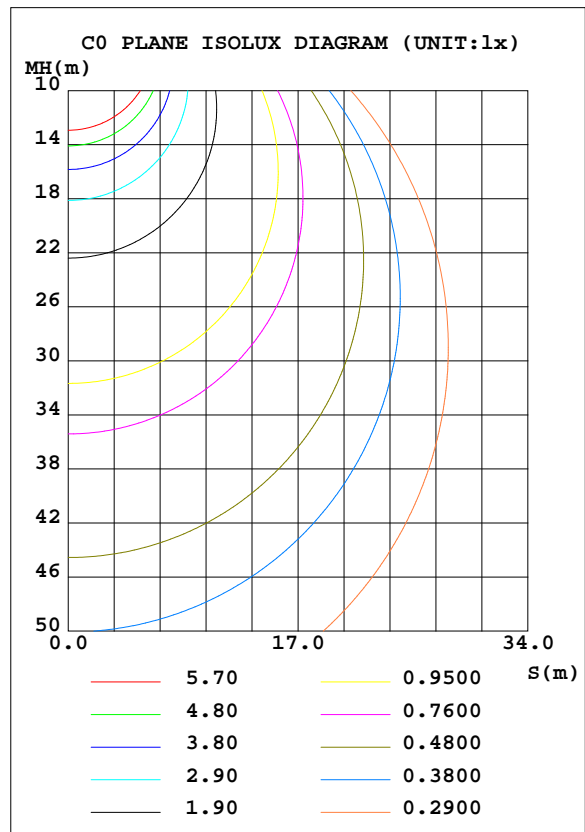
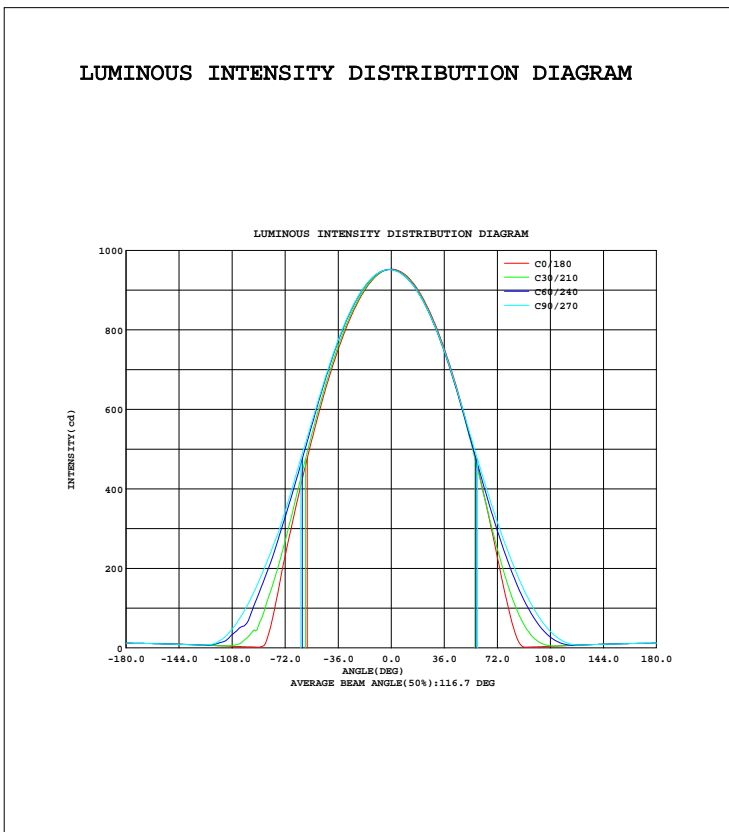


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.1V I:0.2935A P:35.70W PF:0.5287 Lamp Flux:3102.36x1 lm		
NAME: 02TP-JH2-36W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 86.89 lm/W			
MODEL		Imax(cd)	952.7	S/MH(C0/180)	1.26
NOMINAL POWER(W)	40W	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3102.4	$\eta$ UP, DN(C0-180)	2.1,46.9
NOMINAL FLUX(lm)	3102.36	CIE CLASS	DIRECT	$\eta$ UP, DN(C180-360)	2.3,48.7
LAMPS INSIDE	1	$\eta$ up(%)	4.4	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	$\eta$ down(%)	95.6	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:13 December 2019

$\gamma$  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:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	936.9	933.5	932.1	933.4	935.8	938.6	939.8	938.7	0- 10	90.10	90.10	2.9,2.9
20	889.6	884.6	883.5	884.3	887.5	894.8	898.6	894.8	10- 20	258.8	348.9	11.2,11.2
30	812.5	806.6	806.2	806.2	809.9	822.0	828.7	821.5	20- 30	394.3	743.2	24,24
40	708.6	702.0	703.1	701.7	705.8	722.6	732.4	721.6	30- 40	479.4	1223	39.4,39.4
50	581.1	575.2	581.6	575.2	578.4	600.6	615.8	598.6	40- 50	503.3	1726	55.6,55.6
60	432.4	436.1	457.3	435.9	429.9	463.8	492.5	460.8	50- 60	465.2	2191	70.6,70.6
70	264.6	298.3	339.4	297.4	265.7	324.9	367.4	321.0	60- 70	376.2	2567	82.7,82.7
80	93.70	179.0	235.4	177.6	82.71	198.9	257.9	196.4	70- 80	257.5	2825	91,91
90	2.126	90.04	146.9	88.81	1.809	96.20	166.2	102.1	80- 90	142.6	2967	95.6,95.6
100	2.936	37.19	79.36	36.48	2.976	36.89	91.49	42.69	90-100	68.22	3035	97.8,97.8
110	4.332	13.41	34.42	13.14	4.401	15.40	38.41	15.01	100-110	28.51	3064	98.8,98.8
120	5.860	6.848	11.76	6.694	5.942	7.468	10.71	7.090	110-120	10.93	3075	99.1,99.1
130	7.392	7.595	7.501	7.481	7.467	7.425	7.366	7.447	120-130	6.391	3081	99.3,99.3
140	8.767	8.845	8.687	8.758	8.875	8.733	8.567	8.711	130-140	6.277	3088	99.5,99.5
150	9.933	9.929	9.745	9.884	10.01	9.852	9.641	9.815	140-150	5.841	3093	99.7,99.7
160	10.81	10.83	10.73	10.80	10.85	10.76	10.60	10.70	150-160	4.767	3098	99.9,99.9
170	11.42	11.46	11.56	11.43	11.44	11.41	11.43	11.36	160-170	3.142	3101	100,100
180	11.75	11.77	11.89	11.72	11.75	11.76	11.88	11.72	170-180	1.105	3102	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1475.2 lm

%lum = 47.6%

%lamp = 47.6%

Conical surface Flux(120deg): 2191 lm

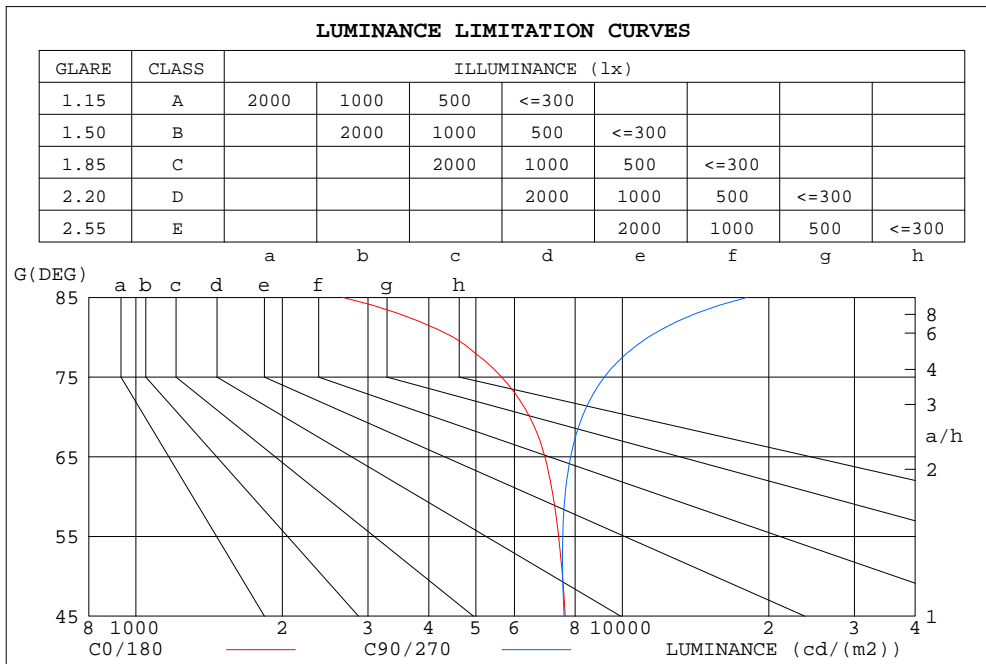
%lum = 70.6%

%lamp = 70.6%

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:13 December 2019

$\gamma$  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:

LUMINANCE LIMITATION CURVES



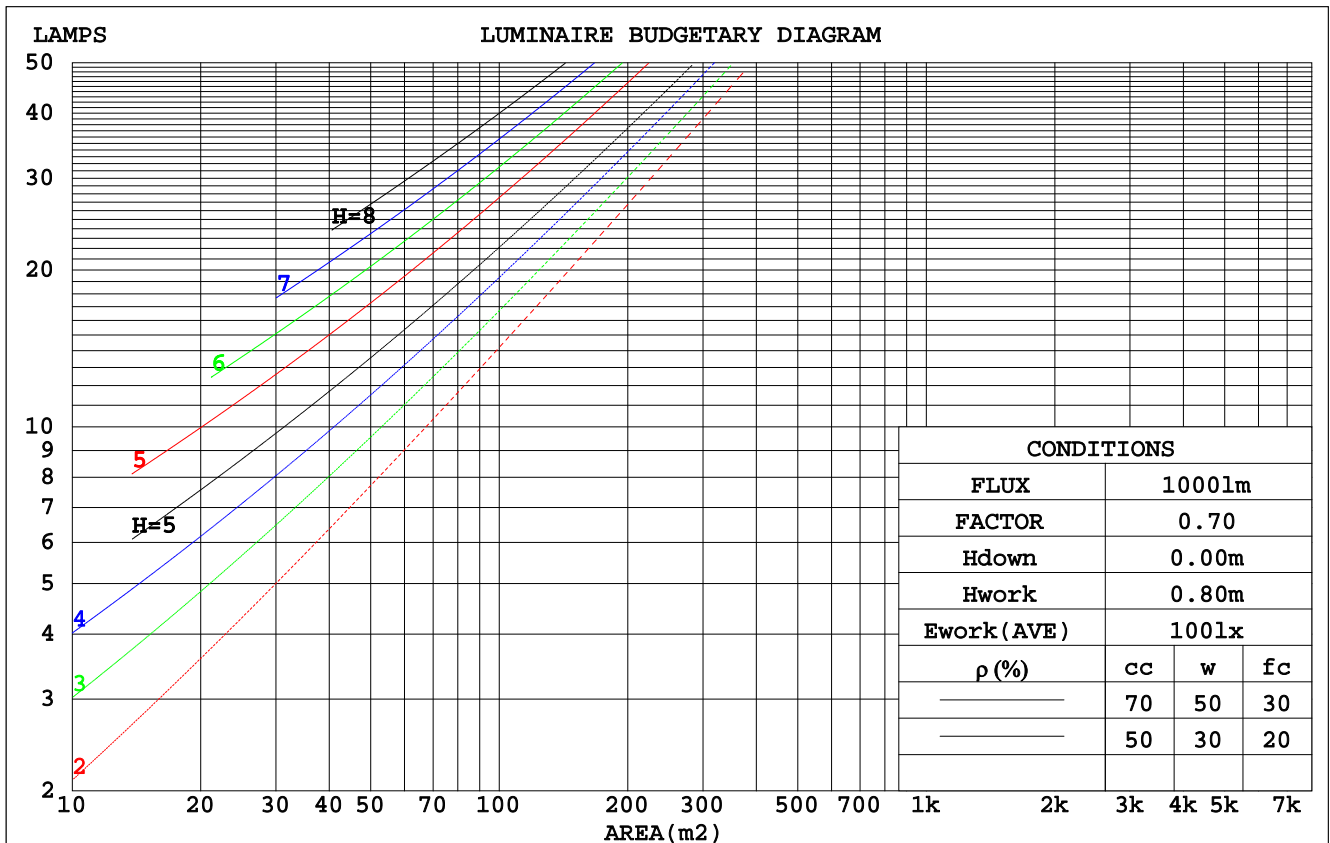
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2663	18040
80	4497	11296
75	5647	9181
70	6447	8269
65	6930	7831
60	7207	7622
55	7396	7544
50	7533	7541
45	7633	7589

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 13 December 2019

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.03	1.03	1.03	.98	.98	.98	.96
1.0	1.01	.96	.92	.98	.94	.90	.93	.90	.86	.88	.85	.83	.84	.82	.80	.77
2.0	.87	.80	.74	.85	.78	.73	.81	.75	.70	.77	.72	.68	.73	.69	.66	.63
3.0	.76	.68	.61	.74	.66	.60	.71	.64	.58	.67	.62	.57	.64	.59	.55	.53
4.0	.67	.58	.51	.66	.57	.51	.63	.55	.49	.60	.53	.48	.57	.52	.47	.45
5.0	.60	.51	.44	.59	.50	.43	.56	.48	.42	.53	.47	.42	.51	.45	.41	.38
6.0	.54	.45	.38	.53	.44	.38	.50	.43	.37	.48	.42	.36	.46	.40	.36	.33
7.0	.49	.40	.34	.48	.39	.33	.46	.38	.33	.44	.37	.32	.42	.36	.32	.30
8.0	.44	.36	.30	.44	.35	.30	.42	.34	.29	.40	.34	.29	.39	.33	.28	.26
9.0	.41	.32	.27	.40	.32	.27	.39	.31	.26	.37	.31	.26	.36	.30	.25	.24
10.0	.38	.30	.24	.37	.29	.24	.36	.29	.24	.34	.28	.23	.33	.27	.23	.21



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 13 December 2019

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:

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	.346	.197	.062	.337	.192	.061	.321	.184	.059	.307	.177	.057	.293	.170	.055	
2.0	.312	.171	.052	.305	.168	.052	.290	.161	.050	.277	.156	.049	.265	.150	.047	
3.0	.283	.151	.045	.276	.148	.045	.264	.143	.043	.252	.138	.042	.241	.134	.041	
4.0	.258	.134	.039	.252	.132	.039	.241	.128	.038	.230	.124	.037	.221	.120	.037	
5.0	.237	.121	.035	.232	.119	.035	.221	.115	.034	.212	.112	.033	.203	.109	.033	
6.0	.218	.109	.031	.214	.108	.031	.205	.105	.030	.196	.102	.030	.188	.099	.029	
7.0	.202	.100	.028	.198	.099	.028	.190	.096	.028	.182	.093	.027	.175	.091	.027	
8.0	.188	.092	.026	.185	.091	.026	.177	.089	.025	.170	.086	.025	.164	.084	.024	
9.0	.176	.085	.024	.173	.084	.024	.166	.082	.023	.160	.080	.023	.154	.078	.023	
10.0	.165	.079	.022	.162	.078	.022	.156	.076	.022	.150	.075	.021	.145	.073	.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	.224	.224	.224	.191	.191	.191	.130	.130	.130	.075	.075	.075	.024	.024	.024	
1.0	.216	.189	.165	.185	.162	.142	.127	.112	.098	.073	.065	.057	.023	.021	.018	
2.0	.209	.166	.129	.179	.142	.112	.122	.099	.078	.071	.057	.046	.023	.019	.015	
3.0	.201	.148	.106	.172	.128	.092	.118	.089	.065	.068	.052	.038	.022	.017	.012	
4.0	.193	.135	.091	.166	.117	.079	.114	.081	.056	.066	.048	.033	.021	.016	.011	
5.0	.185	.125	.080	.159	.108	.070	.110	.076	.049	.064	.044	.029	.020	.014	.010	
6.0	.178	.117	.073	.153	.101	.063	.106	.071	.045	.061	.042	.027	.020	.014	.009	
7.0	.171	.110	.067	.147	.095	.058	.102	.067	.041	.059	.039	.025	.019	.013	.008	
8.0	.165	.104	.063	.142	.090	.055	.098	.063	.039	.057	.037	.023	.018	.012	.008	
9.0	.158	.099	.059	.136	.086	.052	.094	.061	.037	.055	.036	.022	.018	.012	.007	
10.0	.152	.095	.057	.131	.082	.050	.091	.058	.035	.053	.034	.021	.017	.011	.007	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:13 December 2019

$\gamma$  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:

## 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	19.3	20.9	19.7	21.1	21.4	19.6	21.1	19.9	21.3	21.6
3H	20.9	22.3	21.2	22.6	22.9	21.5	22.9	21.9	23.2	23.5
4H	21.4	22.8	21.8	23.1	23.5	22.5	23.8	22.9	24.2	24.5
6H	21.8	23.1	22.2	23.4	23.8	23.6	24.8	24.0	25.2	25.6
8H	21.9	23.1	22.3	23.5	23.9	24.2	25.4	24.6	25.7	26.1
12H	21.9	23.1	22.3	23.5	23.9	24.8	26.0	25.2	26.4	26.8
4H 2H	20.0	21.3	20.4	21.7	22.0	20.2	21.5	20.5	21.8	22.2
3H	21.7	22.9	22.1	23.3	23.7	22.3	23.5	22.8	23.9	24.3
4H	22.4	23.5	22.9	23.9	24.4	23.5	24.6	24.0	25.0	25.4
6H	23.0	23.9	23.4	24.4	24.8	24.8	25.7	25.2	26.2	26.6
8H	23.1	24.0	23.6	24.5	25.0	25.5	26.4	25.9	26.8	27.3
12H	23.2	24.0	23.7	24.5	25.0	26.2	27.1	26.7	27.5	28.0
8H 4H	22.9	23.8	23.4	24.3	24.7	23.8	24.7	24.3	25.2	25.7
6H	23.7	24.4	24.2	24.9	25.4	25.4	26.1	25.9	26.6	27.1
8H	24.0	24.6	24.5	25.1	25.7	26.2	26.9	26.7	27.4	27.9
12H	24.2	24.7	24.7	25.3	25.8	27.2	27.8	27.8	28.3	28.9
12H 4H	23.0	23.8	23.5	24.3	24.8	23.9	24.7	24.3	25.1	25.6
6H	23.9	24.6	24.4	25.1	25.6	25.4	26.1	26.0	26.6	27.2
8H	24.3	24.9	24.8	25.4	26.0	26.4	27.0	27.0	27.5	28.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 3102 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.9)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:13 December 2019

$\gamma$  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:

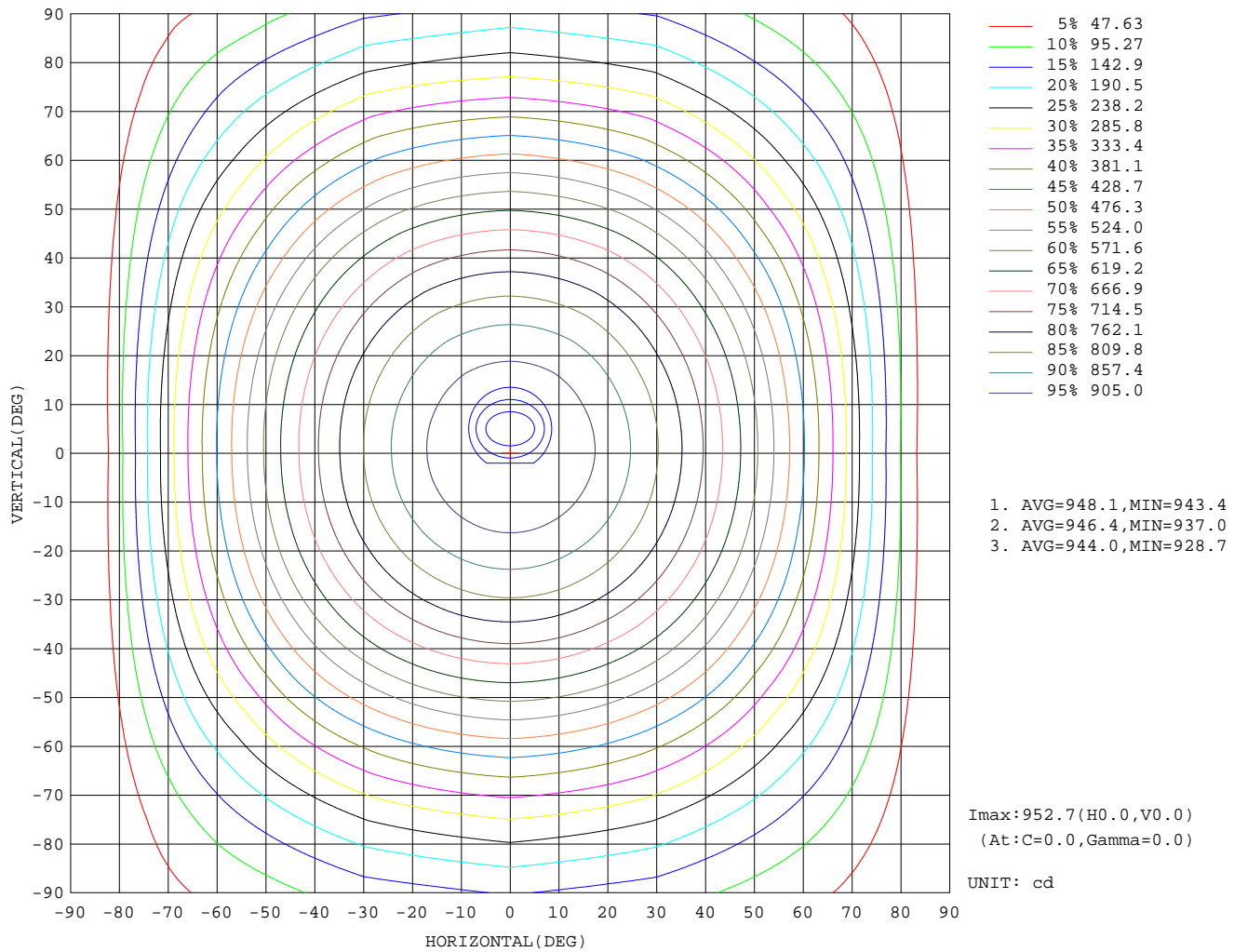
## UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	54	42	35	54	42	35	52	42	35	28
0.80	64	52	44	63	51	44	61	51	44	36
1.00	72	60	53	71	60	52	68	61	52	44
1.25	79	68	60	78	67	60	75	65	59	51
1.50	84	73	66	82	72	65	79	70	64	56
2.00	91	82	75	89	80	74	85	78	72	63
2.50	95	87	80	93	85	79	89	82	77	67
3.00	99	91	85	96	89	83	92	86	81	71
4.00	103	96	91	100	94	89	95	91	86	76
5.00	106	100	95	103	98	93	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:  
 Test Date: 13 December 2019

$\gamma$  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:

ISOCANDELA DIAGRAM

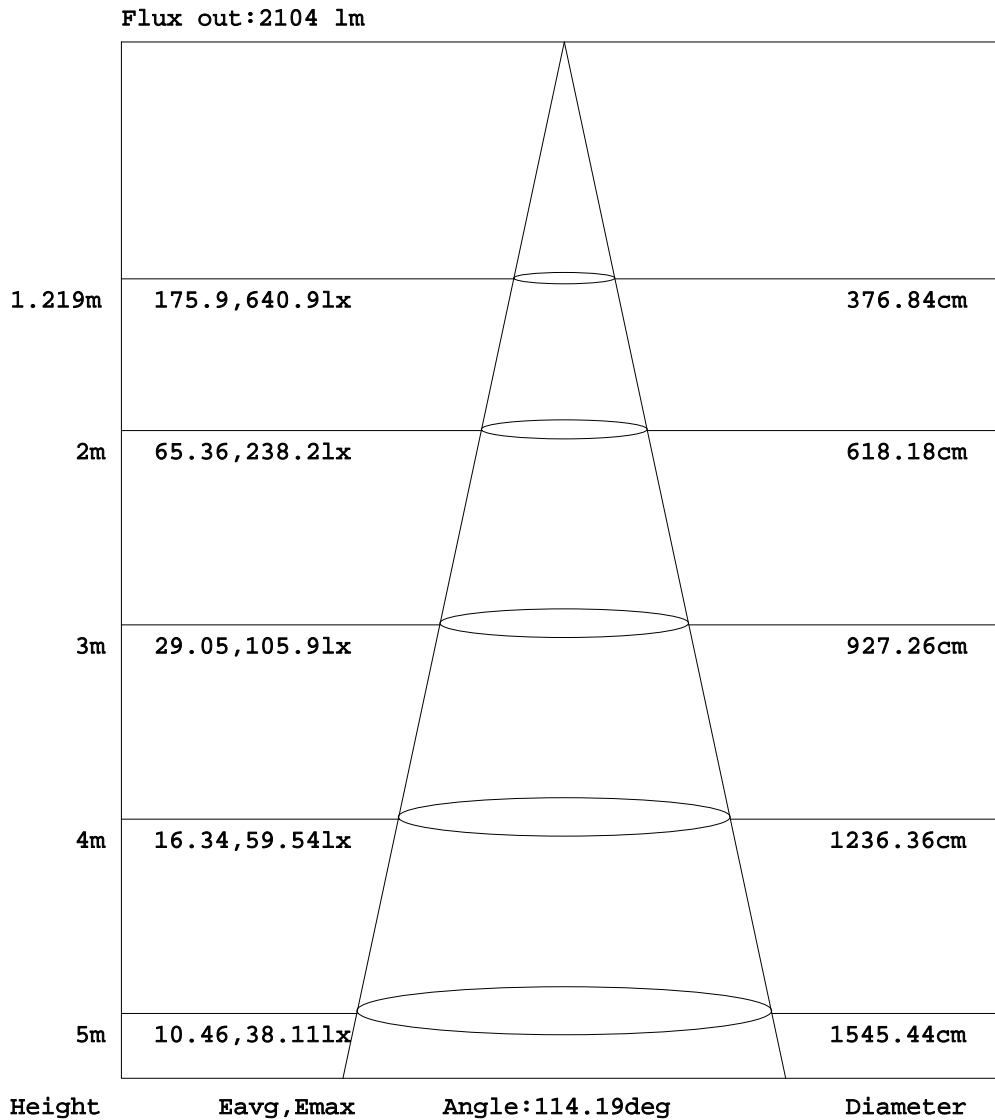


C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 13 December 2019

$\gamma$  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:



AAI Figure

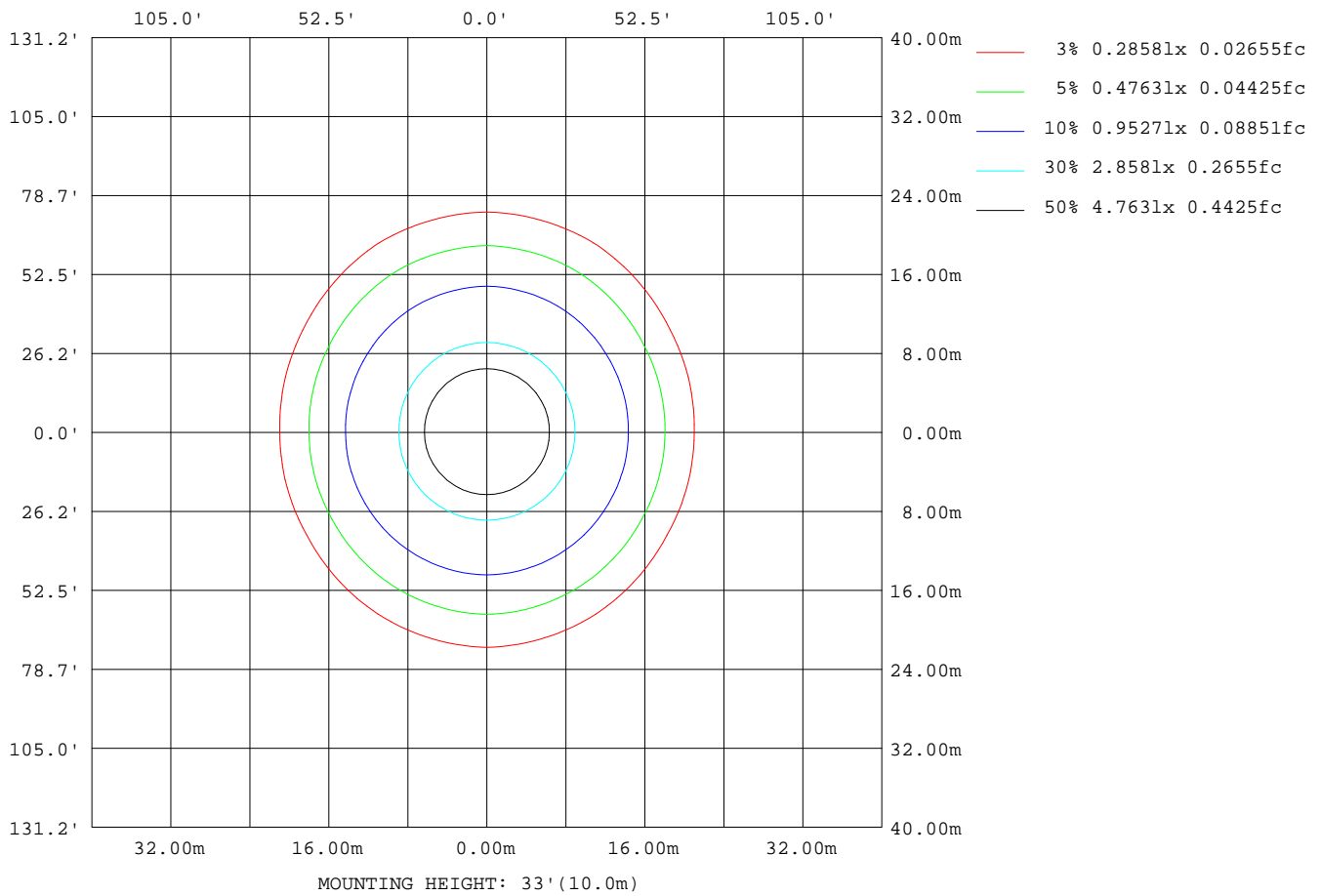


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 13 December 2019

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:

ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 13 December 2019

$\gamma$  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:

## LED Avg.L Report

Test:U:230.1V I:0.2935A P:35.70W PF:0.5287 Lamp Flux:3102.36x1 lm		
NAME: 净化灯	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

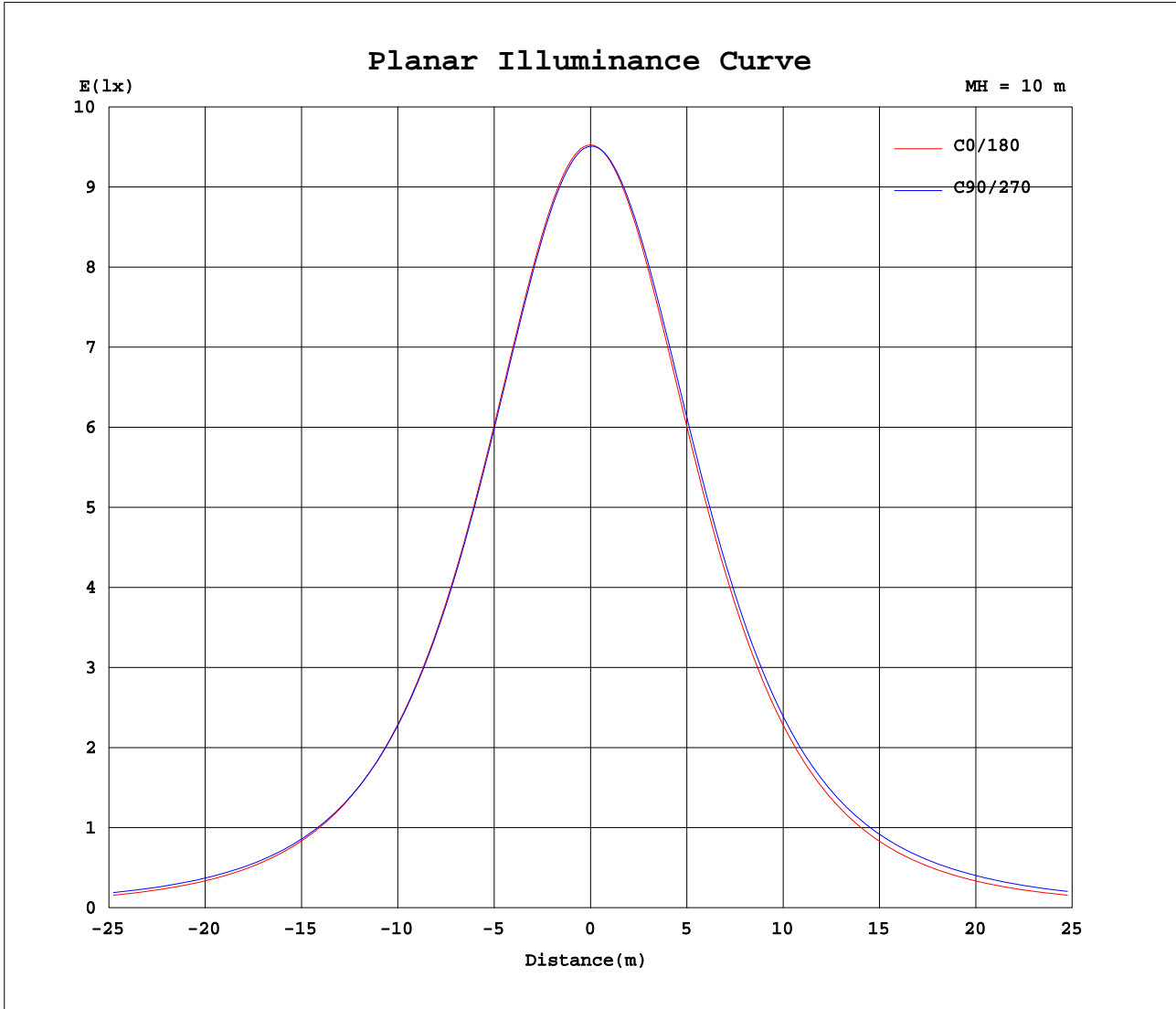
AvgL	cd/m2
L_0~180(65)av	6908
L_0~180(75)av	5655
L_0~180(85)av	2011
L_90~270(65)av	8150
L_90~270(75)av	9559
L_90~270(85)av	19079
L_45(65)av	7461
L_45(75)av	7978
L_45(85)av	13457

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:13 December 2019

$\gamma$  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:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 13 December 2019

$\gamma$  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:

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	953	952	951	951	952	952	953	952	951	951	952	952							
5	949	947	946	945	946	947	948	949	950	949	950	949							
10	937	934	933	932	933	934	936	937	940	940	940	938							
15	917	914	912	912	912	913	916	918	923	923	922	919							
20	890	886	883	884	884	885	887	892	898	899	898	892							
25	855	850	848	848	848	849	852	858	866	867	865	858							
30	812	808	805	806	806	807	810	817	827	829	826	817							
35	764	759	756	758	756	758	761	770	781	783	780	769							
40	709	703	701	703	701	702	706	716	729	732	728	715							
45	648	641	641	644	641	641	645	656	672	676	670	655							
50	581	575	576	582	576	574	578	591	610	616	608	589							
55	509	503	510	519	510	503	506	521	545	554	542	519							
60	432	428	444	457	444	428	430	448	480	493	477	445							
65	351	352	380	397	379	352	349	372	415	430	412	369							
70	265	278	319	339	318	277	266	297	353	367	349	293							
75	175	210	262	285	261	208	176	227	293	309	289	222							
80	93.7	149	209	235	209	147	82.7	164	234	258	234	159							
85	27.9	98.3	162	189	161	96.0	14.2	107	184	210	184	106							
90	2.13	59.2	121	147	120	57.3	1.81	57.2	135	166	140	64.5							
95	2.31	32.1	86.9	110	86.3	30.5	2.61	36.8	87.9	126	101	35.1							
100	2.94	15.6	58.8	79.4	58.3	14.6	2.98	18.7	55.1	91.5	68.5	16.9							
105	3.63	7.46	37.2	54.0	36.8	6.91	3.66	8.21	42.4	61.7	43.0	7.82							
110	4.33	4.83	22.0	34.4	21.7	4.59	4.40	5.04	25.8	38.4	25.2	4.84							
115	5.08	5.39	12.4	20.5	12.2	5.26	5.17	5.26	14.2	21.3	13.9	5.30							
120	5.86	6.14	7.56	11.8	7.39	6.00	5.94	6.00	8.93	10.7	8.14	6.04							
125	6.63	6.87	6.99	7.53	6.89	6.73	6.72	6.73	6.93	7.66	6.76	6.78							
130	7.39	7.56	7.63	7.50	7.54	7.43	7.47	7.41	7.44	7.37	7.41	7.48							
135	8.11	8.23	8.27	8.11	8.18	8.11	8.20	8.08	8.07	7.98	8.05	8.14							
140	8.77	8.84	8.85	8.69	8.78	8.74	8.87	8.77	8.70	8.57	8.65	8.77							
145	9.40	9.42	9.40	9.23	9.35	9.34	9.49	9.36	9.28	9.12	9.22	9.36							
150	9.93	9.95	9.91	9.75	9.88	9.88	10.0	9.89	9.82	9.64	9.75	9.88							
155	10.4	10.4	10.4	10.2	10.4	10.4	10.5	10.4	10.3	10.1	10.2	10.3							
160	10.8	10.9	10.8	10.7	10.8	10.8	10.8	10.8	10.8	10.6	10.7	10.7							
165	11.1	11.2	11.1	11.2	11.2	11.1	11.2	11.1	11.1	11.0	11.0	11.1							
170	11.4	11.5	11.4	11.6	11.4	11.4	11.4	11.4	11.4	11.4	11.3	11.4							
175	11.6	11.7	11.6	11.8	11.6	11.6	11.6	11.6	11.6	11.7	11.6	11.6							
180	11.8	11.8	11.8	11.9	11.7	11.7	11.8	11.8	11.8	11.9	11.7	11.7							

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 13 December 2019

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: