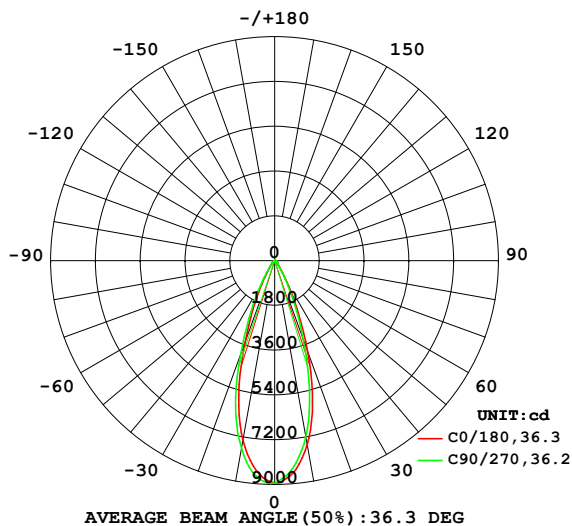


LUMINAIRE PHOTOMETRIC TEST REPORT

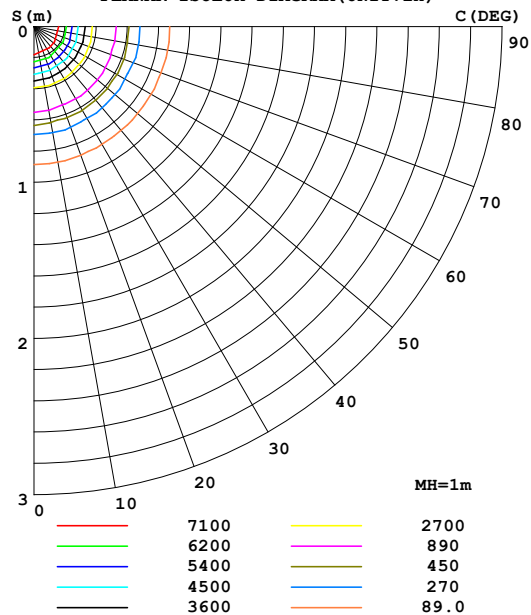
Test:U:240.3V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.75% KDisp:0.9850 Lamp Flux:3830.16x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 36D TYPE:		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 108.92 lm/W			
MODEL		I _{max} (cd)	8957	S/MH(C0/180)	0.57
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	0.60
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	3830.2	η UP,DN(C0-180)	0.0,48.5
NOMINAL FLUX(lm)	3830.16	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,51.5
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	240.17	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	7537	7344	7205	7244	7335	7532	7671	7646	0- 10	778.7	778.7	20.3,20.3
20	3900	3607	3383	3429	3486	3765	4020	4076	10- 20	1557	2336	61,61
30	1015	921.3	888.6	870.6	901.7	1006	1130	1088	20- 30	951.9	3288	85.8,85.8
40	236.9	226.3	221.9	221.9	225.3	237.2	257.4	247.6	30- 40	300.9	3589	93.7,93.7
50	114.3	106.8	106.3	108.1	108.9	108.6	120.9	118.4	40- 50	122.5	3711	96.9,96.9
60	61.43	56.04	57.51	57.88	58.20	57.77	63.60	63.96	50- 60	74.63	3786	98.8,98.8
70	19.78	17.07	14.92	12.77	12.51	14.40	17.51	19.71	60- 70	37.79	3823	99.8,99.8
80	2.673	2.675	2.551	2.328	2.236	2.226	2.381	2.499	70- 80	5.604	3829	100,100
90	0.1375	0.1001	0.1567	0.1114	0.1171	0.1030	0.1216	0.0972	80- 90	1.080	3830	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): 3658.3 lm

%lum = 95.5%

%lamp = 95.5%

Conical surface Flux(120deg): 3785.7 lm

%lum = 98.8%

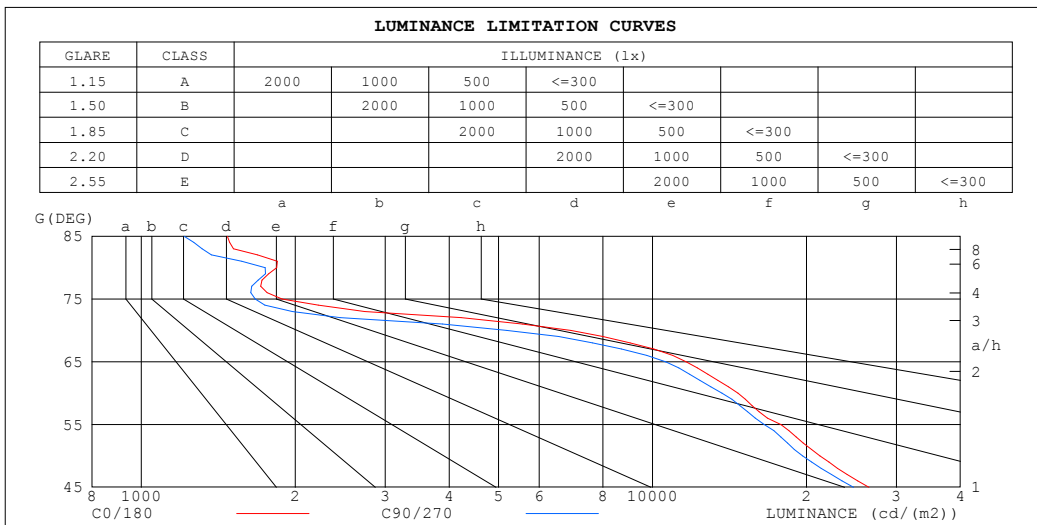
%lamp = 98.8%

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:240.3V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.75% KDisp:0.9850 Lamp Flux:3830.16x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 36D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:



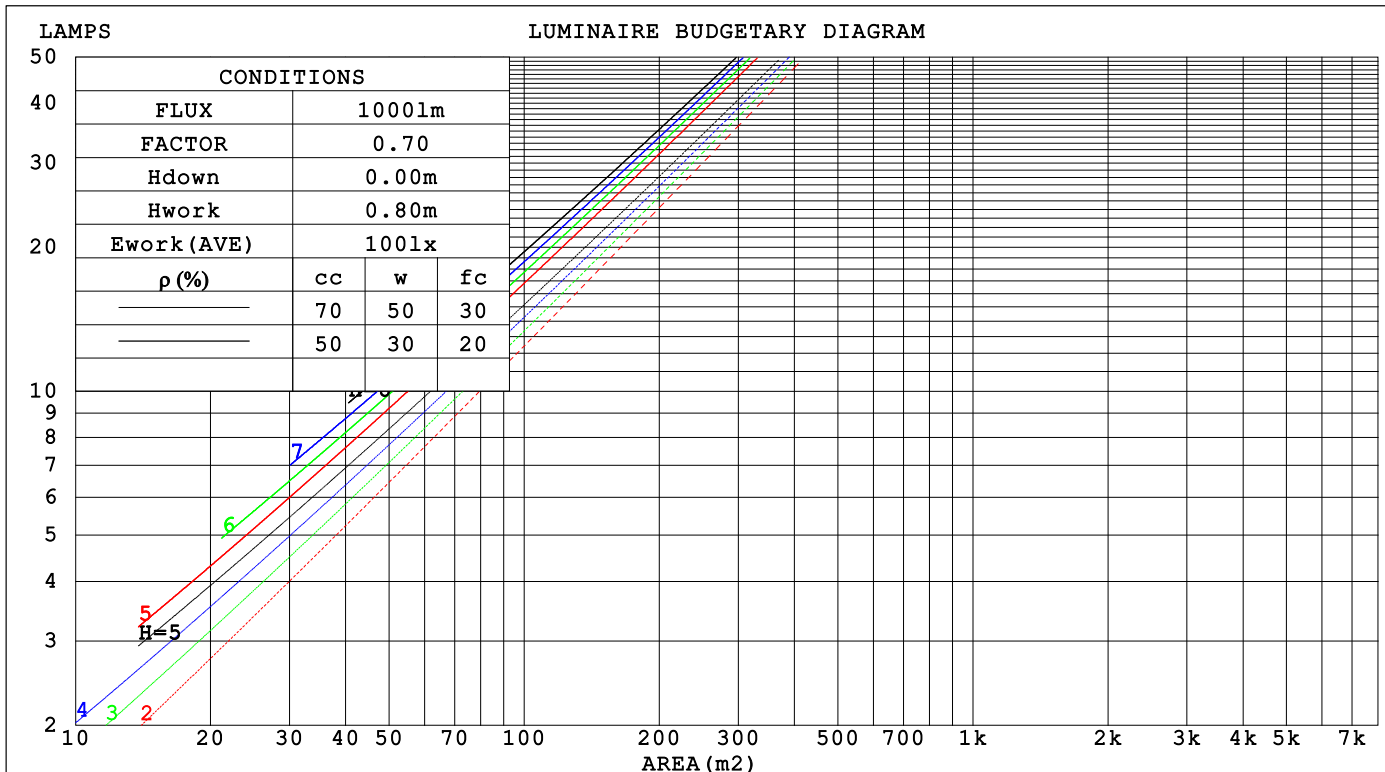
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2024-10-31

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:240.3V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.75% KDisp:0.9850 Lamp Flux:3830.16x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K 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:240.3V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.75% KDisp:0.9850 Lamp Flux:3830.16x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K 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	.019		
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	.103	.053	.015	.099	.051	.015		
8.0	.110	.054	.015	.108	.053	.015	.104	.052	.015	.100	.050	.015	.096	.049	.014		
9.0	.106	.051	.014	.104	.050	.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	.089	.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:240.3V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz UTHDi:0.18% ITHDi:5.75% KDisp:0.9850 Lamp Flux:3830.16x1 lm											
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K 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	17.3	18.1	17.5	18.2	18.4	16.9	17.7	17.1	17.8	18.0	
	3H	17.5	18.2	17.7	18.4	18.6	17.1	17.8	17.3	18.0	18.2
	4H	17.4	18.1	17.7	18.4	18.6	17.0	17.7	17.2	17.9	18.1
	6H	17.3	18.0	17.6	18.3	18.5	16.9	17.6	17.2	17.8	18.1
	8H	17.3	18.0	17.6	18.2	18.5	16.9	17.5	17.2	17.8	18.0
	12H	17.3	17.9	17.6	18.2	18.4	16.8	17.4	17.1	17.7	18.0
4H	2H	17.3	18.0	17.6	18.3	18.5	17.0	17.7	17.2	17.9	18.1
	3H	17.6	18.2	17.9	18.5	18.7	17.2	17.8	17.5	18.1	18.3
	4H	17.5	18.1	17.9	18.4	18.7	17.1	17.7	17.4	18.0	18.3
	6H	17.4	17.9	17.8	18.3	18.6	17.0	17.5	17.4	17.9	18.2
	8H	17.4	17.9	17.8	18.2	18.6	17.0	17.4	17.4	17.8	18.2
	12H	17.3	17.8	17.8	18.1	18.5	16.9	17.4	17.3	17.7	18.1
8H	4H	17.4	17.9	17.8	18.2	18.6	17.0	17.4	17.4	17.8	18.2
	6H	17.3	17.7	17.7	18.1	18.5	16.9	17.3	17.3	17.7	18.1
	8H	17.3	17.6	17.7	18.0	18.5	16.9	17.2	17.3	17.6	18.0
	12H	17.2	17.5	17.7	17.9	18.4	16.8	17.1	17.3	17.5	18.0
12H	4H	17.3	17.8	17.7	18.1	18.5	16.9	17.4	17.3	17.7	18.1
	6H	17.3	17.6	17.7	18.0	18.4	16.9	17.2	17.3	17.6	18.0
	8H	17.2	17.5	17.7	17.9	18.4	16.8	17.1	17.3	17.5	18.0
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 1.4 / - 1.7					+ 1.3 / - 1.8					
1.5H	+ 2.3 / - 1.2					+ 2.1 / - 1.1					
2.0H	+ 1.8 / - 1.5					+ 1.6 / - 1.4					

CIE Pub.117, 3830 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.7$)
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:240.3V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.75% KDisp:0.9850 Lamp Flux:3830.16x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 36D TYPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
SUR.: 104mm		

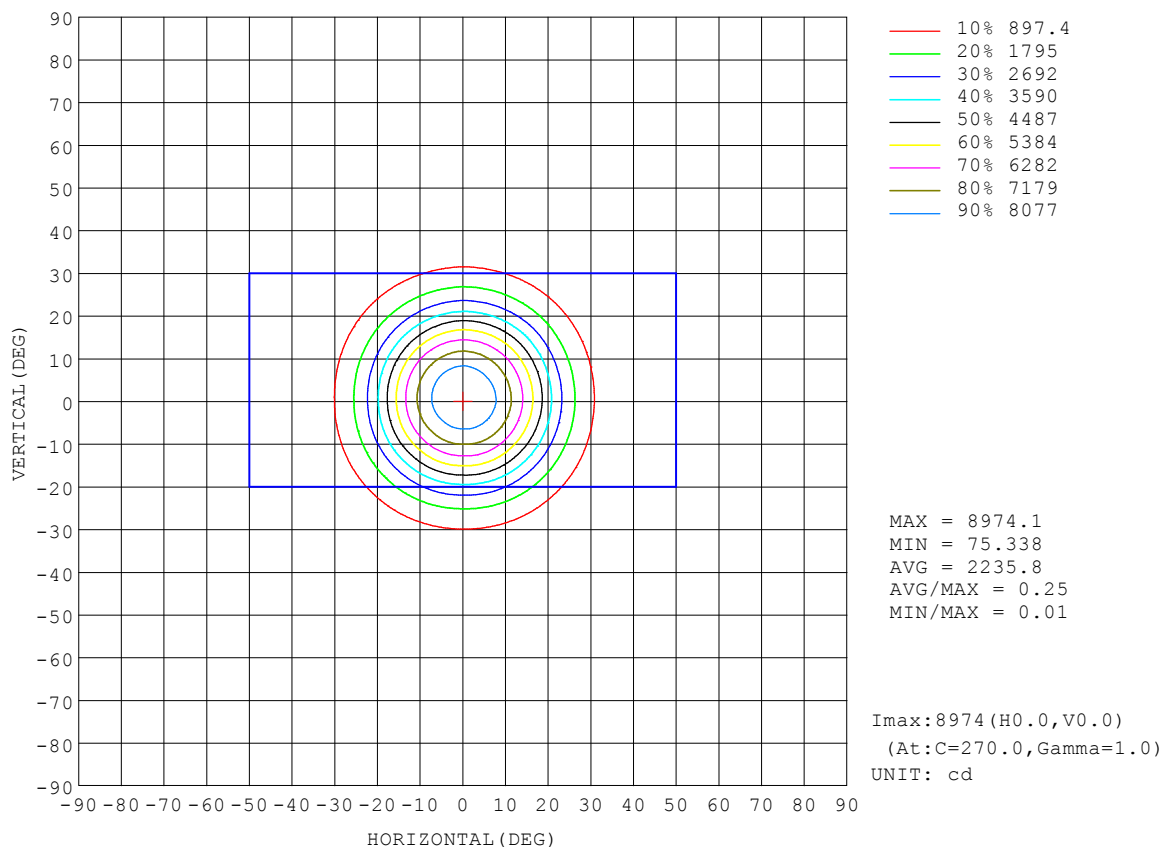
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	81	78	87	81	77	86	81	77	74
0.80	95	89	85	94	89	85	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	110	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:240.3V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.75% KDisp:0.9850 Lamp Flux:3830.16x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 36D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

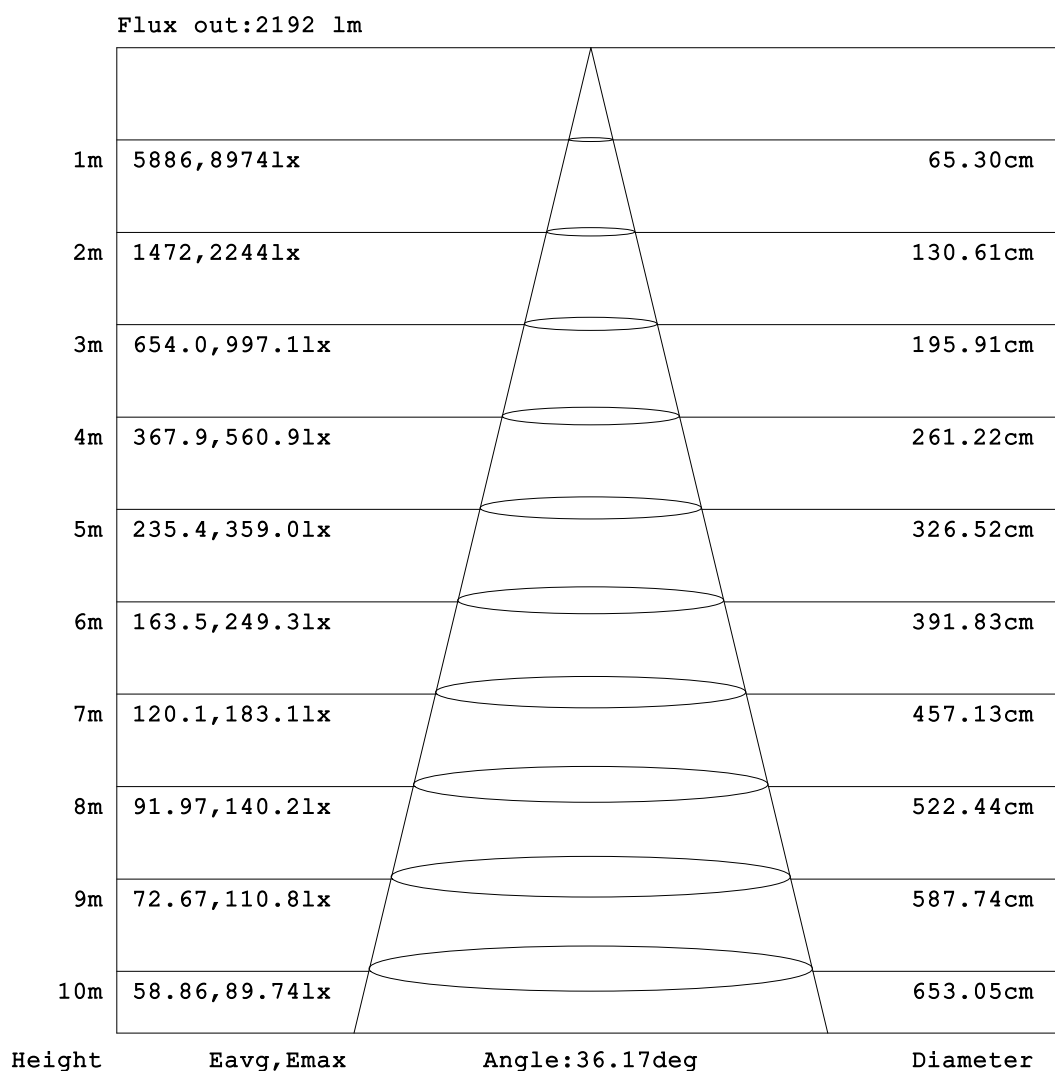


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-10-31

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:240.3V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.75% KDisp:0.9850		Lamp Flux:3830.16x1 lm
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 36D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:



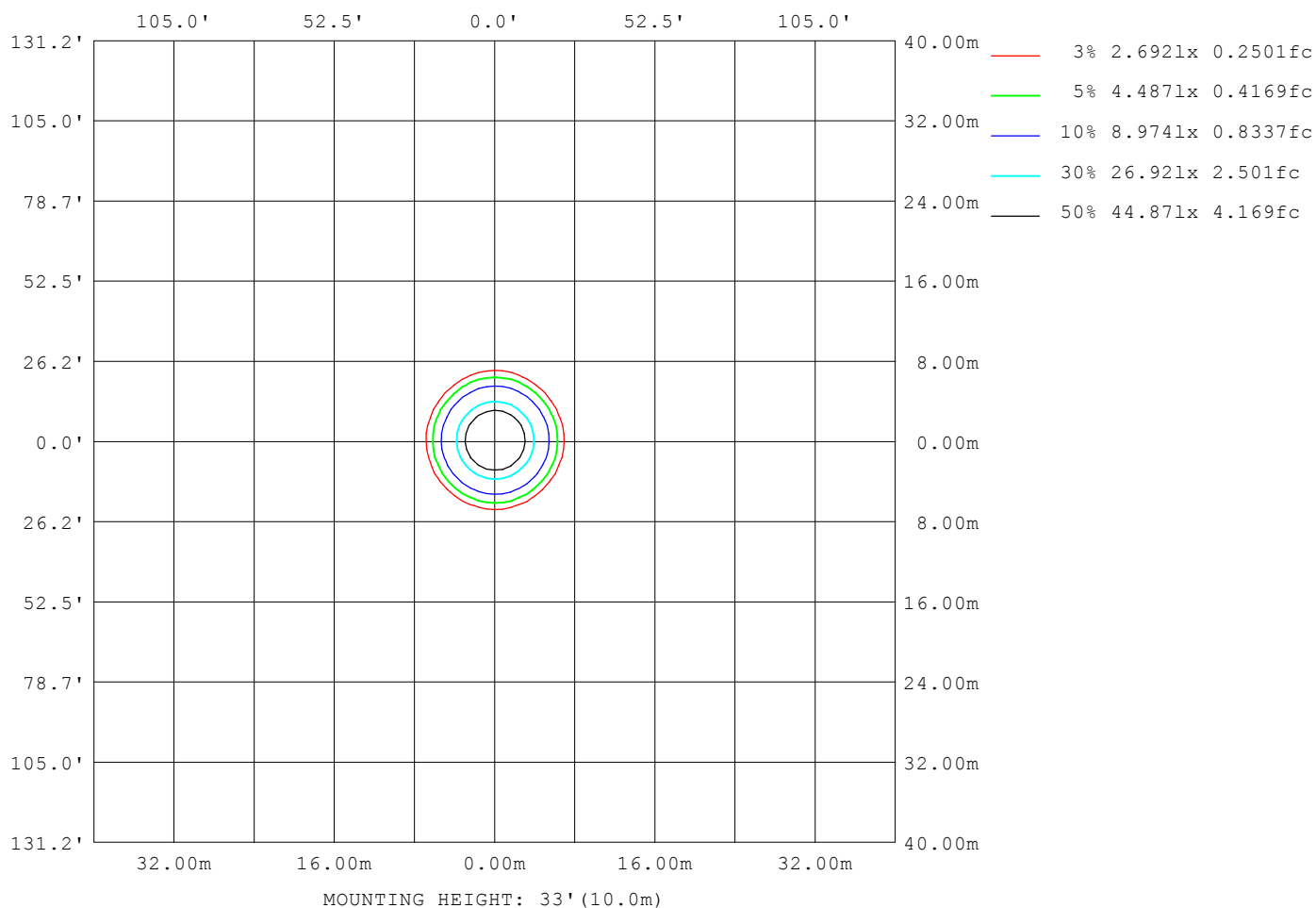
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:240.3V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.75% KDisp:0.9850		Lamp Flux:3830.16x1 lm
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K 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:240.3V I:0.1488A P:35.2W PF:0.9834 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.75% KDisp:0.9850 Lamp Flux:3830.16x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 36D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

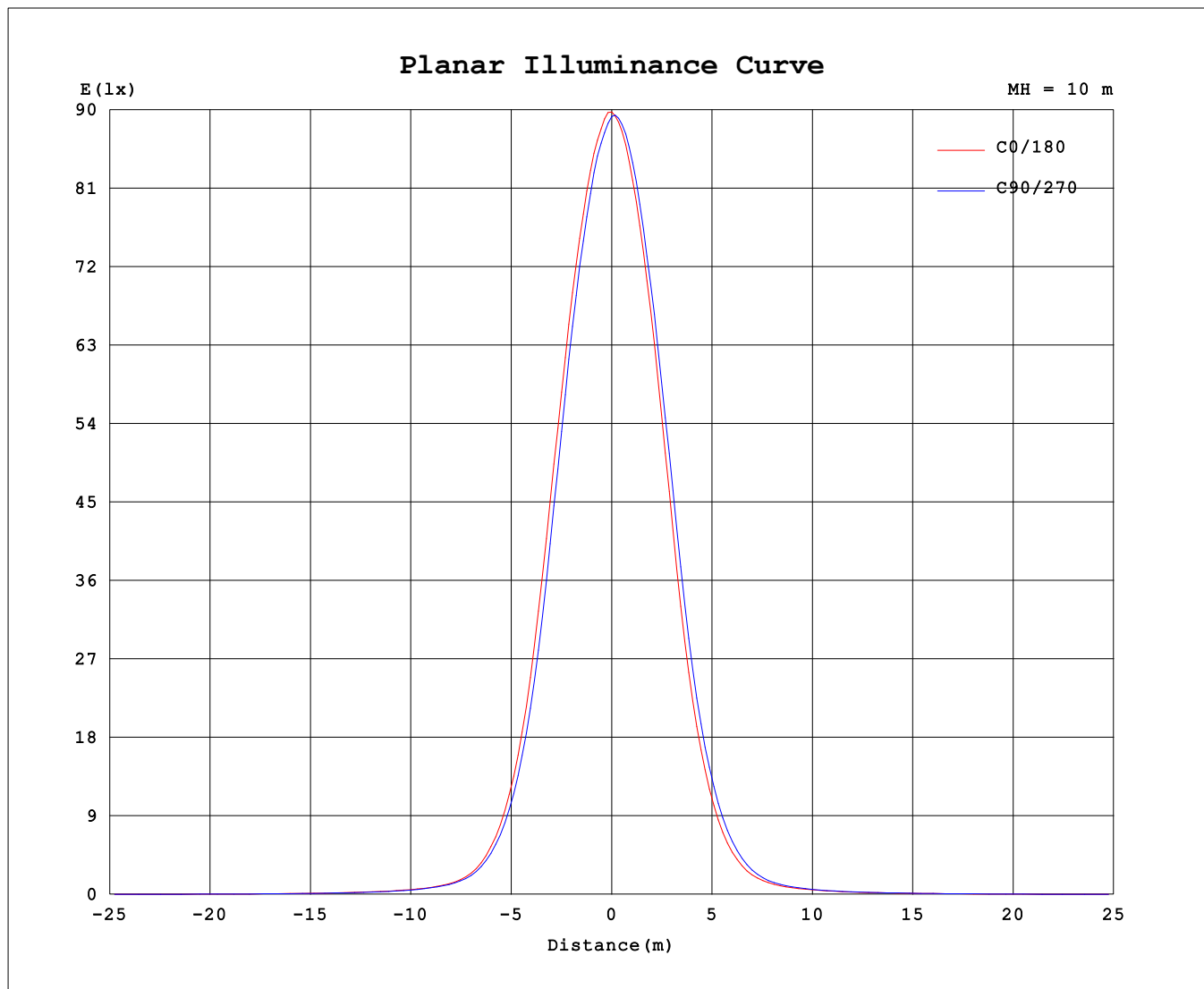
AvgL	cd/m2
L_0~180 (65) av	11009
L_0~180 (75) av	1725
L_0~180 (85) av	1248
L_90~270 (65) av	11221
L_90~270 (75) av	1687
L_90~270 (85) av	1238
L_45 (65) av	10901
L_45 (75) av	1695
L_45 (85) av	1180

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	8934	8934	8934	8934	8934	8934	8934	8934
3.0	8777	8699	8665	8697	8747	8831	8879	8843
6.0	8407	8278	8185	8227	8290	8436	8545	8496
9.0	7778	7610	7490	7517	7608	7791	7929	7888
12.0	6957	6743	6569	6609	6722	6946	7124	7101
15.0	5907	5624	5425	5481	5590	5880	6077	6086
18.0	4724	4410	4189	4239	4320	4620	4887	4920
21.0	3497	3224	3022	3060	3117	3377	3614	3652
24.0	2433	2226	2095	2131	2165	2377	2566	2561
27.0	1617	1473	1385	1393	1436	1584	1752	1720
30.0	1015	921.3	888.6	870.6	901.7	1006	1130	1088
33.0	612.5	556.2	541.6	534.6	555.2	618.7	707.6	658.5
36.0	379.4	354.1	345.9	342.4	353.0	386.9	435.4	405.2
39.0	261.8	248.2	244.4	242.2	246.6	263.9	288.2	274.8
42.0	197.5	187.1	185.7	185.2	187.2	195.9	213.1	206.1
45.0	156.7	147.3	147.2	147.5	148.7	152.8	165.2	162.8
48.0	128.7	120.6	120.3	121.5	122.3	123.5	135.1	133.7
51.0	107.8	100.5	100.2	102.1	102.8	102.1	114.4	111.8
54.0	90.78	83.32	85.44	86.16	86.42	85.70	96.06	94.29
57.0	73.65	67.20	70.26	71.25	71.96	71.13	77.66	76.88
60.0	61.43	56.04	57.51	57.88	58.20	57.77	63.60	63.96
63.0	48.72	44.21	45.12	45.37	45.54	45.41	50.09	50.26
66.0	37.24	33.86	33.33	32.67	32.09	32.54	37.36	38.49
69.0	23.96	21.65	19.75	17.88	17.64	19.55	22.74	24.23
72.0	10.91	7.827	6.365	5.716	5.620	6.062	7.518	10.43
75.0	4.081	3.842	3.637	3.501	3.422	3.443	3.697	3.951
78.0	2.991	3.008	2.957	2.853	2.743	2.602	2.724	2.830
81.0	2.414	2.328	2.068	1.802	1.735	1.807	2.072	2.261
84.0	1.301	1.194	1.114	0.9698	0.9652	0.9693	1.131	1.198
87.0	0.6513	0.5321	0.4740	0.3542	0.3564	0.3897	0.5344	0.5658
90.0	0.1375	0.1001	0.1567	0.1114	0.1171	0.1030	0.1216	0.0972

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: