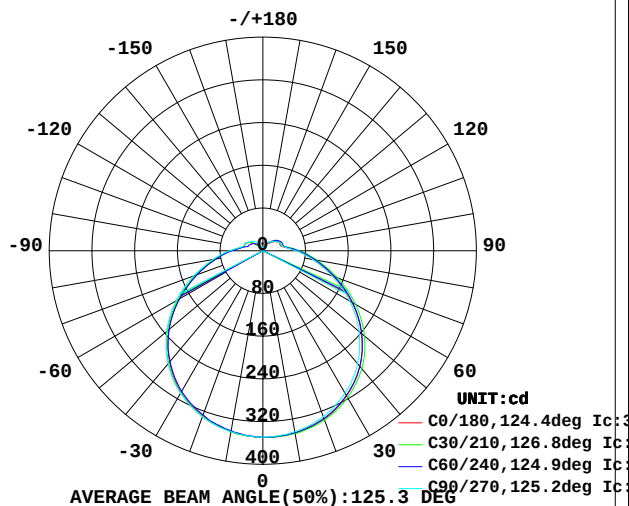


LUMINAIRE PHOTOMETRIC TEST REPORT

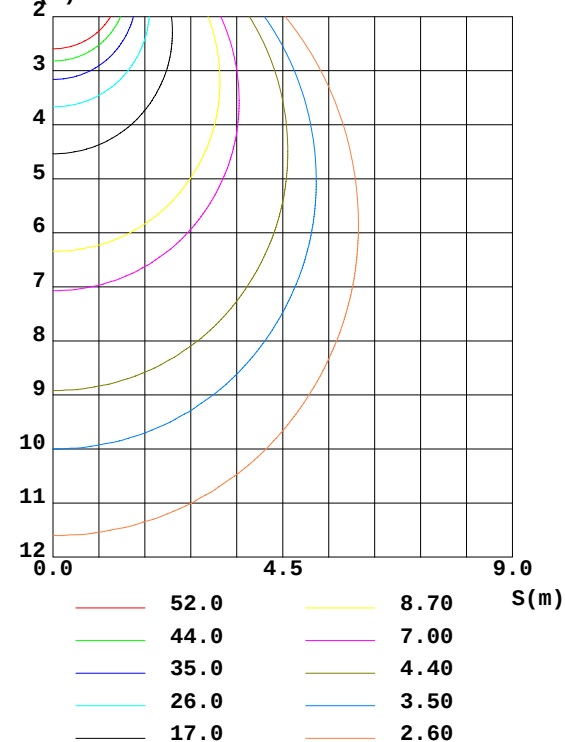
Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm		
NAME: ASD-LFMDR-12D20DH-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 65.97 lm/W			
MODEL	ASD-LFMDR-12D20DH-NK	I _{max} (cd)	350.3	S/MH(C0/180)	1.30
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.32
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1408.2	η UP, DN(C0-180)	6.7, 43.4
NOMINAL FLUX(lm)	1408.18	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	6.6, 43.2
LAMPS INSIDE	1	η up(%)	13.3	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	86.7	CIBSE SHR MAX	1.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-11-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:7.500m [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	347.1	346.9	344.3	342.3	343.5	342.3	344.3	346.9	0- 10	33.12	33.12	2.35,2.35
20	335.5	336.3	330.9	327.2	329.0	327.2	330.9	336.3	10- 20	95.93	129.1	9.16,9.16
30	313.6	315.3	307.6	303.4	306.1	303.4	307.6	315.3	20- 30	148.5	277.6	19.7,19.7
40	282.8	285.7	276.3	269.7	271.9	269.7	276.3	285.7	30- 40	184.6	462.2	32.8,32.8
50	241.3	245.4	235.3	226.3	229.4	226.3	235.3	245.4	40- 50	199.4	661.6	47,47
60	192.3	196.3	187.7	177.6	180.2	177.6	187.7	196.3	50- 60	190.2	851.8	60.5,60.5
70	140.7	145.6	138.0	128.2	131.3	128.2	138.0	145.6	60- 70	161.0	1013	71.9,71.9
80	96.12	101.9	95.44	87.77	90.14	87.77	95.44	101.9	70- 80	122.1	1135	80.6,80.6
90	63.97	67.62	62.08	57.81	59.51	57.81	62.08	67.62	80- 90	85.39	1220	86.7,86.7
100	40.48	43.46	41.33	38.19	38.35	38.19	41.33	43.46	90-100	55.28	1276	90.6,90.6
110	34.24	38.30	36.31	30.69	36.72	30.69	36.31	38.30	100-110	38.95	1315	93.3,93.3
120	32.83	36.00	32.34	26.09	30.64	26.09	32.34	36.00	110-120	33.95	1348	95.8,95.8
130	26.34	29.84	27.62	16.02	20.39	16.02	27.62	29.84	120-130	26.01	1374	97.6,97.6
140	18.70	21.80	22.61	13.39	11.80	13.39	22.61	21.80	130-140	16.78	1391	98.8,98.8
150	13.84	14.17	15.50	7.884	9.718	7.884	15.50	14.17	140-150	9.859	1401	99.5,99.5
160	7.125	7.442	8.293	6.758	6.060	6.758	8.293	7.442	150-160	4.559	1406	99.8,99.8
170	6.164	6.868	6.267	6.677	5.253	6.677	6.267	6.868	160-170	1.941	1408	100,100
180	5.461	5.242	5.346	5.492	5.369	5.492	5.346	5.242	170-180	0.5706	1408	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

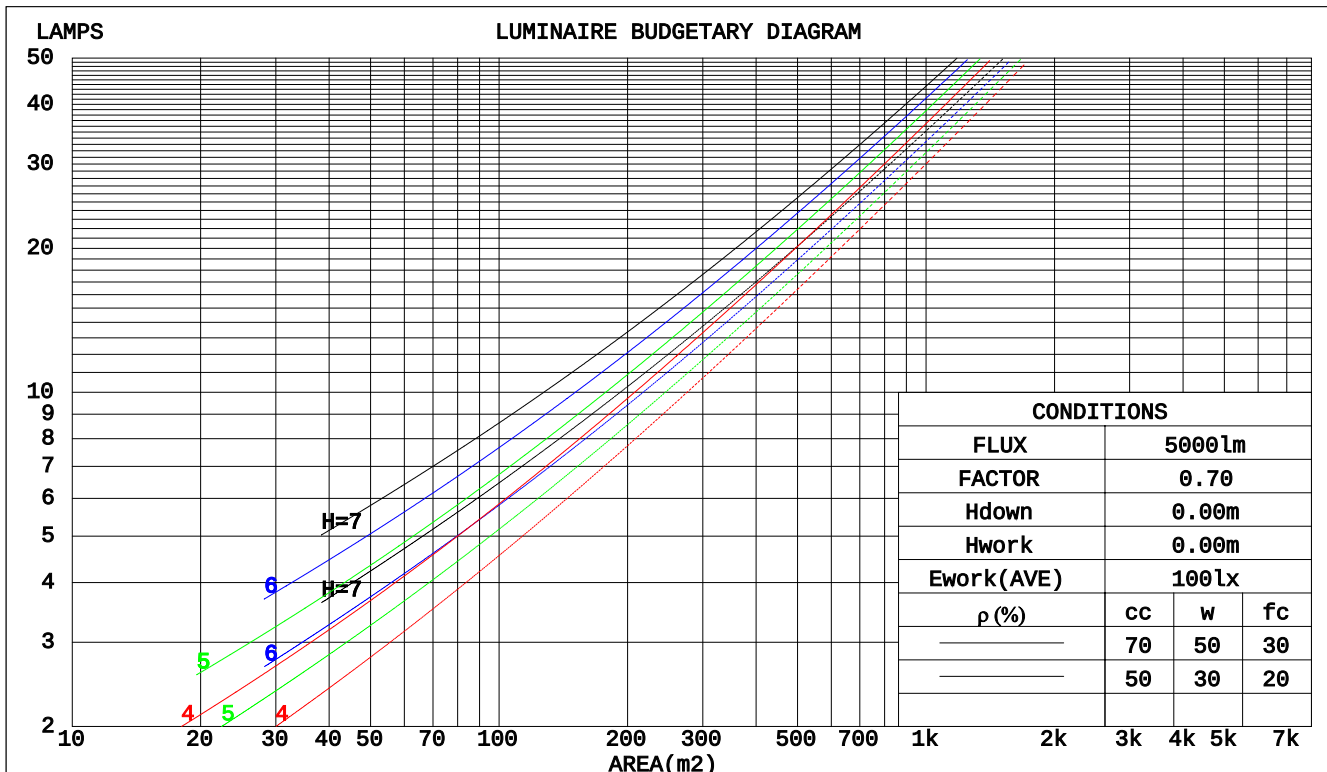
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm		
NAME: ASD-LFMDR-12D20DH-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.16	1.16	1.16	1.12	1.12	1.12	1.04	1.04	1.04	.96	.96	.96	.90	.90	.90	.87
1.0	.98	.93	.88	.94	.90	.85	.87	.84	.80	.81	.78	.75	.75	.73	.71	.68
2.0	.84	.76	.70	.81	.74	.68	.75	.70	.65	.70	.65	.61	.65	.61	.58	.55
3.0	.73	.64	.57	.71	.62	.56	.66	.59	.53	.61	.55	.51	.57	.52	.48	.45
4.0	.64	.55	.48	.62	.54	.47	.58	.51	.45	.54	.48	.43	.50	.45	.41	.38
5.0	.57	.48	.41	.55	.47	.40	.52	.44	.38	.48	.42	.37	.45	.40	.35	.33
6.0	.51	.42	.35	.50	.41	.35	.46	.39	.33	.43	.37	.32	.41	.35	.31	.28
7.0	.46	.37	.31	.45	.36	.30	.42	.35	.29	.39	.33	.28	.37	.31	.27	.25
8.0	.42	.33	.27	.41	.33	.27	.38	.31	.26	.36	.30	.25	.34	.28	.24	.22
9.0	.39	.30	.25	.37	.30	.24	.35	.28	.23	.33	.27	.22	.31	.26	.22	.20
10.0	.35	.27	.22	.34	.27	.22	.33	.26	.21	.31	.25	.20	.29	.24	.20	.18



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm					
NAME: ASD-LFMDR-12D20DH-NK			TYPE:LED		WEIGHT:
SPEC.:5000K			DIM.:		SERIAL No.:
MFR.: ASD Lighting corp			SUR.:		PROTECTION ANGLE:

ρ _{CC}	80%			70%			50%			30%			10%			0	
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ _{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.365	.208	.066	.354	.202	.064	.333	.191	.061	.313	.181	.058	.295	.171	.055		
2.0	.322	.176	.054	.312	.172	.053	.293	.163	.051	.275	.154	.048	.259	.147	.046		
3.0	.289	.154	.046	.280	.150	.045	.263	.142	.043	.247	.135	.041	.232	.129	.040		
4.0	.262	.136	.040	.254	.133	.039	.238	.126	.038	.224	.120	.036	.210	.114	.035		
5.0	.239	.122	.035	.232	.119	.035	.218	.113	.033	.205	.108	.032	.192	.103	.031		
6.0	.220	.110	.032	.213	.108	.031	.200	.103	.030	.188	.098	.029	.177	.093	.028		
7.0	.203	.100	.028	.197	.098	.028	.185	.094	.027	.175	.090	.026	.164	.085	.025		
8.0	.189	.092	.026	.183	.090	.025	.173	.086	.025	.163	.082	.024	.153	.079	.023		
9.0	.176	.085	.024	.171	.083	.023	.161	.080	.023	.152	.076	.022	.144	.073	.021		
10.0	.165	.079	.022	.160	.077	.022	.151	.074	.021	.143	.071	.020	.135	.068	.019		

ρ _{CC}	80%			70%			50%			30%			10%			0
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.292	.292	.292	.250	.250	.250	.170	.170	.170	.098	.098	.098	.031	.031	.031	
1.0	.287	.258	.233	.245	.222	.200	.168	.152	.138	.097	.088	.080	.031	.028	.026	
2.0	.279	.235	.198	.239	.202	.171	.164	.140	.119	.095	.081	.070	.030	.026	.023	
3.0	.272	.218	.175	.233	.188	.152	.160	.131	.107	.092	.076	.063	.030	.025	.021	
4.0	.264	.205	.161	.227	.178	.140	.156	.124	.098	.090	.072	.058	.029	.024	.019	
5.0	.257	.196	.150	.220	.169	.131	.152	.118	.092	.088	.069	.055	.028	.023	.018	
6.0	.249	.187	.143	.214	.162	.125	.148	.114	.088	.086	.067	.052	.028	.022	.017	
7.0	.242	.181	.138	.208	.157	.120	.144	.110	.085	.084	.065	.051	.027	.021	.017	
8.0	.236	.175	.134	.203	.152	.117	.140	.107	.083	.082	.063	.049	.026	.021	.016	
9.0	.229	.170	.130	.198	.148	.114	.137	.104	.081	.080	.061	.048	.026	.020	.016	
10.0	.224	.166	.128	.193	.144	.112	.134	.102	.079	.078	.060	.047	.025	.020	.016	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm											
NAME: ASD-LFMDR-12D20DH-NK					TYPE:LED			WEIGHT:			
SPEC.:5000K					DIM.:			SERIAL No.:			
MFR.: ASD Lighting corp					SUR.:			PROTECTION 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	16.8	18.2	17.3	18.7	19.1	16.7	18.1	17.2	18.6	19.0	
	3H	18.7	20.0	19.2	20.5	21.0	18.7	20.0	19.1	20.4	20.9
	4H	19.7	21.0	20.2	21.4	22.0	19.7	20.9	20.2	21.4	21.9
	6H	20.7	21.9	21.3	22.4	23.0	20.7	21.9	21.2	22.4	22.9
	8H	21.3	22.4	21.8	22.9	23.5	21.3	22.4	21.8	22.9	23.5
	12H	21.9	23.0	22.5	23.5	24.1	21.9	23.0	22.4	23.5	24.1
4H	2H	17.5	18.8	18.0	19.3	19.8	17.5	18.7	18.0	19.2	19.7
	3H	19.7	20.8	20.2	21.3	21.9	19.6	20.7	20.2	21.2	21.8
	4H	20.8	21.8	21.4	22.4	23.0	20.8	21.8	21.3	22.3	22.9
	6H	22.0	22.9	22.6	23.5	24.1	22.0	22.9	22.6	23.5	24.1
	8H	22.7	23.5	23.3	24.1	24.8	22.7	23.5	23.3	24.1	24.7
	12H	23.4	24.2	24.1	24.8	25.5	23.4	24.2	24.0	24.8	25.5
8H	4H	21.3	22.2	21.9	22.7	23.4	21.3	22.1	21.9	22.7	23.3
	6H	22.8	23.5	23.4	24.1	24.8	22.8	23.5	23.4	24.1	24.8
	8H	23.6	24.3	24.3	24.9	25.6	23.6	24.2	24.3	24.9	25.6
	12H	24.6	25.1	25.3	25.8	26.6	24.6	25.1	25.3	25.8	26.5
12H	4H	21.4	22.2	22.0	22.8	23.5	21.4	22.1	22.0	22.7	23.4
	6H	23.0	23.6	23.7	24.3	25.0	23.0	23.6	23.6	24.2	25.0
	8H	24.0	24.5	24.6	25.2	25.9	23.9	24.5	24.6	25.1	25.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					

CIE Pub.117 Corrected 1408 lm Total Lamp Luminous Flux.(8log(F/F0) = 1.2)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm		
NAME: ASD-LFMDR-12D20DH-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

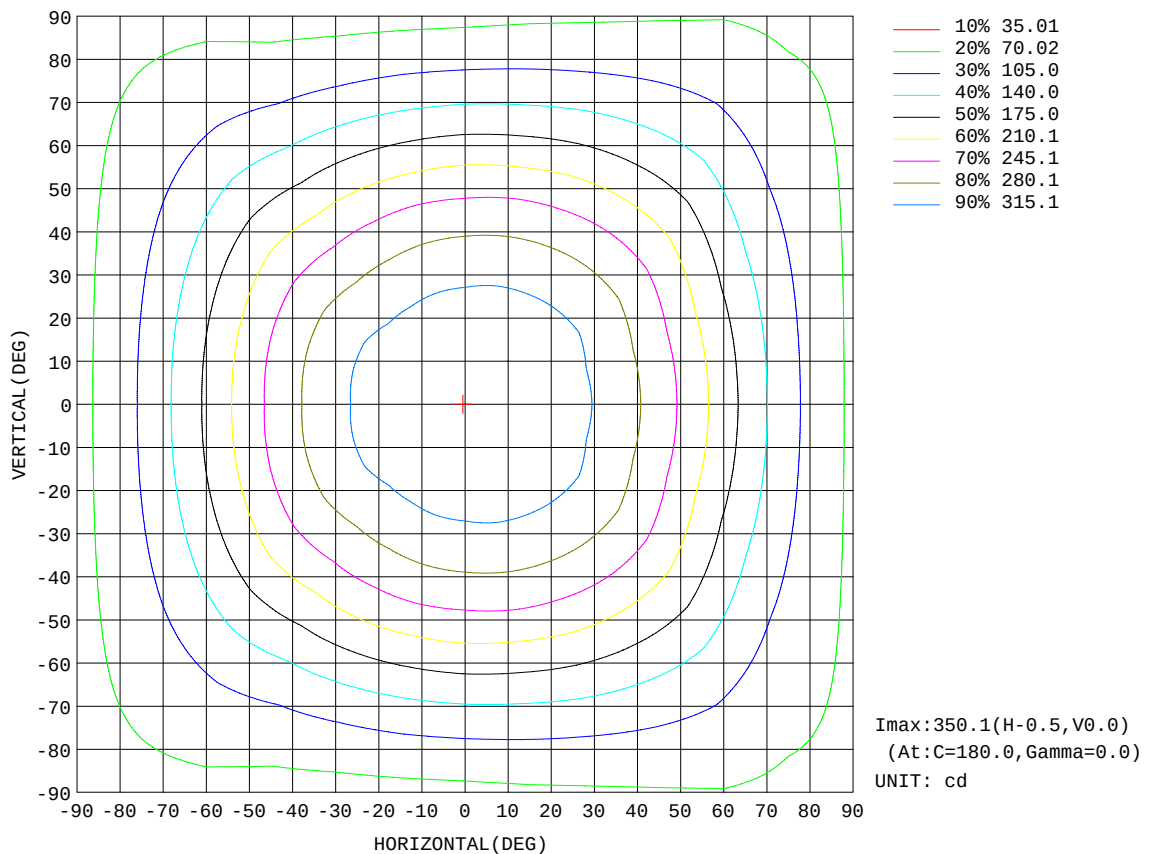
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	50	38	31	49	38	31	48	37	30	24
0.80	60	47	39	58	46	39	56	45	38	30
1.00	68	55	47	66	54	47	63	55	46	37
1.25	75	63	54	73	61	54	69	59	52	43
1.50	80	68	60	77	67	59	73	64	57	48
2.00	87	77	69	84	75	67	79	71	65	54
2.50	91	82	74	88	80	73	83	75	70	58
3.00	95	86	79	92	84	78	86	79	74	62
4.00	99	92	86	96	89	84	89	84	80	67
5.00	102	96	90	99	93	88	92	87	83	70
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm		
NAME: ASD-LFMDR-12D20DH-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

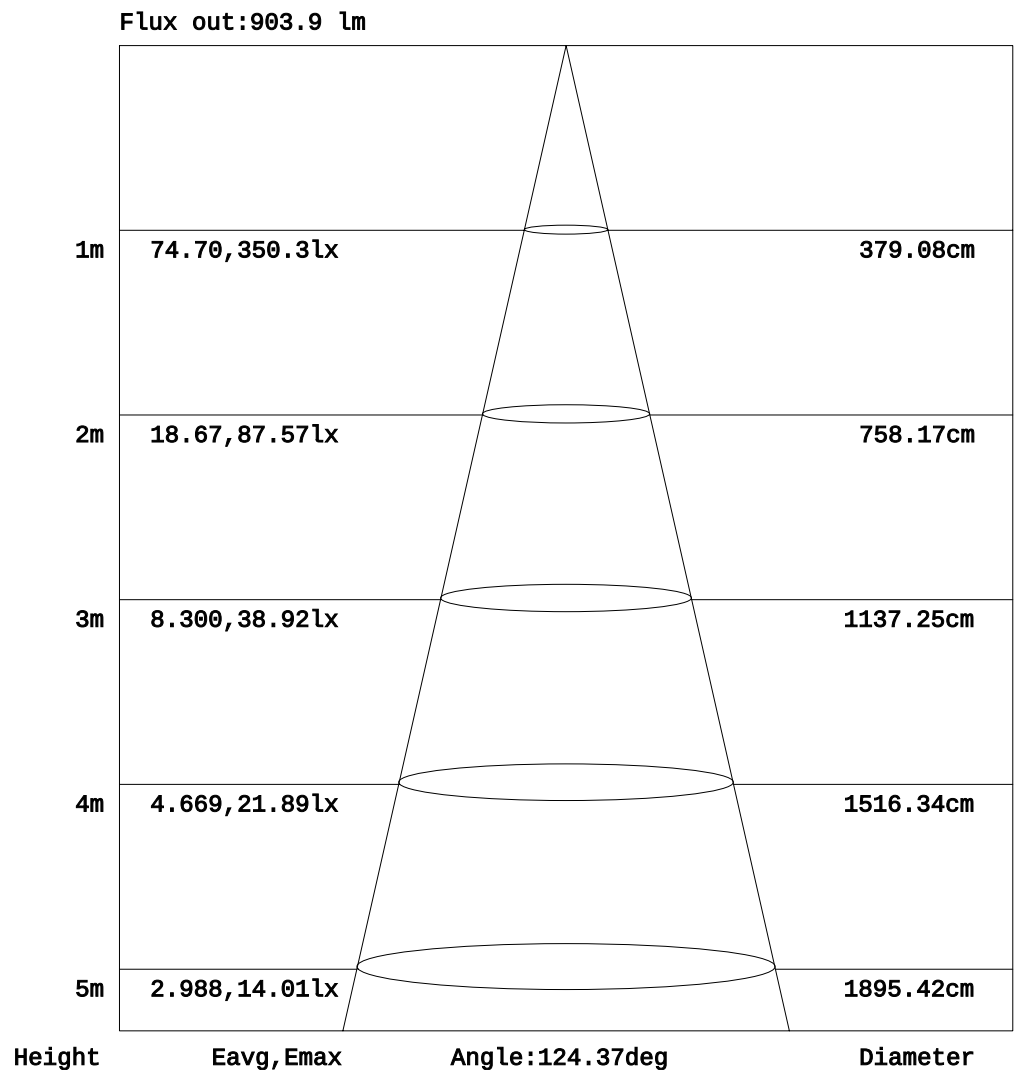


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2025-11-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.291
Humidity: 65.0%
Test Distance: 7.500m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm		
NAME: ASD-LFMDR-12D20DH-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:



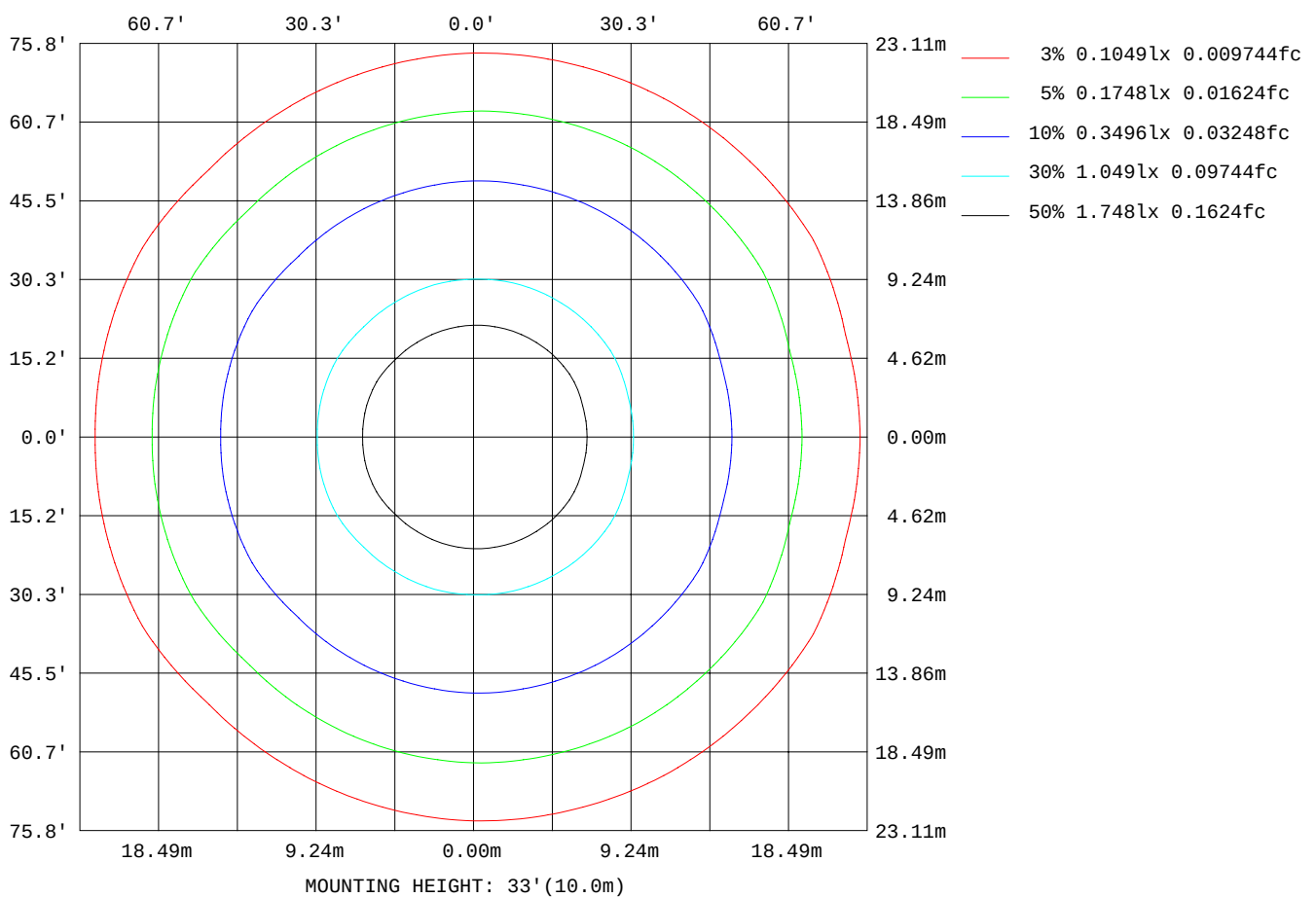
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm		
NAME: ASD-LFMDR-12D20DH-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2025-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.291
 Humidity: 65.0%
 Test Distance: 7.500m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm		
NAME: ASD-LFMDR-12D20DH-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

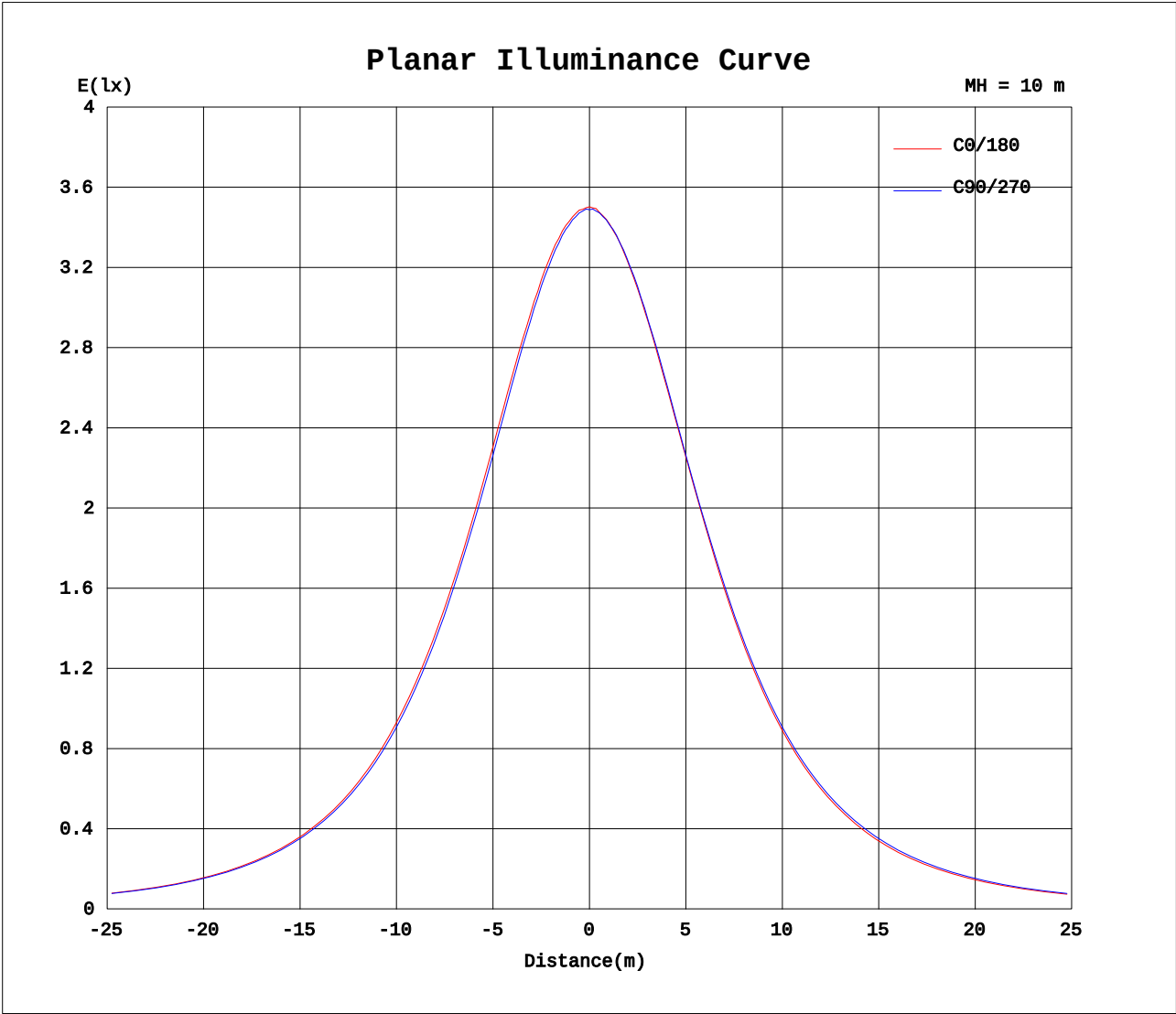
AvgL	cd/m2
L_0~180(65)av	3804
L_0~180(75)av	4368
L_0~180(85)av	8771
L_90~270(65)av	3845
L_90~270(75)av	4445
L_90~270(85)av	8910
L_45(65)av	3827
L_45(75)av	4424
L_45(85)av	8934

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-11-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm																		
NAME: ASD-LFMDR-12D20DH-NK									TYPE:LED					WEIGHT:				
SPEC.:5000K									DIM.:					SERIAL No.:				
MFR.: ASD Lighting corp									SUR.:					PROTECTION ANGLE:				

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	350	350	349	349	349	349	349	349	350	349	350	350	350	350	350	349	350	349	349
5	349	349	349	349	348	348	348	347	347	347	348	348	348	348	348	347	347	347	348
10	347	347	347	347	346	345	344	344	342	342	344	344	343	344	344	342	342	344	344
15	342	342	343	343	341	340	338	338	337	336	339	338	338	338	339	336	337	338	338
20	335	335	337	336	334	332	331	330	327	327	330	330	329	330	330	327	327	330	331
25	326	325	329	327	325	323	320	319	317	316	320	320	319	320	320	316	317	319	320
30	314	313	317	315	313	311	308	306	304	303	308	308	306	308	308	303	304	306	308
35	300	299	304	302	299	296	294	291	288	288	293	292	290	292	293	288	288	291	294
40	283	282	288	286	283	280	276	274	271	270	275	274	272	274	275	270	271	274	276
45	263	263	270	267	263	261	257	255	251	250	255	254	252	254	255	250	251	255	257
50	241	241	248	245	242	239	235	233	229	226	233	231	229	231	233	226	229	233	235
55	218	216	225	221	219	215	212	208	205	203	210	207	206	207	210	203	205	208	212
60	192	191	200	196	194	190	188	184	180	178	184	182	180	182	184	178	180	184	188
65	166	165	175	171	169	165	163	159	155	152	159	157	155	157	159	152	155	159	163
70	141	139	149	146	144	140	138	134	131	128	135	133	131	133	135	128	131	134	138
75	117	116	125	123	121	118	115	113	109	106	112	111	109	111	112	106	109	113	115
80	96.1	96.0	103	102	99.9	98.0	95.4	92.7	89.1	87.8	92.3	91.9	90.1	91.9	92.3	87.8	89.1	92.7	95.4
85	78.9	78.9	84.7	83.7	82.1	80.6	77.7	75.5	72.9	72.1	76.1	75.4	74.0	75.4	76.1	72.1	72.9	75.5	77.7
90	64.0	63.9	68.8	67.6	66.2	64.7	62.1	60.4	58.3	57.8	61.6	61.0	59.5	61.0	61.6	57.8	58.3	60.4	62.1
95	50.6	50.3	56.2	55.1	52.8	51.2	49.6	48.0	46.3	45.9	48.9	48.5	46.8	48.5	48.9	45.9	46.3	48.0	49.6
100	40.5	40.6	43.5	43.5	42.8	42.1	41.3	40.4	38.4	38.2	40.2	39.8	38.3	39.8	40.2	38.2	38.4	40.4	41.3
105	35.5	35.7	37.8	38.4	39.1	39.3	37.2	34.0	30.4	33.0	35.9	35.8	35.6	35.8	35.9	33.0	30.4	34.0	37.2
110	34.2	34.8	36.6	38.3	39.2	39.6	36.3	32.1	28.8	30.7	36.2	36.7	36.7	36.7	36.2	30.7	28.8	32.1	36.3
115	34.2	34.9	36.7	37.5	38.5	38.9	35.0	31.5	27.1	28.9	34.7	34.7	34.7	34.7	34.7	28.9	27.1	31.5	35.0
120	32.8	33.5	35.6	36.0	36.6	36.1	32.3	29.7	25.0	26.1	31.6	31.7	30.6	31.7	31.6	26.1	25.0	29.7	32.3
125	30.0	30.8	33.4	34.0	33.6	33.1	29.7	27.9	23.2	20.7	26.8	26.6	26.4	26.6	26.8	20.7	23.2	27.9	29.7
130	26.3	27.8	30.1	29.8	30.8	29.8	27.6	25.7	21.1	16.0	21.2	21.0	20.4	21.0	21.2	16.0	21.1	25.7	27.6
135	22.0	23.0	24.6	25.4	26.5	26.4	25.7	23.0	18.7	14.4	14.6	16.9	15.2	16.9	14.6	14.4	18.7	23.0	25.7
140	18.7	18.9	20.5	21.8	22.3	23.3	22.6	20.0	16.1	13.4	10.6	12.5	11.8	12.5	10.6	13.4	16.1	20.0	22.6
145	16.8	16.7	18.3	18.0	19.6	19.5	18.9	16.8	13.6	11.1	10.6	10.8	10.0	10.8	10.6	11.1	13.6	16.8	18.9
150	13.8	14.1	15.0	14.2	14.5	15.5	15.5	14.2	10.9	7.88	10.4	10.3	9.72	10.3	10.4	7.88	10.9	14.2	15.5
155	9.09	9.58	10.0	9.56	10.5	10.4	10.6	9.90	8.93	7.35	8.05	8.55	8.27	8.55	8.05	7.35	8.93	9.90	10.6
160	7.13	7.20	7.64	7.44	7.72	8.48	8.29	8.67	7.77	6.76	6.22	6.12	6.06	6.12	6.22	6.76	7.77	8.67	8.29
165	6.73	7.11	6.88	6.87	7.68	7.17	6.97	6.97	6.66	6.37	6.17	6.19	5.69	6.19	6.17	6.37	6.66	6.97	6.97
170	6.16	6.70	7.37	6.87	6.38	6.74	6.27	6.50	6.86	6.68	5.63	5.39	5.25	5.39	5.63	6.68	6.86	6.50	6.27
175	5.27	5.41	5.90	5.74	5.51	5.43	5.48	5.88	6.26	6.40	5.72	5.28	5.28	5.28	5.72	6.40	6.26	5.88	5.48
180	5.46	5.43	5.23	5.24	5.23	5.25	5.35	5.36	5.43	5.49	5.40	5.38	5.37	5.38	5.40	5.49	5.43	5.36	5.35

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.2V I:0.1916A P:21.35W PF:0.9268 Lamp Flux:1408.18x1 lm		
NAME: ASD-LFMDR-12D20DH-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345													
0	349	349	349	349	350													
5	348	348	349	349	349													
10	345	346	347	347	347													
15	340	341	343	343	342													
20	332	334	336	337	335													
25	323	325	327	329	325													
30	311	313	315	317	313													
35	296	299	302	304	299													
40	280	283	286	288	282													
45	261	263	267	270	263													
50	239	242	245	248	241													
55	215	219	221	225	216													
60	190	194	196	200	191													
65	165	169	171	175	165													
70	140	144	146	149	139													
75	118	121	123	125	116													
80	98.0	99.9	102	103	96.0													
85	80.6	82.1	83.7	84.7	78.9													
90	64.7	66.2	67.6	68.8	63.9													
95	51.2	52.8	55.1	56.2	50.3													
100	42.1	42.8	43.5	43.5	40.6													
105	39.3	39.1	38.4	37.8	35.7													
110	39.6	39.2	38.3	36.6	34.8													
115	38.9	38.5	37.5	36.7	34.9													
120	36.1	36.6	36.0	35.6	33.5													
125	33.1	33.6	34.0	33.4	30.8													
130	29.8	30.8	29.8	30.1	27.8													
135	26.4	26.5	25.4	24.6	23.0													
140	23.3	22.3	21.8	20.5	18.9													
145	19.5	19.6	18.0	18.3	16.7													
150	15.5	14.5	14.2	15.0	14.1													
155	10.4	10.5	9.56	10.0	9.58													
160	8.48	7.72	7.44	7.64	7.20													
165	7.17	7.68	6.87	6.88	7.11													
170	6.74	6.38	6.87	7.37	6.70													
175	5.43	5.51	5.74	5.90	5.41													
180	5.25	5.23	5.24	5.23	5.43													

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks: