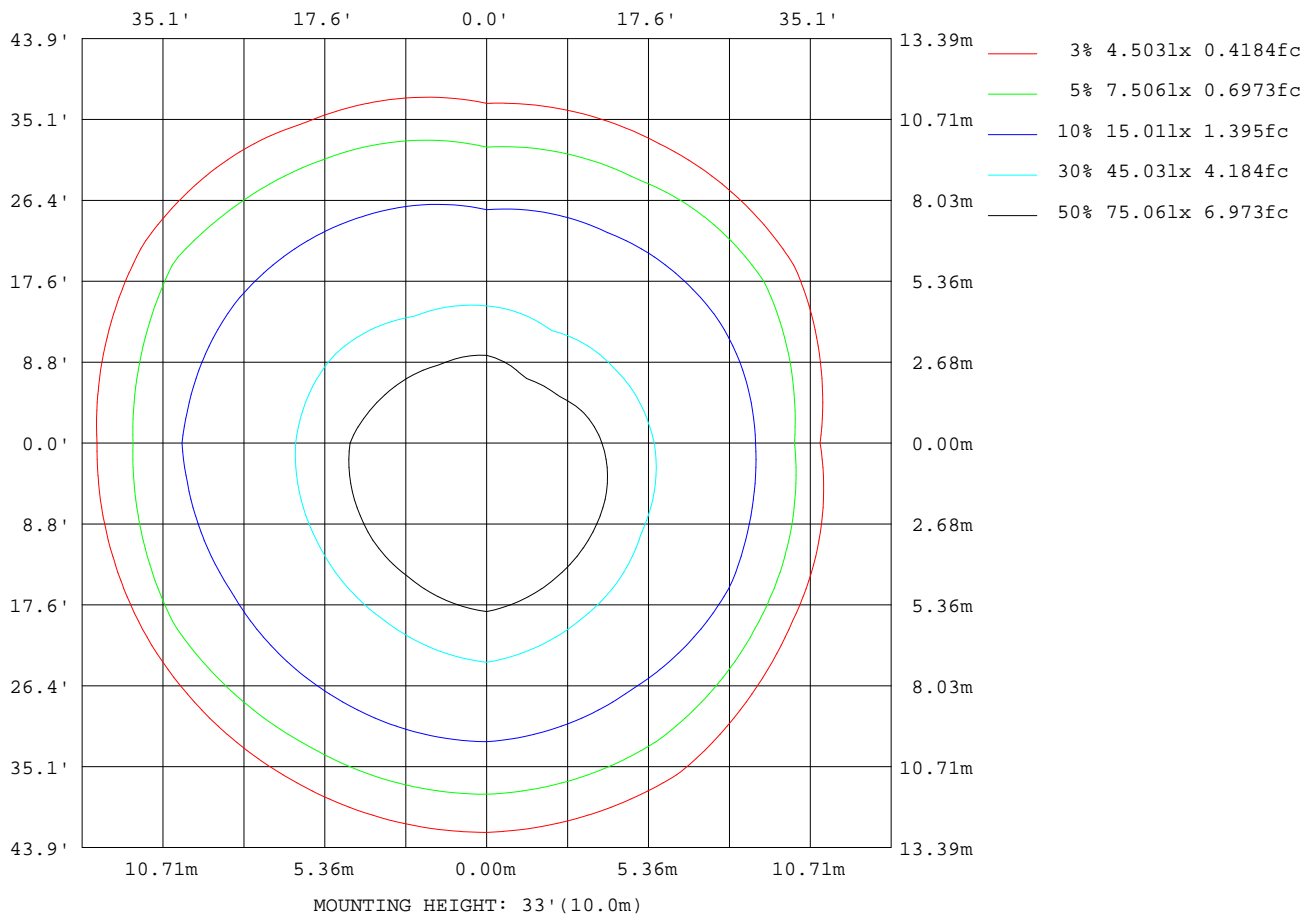
AAI Figure



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

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:

LED Avg.L Report

Test:U:87.600V I:1.0560A P:92.500W PF:1.0000 Freq:0Hz Lamp Flux:16611.7x1 lm		
NAME: B115 -日亜-R	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:0.04*0.9	Shielding Angle:

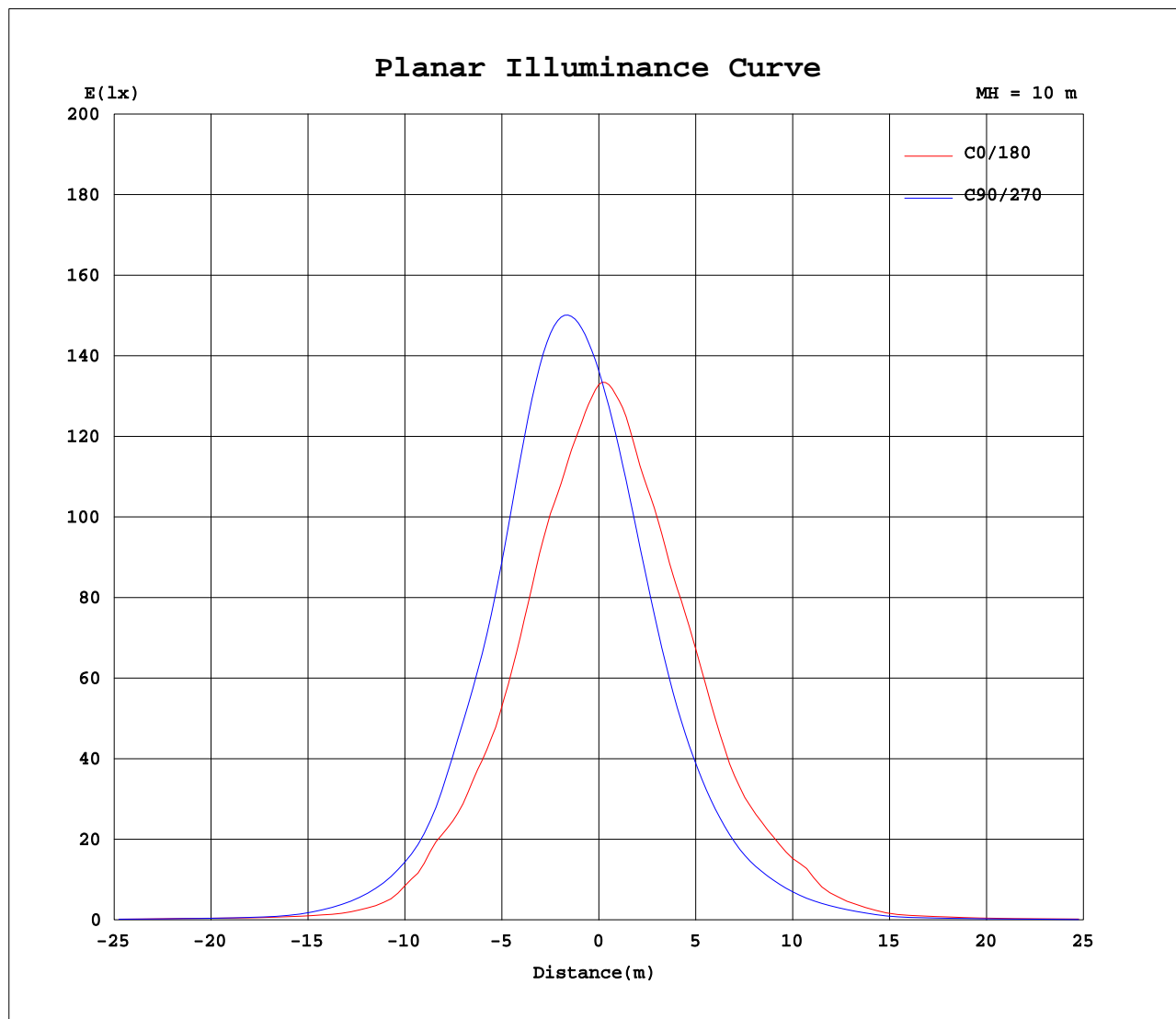
AvgL	cd/m2
L_0~180(65)av	31910
L_0~180(75)av	32875
L_0~180(85)av	58571
L_90~270(65)av	24797
L_90~270(75)av	18453
L_90~270(85)av	6029
L_45(65)av	31127
L_45(75)av	30208
L_45(85)av	37398

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

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: ×10cd

C(DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	1329	1350	1355	1363	1218	1216	1329	1350	1355	1363	1218	1216						
5	1250	1344	1424	1485	1313	1261	1318	1272	1234	1219	1085	1102						
10	1163	1311	1445	1571	1366	1258	1246	1148	1082	1058	937	984						
15	1084	1249	1407	1590	1374	1208	1164	1007	913	887	792	870						
20	948	1134	1281	1504	1292	1154	1069	897	750	723	656	767						
25	786	928	1096	1312	1143	1045	979	788	632	581	547	648						
30	651	730	902	1091	959	890	829	702	537	460	471	542						
35	525	595	703	893	757	670	651	571	437	352	384	451						
40	433	448	494	623	568	498	543	445	353	269	297	361						
45	240	328	348	406	394	399	431	374	281	198	217	286						
50	114	148	229	251	251	288	256	287	189	134	143	157						
55	66.2	80.1	113	132	132	131	127	152	109	71.1	84.1	85.9						
60	49.3	56.0	71.0	59.3	69.6	61.2	69.1	79.0	64.9	39.1	47.1	51.3						
65	48.9	46.7	53.0	44.6	52.0	47.2	48.2	54.0	44.9	30.9	35.9	41.4						
70	34.4	41.4	37.2	32.7	40.6	40.4	42.5	42.9	31.9	23.2	25.6	35.1						
75	26.3	32.3	26.2	19.6	27.7	34.5	35.0	35.0	22.4	14.8	18.1	25.2						
80	22.4	22.2	18.3	8.42	20.1	27.3	28.2	27.2	15.0	6.39	11.7	17.8						
85	16.2	14.5	7.44	1.98	10.2	17.4	20.5	17.3	9.14	1.80	5.84	10.6						
90	16.1	13.1	4.17	0.19	3.81	11.9	16.2	11.0	3.76	0.29	2.84	8.14						
95	11.7	8.35	1.72	0.18	1.88	10.6	17.2	8.96	1.97	0.33	1.30	5.06						
100	6.78	4.00	1.15	0.25	0.93	10.8	16.3	8.38	1.23	0.53	1.12	2.57						
105	2.49	2.15	1.20	0.36	0.90	1.45	3.64	1.61	1.28	0.83	1.29	1.76						
110	2.46	1.94	0.82	0.52	0.85	1.58	1.68	1.81	1.52	1.29	1.24	1.84						
115	2.02	2.10	0.98	0.75	0.85	1.55	2.18	2.03	1.65	1.89	1.69	2.19						
120	2.37	1.90	1.28	1.06	1.05	1.85	2.23	2.49	2.21	2.65	2.32	2.31						
125	2.58	2.09	1.69	1.45	1.36	1.80	2.70	2.68	2.93	3.55	3.11	2.80						
130	3.00	2.55	2.18	1.92	1.78	2.08	2.94	3.29	3.83	4.53	3.95	3.50						
135	3.65	3.13	2.74	2.47	2.25	2.50	3.48	4.07	4.83	5.54	4.83	4.29						
140	4.41	3.84	3.39	3.09	2.78	2.96	4.15	4.90	5.83	6.51	5.69	5.13						
145	5.30	4.64	4.13	3.80	3.39	3.56	4.87	5.83	6.80	7.44	6.50	5.97						
150	6.25	5.51	4.96	4.60	4.11	4.24	5.76	6.78	7.72	8.29	7.23	6.72						
155	7.19	6.45	5.85	5.46	4.89	5.02	6.73	7.71	8.54	9.00	8.33	7.37						
160	8.08	7.36	6.73	6.35	5.70	5.81	7.66	8.52	9.19	9.57	8.68	7.91						
165	8.85	8.21	7.62	7.26	6.51	6.60	8.50	9.16	9.65	9.94	9.08	8.30						
170	9.51	8.95	8.47	8.15	7.31	7.32	9.20	9.65	9.92	10.1	9.55	8.55						
175	9.91	9.54	9.23	8.98	8.04	7.97	9.71	9.94	9.96	10.0	9.86	8.63						
180	10.0	9.92	9.82	9.68	8.65	8.50	9.96	9.97	9.76	9.73	9.70	8.51						

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: