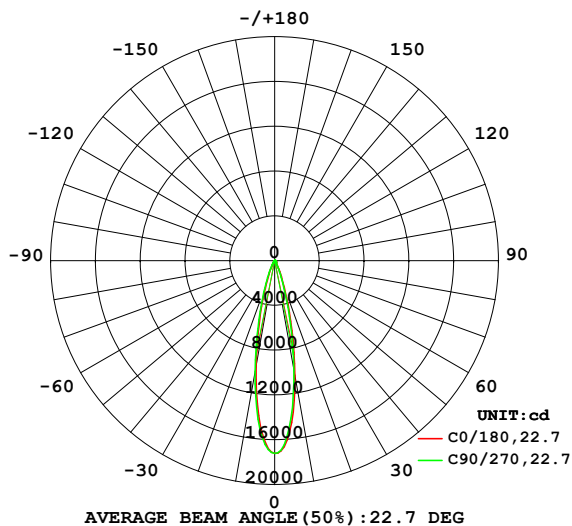


LUMINAIRE PHOTOMETRIC TEST REPORT

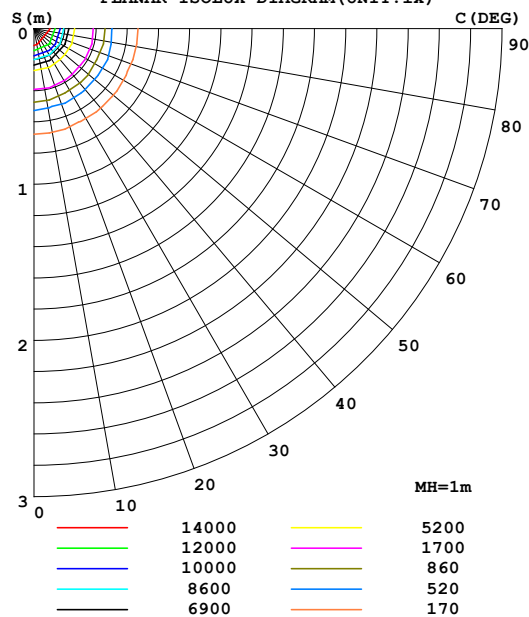
Test:U:240.2V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.17% ITHDi:5.70% KDisp:0.9852 Lamp Flux:3595.45x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 24D TYPE:		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 102.27 lm/W			
MODEL		Imax (cd)	17216	S/MH(C0/180)	0.37
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	0.39
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	3595.5	η UP,DN(C0-180)	0.0,49.6
NOMINAL FLUX(lm)	3595.45	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.4
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	240.15	η down (%)	100.0	CIBSE SHR MAX	0.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM(UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [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	1043	1023	994.3	972.2	964.2	978.7	1008	1035	0- 10	1272	1272	35.4,35.4
20	252.7	236.8	221.9	216.8	221.2	238.1	256.0	260.7	10- 20	1471	2744	76.3,76.3
30	48.71	45.83	43.92	43.56	44.15	47.48	52.69	52.52	20- 30	516.6	3260	90.7,90.7
40	15.61	15.02	14.95	15.13	15.18	15.71	17.05	16.87	30- 40	168.7	3429	95.4,95.4
50	7.722	7.131	7.407	7.586	7.709	7.513	8.310	8.357	40- 50	84.72	3514	97.7,97.7
60	4.266	3.805	3.911	3.921	3.982	3.888	4.363	4.500	50- 60	51.33	3565	99.2,99.2
70	1.262	1.096	0.9763	0.8704	0.8549	1.025	1.227	1.319	60- 70	25.40	3590	99.9,99.9
80	0.1812	0.1710	0.1586	0.1457	0.1501	0.1579	0.1793	0.1781	70- 80	4.322	3595	100,100
90	0.0140	0.0091	0.0159	0.0101	0.0105	0.0093	0.0113	0.0082	80- 90	0.7600	3595	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:X10cd									UNIT:lm		

Conical surface Flux(90deg): 3476.9 lm

%lum = 96.7%

%lamp = 96.7%

Conical surface Flux(120deg): 3565 lm

%lum = 99.2%

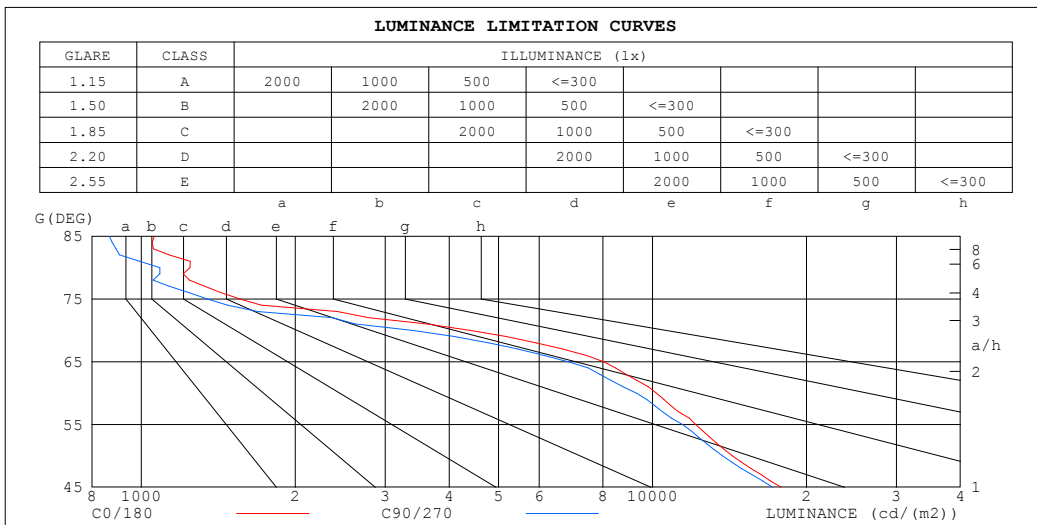
%lamp = 99.2%

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:240.2V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.17% ITHDi:5.70% KDisp:0.9852 Lamp Flux:3595.45x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 24D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:



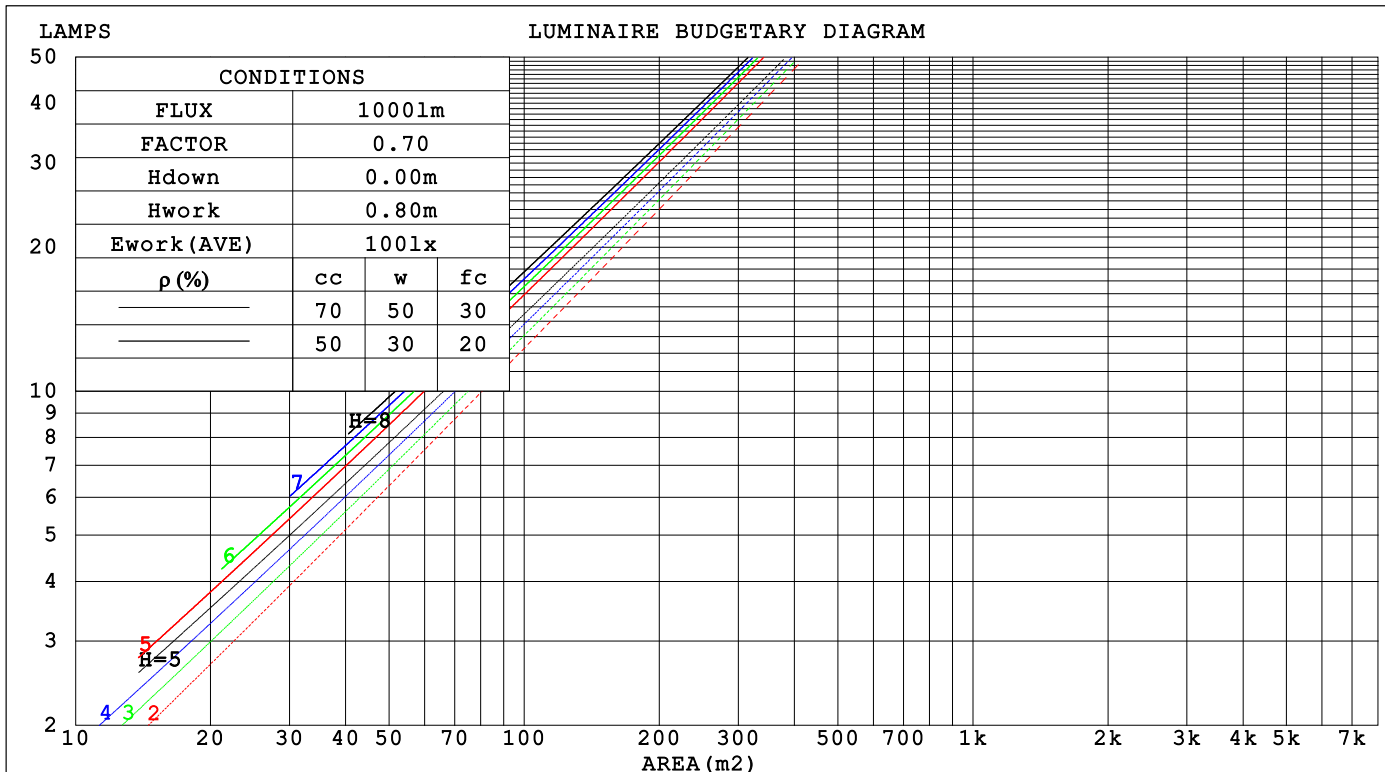
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2024-10-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.2V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.17% ITHDi:5.70% KDisp:0.9852 Lamp Flux:3595.45x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 24D TYPE:		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

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															



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:240.2V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.17% ITHDi:5.70% KDisp:0.9852 Lamp Flux:3595.45x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 24D TYPE:		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

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	.143	.081	.026	.137	.078	.025	.124	.071	.023	.113	.065	.021	.102	.059	.019	
2.0	.134	.073	.022	.128	.071	.022	.118	.066	.020	.108	.061	.019	.100	.056	.018	
3.0	.125	.066	.020	.120	.064	.019	.112	.061	.018	.104	.057	.017	.096	.053	.017	
4.0	.117	.061	.018	.113	.059	.018	.106	.056	.017	.099	.053	.016	.093	.050	.015	
5.0	.110	.056	.016	.107	.055	.016	.101	.052	.015	.095	.050	.015	.089	.048	.014	
6.0	.104	.052	.015	.101	.051	.015	.096	.049	.014	.091	.047	.014	.086	.045	.013	
7.0	.099	.049	.014	.096	.048	.014	.092	.046	.013	.087	.045	.013	.083	.043	.013	
8.0	.094	.046	.013	.092	.045	.013	.088	.044	.012	.084	.042	.012	.080	.041	.012	
9.0	.090	.043	.012	.088	.043	.012	.084	.042	.012	.081	.040	.012	.077	.039	.011	
10.0	.086	.041	.011	.084	.041	.011	.081	.040	.011	.078	.039	.011	.075	.038	.011	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.169	.158	.148	.144	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017		
2.0	.151	.133	.117	.129	.114	.101	.089	.079	.071	.051	.046	.041	.016	.015	.013		
3.0	.137	.113	.095	.117	.098	.082	.080	.068	.058	.046	.040	.034	.015	.013	.011		
4.0	.124	.098	.078	.107	.085	.068	.073	.059	.048	.042	.035	.028	.014	.011	.009		
5.0	.114	.086	.065	.098	.074	.057	.067	.052	.040	.039	.030	.024	.013	.010	.008		
6.0	.105	.076	.055	.090	.066	.048	.062	.046	.034	.036	.027	.020	.012	.009	.007		
7.0	.098	.068	.047	.084	.059	.041	.058	.041	.029	.034	.024	.017	.011	.008	.006		
8.0	.091	.061	.040	.078	.053	.035	.054	.037	.025	.032	.022	.015	.010	.007	.005		
9.0	.085	.055	.035	.074	.048	.031	.051	.034	.022	.030	.020	.013	.010	.007	.004		
10.0	.080	.051	.031	.069	.044	.027	.048	.031	.019	.028	.018	.011	.009	.006	.004		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.2V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz UTHDi:0.17% ITHDi:5.70% KDisp:0.9852 Lamp Flux:3595.45x1 lm										
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 24D TYPE:								WEIGHT:		
SPEC.:				DIM.:				SERIAL No.:		
MFR.: Norming lighting				SUR.: 104mm				Shielding Angle:		
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	14.3	15.0	14.5	15.2	15.3	14.1	14.8	14.3	14.9	15.1
3H	14.6	15.3	14.9	15.4	15.6	14.3	14.9	14.5	15.1	15.3
4H	14.6	15.2	14.8	15.4	15.6	14.2	14.8	14.5	15.0	15.2
6H	14.5	15.1	14.8	15.3	15.5	14.1	14.7	14.4	14.9	15.2
8H	14.5	15.0	14.7	15.3	15.5	14.1	14.6	14.4	14.9	15.1
12H	14.4	15.0	14.7	15.2	15.5	14.0	14.6	14.4	14.8	15.1
4H 2H	14.5	15.1	14.7	15.3	15.5	14.2	14.8	14.5	15.0	15.2
3H	14.7	15.3	15.1	15.5	15.8	14.4	15.0	14.7	15.2	15.5
4H	14.7	15.2	15.0	15.5	15.8	14.4	14.8	14.7	15.1	15.4
6H	14.6	15.0	15.0	15.4	15.7	14.3	14.7	14.6	15.0	15.4
8H	14.6	15.0	15.0	15.3	15.7	14.2	14.6	14.6	15.0	15.3
12H	14.5	14.9	14.9	15.3	15.6	14.2	14.5	14.6	14.9	15.3
8H 4H	14.6	15.0	15.0	15.3	15.7	14.2	14.6	14.6	15.0	15.3
6H	14.5	14.8	14.9	15.2	15.6	14.1	14.5	14.6	14.9	15.3
8H	14.4	14.7	14.9	15.1	15.6	14.1	14.4	14.5	14.8	15.2
12H	14.4	14.6	14.8	15.1	15.5	14.0	14.3	14.5	14.7	15.2
12H 4H	14.5	14.9	14.9	15.3	15.6	14.2	14.6	14.6	14.9	15.3
6H	14.4	14.7	14.9	15.1	15.6	14.1	14.4	14.5	14.8	15.2
8H	14.4	14.6	14.8	15.1	15.5	14.0	14.3	14.5	14.7	15.2
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.2 / - 1.6					+ 1.2 / - 1.7				
1.5H	+ 2.0 / - 1.0					+ 1.8 / - 1.0				
2.0H	+ 1.7 / - 1.5					+ 1.8 / - 1.5				

CIE Pub.117, 3595 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.4$)
Area: 0.0084 m²

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.2V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.17% ITHDi:5.70% KDisp:0.9852 Lamp Flux:3595.45x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 24D TYPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
SUR.: 104mm		

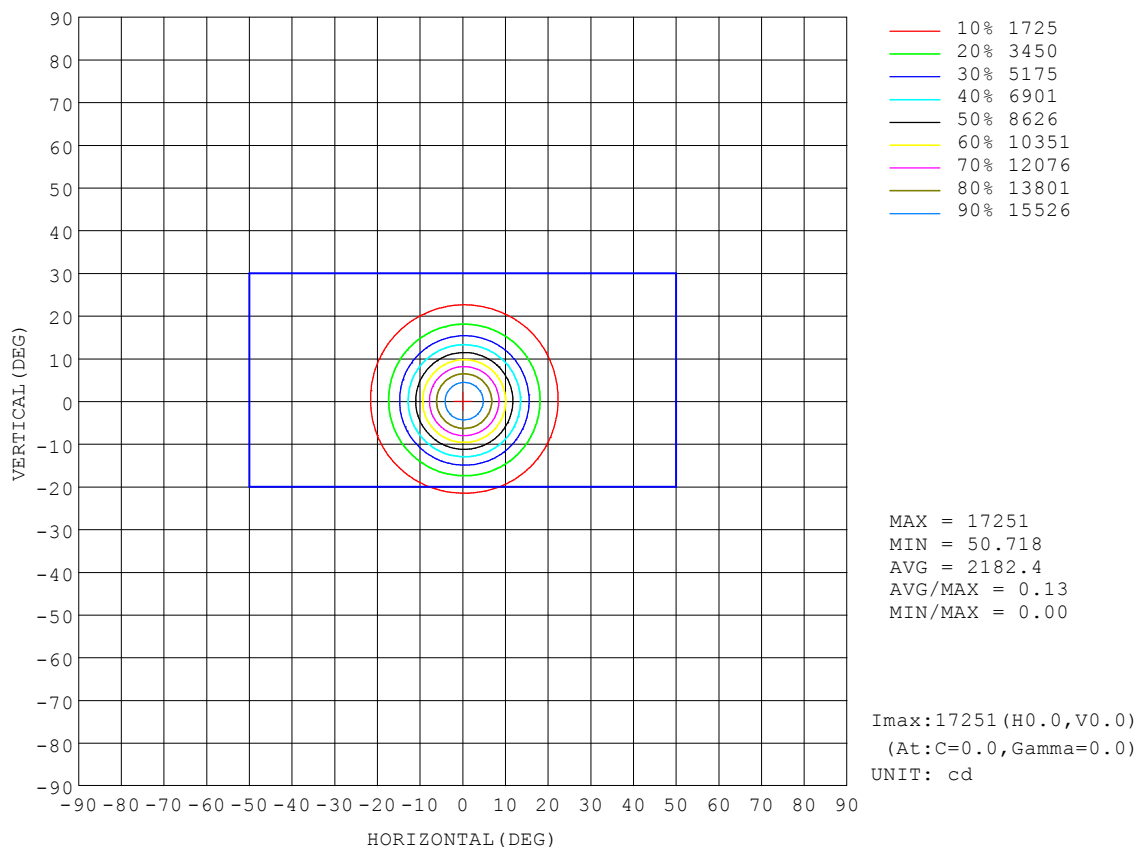
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	79	88	82	79	87	82	79	75
0.80	96	90	87	95	90	87	94	89	86	83
1.00	100	95	91	99	94	91	98	94	90	87
1.25	104	99	96	103	98	95	101	97	94	90
1.50	106	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:240.2V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.17% ITHDi:5.70% KDisp:0.9852 Lamp Flux:3595.45x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 24D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

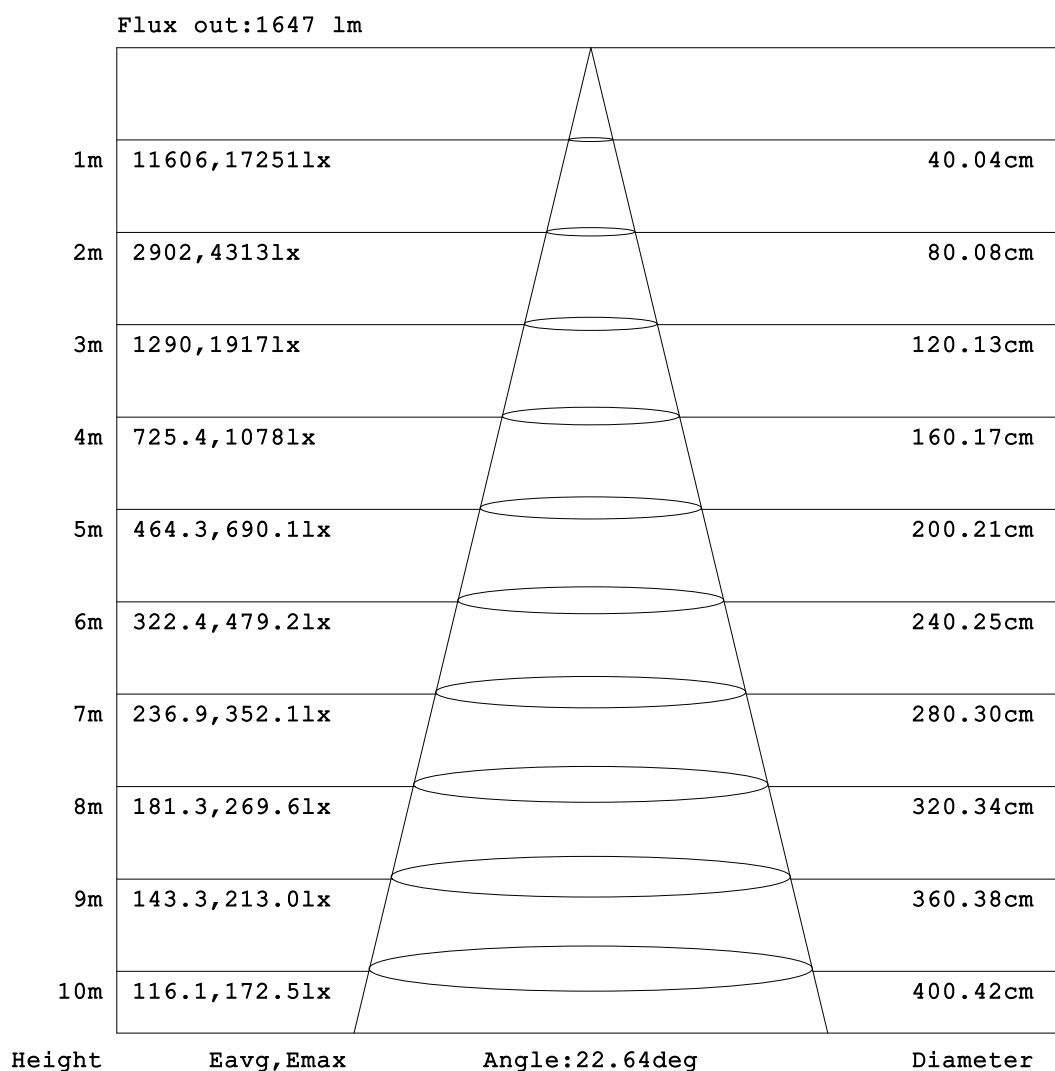


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

AAI Figure

Test:U:240.2V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.17% ITHDi:5.70% KDisp:0.9852		Lamp Flux:3595.45x1 lm
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 24D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:



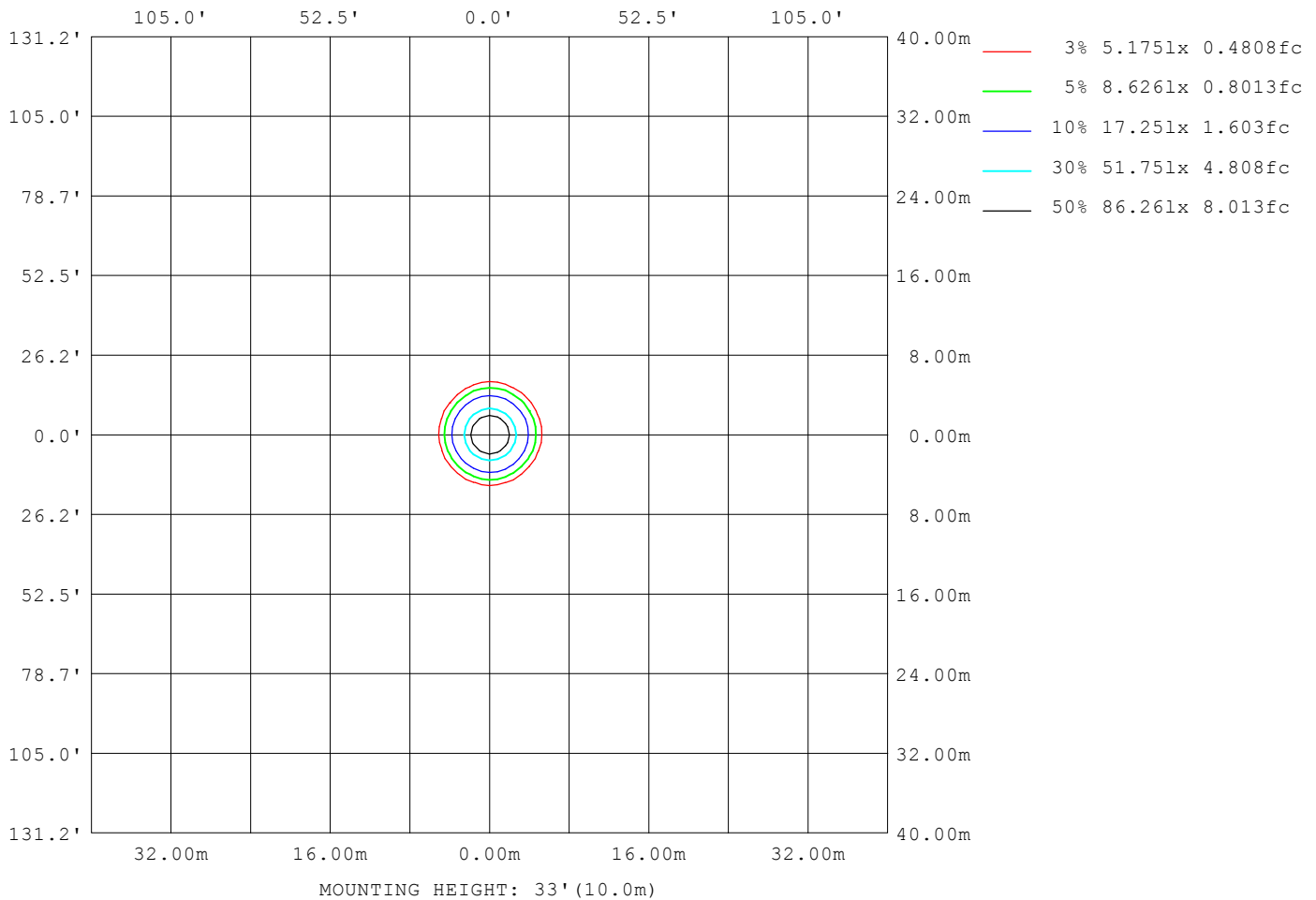
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:240.2V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.17% ITHDi:5.70% KDisp:0.9852		Lamp Flux:3595.45x1 lm
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 24D TYPE:		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-10-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:240.2V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.17% ITHDi:5.70% KDisp:0.9852 Lamp Flux:3595.45x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 24D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

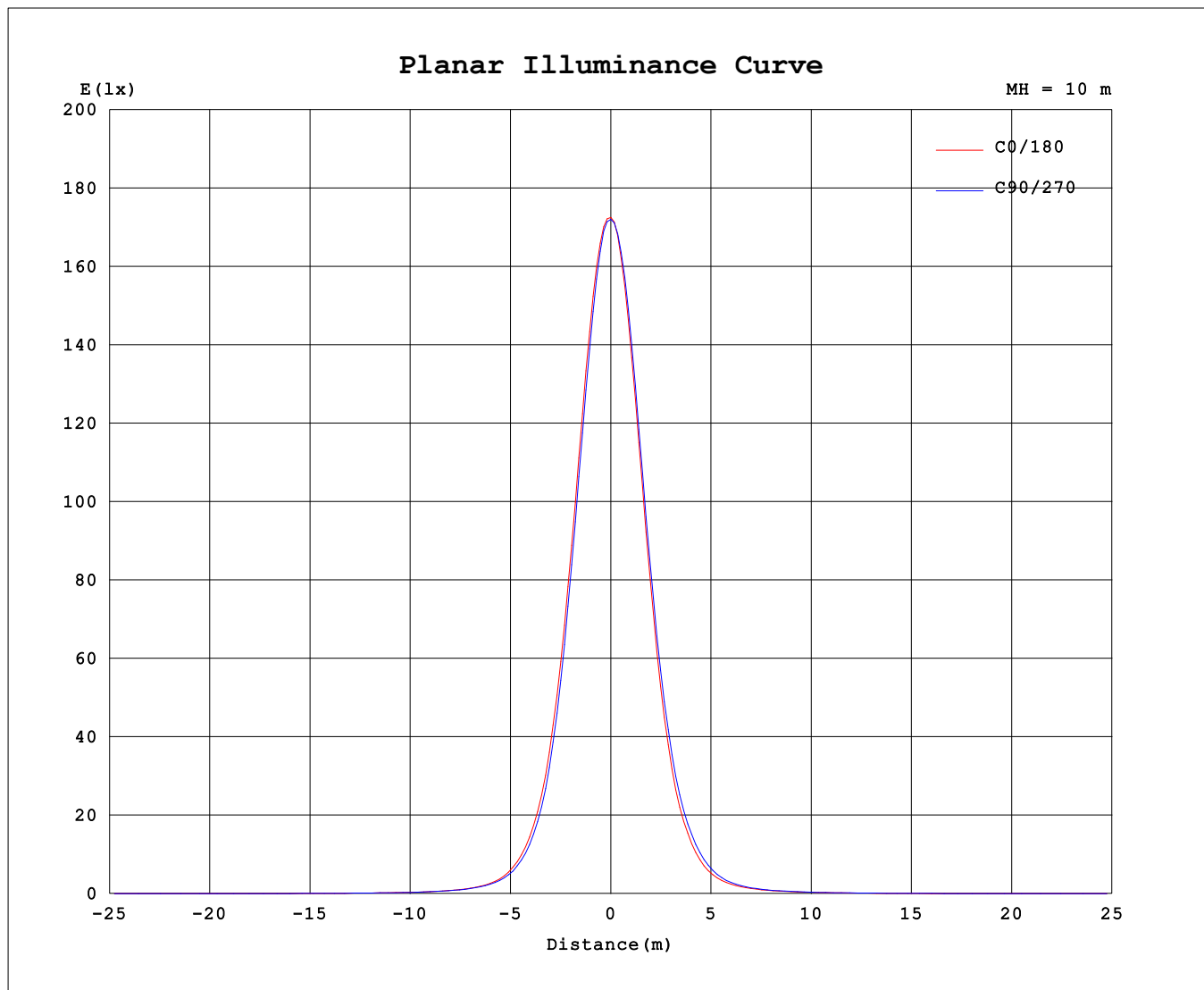
AvgL	cd/m2
L_0~180 (65) av	7431
L_0~180 (75) av	1425
L_0~180 (85) av	916
L_90~270 (65) av	7474
L_90~270 (75) av	1419
L_90~270 (85) av	906
L_45 (65) av	7287
L_45 (75) av	1418
L_45 (85) av	832

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-10-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2024-10-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

```

Photometric Data Table [cd]

G/C	0.0	45.0	90.0	135.0	180.0	225.0	270.0	315.0
0.0	17216	17216	17216	17216	17216	17216	17216	17216
3.0	16629	16544	16467	16427	16252	16303	16442	16555
6.0	14549	14386	14148	13988	13879	14003	14246	14481
9.0	11523	11326	11043	10829	10742	10865	11147	11421
12.0	8355	8163	7846	7645	7610	7774	8056	8298
15.0	5615	5412	5119	4951	4978	5171	5443	5603
18.0	3509	3318	3118	3018	3079	3258	3482	3563
21.0	2144	2027	1875	1838	1901	2028	2192	2228
24.0	1298	1196	1123	1107	1134	1243	1379	1383
27.0	781.7	722.5	681.7	672.1	687.5	754.9	845.6	857.1
30.0	487.1	458.3	439.2	435.6	441.5	474.8	526.9	525.2
33.0	325.2	310.4	303.2	302.0	302.6	320.1	350.9	349.1
36.0	230.7	223.3	218.6	220.9	221.0	229.6	249.6	248.3
39.0	170.9	164.5	163.2	164.9	165.5	171.7	186.6	184.4
42.0	132.2	126.7	127.1	129.6	130.6	133.7	145.3	143.4
45.0	105.8	100.7	102.1	104.7	106.2	106.7	116.7	115.3
48.0	87.35	81.36	83.82	85.88	87.38	86.34	94.87	94.80
51.0	72.83	66.99	69.77	71.47	72.67	70.36	77.95	78.76
54.0	61.68	56.06	58.72	60.06	61.26	58.40	64.96	66.39
57.0	51.29	46.00	47.89	48.42	49.08	47.06	52.69	54.32
60.0	42.66	38.05	39.11	39.21	39.82	38.88	43.63	45.00
63.0	33.77	29.52	30.10	30.53	30.55	30.20	34.11	35.34
66.0	25.28	21.53	20.95	20.92	21.05	21.50	25.32	26.56
69.0	15.53	13.29	12.34	11.86	11.98	12.92	15.40	16.39
72.0	7.197	6.589	6.121	5.644	5.486	6.296	7.197	7.476
75.0	3.386	3.170	2.929	2.823	2.812	2.941	3.241	3.399
78.0	2.167	2.038	1.843	1.803	1.880	1.855	2.090	2.163
81.0	1.634	1.439	1.306	1.159	1.193	1.271	1.531	1.595
84.0	0.9204	0.7970	0.7706	0.6692	0.7049	0.6976	0.8422	0.8556
87.0	0.4888	0.3715	0.3715	0.2667	0.2835	0.2962	0.4254	0.4164
90.0	0.1401	0.0912	0.1585	0.1008	0.1049	0.0928	0.1125	0.0818

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks: