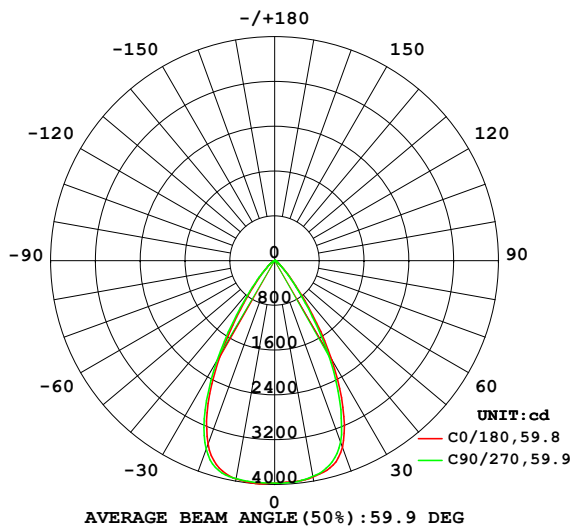


LUMINAIRE PHOTOMETRIC TEST REPORT

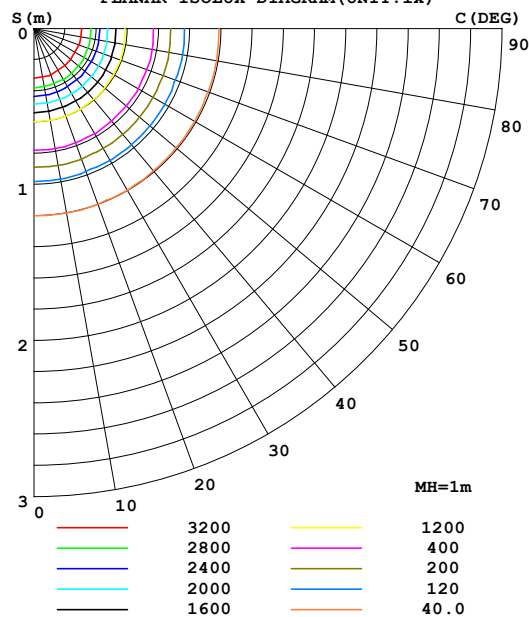
Test:U:240.3V I:0.1488A P:35.2W PF:0.9835 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.68% KDisp:0.9853 Lamp Flux:3807.37x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 60D TYPE:		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 108.28 lm/W			
MODEL		Imax (cd)	3994	S/MH(C0/180)	0.87
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	0.90
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	3807.4	η UP,DN(C0-180)	0.0,49.4
NOMINAL FLUX(lm)	3807.37	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	240.21	η down (%)	100.0	CIBSE SHR MAX	0.90

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	3926	3912	3914	3940	3958	3967	3955	3940	0- 10	378.3	378.3	9.94,9.94
20	3543	3491	3444	3423	3480	3517	3580	3590	10- 20	1070	1448	38,38
30	2040	2011	1900	1857	1925	1947	2064	2118	20- 30	1280	2728	71.6,71.6
40	591.2	581.4	536.1	520.4	545.1	557.2	615.6	632.7	30- 40	723.9	3452	90.7,90.7
50	155.5	149.0	144.9	147.3	150.5	150.1	167.3	170.2	40- 50	238.7	3690	96.9,96.9
60	51.70	47.68	44.48	43.65	43.52	42.99	49.67	56.32	50- 60	83.32	3774	99.1,99.1
70	15.81	15.33	13.42	11.15	11.64	12.14	15.04	16.26	60- 70	26.92	3801	99.8,99.8
80	3.159	3.079	2.708	2.292	2.265	2.297	2.765	3.020	70- 80	5.583	3806	100,100
90	0.1135	0.0903	0.1225	0.1030	0.1055	0.0960	0.1035	0.0885	80- 90	1.088	3807	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): 3604.6 lm

%lum = 94.7%

%lamp = 94.7%

Conical surface Flux(120deg): 3773.8 lm

%lum = 99.1%

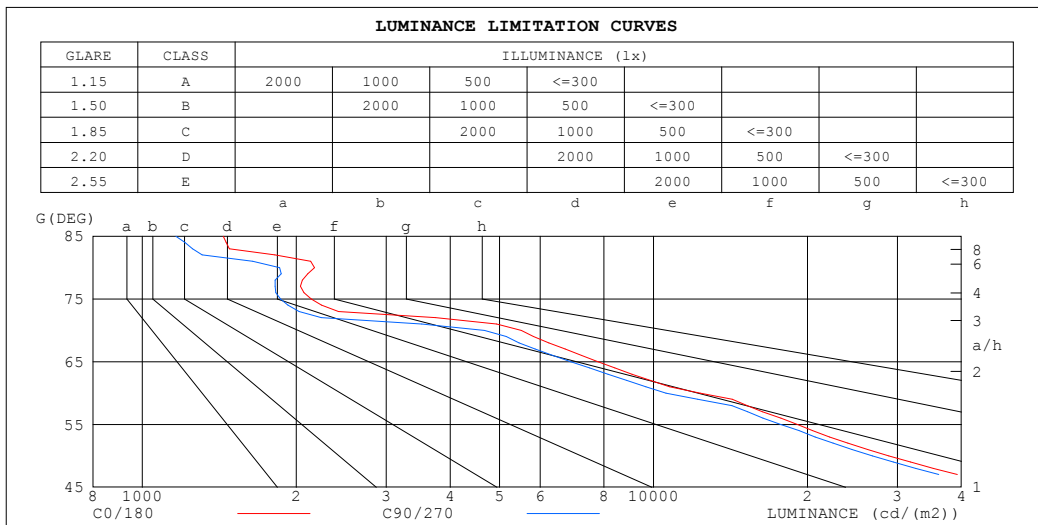
%lamp = 99.1%

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:240.3V I:0.1488A P:35.2W PF:0.9835 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.68% KDisp:0.9853 Lamp Flux:3807.37x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 60D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:



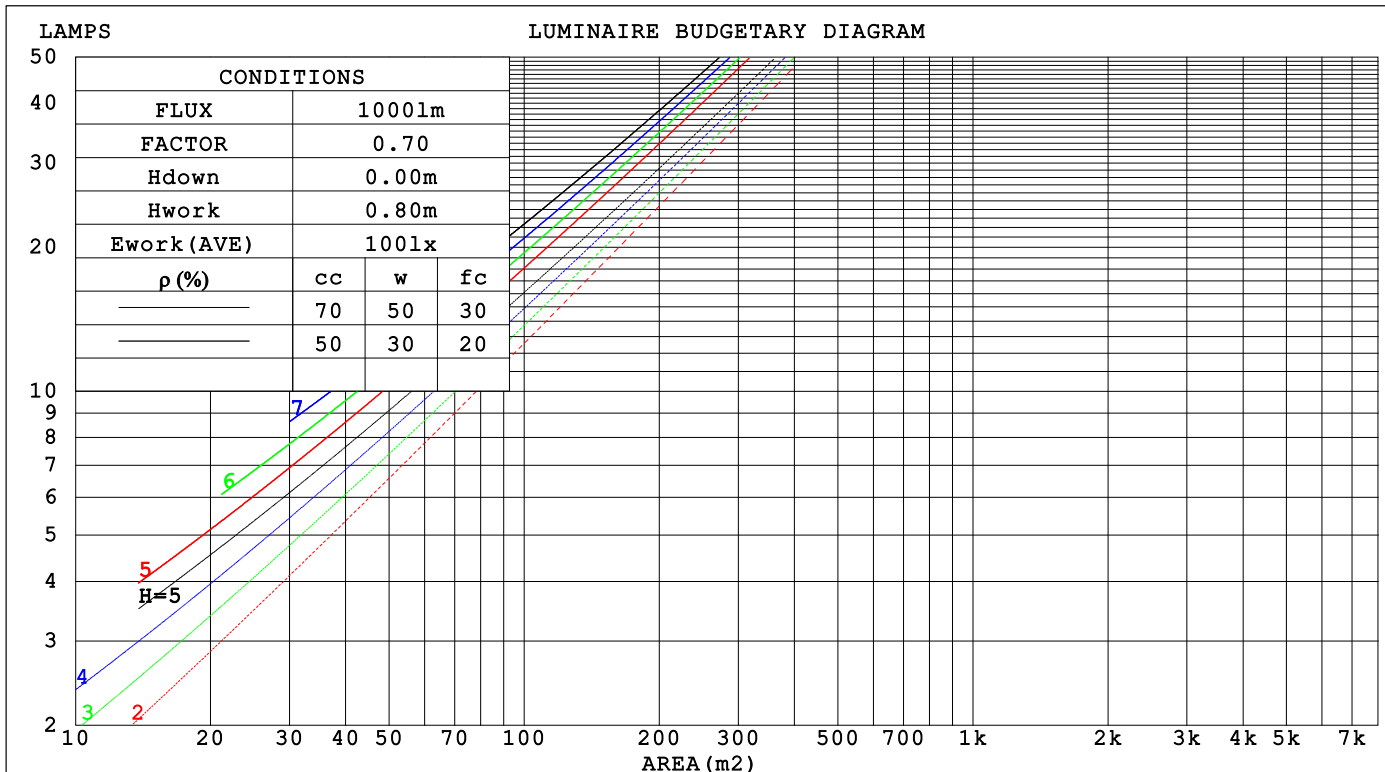
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2024-10-30

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:240.3V I:0.1488A P:35.2W PF:0.9835 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.68% KDisp:0.9853 Lamp Flux:3807.37x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 60D TYPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
DIM.:		
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:2024-10-30

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:240.3V I:0.1488A P:35.2W PF:0.9835 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.68% KDisp:0.9853 Lamp Flux:3807.37x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 60D TYPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
DIM.:		
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	.180	.103	.033	.174	.099	.031	.161	.092	.030	.150	.086	.028	.139	.080	.026		
2.0	.173	.095	.029	.168	.092	.028	.157	.087	.027	.147	.083	.026	.138	.078	.025		
3.0	.165	.088	.026	.160	.086	.026	.151	.082	.025	.143	.078	.024	.135	.075	.023		
4.0	.157	.082	.024	.153	.080	.024	.145	.077	.023	.138	.074	.022	.131	.071	.022		
5.0	.150	.076	.022	.146	.075	.022	.140	.073	.021	.133	.070	.021	.127	.068	.020		
6.0	.143	.072	.021	.140	.071	.020	.134	.069	.020	.128	.067	.020	.123	.065	.019		
7.0	.137	.068	.019	.134	.067	.019	.129	.065	.019	.124	.063	.018	.119	.062	.018		
8.0	.131	.064	.018	.128	.063	.018	.124	.062	.018	.119	.060	.017	.115	.059	.017		
9.0	.125	.061	.017	.123	.060	.017	.119	.059	.017	.115	.058	.016	.111	.056	.016		
10.0	.120	.058	.016	.118	.057	.016	.114	.056	.016	.111	.055	.016	.107	.054	.015		

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	.171	.157	.145	.147	.135	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016		
2.0	.156	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013		
3.0	.144	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010		
4.0	.134	.099	.072	.115	.085	.063	.079	.060	.044	.046	.035	.026	.015	.011	.009		
5.0	.126	.087	.059	.108	.076	.051	.074	.053	.036	.043	.031	.022	.014	.010	.007		
6.0	.118	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006		
7.0	.112	.071	.042	.096	.061	.036	.067	.043	.026	.039	.025	.015	.012	.008	.005		
8.0	.106	.064	.036	.092	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004		
9.0	.101	.059	.031	.087	.051	.027	.060	.036	.019	.035	.021	.011	.011	.007	.004		
10.0	.097	.055	.027	.083	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003		

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:240.3V I:0.1488A P:35.2W PF:0.9835 Freq:49.99Hz											
UTHDi:0.18% ITHDi:5.68% KDisp:0.9853 Lamp Flux:3807.37x1 lm											
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 60D 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	21.9	22.9	22.1	23.0	23.2	21.5	22.5	21.7	22.6	22.8
	3H	21.8	22.7	22.0	22.9	23.1	21.4	22.3	21.6	22.5	22.7
	4H	21.7	22.5	22.0	22.7	23.0	21.3	22.1	21.6	22.3	22.6
	6H	21.6	22.4	21.9	22.6	22.9	21.2	22.0	21.5	22.2	22.5
	8H	21.6	22.3	21.9	22.6	22.8	21.2	21.9	21.5	22.2	22.4
	12H	21.5	22.2	21.8	22.5	22.8	21.1	21.8	21.4	22.1	22.4
4H	2H	21.7	22.5	22.0	22.7	23.0	21.3	22.1	21.6	22.4	22.6
	3H	21.6	22.3	21.9	22.6	22.8	21.2	21.9	21.5	22.2	22.5
	4H	21.5	22.1	21.8	22.4	22.7	21.1	21.8	21.4	22.1	22.4
	6H	21.4	22.0	21.8	22.3	22.7	21.0	21.6	21.4	21.9	22.3
	8H	21.4	21.9	21.7	22.2	22.6	21.0	21.5	21.4	21.8	22.2
	12H	21.3	21.8	21.7	22.2	22.6	20.9	21.4	21.3	21.8	22.2
8H	4H	21.3	21.9	21.7	22.2	22.6	21.0	21.5	21.4	21.8	22.2
	6H	21.3	21.7	21.7	22.1	22.5	20.9	21.3	21.3	21.7	22.1
	8H	21.2	21.6	21.7	22.0	22.5	20.8	21.2	21.3	21.6	22.1
	12H	21.2	21.5	21.6	21.9	22.4	20.8	21.1	21.2	21.5	22.0
12H	4H	21.3	21.8	21.7	22.2	22.5	20.9	21.4	21.3	21.8	22.2
	6H	21.2	21.6	21.7	22.0	22.4	20.8	21.2	21.3	21.6	22.1
	8H	21.2	21.5	21.6	21.9	22.4	20.8	21.1	21.2	21.5	22.0
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 3.0 / - 6.4					+ 2.7 / - 6.4					
1.5H	+ 4.8 / - 4.7					+ 4.4 / - 4.6					
2.0H	+ 4.7 / - 4.9					+ 4.4 / - 4.9					

CIE Pub.117, 3807 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:2024-10-30

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:240.3V I:0.1488A P:35.2W PF:0.9835 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.68% KDisp:0.9853 Lamp Flux:3807.37x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 60D TYPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
DIM.:		
SUR.: 104mm		

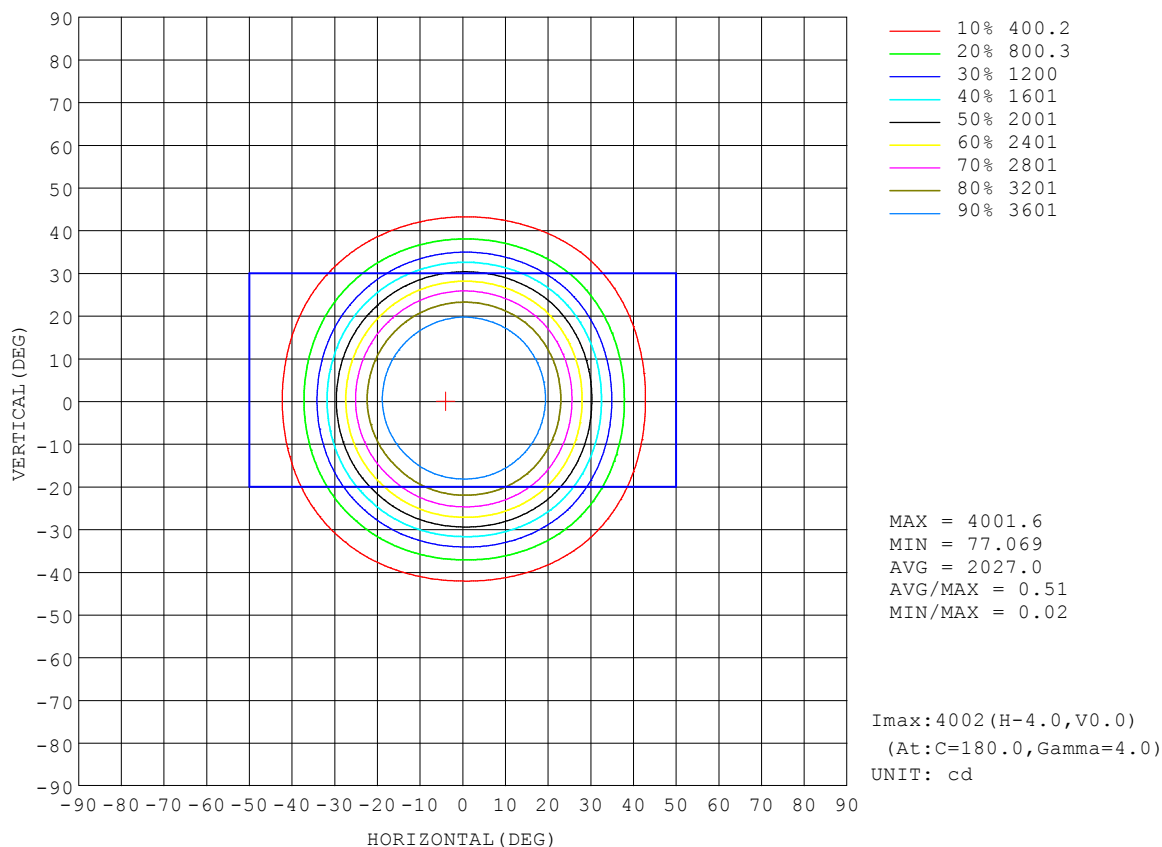
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	79	75	85	79	75	84	78	75	71
0.80	93	87	83	93	87	83	91	86	83	79
1.00	98	92	89	97	92	88	96	92	88	84
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	97	104	100	96	102	98	95	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	111	108	105	110	107	104	106	104	102	95
4.00	114	111	108	111	109	107	108	106	104	97
5.00	115	112	111	113	111	109	109	107	106	98
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:240.3V I:0.1488A P:35.2W PF:0.9835 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.68% KDisp:0.9853 Lamp Flux:3807.37x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 60D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

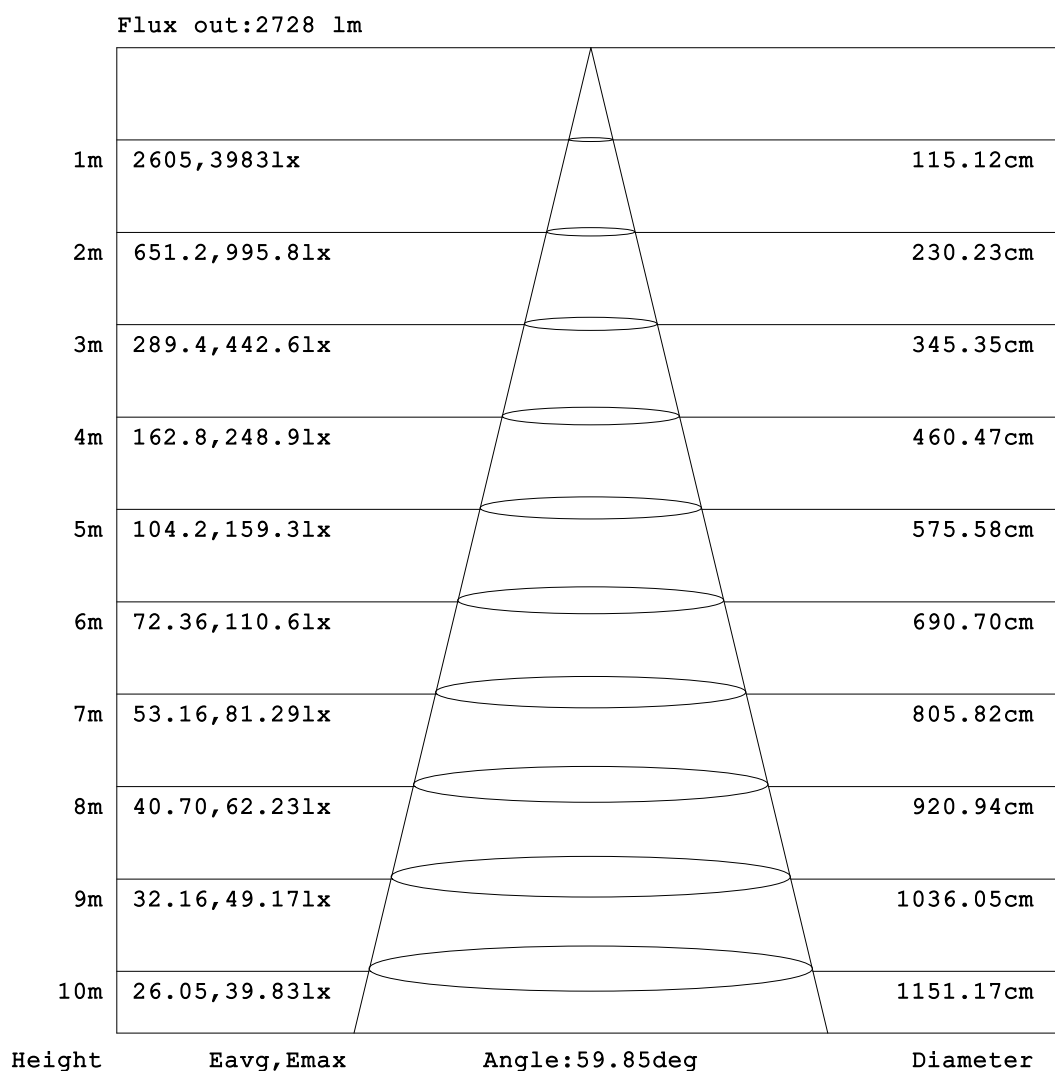


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2024-10-30

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:240.3V I:0.1488A P:35.2W PF:0.9835 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.68% KDisp:0.9853		Lamp Flux:3807.37x1 lm
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 60D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:



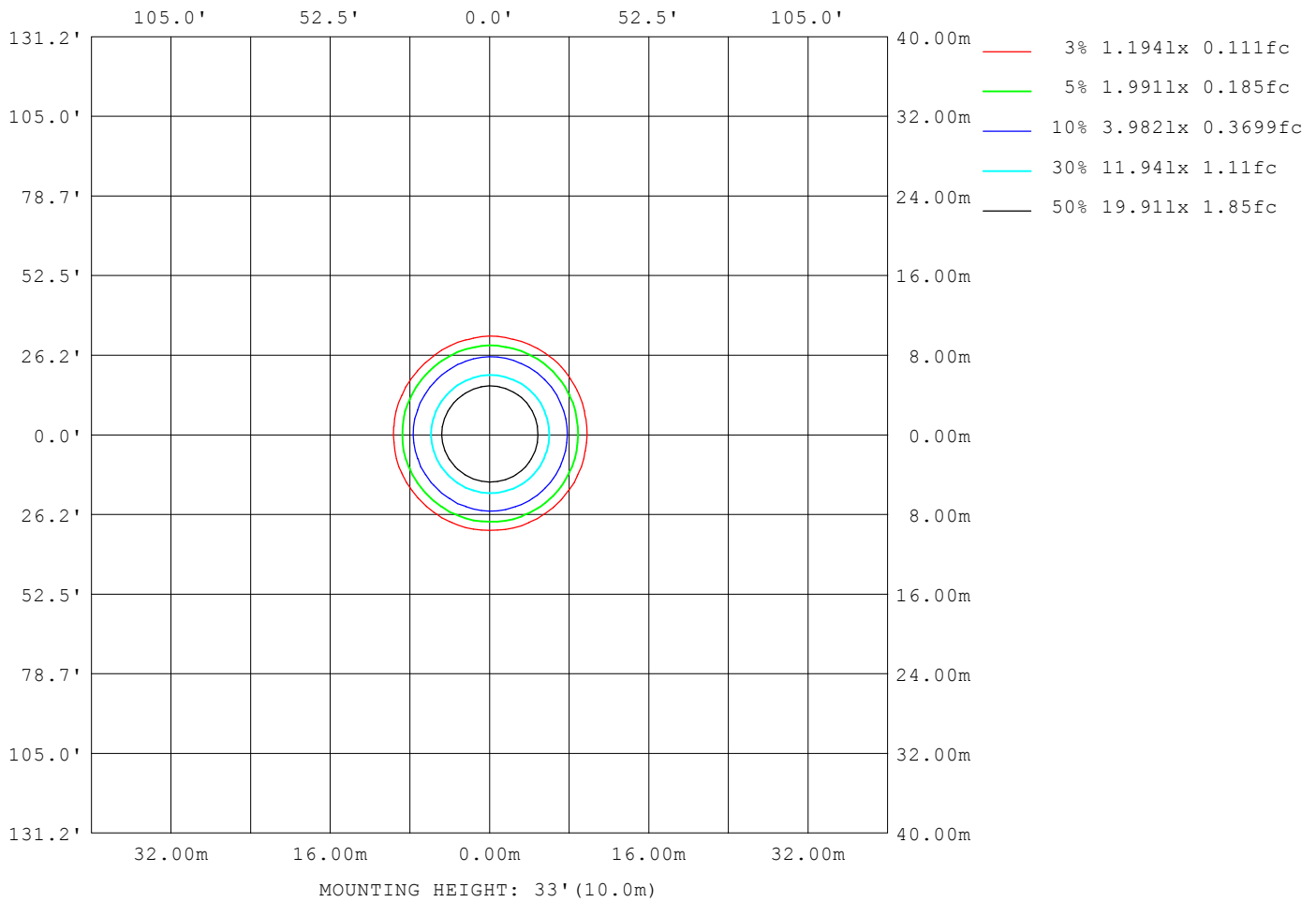
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:240.3V I:0.1488A P:35.2W PF:0.9835 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.68% KDisp:0.9853		Lamp Flux:3807.37x1 lm
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 60D 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:240.3V I:0.1488A P:35.2W PF:0.9835 Freq:49.99Hz		
UTHDi:0.18% ITHDi:5.68% KDisp:0.9853 Lamp Flux:3807.37x1 lm		
NAME: FUSION GT-TR02-AHD-035-COB-01SC 2700K RA90 60D TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 104mm	Shielding Angle:

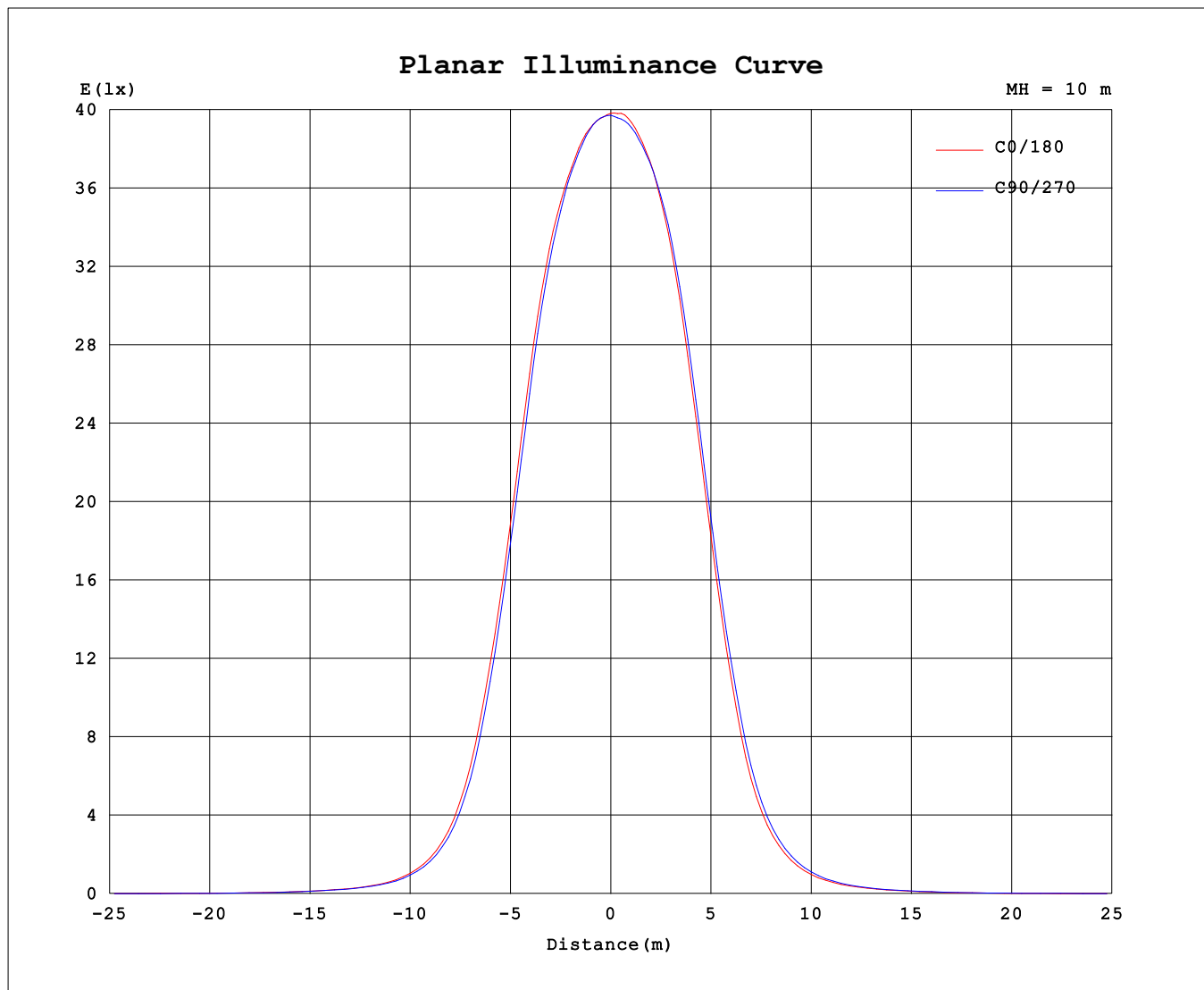
AvgL	cd/m2
L_0~180 (65) av	7274
L_0~180 (75) av	1922
L_0~180 (85) av	1196
L_90~270 (65) av	7275
L_90~270 (75) av	1898
L_90~270 (85) av	1169
L_45 (65) av	7204
L_45 (75) av	1905
L_45 (85) av	1150

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	3974	3974	3974	3974	3974	3974	3974	3974
3.0	3964	3971	3976	3982	3990	3987	3971	3959
6.0	3960	3961	3965	3982	3992	3991	3975	3959
9.0	3941	3929	3929	3951	3968	3978	3960	3948
12.0	3896	3877	3879	3904	3929	3947	3938	3917
15.0	3832	3794	3782	3804	3835	3859	3880	3863
18.0	3697	3643	3618	3622	3664	3695	3741	3737
21.0	3443	3390	3333	3294	3366	3405	3480	3492
24.0	3046	3003	2909	2871	2972	3008	3095	3119
27.0	2559	2530	2427	2390	2468	2496	2604	2648
30.0	2040	2011	1900	1857	1925	1947	2064	2118
33.0	1512	1486	1377	1332	1382	1403	1523	1574
36.0	1034	1017	939.6	896.5	934.9	961.0	1044	1077
39.0	680.4	669.9	615.3	596.4	624.9	637.7	703.5	722.9
42.0	446.5	436.7	405.0	396.6	414.7	423.6	471.2	482.8
45.0	294.5	285.3	268.8	267.5	276.7	282.0	314.8	322.6
48.0	197.7	190.2	183.1	184.9	190.0	190.6	214.9	217.2
51.0	138.4	133.0	129.4	132.2	134.7	134.2	149.0	151.8
54.0	100.9	96.62	95.15	96.54	97.35	95.55	107.8	109.9
57.0	74.58	70.26	69.91	70.60	71.17	70.58	77.80	80.68
60.0	51.70	47.68	44.48	43.65	43.52	42.99	49.67	56.32
63.0	34.56	31.88	31.11	30.19	30.58	30.18	34.49	37.06
66.0	24.66	22.97	21.70	20.70	21.35	21.56	24.09	25.96
69.0	17.49	16.91	15.51	14.40	15.09	15.72	17.03	18.07
72.0	9.703	8.554	5.810	5.130	5.111	5.365	6.647	9.997
75.0	4.643	4.499	4.056	3.691	3.715	3.796	4.198	4.584
78.0	3.584	3.494	3.178	2.911	2.844	2.883	3.194	3.482
81.0	2.798	2.699	2.162	1.668	1.674	1.664	2.287	2.686
84.0	1.278	1.229	1.064	0.8816	0.8899	0.8605	1.063	1.228
87.0	0.6287	0.5791	0.4596	0.3128	0.3321	0.3195	0.4808	0.5967
90.0	0.1135	0.0903	0.1225	0.1030	0.1055	0.0960	0.1035	0.0885

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: