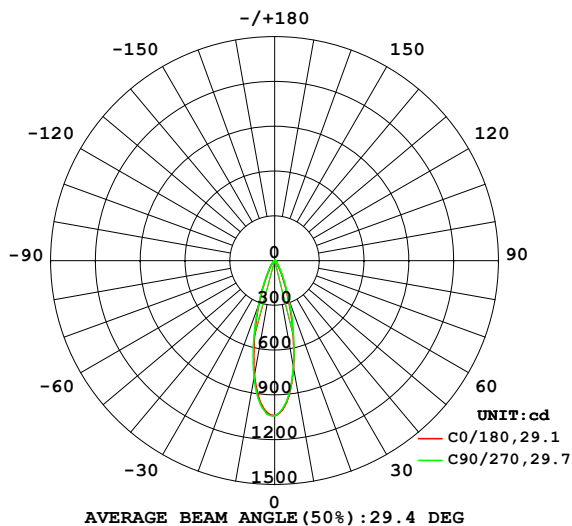


LUMINAIRE PHOTOMETRIC TEST REPORT

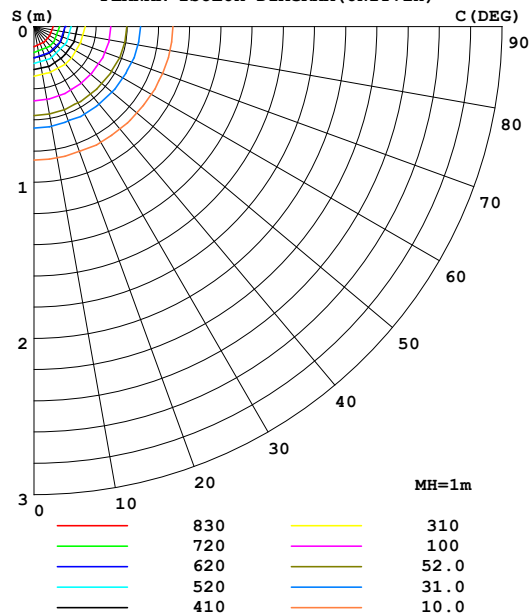
Test:U:240.5V I:0.0288A P:6.1W PF:0.8835 Freq:49.99Hz		
UTHDi:0.17% ITHDi:22.41% KDisp:0.9054 Lamp Flux:353.054x1 lm		
NAME: MD10-06-DW-16 3000K RA95 24D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 26mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 57.79 lm/W
MODEL		I _{max} (cd)	1040	S/MH(C0/180)		0.50
NOMINAL POWER(W)	6	LOR(%)	100.0	S/MH(C90/270)		0.52
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	353.05	η UP,DN(C0-180)		0.0,48.0
NOMINAL FLUX(lm)	353.054	CIE CLASS	DIRECT	η UP,DN(C180-360)		0.0,52.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM		0.50
TEST VOLTAGE(V)	240.4	η down (%)	100.0	CIBSE SHR MAX		0.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM(UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-03-26

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	729.2	714.3	724.3	751.5	780.2	799.1	799.5	766.1	0- 10	85.30	85.30	24.2,24.2
20	261.4	259.0	285.9	303.0	305.6	313.8	322.2	293.6	10- 20	137.9	223.2	63.2,63.2
30	72.07	74.83	88.63	93.34	89.20	90.41	92.97	82.55	20- 30	75.26	298.5	84.5,84.5
40	23.22	24.57	28.56	29.61	28.39	28.07	28.71	25.75	30- 40	30.89	329.3	93.3,93.3
50	8.652	9.433	10.18	10.70	10.48	10.29	10.67	9.520	40- 50	12.94	342.3	97,97
60	3.652	3.882	4.107	4.539	4.784	4.292	4.567	3.959	50- 60	5.913	348.2	98.6,98.6
70	1.846	1.989	2.001	2.287	2.191	2.100	2.100	1.861	60- 70	2.927	351.1	99.5,99.5
80	0.7980	0.7784	0.8036	0.9606	0.9731	0.9887	0.9176	0.8249	70- 80	1.525	352.7	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	0.4002	353.1	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): 337.14 lm

%lum = 95.5%

%lamp = 95.5%

Conical surface Flux(120deg): 348.2 lm

%lum = 98.6%

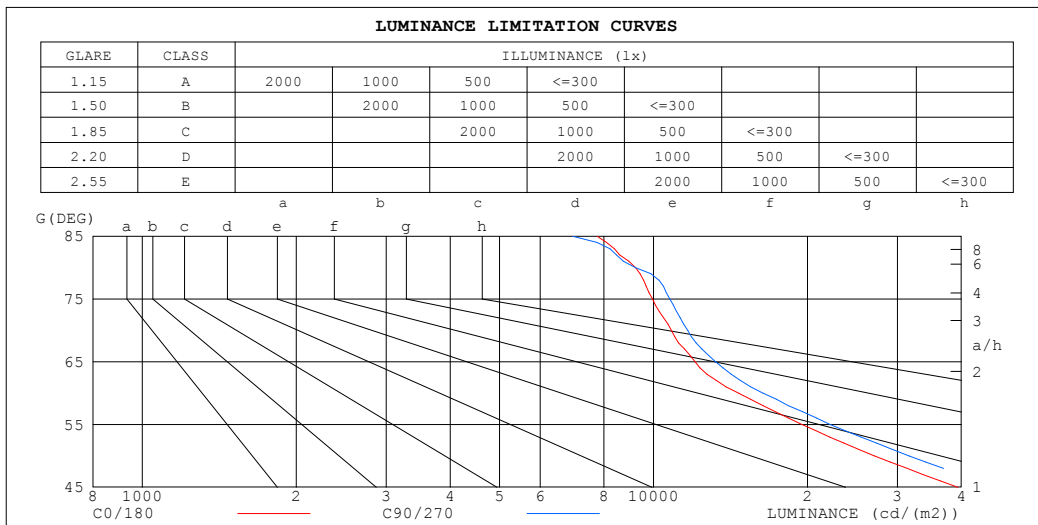
%lamp = 98.6%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-26

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:240.5V I:0.0288A P:6.1W PF:0.8835 Freq:49.99Hz		
UTHDi:0.17% ITHDi:22.41% KDisp:0.9054 Lamp Flux:353.054x1 lm		
NAME: MD10-06-DW-16 3000K RA95 24D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 26mm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7757	6947
80	9227	9230
75	9952	10769
70	10837	11671
65	12053	13218
60	14666	16381
55	19516	22172
50	27026	31589
45	39399	47326

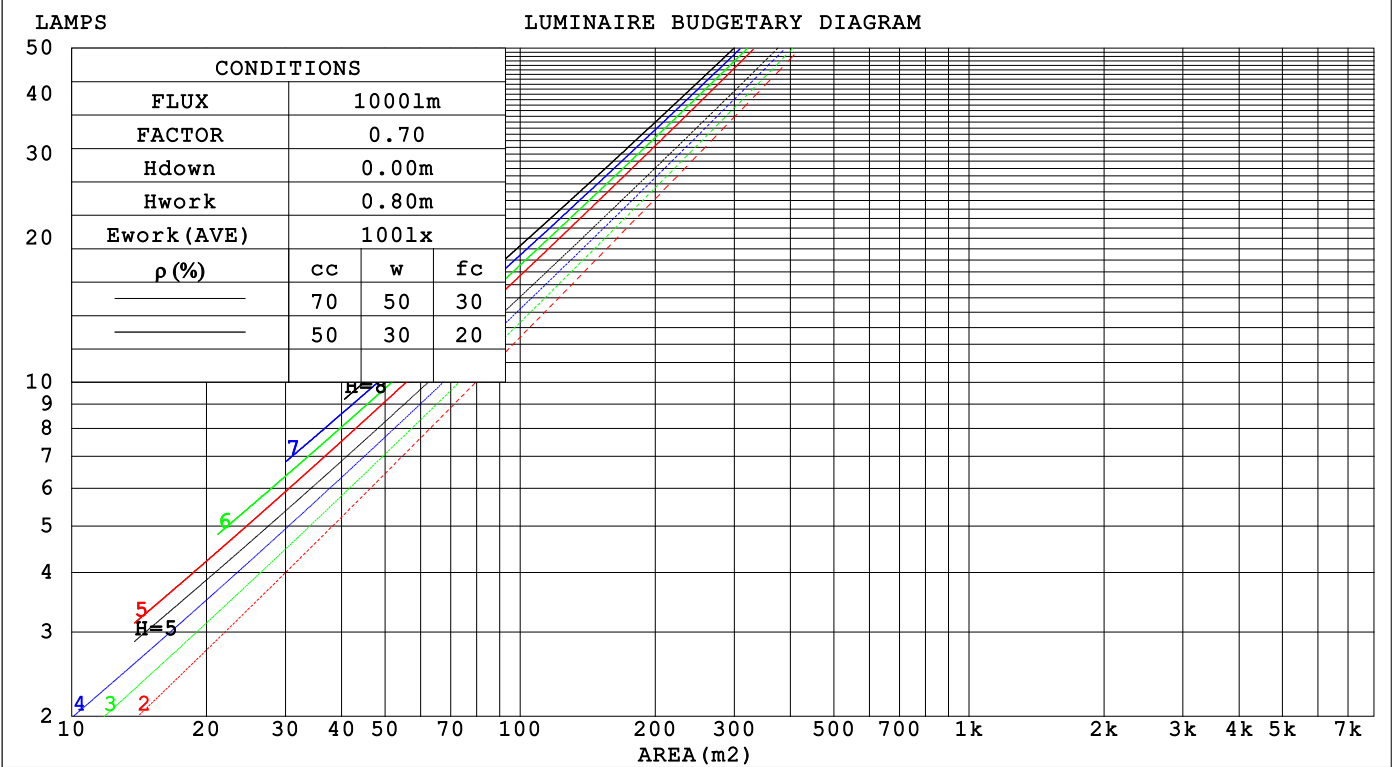
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-03-26

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:240.5V I:0.0288A P:6.1W PF:0.8835 Freq:49.99Hz		
UTHDi:0.17% ITHDi:22.41% KDisp:0.9054		
Lamp Flux:353.054x1 lm		
NAME: MD10-06-DW-16 3000K RA95 24D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 26mm	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: MEDIUM

Temperature:25.3DEG

Operators:DAMIN

Test Date:2024-03-26

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:240.5V I:0.0288A P:6.1W PF:0.8835 Freq:49.99Hz		
UTHDi:0.17% ITHDi:22.41% KDisp:0.9054 Lamp Flux:353.054x1 lm		
NAME: MD10-06-DW-16 3000K RA95 24D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 26mm	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	.160	.091	.029	.153	.087	.028	.141	.081	.026	.129	.075	.024	.119	.069	.022		
2.0	.150	.082	.025	.145	.080	.025	.134	.075	.023	.125	.070	.022	.116	.066	.021		
3.0	.141	.075	.023	.137	.073	.022	.128	.069	.021	.120	.066	.020	.112	.062	.019		
4.0	.133	.069	.020	.129	.068	.020	.122	.065	.019	.115	.062	.019	.108	.059	.018		
5.0	.126	.064	.019	.122	.063	.018	.116	.060	.018	.110	.058	.017	.104	.056	.017		
6.0	.119	.060	.017	.116	.059	.017	.111	.057	.017	.105	.055	.016	.101	.053	.016		
7.0	.113	.056	.016	.111	.055	.016	.106	.054	.015	.101	.052	.015	.097	.050	.015		
8.0	.108	.053	.015	.106	.052	.015	.101	.051	.014	.097	.049	.014	.094	.048	.014		
9.0	.103	.050	.014	.101	.049	.014	.097	.048	.014	.094	.047	.013	.090	.046	.013		
10.0	.099	.047	.013	.097	.047	.013	.094	.046	.013	.090	.045	.013	.087	.044	.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	.153	.133	.115	.131	.114	.100	.090	.079	.069	.052	.046	.041	.017	.015	.013		
3.0	.140	.113	.092	.120	.098	.080	.082	.068	.056	.047	.040	.033	.015	.013	.011		
4.0	.128	.098	.076	.110	.085	.066	.076	.059	.046	.044	.035	.027	.014	.011	.009		
5.0	.119	.086	.063	.102	.075	.055	.070	.052	.039	.041	.031	.023	.013	.010	.008		
6.0	.110	.077	.053	.095	.066	.046	.065	.047	.032	.038	.027	.019	.012	.009	.006		
7.0	.103	.069	.045	.089	.060	.039	.061	.042	.028	.036	.025	.016	.012	.008	.005		
8.0	.097	.062	.039	.083	.054	.034	.058	.038	.024	.034	.022	.014	.011	.007	.005		
9.0	.092	.057	.034	.079	.049	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004		
10.0	.087	.052	.029	.075	.045	.026	.052	.032	.018	.030	.019	.011	.010	.006	.004		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-03-26

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:240.5V I:0.0288A P:6.1W PF:0.8835 Freq:49.99Hz UTHDi:0.17% ITHDi:22.41% KDisp:0.9054Lamp Flux:353.054x1 lm										
NAME: MD10-06-DW-16 3000K RA95 24D						TYPE:		WEIGHT:		
SPEC.:						DIM.:		SERIAL No.:		
MFR.: Norming Lighting						SUR.: 26mm		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	18.1	18.9	18.3	19.0	19.2	18.8	19.6	19.0	19.8	19.9
3H	18.3	19.0	18.5	19.2	19.4	19.0	19.7	19.2	19.9	20.1
4H	18.4	19.1	18.6	19.3	19.5	19.1	19.8	19.3	20.0	20.2
6H	18.4	19.1	18.7	19.3	19.6	19.1	19.8	19.4	20.0	20.3
8H	18.5	19.1	18.8	19.3	19.6	19.1	19.8	19.4	20.0	20.3
12H	18.5	19.1	18.8	19.3	19.6	19.1	19.7	19.4	20.0	20.3
4H 2H	18.1	18.8	18.4	19.0	19.2	18.8	19.5	19.0	19.7	19.9
3H	18.4	19.0	18.7	19.3	19.5	19.0	19.7	19.4	19.9	20.2
4H	18.6	19.1	18.9	19.4	19.7	19.2	19.7	19.5	20.0	20.3
6H	18.7	19.2	19.1	19.5	19.9	19.3	19.8	19.7	20.1	20.5
8H	18.8	19.2	19.1	19.6	19.9	19.3	19.8	19.7	20.1	20.5
12H	18.8	19.2	19.2	19.6	19.9	19.3	19.8	19.7	20.1	20.5
8H 4H	18.6	19.0	19.0	19.4	19.7	19.2	19.6	19.6	20.0	20.3
6H	18.8	19.2	19.2	19.6	20.0	19.3	19.7	19.8	20.1	20.5
8H	18.9	19.2	19.3	19.6	20.1	19.4	19.7	19.8	20.2	20.6
12H	18.9	19.2	19.4	19.6	20.1	19.4	19.7	19.9	20.2	20.6
12H 4H	18.5	19.0	19.0	19.3	19.7	19.1	19.6	19.5	19.9	20.3
6H	18.8	19.1	19.2	19.5	20.0	19.3	19.7	19.8	20.1	20.5
8H	18.9	19.1	19.3	19.6	20.1	19.4	19.7	19.9	20.1	20.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.4 / - 2.0					+ 1.8 / - 2.2				
1.5H	+ 2.3 / - 1.5					+ 3.0 / - 1.9				
2.0H	+ 2.3 / - 1.5					+ 2.8 / - 1.7				

CIE Pub.117, 353.1 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -3.6)
Area: 0.0005 m2

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-03-26

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:240.5V I:0.0288A P:6.1W PF:0.8835 Freq:49.99Hz		
UTHDi:0.17% ITHDi:22.41% KDisp:0.9054 Lamp Flux:353.054x1 lm		
NAME: MD10-06-DW-16 3000K RA95 24D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 26mm	Shielding Angle:

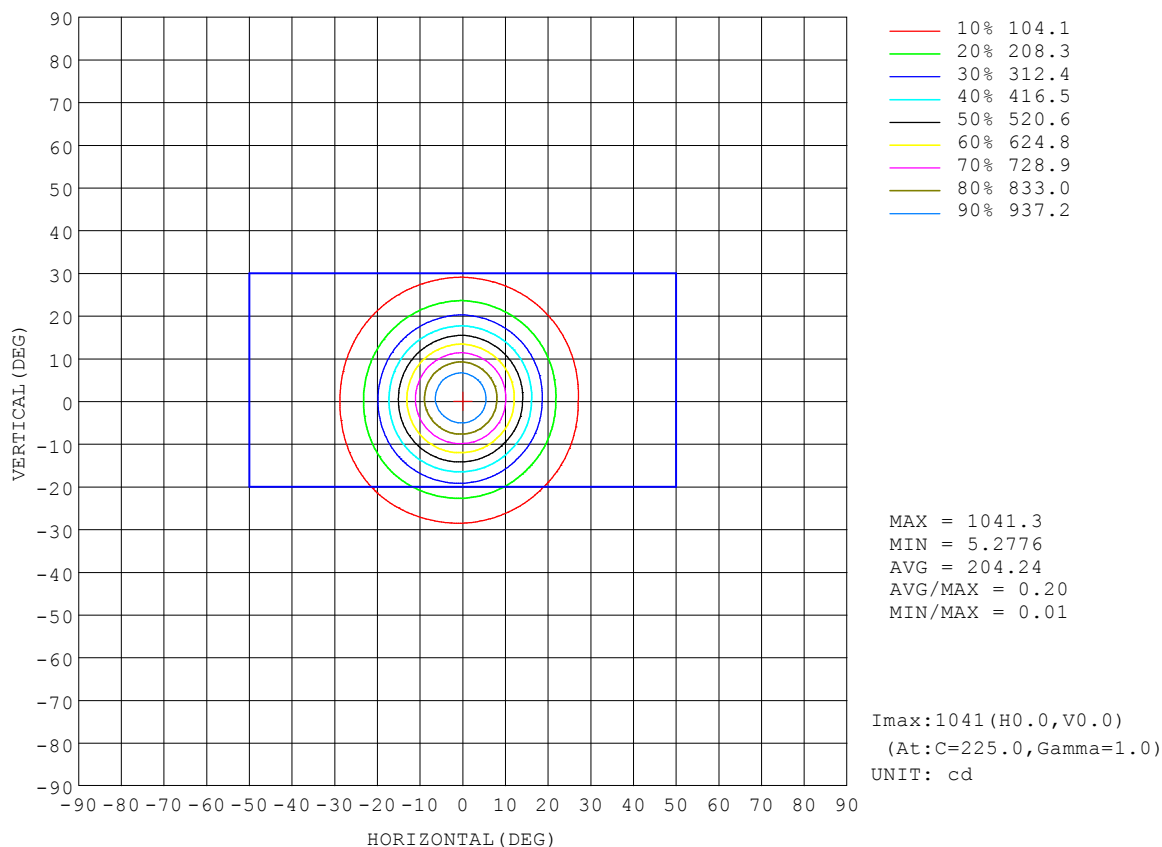
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	80	77	73
0.80	95	89	85	94	89	85	93	88	85	81
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	108	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	102	105	103	101	95
3.00	112	108	106	110	107	104	107	104	102	96
4.00	114	111	109	112	109	107	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: MEDIUM
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2024-03-26

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:240.5V I:0.0288A P:6.1W PF:0.8835 Freq:49.99Hz		
UTHDi:0.17% ITHDi:22.41% KDisp:0.9054 Lamp Flux:353.054x1 lm		
NAME: MD10-06-DW-16 3000K RA95 24D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 26mm	Shielding Angle:

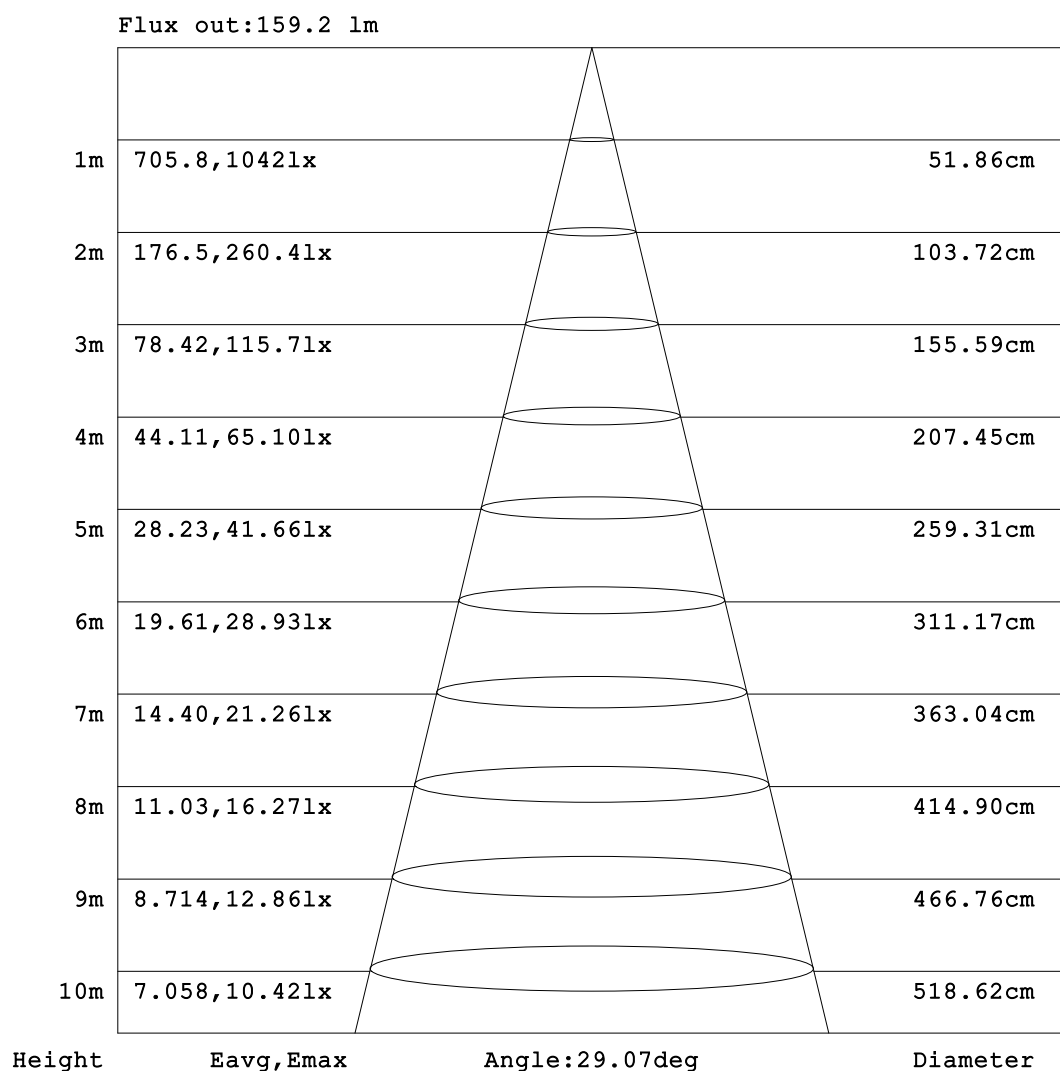


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-03-26

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:240.5V I:0.0288A P:6.1W PF:0.8835 Freq:49.99Hz		
UTHDi:0.17% ITHDi:22.41% KDisp:0.9054 Lamp Flux:353.054x1 lm		
NAME: MD10-06-DW-16 3000K RA95 24D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 26mm	Shielding Angle:



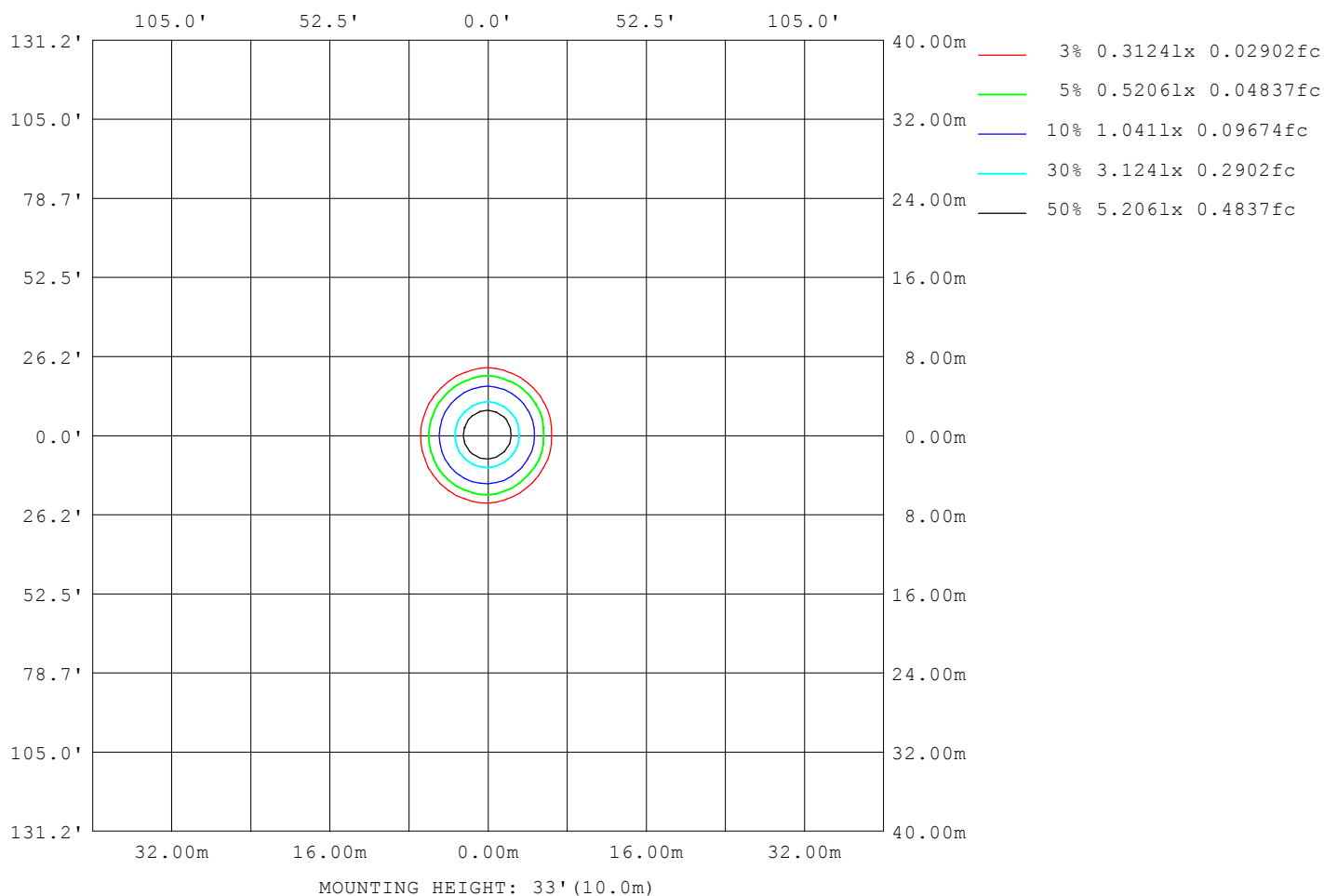
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-03-26

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:240.5V I:0.0288A P:6.1W PF:0.8835 Freq:49.99Hz		
UTHDi:0.17% ITHDi:22.41% KDisp:0.9054 Lamp Flux:353.054x1 lm		
NAME: MD10-06-DW-16 3000K RA95 24D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 26mm	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-26

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:240.5V I:0.0288A P:6.1W PF:0.8835 Freq:49.99Hz		
UTHDi:0.17% ITHDi:22.41% KDisp:0.9054 Lamp Flux:353.054x1 lm		
NAME: MD10-06-DW-16 3000K RA95 24D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 26mm	Shielding Angle:

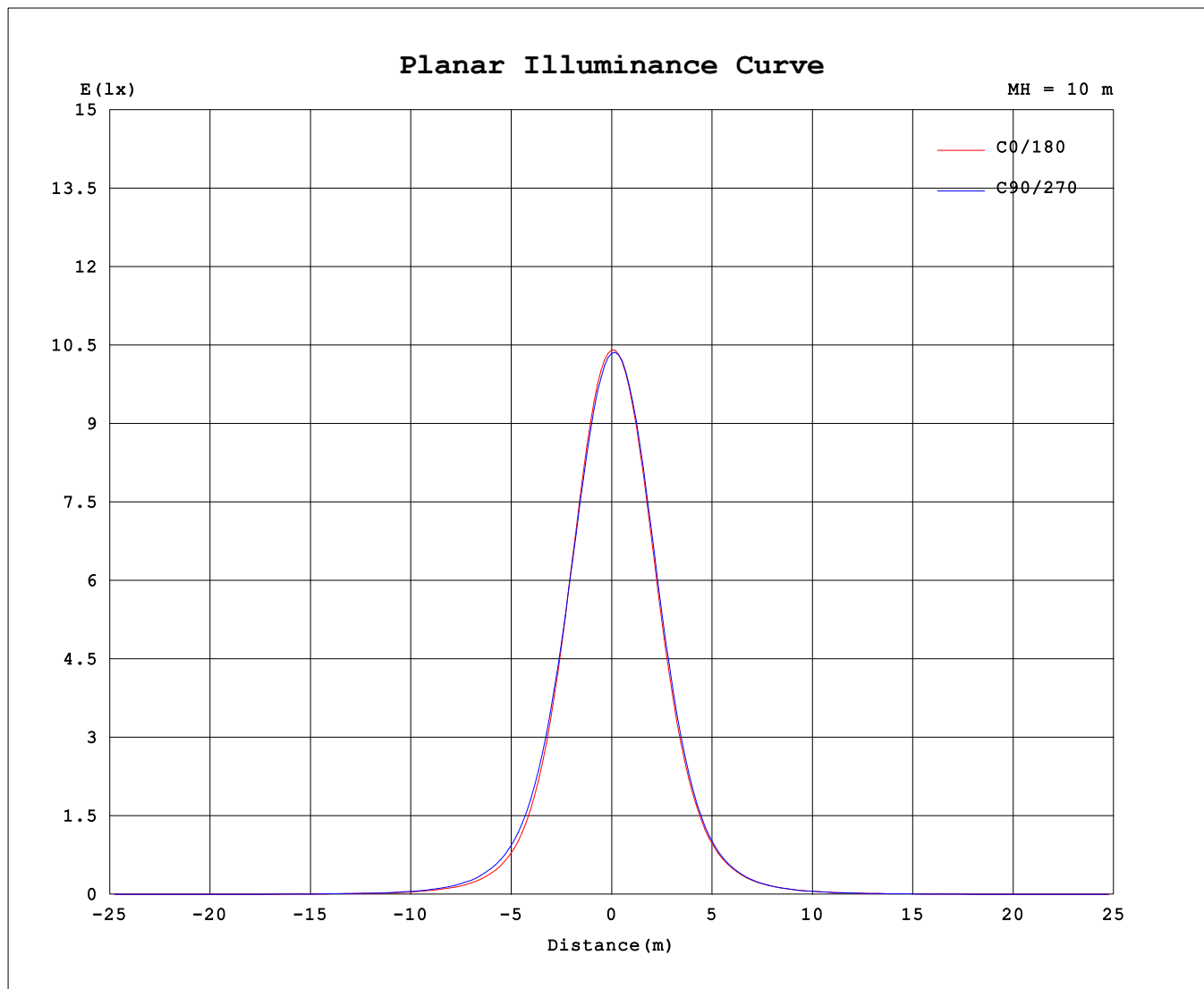
AvgL	cd/m2
L_0~180 (65) av	13512
L_0~180 (75) av	10926
L_0~180 (85) av	8786
L_90~270 (65) av	13881
L_90~270 (75) av	10994
L_90~270 (85) av	8302
L_45 (65) av	13557
L_45 (75) av	11175
L_45 (85) av	8824

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-03-26

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: MEDIUM
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2024-03-26

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	1037	1037	1037	1037	1037	1037	1037	1037
3.0	1002	995.0	994.7	1005	1019	1026	1028	1015
6.0	913.8	900.5	904.5	922.6	946.7	961.8	961.0	938.7
9.0	780.0	765.5	773.5	799.1	828.4	846.6	846.7	814.9
12.0	624.3	610.6	626.8	654.6	677.9	696.0	699.4	662.9
15.0	468.2	458.9	483.9	508.4	522.1	538.5	544.6	508.2
18.0	334.0	329.1	357.3	377.4	383.0	395.0	403.4	371.2
21.0	230.2	229.0	255.0	270.7	271.2	278.0	286.3	259.5
24.0	154.9	157.1	178.8	190.9	187.7	191.3	198.0	177.2
27.0	104.3	107.9	125.0	133.1	128.9	131.0	135.4	120.2
30.0	72.07	74.83	88.63	93.34	89.20	90.41	92.97	82.55
33.0	50.32	52.81	62.55	65.52	62.26	62.62	64.68	57.28
36.0	35.81	37.78	44.57	46.38	44.09	43.96	45.22	40.25
39.0	25.79	27.30	31.90	33.04	31.62	31.28	32.06	28.72
42.0	18.88	20.04	23.06	23.92	23.13	22.67	23.20	20.84
45.0	13.87	14.96	16.78	17.43	16.99	16.55	17.12	15.31
48.0	10.45	11.34	12.39	12.96	12.61	12.34	12.81	11.41
51.0	7.907	8.581	9.262	9.759	9.622	9.340	9.771	8.689
54.0	6.081	6.542	6.978	7.439	7.593	7.172	7.506	6.641
57.0	4.698	4.998	5.346	5.763	6.092	5.545	5.824	5.124
60.0	3.652	3.882	4.107	4.539	4.784	4.292	4.567	3.959
63.0	2.877	3.120	3.229	3.624	3.714	3.346	3.597	3.084
66.0	2.386	2.568	2.613	2.982	2.951	2.701	2.826	2.476
69.0	1.962	2.120	2.129	2.446	2.359	2.240	2.262	1.999
72.0	1.610	1.727	1.747	2.035	1.929	1.855	1.814	1.624
75.0	1.283	1.366	1.397	1.616	1.545	1.514	1.448	1.289
78.0	0.9901	1.034	1.069	1.238	1.200	1.195	1.126	1.008
81.0	0.6969	0.6616	0.6849	0.8156	0.8458	0.8800	0.8115	0.7289
84.0	0.4213	0.3931	0.4058	0.5023	0.5096	0.5543	0.4923	0.4577
87.0	0.0446	0	0.0001	0.0128	0.2167	0.2879	0.2790	0.1996
90.0	0	0	0	0	0	0	0	0

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-03-26

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: