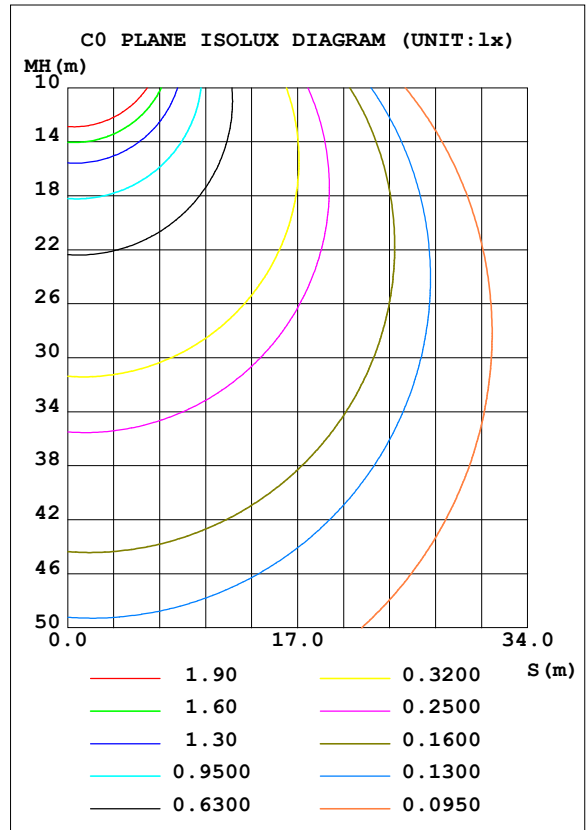
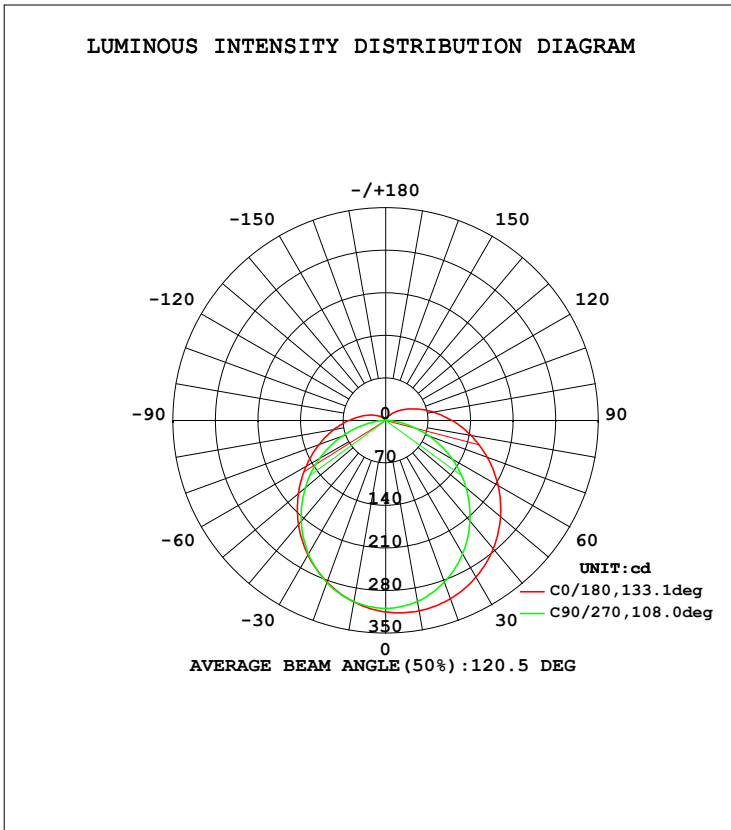


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.2V I:0.0476A P:10.17W PF:0.9272 Lamp Flux:1128.17x1 lm		
NAME: T82A06-9W	TYPE:LED 2835	WEIGHT:
SPEC: LED tube T8	DIM.: 600*26MM	SERIAL No.:1
MFR.: Integratech	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 110.95 lm/W			
MODEL		I <sub>max</sub> (cd)	318.6	S/MH (C0/180)	1.22
NOMINAL POWER (W)	9	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm)	1128.2	η UP, DN (C0-180)	5.2, 46.3
NOMINAL FLUX (lm)	1128.17	CIE CLASS	DIRECT	η UP, DN (C180-360)	4.4, 44.1
LAMPS INSIDE	1	η up (%)	9.5	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	90.5	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2015-11-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity: 65.0%  
 Test Distance: 11.550m [K=1.0000]  
 Remarks:

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

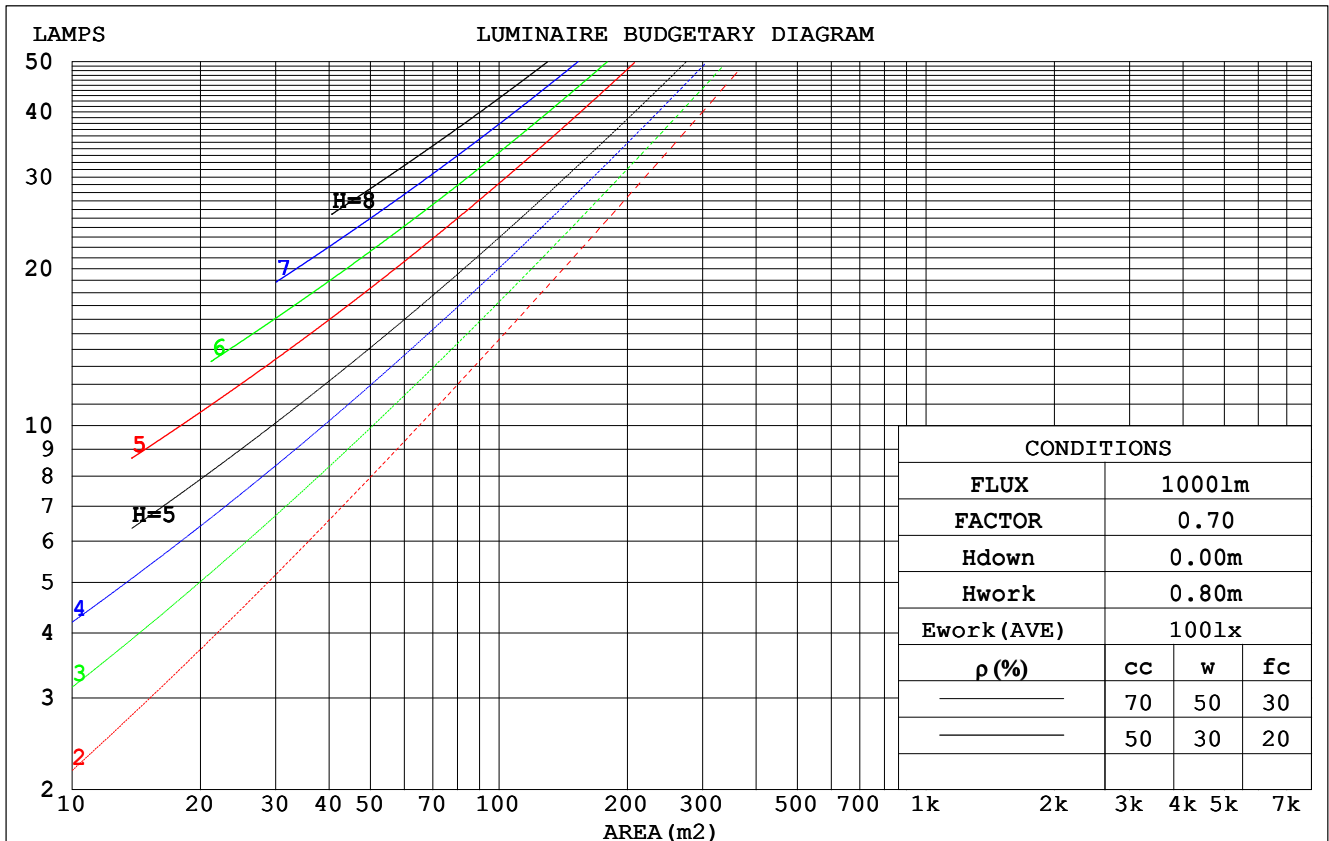
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	318.1	312.0	302.2	298.7	303.1	301.6	302.6	310.2	0- 10	29.51	29.51	2.62,2.62
20	312.1	300.9	282.8	277.5	283.1	280.6	283.8	299.6	10- 20	84.57	114.1	10.1,10.1
30	297.6	280.3	253.3	247.8	255.8	250.8	254.1	279.5	20- 30	128.5	242.6	21.5,21.5
40	275.4	251.7	215.8	211.8	223.4	214.5	216.4	251.1	30- 40	156.2	398.8	35.3,35.3
50	246.9	216.9	172.9	172.5	187.8	174.3	173.0	215.6	40- 50	165.3	564.1	50,50
60	213.6	178.7	126.1	132.1	151.3	133.1	125.8	176.0	50- 60	156.3	720.4	63.9,63.9
70	178.1	139.6	76.82	94.42	117.0	94.84	76.42	135.3	60- 70	132.8	853.1	75.6,75.6
80	142.4	102.6	30.23	62.50	86.73	62.76	29.59	98.77	70- 80	100.4	953.5	84.5,84.5
90	109.1	71.00	3.110	37.57	60.97	37.47	2.486	66.65	80- 90	67.15	1021	90.5,90.5
100	79.95	46.80	2.204	22.08	41.33	22.11	1.920	46.52	90-100	44.07	1065	94.4,94.4
110	56.00	30.03	1.962	12.46	26.65	12.43	1.803	29.76	100-110	28.08	1093	96.9,96.9
120	37.18	17.99	1.828	7.043	16.21	6.917	1.803	17.92	110-120	16.87	1110	98.4,98.4
130	23.25	9.507	1.745	4.010	9.252	3.913	1.803	10.03	120-130	9.365	1119	99.2,99.2
140	13.50	5.147	1.662	2.689	5.031	2.554	1.795	5.465	130-140	4.842	1124	99.6,99.6
150	7.268	2.948	1.636	2.104	3.087	1.978	1.787	3.071	140-150	2.356	1126	99.8,99.8
160	3.642	2.229	1.720	1.895	2.279	1.812	1.803	2.387	150-160	1.162	1127	99.9,99.9
170	2.188	2.062	1.728	1.912	2.162	1.820	1.853	2.137	160-170	0.5926	1128	100,100
180	2.112	1.987	1.787	1.837	2.162	1.812	1.878	2.079	170-180	0.1918	1128	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2015-11-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:11.550m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

<b>ρcc</b>	80%			70%			50%			30%			10%			0
<b>ρw</b>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<b>ρfc</b>	20%			20%			20%			20%			20%			0
<b>RCR</b>	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	.99	.99	.99	.93	.93	.93	.90
1.0	.99	.94	.89	.96	.91	.87	.89	.86	.82	.84	.81	.78	.79	.76	.74	.71
2.0	.85	.77	.71	.82	.75	.69	.77	.71	.66	.72	.68	.63	.68	.64	.61	.58
3.0	.74	.65	.58	.72	.64	.57	.67	.61	.55	.63	.58	.53	.59	.55	.51	.48
4.0	.65	.56	.49	.63	.55	.48	.60	.52	.46	.56	.50	.45	.53	.47	.43	.40
5.0	.58	.49	.42	.56	.48	.41	.53	.46	.40	.50	.44	.38	.47	.42	.37	.35
6.0	.52	.43	.36	.51	.42	.36	.48	.40	.35	.45	.39	.34	.43	.37	.33	.30
7.0	.47	.38	.32	.46	.37	.31	.43	.36	.31	.41	.35	.30	.39	.33	.29	.27
8.0	.43	.34	.28	.42	.34	.28	.40	.32	.27	.38	.31	.26	.36	.30	.26	.24
9.0	.39	.31	.25	.38	.30	.25	.37	.29	.24	.35	.28	.24	.33	.27	.23	.21
10.0	.36	.28	.23	.35	.28	.23	.34	.27	.22	.32	.26	.22	.31	.25	.21	.19



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2015-11-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity: 65.0%  
 Test Distance: 11.550m [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	.364	.207	.066	.354	.202	.064	.335	.192	.061	.317	.183	.059	.301	.175	.056	
2.0	.322	.176	.054	.313	.172	.053	.296	.164	.051	.280	.157	.049	.265	.150	.047	
3.0	.289	.154	.046	.281	.150	.045	.266	.144	.044	.251	.138	.042	.238	.132	.041	
4.0	.262	.136	.040	.255	.133	.039	.241	.128	.038	.228	.123	.037	.216	.118	.036	
5.0	.239	.122	.035	.233	.119	.035	.220	.115	.034	.209	.110	.033	.198	.106	.032	
6.0	.220	.110	.032	.214	.108	.031	.203	.104	.030	.192	.100	.029	.183	.096	.029	
7.0	.203	.101	.029	.198	.099	.028	.188	.095	.027	.178	.091	.027	.169	.088	.026	
8.0	.189	.092	.026	.184	.091	.026	.175	.087	.025	.166	.084	.024	.158	.081	.024	
9.0	.176	.085	.024	.172	.084	.024	.164	.081	.023	.156	.078	.022	.148	.075	.022	
10.0	.165	.079	.022	.161	.078	.022	.154	.075	.021	.146	.073	.021	.139	.070	.020	

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.263	.263	.263	.225	.225	.225	.153	.153	.153	.088	.088	.088	.028	.028	.028	
1.0	.257	.229	.203	.220	.196	.175	.151	.135	.121	.087	.078	.070	.028	.025	.023	
2.0	.250	.205	.168	.214	.177	.145	.147	.122	.101	.085	.071	.059	.027	.023	.019	
3.0	.242	.189	.146	.208	.163	.126	.143	.113	.089	.082	.066	.052	.026	.021	.017	
4.0	.234	.176	.131	.201	.152	.114	.138	.106	.080	.080	.062	.047	.026	.020	.016	
5.0	.227	.166	.121	.195	.143	.105	.134	.100	.074	.078	.059	.044	.025	.019	.014	
6.0	.219	.157	.113	.188	.136	.099	.130	.095	.070	.075	.056	.041	.024	.018	.014	
7.0	.212	.151	.108	.183	.131	.094	.126	.092	.066	.073	.054	.040	.024	.018	.013	
8.0	.206	.145	.104	.177	.126	.090	.122	.088	.064	.071	.052	.038	.023	.017	.013	
9.0	.199	.140	.100	.172	.122	.087	.119	.086	.062	.069	.051	.037	.022	.017	.012	
10.0	.193	.136	.098	.167	.118	.085	.116	.083	.061	.067	.049	.036	.022	.016	.012	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2015-11-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:11.550m [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	9.9	11.3	10.3	11.7	12.1	7.8	9.2	8.2	9.6	10.0
3H	12.4	13.7	12.8	14.1	14.5	9.3	10.6	9.7	11.0	11.4
4H	13.7	15.0	14.2	15.4	15.9	9.8	11.1	10.3	11.5	12.0
6H	15.2	16.4	15.6	16.8	17.3	10.3	11.5	10.7	11.9	12.4
8H	16.0	17.1	16.4	17.6	18.1	10.4	11.5	10.9	12.0	12.5
12H	16.9	18.0	17.4	18.5	19.0	10.4	11.6	10.9	12.0	12.5
4H 2H	10.4	11.7	10.9	12.1	12.6	8.9	10.2	9.4	10.6	11.1
3H	13.2	14.3	13.7	14.8	15.3	10.6	11.8	11.1	12.2	12.7
4H	14.7	15.7	15.2	16.2	16.8	11.4	12.4	11.9	12.9	13.5
6H	16.4	17.3	16.9	17.8	18.4	12.0	12.9	12.5	13.4	14.0
8H	17.3	18.2	17.9	18.7	19.3	12.2	13.1	12.8	13.6	14.2
12H	18.4	19.2	19.0	19.7	20.3	12.4	13.2	12.9	13.7	14.3
8H 4H	15.0	15.9	15.6	16.4	17.0	12.4	13.2	12.9	13.8	14.4
6H	17.0	17.8	17.6	18.3	19.0	13.3	14.1	13.9	14.6	15.3
8H	18.2	18.8	18.8	19.4	20.1	13.7	14.4	14.3	15.0	15.6
12H	19.5	20.1	20.1	20.7	21.3	14.1	14.6	14.7	15.2	15.9
12H 4H	15.1	15.9	15.6	16.4	17.0	12.7	13.5	13.2	14.0	14.6
6H	17.1	17.8	17.7	18.4	19.0	13.8	14.5	14.4	15.1	15.7
8H	18.4	19.0	19.0	19.6	20.2	14.4	15.0	15.0	15.6	16.3
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	+ 0.2 / - 0.3					+ 0.2 / - 0.5				

CIE Pub.117 Corrected 1128 lm Total Lamp Luminous Flux. (8log(F/F0) = 0.4)

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2015-11-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:11.550m [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) $k(RI) \times RCR = 5$									
$k = 0.60$	52	40	33	51	39	32	49	39	32	26
0.80	61	49	41	60	48	41	58	47	40	33
1.00	69	57	49	68	56	49	65	57	48	40
1.25	76	64	56	74	63	56	71	61	54	46
1.50	81	70	62	79	69	61	75	66	60	50
2.00	88	78	70	86	76	69	81	73	67	57
2.50	93	83	76	90	81	75	85	78	72	61
3.00	96	88	81	93	86	79	88	82	76	65
4.00	101	93	87	97	91	86	92	86	82	70
5.00	103	97	92	100	94	90	94	89	85	73
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2015-11-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity: 65.0%  
 Test Distance: 11.550m [K=1.0000]  
 Remarks:

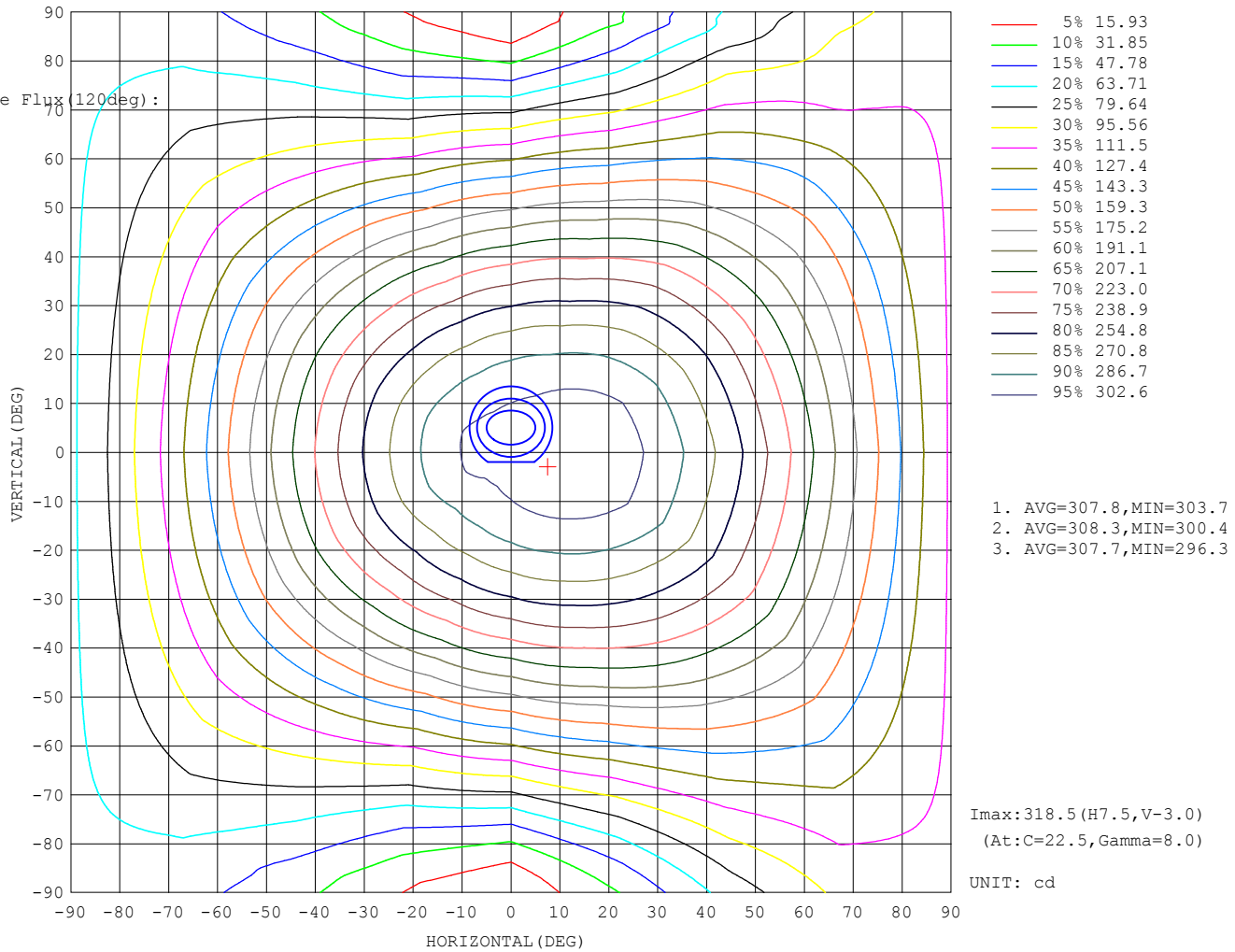
ISOCANDELA DIAGRAM

Conical surface Flux(90deg):

481.47 lm  
%lum = 42.7%  
%lamp = 42.7%

Conical surface Flux(120deg):

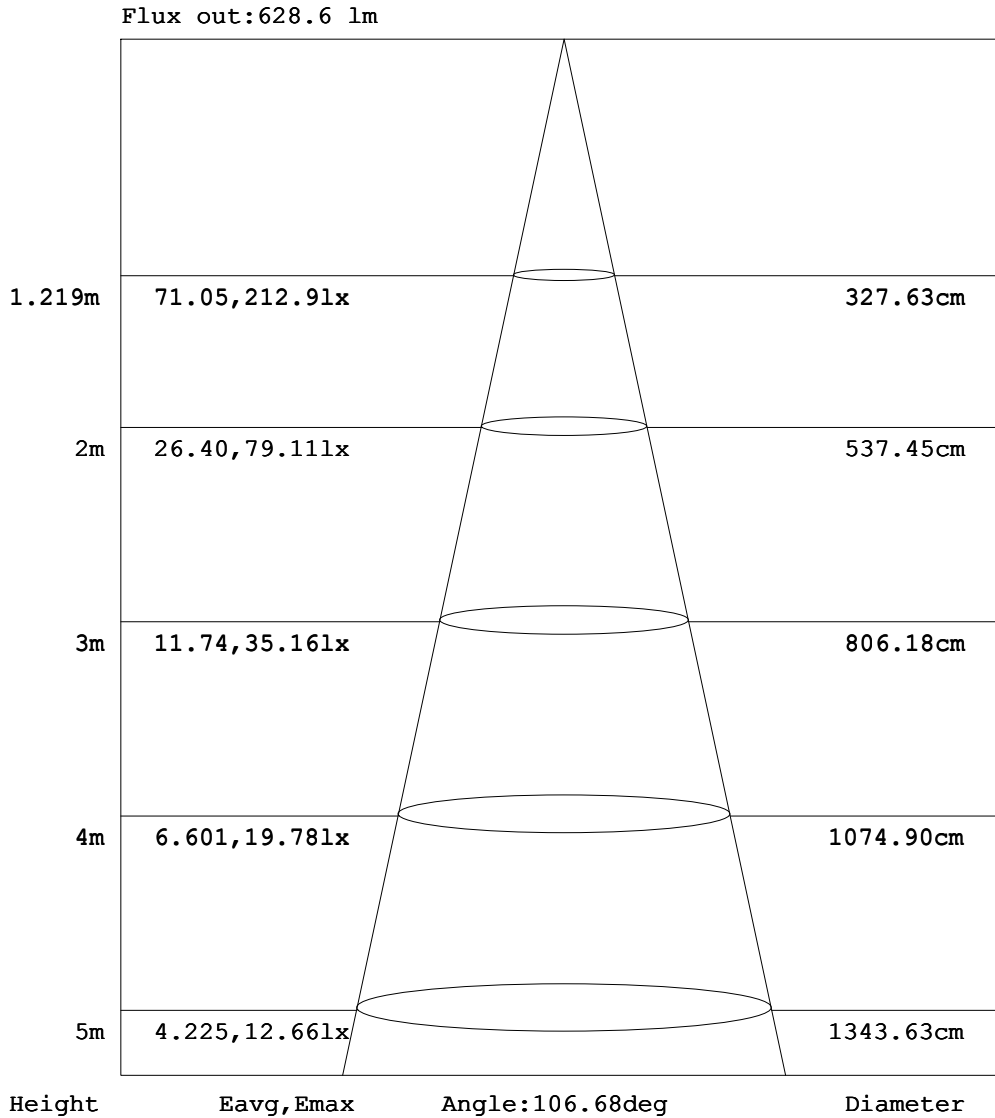
720.37 lm  
%lum = 63.9%  
%lamp = 63.9%



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2015-11-05

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
Humidity:65.0%  
Test Distance:11.550m [K=1.0000]  
Remarks:

AAI Figure



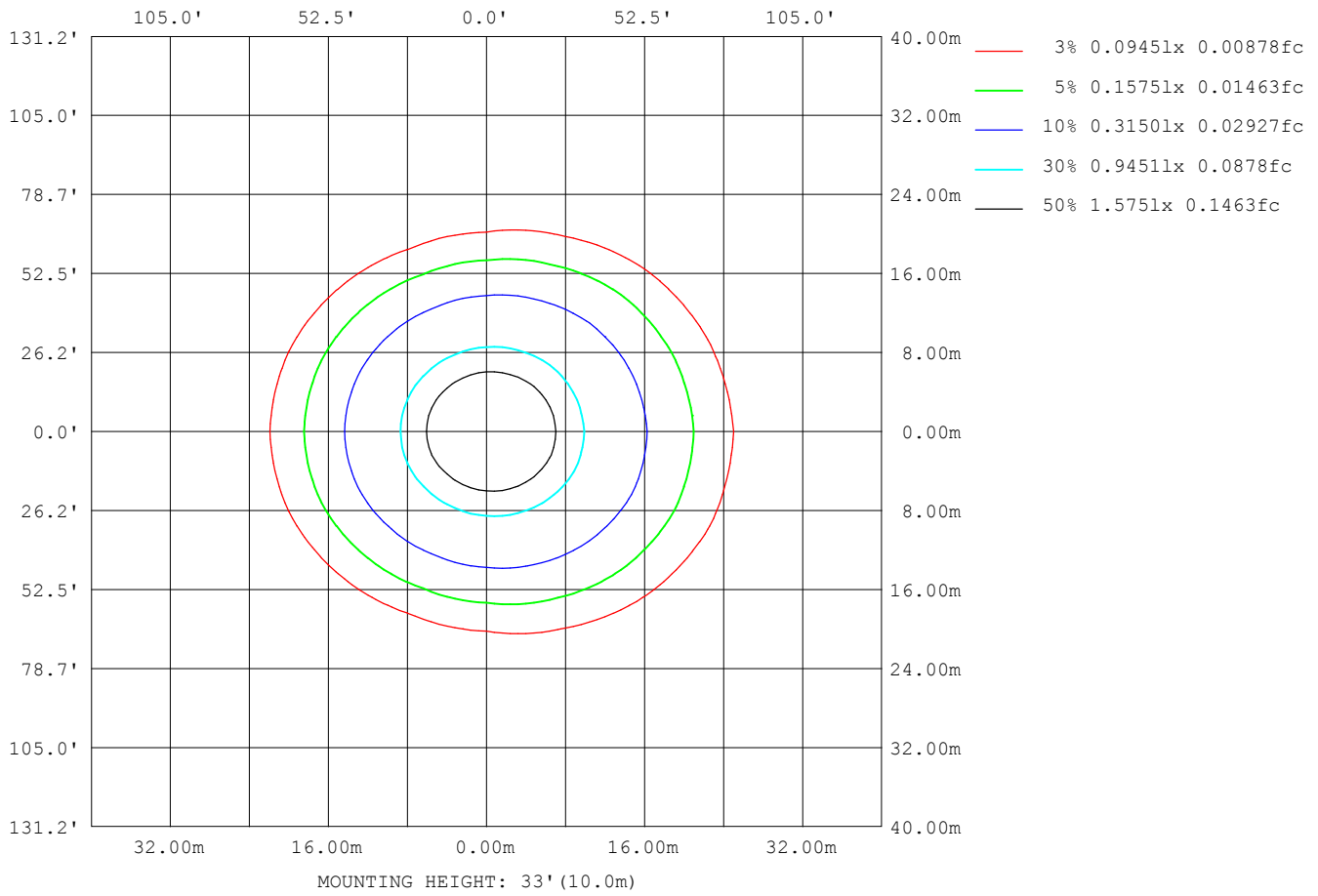
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2015-11-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity: 65.0%  
 Test Distance: 11.550m [K=1.0000]  
 Remarks:



**ISOLUX DIAGRAM**



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2015-11-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity: 65.0%  
 Test Distance: 11.550m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

Test:U:230.2V I:0.0476A P:10.17W PF:0.9272 Lamp Flux:1128.17x1 lm		
NAME: T82A06-9W	TYPE:LED 2835	WEIGHT:
SPEC: LED tube T8	DIM.: 600*26MM	SERIAL No.:1
MFR.: Integratech	SUR.:	PROTECTION ANGLE:

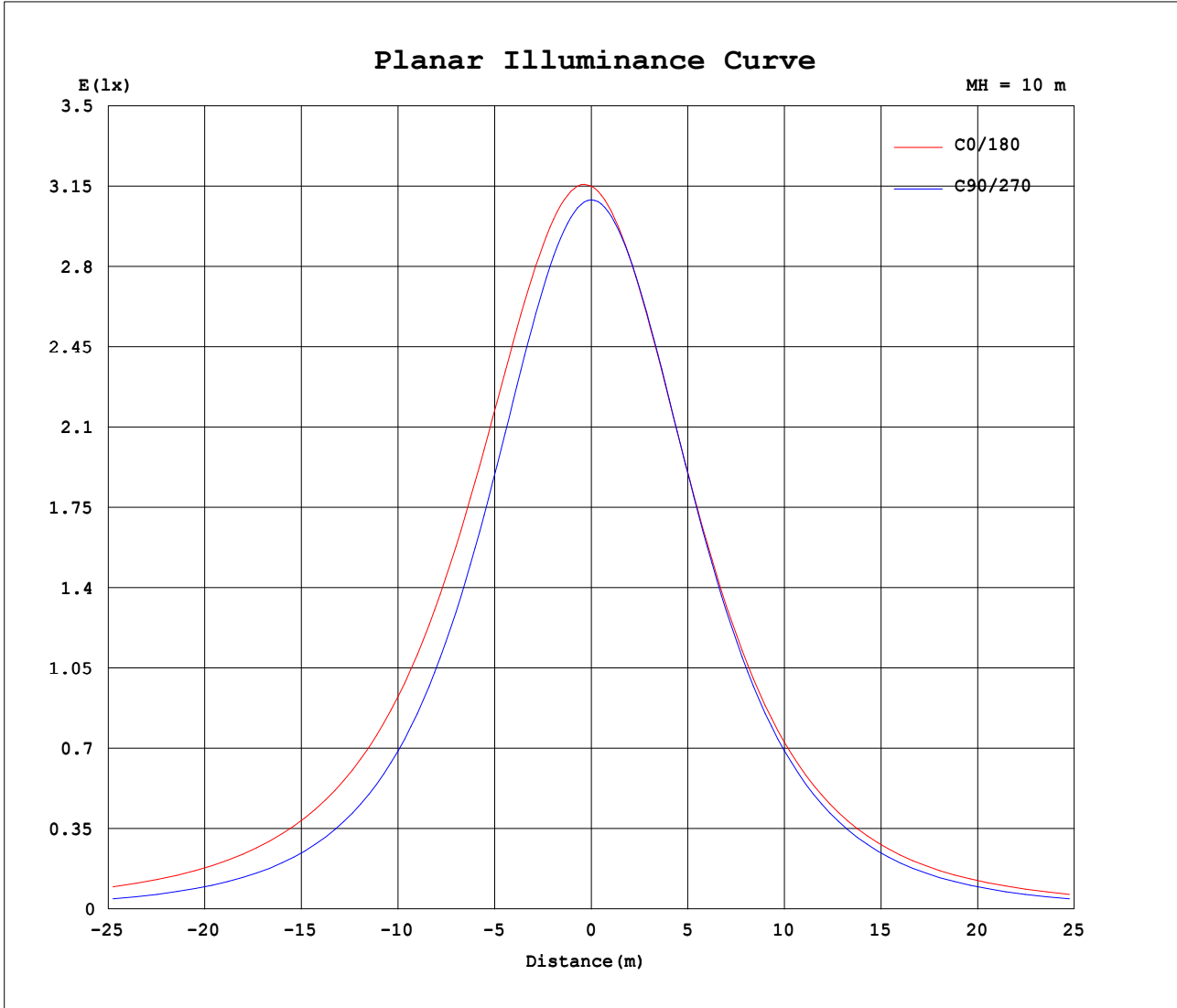
AvgL	cd/m2
L_0~180 (65) av	390
L_0~180 (75) av	506
L_0~180 (85) av	1136
L_90~270 (65) av	240
L_90~270 (75) av	202
L_90~270 (85) av	135
L_45 (65) av	320
L_45 (75) av	379
L_45 (85) av	752

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2015-11-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:11.550m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2015-11-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:11.550m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	23	45	68	90	113	135	158	180	203	225	248	270	293	315	338			
0	315	316	312	310	309	308	310	315	315	316	312	310	309	308	310	315			
5	318	318	313	310	307	305	306	310	310	311	308	307	307	308	311	317			
10	318	318	312	307	302	299	299	303	303	304	302	301	303	305	310	317			
15	316	316	308	300	294	290	289	294	294	294	292	292	295	299	306	315			
20	312	311	301	291	283	278	278	282	283	283	281	280	284	290	300	310			
25	306	304	292	279	269	264	264	269	270	270	267	266	270	278	291	302			
30	298	295	280	265	253	247	248	254	256	255	251	249	254	264	279	292			
35	287	284	267	249	235	229	231	238	240	238	233	231	236	248	266	281			
40	275	271	252	231	216	209	212	220	223	221	215	211	216	230	251	266			
45	262	257	235	212	195	188	192	202	206	202	195	190	195	210	234	251			
50	247	240	217	192	173	166	172	183	188	183	174	168	173	190	216	234			
55	231	223	198	170	150	144	152	164	169	164	154	145	150	168	196	216			
60	214	205	179	148	126	121	132	146	151	146	133	122	126	146	176	198			
65	196	187	159	126	102	99.1	113	128	134	128	113	99.6	101	123	155	180			
70	178	169	140	103	76.8	77.6	94.4	111	117	111	94.8	77.9	76.4	99.8	135	162			
75	160	150	121	82.0	52.6	57.7	77.6	95.0	102	94.7	77.9	58.0	52.1	78.4	116	141			
80	142	133	103	62.5	30.2	40.5	62.5	80.3	86.7	80.2	62.8	40.7	29.6	58.9	98.8	121			
85	125	116	85.9	45.6	12.3	26.4	48.2	65.7	72.6	65.4	48.4	26.9	11.4	42.2	79.5	103			
90	109	99.6	71.0	32.2	3.11	16.1	37.6	54.4	61.0	53.8	37.5	16.3	2.49	30.8	66.7	89.8			
95	93.9	85.0	57.9	22.6	2.35	10.2	28.8	44.5	50.5	44.2	28.9	10.6	2.04	21.4	57.5	83.8			
100	79.9	71.6	46.8	16.0	2.20	6.71	22.1	35.9	41.3	35.6	22.1	7.05	1.92	15.1	46.5	70.8			
105	67.3	59.8	37.6	11.7	2.06	4.64	16.6	28.7	33.4	28.3	16.7	4.94	1.80	10.9	37.3	59.0			
110	56.0	49.3	30.0	8.82	1.96	3.34	12.5	22.5	26.6	22.2	12.4	3.67	1.80	8.22	29.8	48.6			
115	45.9	40.2	23.5	6.81	1.95	2.70	9.33	17.4	20.9	17.2	9.26	2.88	1.81	6.39	23.1	39.6			
120	37.2	32.3	18.0	5.17	1.83	2.21	7.04	13.2	16.2	13.1	6.92	2.51	1.80	5.00	17.9	31.8			
125	29.7	25.5	13.0	4.04	1.80	1.99	5.16	9.99	12.4	9.86	5.12	2.32	1.78	3.86	13.2	24.5			
130	23.2	20.0	9.51	3.20	1.74	1.83	4.01	7.43	9.25	7.29	3.91	2.15	1.80	2.99	10.0	19.3			
135	17.9	15.1	6.96	2.69	1.69	1.74	3.22	5.36	6.77	5.29	3.10	2.09	1.79	2.51	7.37	14.8			
140	13.5	10.5	5.15	2.42	1.66	1.69	2.69	4.09	5.03	3.93	2.55	2.03	1.80	2.25	5.46	10.5			
145	9.98	7.15	3.84	2.25	1.64	1.69	2.32	3.17	3.83	2.99	2.20	2.02	1.79	2.11	4.06	7.44			
150	7.27	5.01	2.95	2.12	1.64	1.70	2.10	2.63	3.09	2.39	1.98	2.01	1.79	2.00	3.07	5.28			
155	5.04	3.37	2.52	2.00	1.62	1.73	1.96	2.30	2.51	2.04	1.85	2.03	1.79	1.95	2.66	3.59			
160	3.64	2.70	2.23	1.99	1.72	1.81	1.90	2.16	2.28	1.83	1.81	2.05	1.80	1.92	2.39	2.92			
165	2.37	2.35	2.09	2.01	1.75	1.85	1.90	2.19	2.15	1.78	1.82	2.07	1.85	1.95	2.21	2.60			
170	2.19	2.15	2.06	2.00	1.73	1.84	1.91	2.22	2.16	1.80	1.82	2.09	1.85	1.95	2.14	2.41			
175	2.14	2.07	2.00	1.97	1.72	1.81	1.87	2.32	2.19	1.83	1.81	2.08	1.90	1.95	2.10	2.37			
180	2.11	2.09	1.99	1.91	1.79	1.81	1.84	2.24	2.16	1.79	1.81	2.01	1.88	1.98	2.08	2.39			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2015-11-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:11.550m [K=1.0000]  
 Remarks: