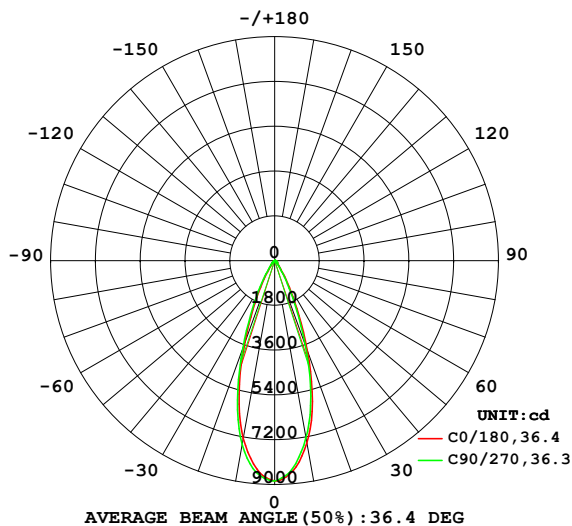


LUMINAIRE PHOTOMETRIC TEST REPORT

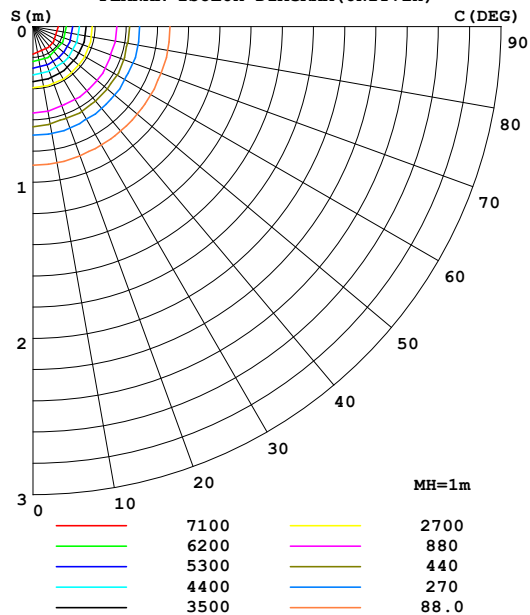
Test:U:240.4V I:0.1482A P:35.0W PF:0.9835 Freq:49.99Hz		
UTHDi:0.16% ITHDi:5.78% KDisp:0.9849 Lamp Flux:3800.13x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 3000K RA90 36D TYPE:		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 108.45 lm/W			
MODEL		Imax (cd)	8857	S/MH(C0/180)	0.57
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	0.59
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	3800.1	η UP,DN(C0-180)	0.0,49.7
NOMINAL FLUX(lm)	3800.13	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	240.29	η down (%)	100.0	CIBSE SHR MAX	0.60

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:2024-10-31

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	7455	7314	7255	7266	7260	7431	7521	7499	0- 10	771.7	771.7	20.3,20.3
20	3859	3717	3583	3525	3500	3662	3756	3823	10- 20	1545	2317	61,61
30	1045	956.8	929.0	916.7	889.3	947.3	1032	1039	20- 30	943.9	3261	85.8,85.8
40	241.9	227.6	228.5	227.8	219.4	225.6	246.2	246.4	30- 40	299.3	3560	93.7,93.7
50	110.5	103.5	110.2	112.1	109.8	108.0	117.5	114.4	40- 50	121.9	3682	96.9,96.9
60	60.92	55.90	59.69	59.21	57.68	55.45	62.40	62.12	50- 60	74.13	3756	98.8,98.8
70	19.73	17.40	15.34	12.17	11.71	13.74	17.29	19.56	60- 70	37.54	3793	99.8,99.8
80	2.758	2.677	2.411	2.084	2.069	2.197	2.534	2.711	70- 80	5.572	3799	100,100
90	0.1379	0.0992	0.1538	0.1084	0.1162	0.1027	0.1191	0.0948	80- 90	1.081	3800	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:cd									UNIT:lm		

Conical surface Flux(90deg): 3629.4 lm

%lum = 95.5%

%lamp = 95.5%

Conical surface Flux(120deg): 3755.9 lm

%lum = 98.8%

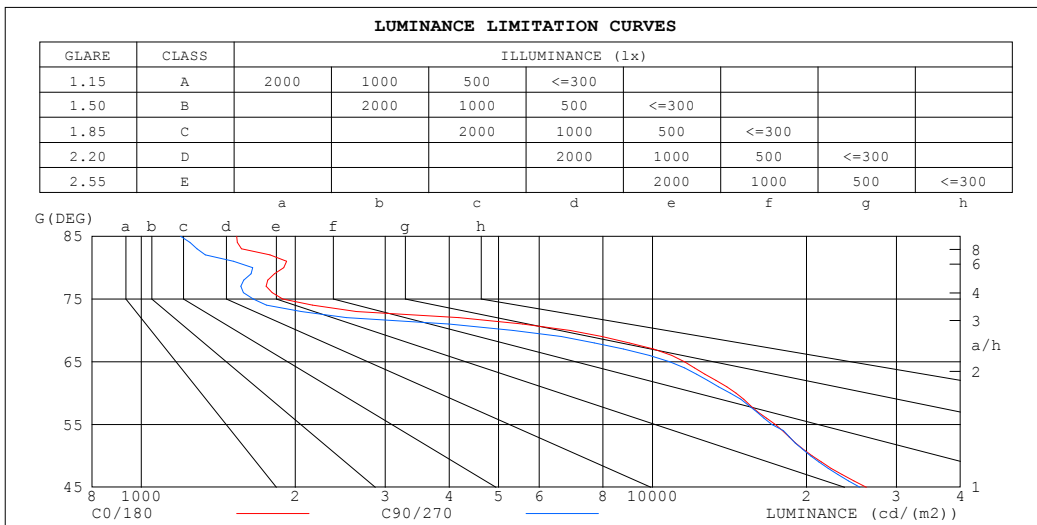
%lamp = 98.8%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-10-31

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:240.4V I:0.1482A P:35.0W PF:0.9835 Freq:49.99Hz		
UTHDi:0.16% ITHDi:5.78% KDisp:0.9849 Lamp Flux:3800.13x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 3000K RA90 36D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:



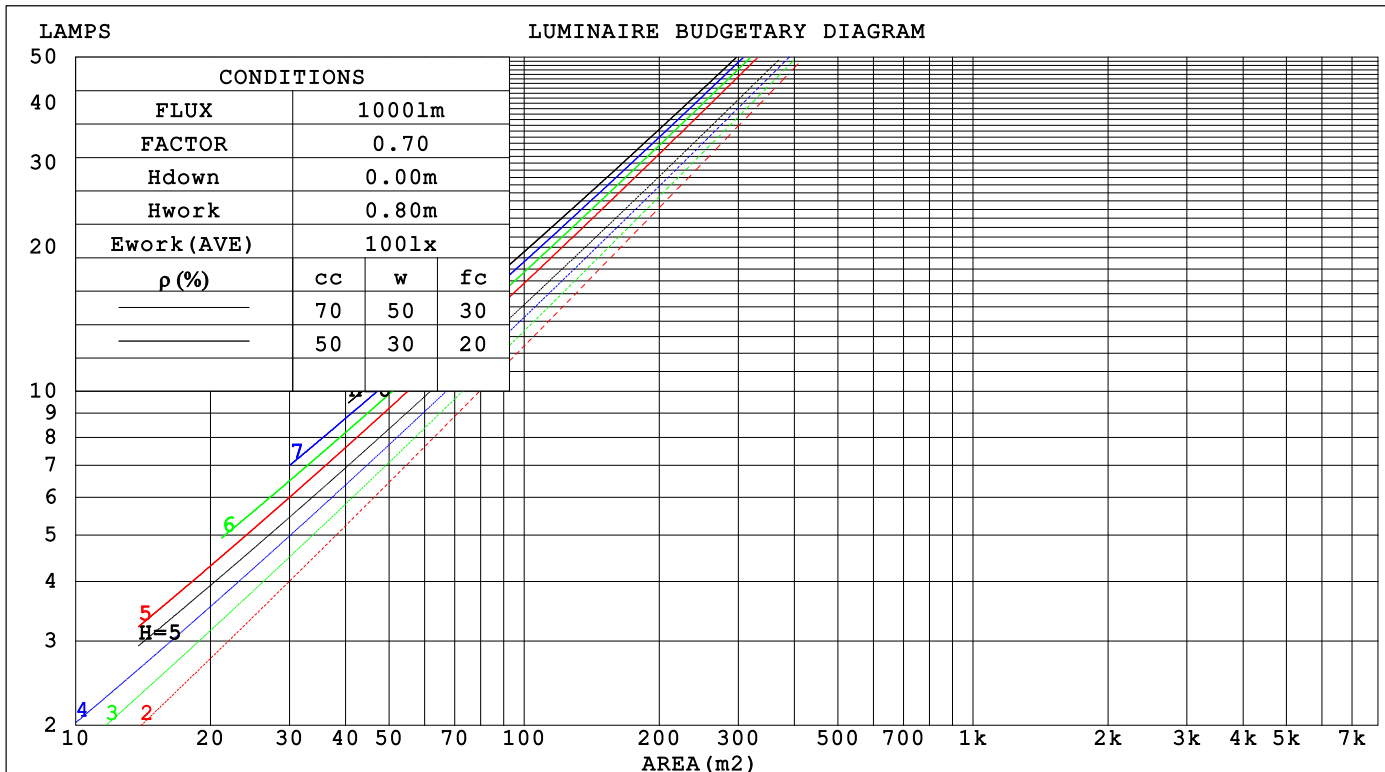
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2024-10-31

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:240.4V I:0.1482A P:35.0W PF:0.9835 Freq:49.99Hz		
UTHDi:0.16% ITHDi:5.78% KDisp:0.9849 Lamp Flux:3800.13x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 3000K RA90 36D TYPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
SUR.: 104mm		

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:2024-10-31

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:240.4V I:0.1482A P:35.0W PF:0.9835 Freq:49.99Hz		
UTHDi:0.16% ITHDi:5.78% KDisp:0.9849 Lamp Flux:3800.13x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 3000K RA90 36D TYPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
SUR.: 104mm		

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	.160	.091	.029	.154	.088	.028	.141	.081	.026	.130	.075	.024	.119	.069	.022		
2.0	.152	.083	.025	.146	.080	.025	.136	.075	.023	.126	.071	.022	.117	.066	.021		
3.0	.143	.076	.023	.138	.074	.022	.130	.070	.021	.121	.067	.020	.114	.063	.020		
4.0	.135	.070	.021	.131	.069	.020	.124	.066	.020	.117	.063	.019	.110	.060	.018		
5.0	.128	.065	.019	.125	.064	.019	.118	.061	.018	.112	.059	.018	.106	.057	.017		
6.0	.122	.061	.017	.119	.060	.017	.113	.058	.017	.108	.056	.016	.103	.054	.016		
7.0	.116	.057	.016	.113	.056	.016	.108	.055	.016	.104	.053	.015	.099	.052	.015		
8.0	.110	.054	.015	.108	.053	.015	.104	.052	.015	.100	.050	.015	.096	.049	.014		
9.0	.106	.051	.014	.104	.051	.014	.100	.049	.014	.096	.048	.014	.093	.047	.014		
10.0	.101	.049	.013	.099	.048	.013	.096	.047	.013	.093	.046	.013	.089	.045	.013		

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	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016		
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013		
3.0	.140	.113	.092	.120	.098	.080	.082	.068	.056	.048	.040	.033	.015	.013	.011		
4.0	.129	.098	.075	.110	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009		
5.0	.119	.087	.062	.102	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007		
6.0	.111	.077	.052	.095	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006		
7.0	.104	.069	.045	.090	.060	.039	.062	.042	.028	.036	.025	.016	.012	.008	.005		
8.0	.098	.063	.038	.084	.054	.033	.058	.038	.024	.034	.022	.014	.011	.007	.005		
9.0	.093	.057	.033	.080	.050	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004		
10.0	.088	.053	.029	.076	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-31

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:240.4V I:0.1482A P:35.0W PF:0.9835 Freq:49.99Hz UTHDi:0.16% ITHDi:5.78% KDisp:0.9849 Lamp Flux:3800.13x1 lm											
NAME: FUSION GT-TR02-AHD-035-COB-01SC 3000K RA90 36D 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	2H	17.3	18.2	17.6	18.3	18.5	17.1	17.9	17.3	18.0	18.2
	3H	17.6	18.3	17.8	18.5	18.7	17.2	18.0	17.5	18.2	18.4
	4H	17.5	18.2	17.8	18.4	18.6	17.2	17.9	17.4	18.1	18.3
	6H	17.4	18.1	17.7	18.3	18.6	17.1	17.8	17.4	18.0	18.2
	8H	17.4	18.0	17.7	18.3	18.5	17.0	17.7	17.3	17.9	18.2
	12H	17.3	18.0	17.7	18.2	18.5	17.0	17.6	17.3	17.9	18.2
4H	2H	17.4	18.1	17.7	18.3	18.6	17.1	17.9	17.4	18.1	18.3
	3H	17.7	18.3	18.0	18.5	18.8	17.3	18.0	17.7	18.2	18.5
	4H	17.6	18.2	17.9	18.4	18.8	17.3	17.8	17.6	18.1	18.4
	6H	17.5	18.0	17.9	18.3	18.7	17.2	17.7	17.6	18.0	18.4
	8H	17.5	17.9	17.9	18.3	18.6	17.1	17.6	17.5	18.0	18.3
	12H	17.4	17.8	17.8	18.2	18.6	17.1	17.5	17.5	17.9	18.3
8H	4H	17.5	17.9	17.8	18.3	18.6	17.1	17.6	17.5	18.0	18.3
	6H	17.4	17.8	17.8	18.2	18.6	17.1	17.4	17.5	17.8	18.2
	8H	17.3	17.7	17.8	18.1	18.5	17.0	17.4	17.5	17.8	18.2
	12H	17.3	17.6	17.8	18.0	18.5	17.0	17.3	17.4	17.7	18.2
12H	4H	17.4	17.8	17.8	18.2	18.6	17.1	17.5	17.5	17.9	18.3
	6H	17.3	17.7	17.8	18.1	18.5	17.0	17.3	17.5	17.8	18.2
	8H	17.3	17.6	17.7	18.0	18.5	17.0	17.3	17.4	17.7	18.2
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 1.6 / - 1.8					+ 1.3 / - 1.7				
1.5H		+ 2.6 / - 1.2					+ 2.2 / - 1.1				
2.0H		+ 1.8 / - 1.4					+ 1.6 / - 1.4				

CIE Pub.117, 3800 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.6$)
Area: 0.0084 m²

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-31

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:240.4V I:0.1482A P:35.0W PF:0.9835 Freq:49.99Hz		
UTHDi:0.16% ITHDi:5.78% KDisp:0.9849 Lamp Flux:3800.13x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 3000K RA90 36D TYPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
SUR.: 104mm		

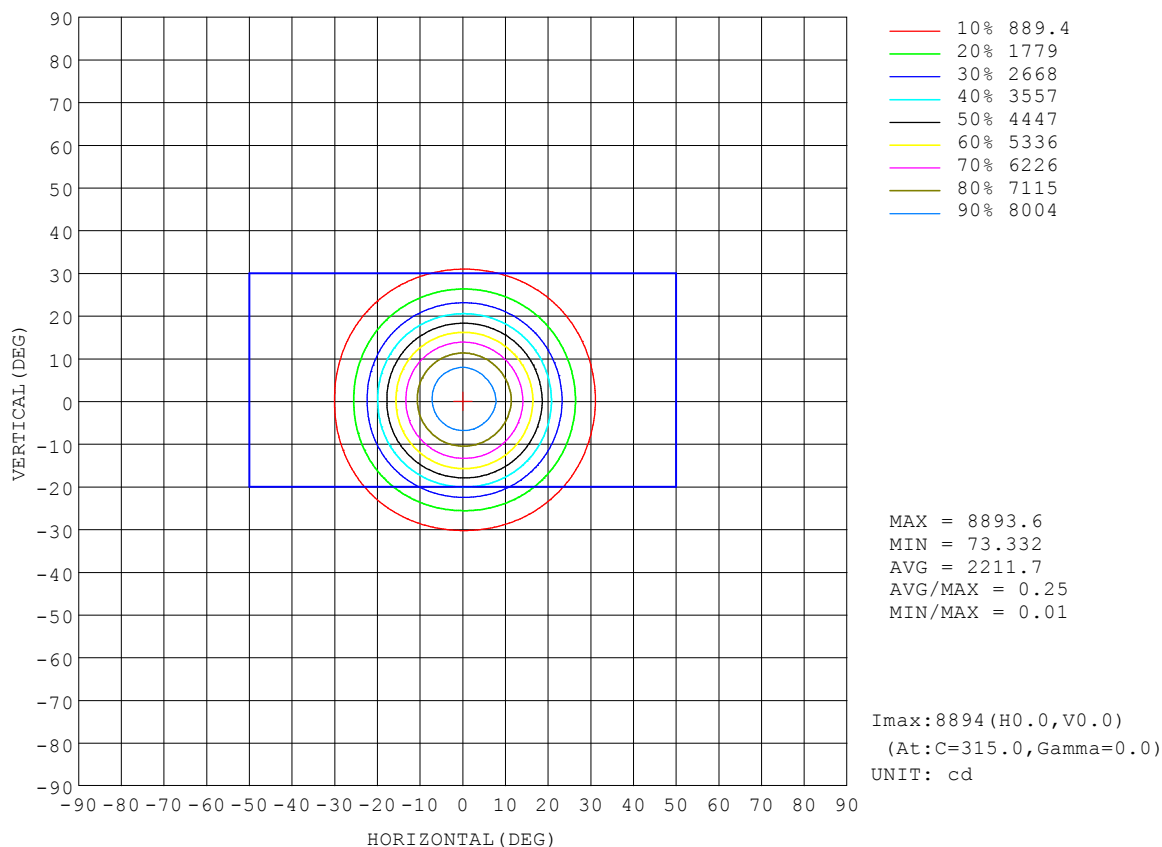
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	81	77	87	81	77	86	81	77	74
0.80	95	89	85	94	89	85	93	88	85	81
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	95	102	98	94	100	96	93	89
1.50	106	101	98	105	101	97	103	99	96	92
2.00	109	104	101	107	103	101	104	101	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	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:2024-10-31

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:240.4V I:0.1482A P:35.0W PF:0.9835 Freq:49.99Hz		
UTHDi:0.16% ITHDi:5.78% KDisp:0.9849 Lamp Flux:3800.13x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 3000K RA90 36D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

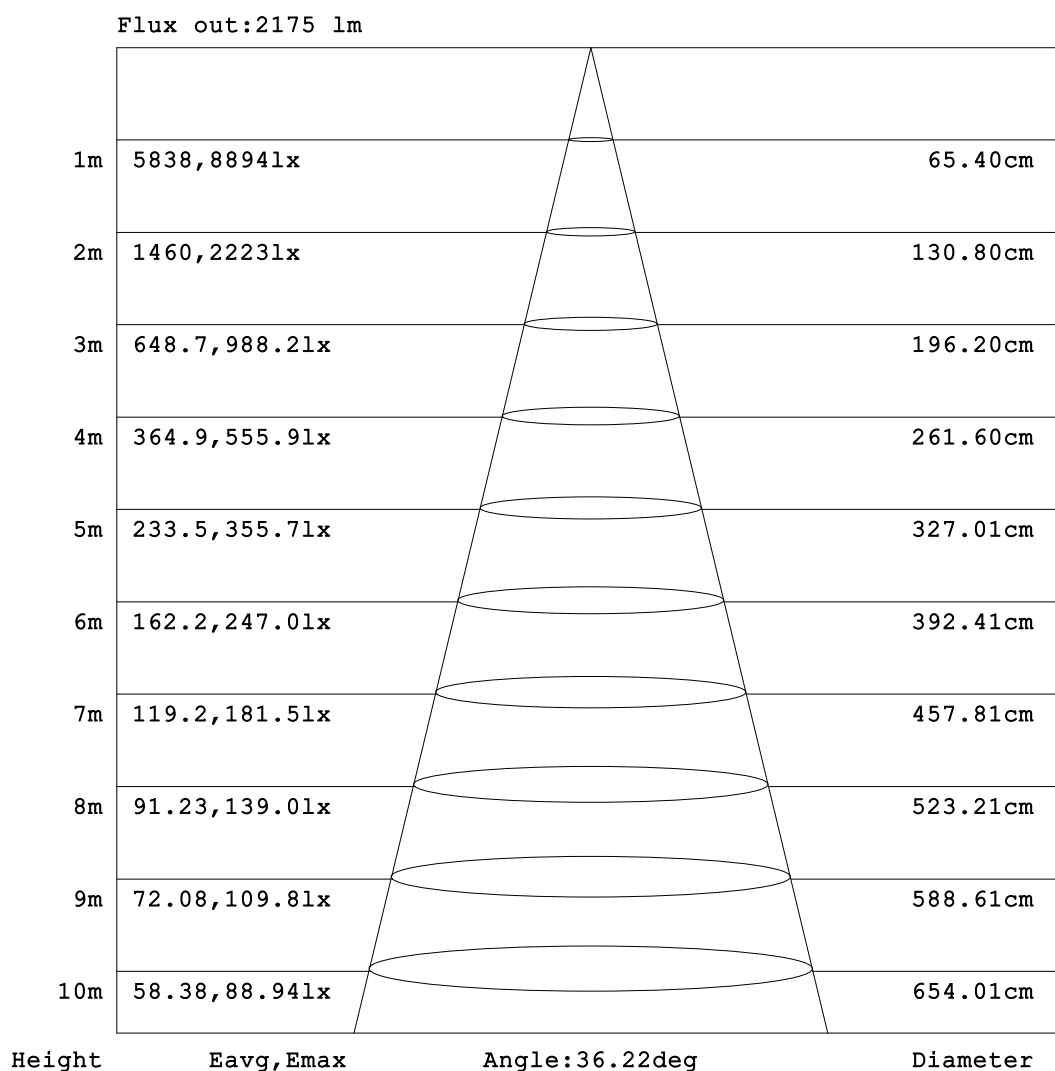


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-31

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:240.4V I:0.1482A P:35.0W PF:0.9835 Freq:49.99Hz		
UTHDi:0.16% ITHDi:5.78% KDisp:0.9849		Lamp Flux:3800.13x1 lm
NAME: FUSION GT-TR02-AHD-035-COB-01SC 3000K RA90 36D TYPE :	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:



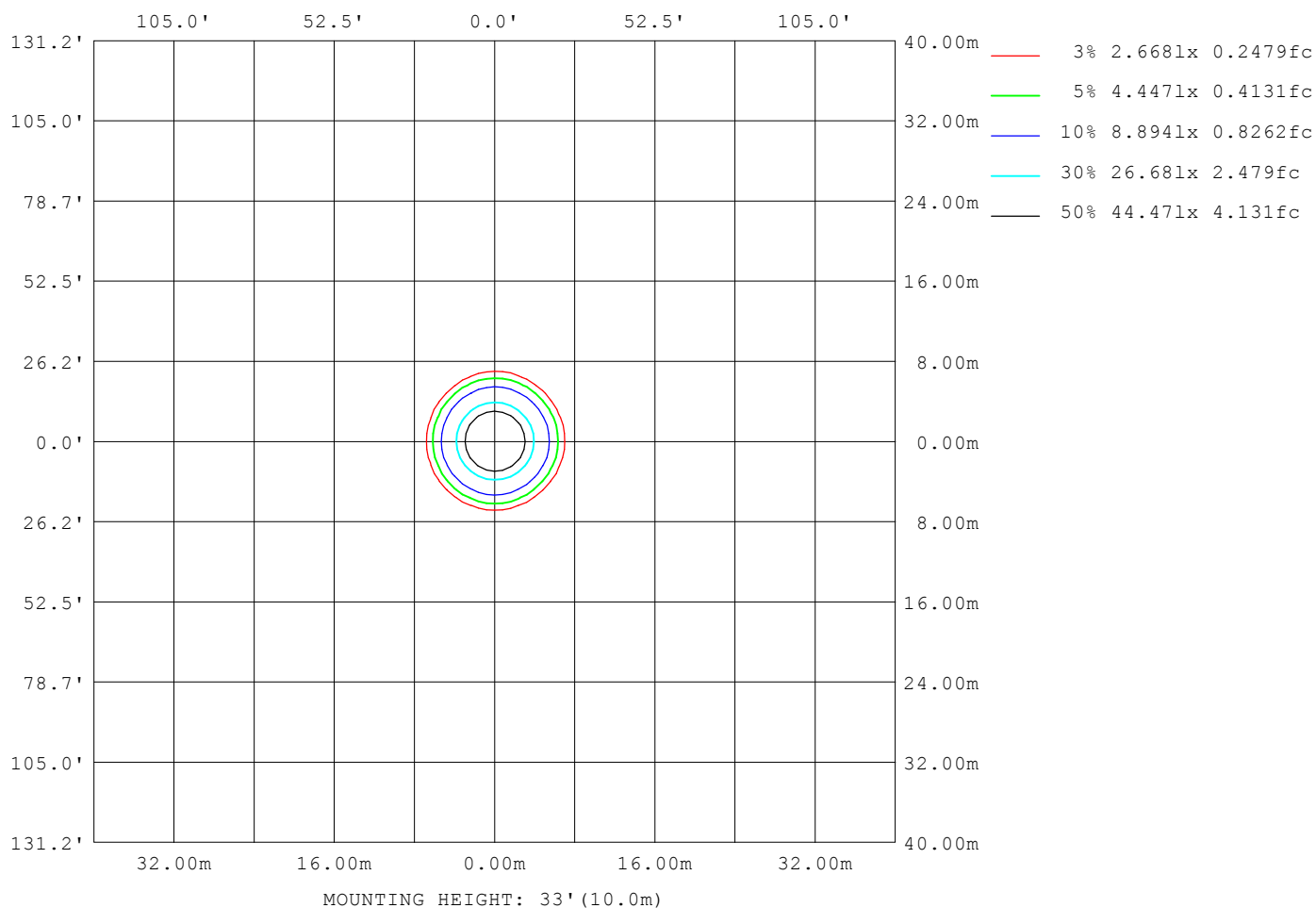
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-31

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:240.4V I:0.1482A P:35.0W PF:0.9835 Freq:49.99Hz		
UTHDi:0.16% ITHDi:5.78% KDisp:0.9849		Lamp Flux:3800.13x1 lm
NAME: FUSION GT-TR02-AHD-035-COB-01SC 3000K RA90 36D 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:2024-10-31

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:240.4V I:0.1482A P:35.0W PF:0.9835 Freq:49.99Hz		
UTHDi:0.16% ITHDi:5.78% KDisp:0.9849 Lamp Flux:3800.13x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 3000K RA90 36D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

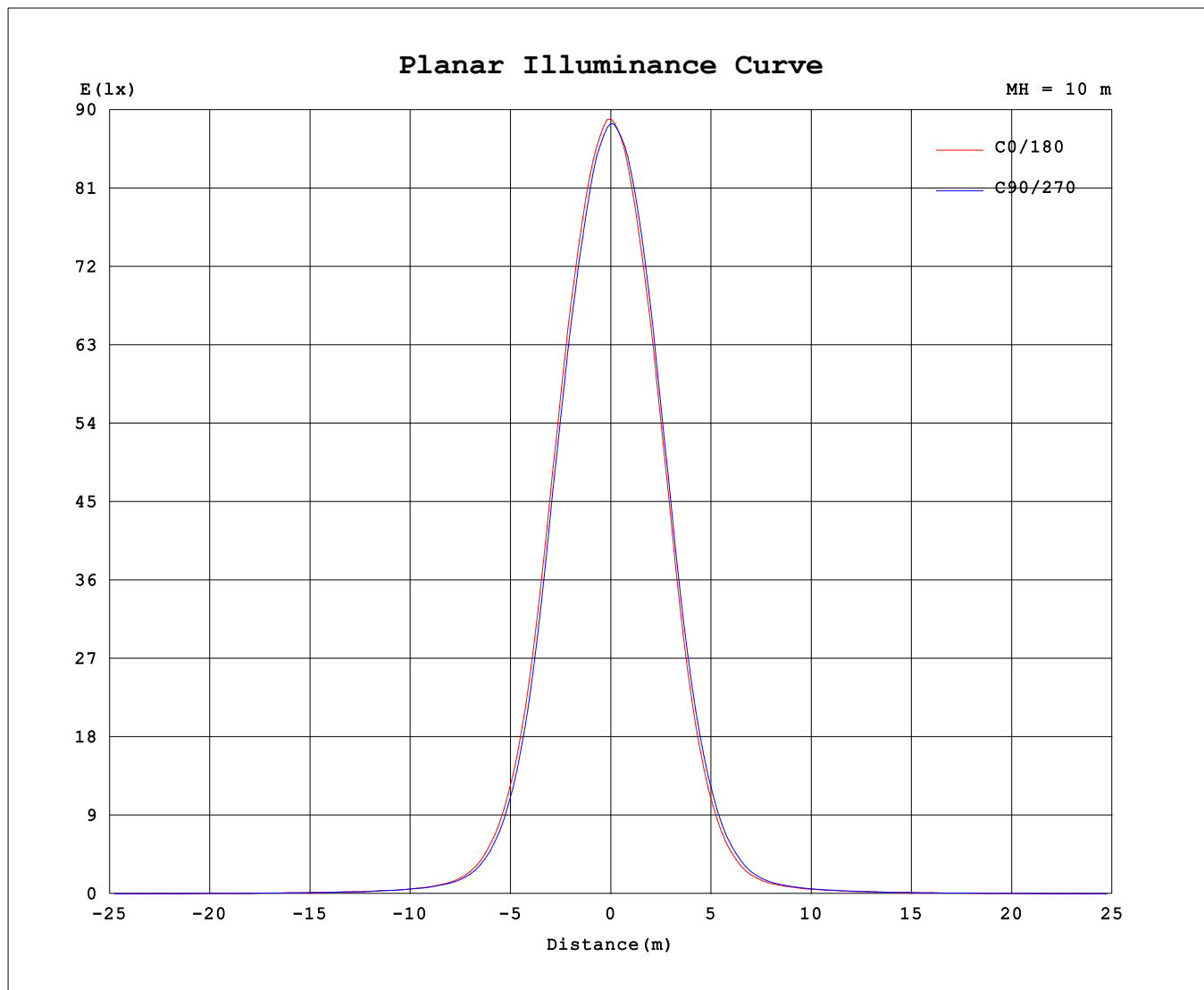
AvgL	cd/m2
L_0~180 (65) av	10933
L_0~180 (75) av	1702
L_0~180 (85) av	1243
L_90~270 (65) av	11228
L_90~270 (75) av	1675
L_90~270 (85) av	1239
L_45 (65) av	10770
L_45 (75) av	1677
L_45 (85) av	1181

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-31

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: 2024-10-31

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	8857	8857	8857	8857	8857	8857	8857	8857
3.0	8704	8643	8641	8663	8674	8725	8737	8704
6.0	8331	8216	8198	8212	8212	8336	8396	8359
9.0	7705	7570	7523	7533	7524	7700	7781	7739
12.0	6909	6763	6678	6673	6658	6807	6907	6916
15.0	5866	5733	5637	5597	5563	5715	5799	5841
18.0	4686	4544	4423	4361	4329	4488	4576	4640
21.0	3467	3319	3195	3148	3127	3280	3381	3436
24.0	2432	2293	2206	2188	2166	2289	2387	2412
27.0	1635	1522	1457	1451	1428	1517	1613	1628
30.0	1045	956.8	929.0	916.7	889.3	947.3	1032	1039
33.0	641.9	581.5	563.9	564.4	539.2	577.7	643.2	646.2
36.0	400.5	367.7	359.2	358.7	340.6	361.5	400.9	405.1
39.0	269.8	252.7	252.0	251.2	239.5	249.6	273.2	274.3
42.0	199.0	188.4	191.0	191.3	183.6	187.9	205.5	203.5
45.0	154.9	146.6	151.4	152.4	147.4	148.4	162.4	159.0
48.0	125.2	117.9	124.2	125.7	122.6	121.1	132.8	129.0
51.0	104.0	97.30	104.2	106.1	104.0	101.9	110.7	108.1
54.0	88.27	81.28	89.11	88.96	85.54	83.68	92.56	91.71
57.0	73.14	67.10	73.18	73.82	71.39	67.92	75.52	75.04
60.0	60.92	55.90	59.69	59.21	57.68	55.45	62.40	62.12
63.0	48.14	44.03	46.57	46.43	45.31	43.83	49.24	49.13
66.0	37.11	33.63	33.70	32.46	31.88	31.82	36.87	37.93
69.0	23.87	21.63	19.98	17.40	17.03	19.24	22.56	23.99
72.0	10.81	7.979	6.550	5.481	5.463	6.166	7.691	10.48
75.0	4.096	3.980	3.603	3.297	3.306	3.341	3.679	3.966
78.0	3.074	3.008	2.773	2.557	2.595	2.615	2.876	3.022
81.0	2.518	2.367	1.993	1.649	1.605	1.737	2.180	2.453
84.0	1.348	1.218	1.094	0.9068	0.8993	0.9275	1.156	1.277
87.0	0.6874	0.5605	0.4806	0.3234	0.3201	0.3564	0.5314	0.6124
90.0	0.1379	0.0992	0.1538	0.1084	0.1162	0.1027	0.1191	0.0948

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-31

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: