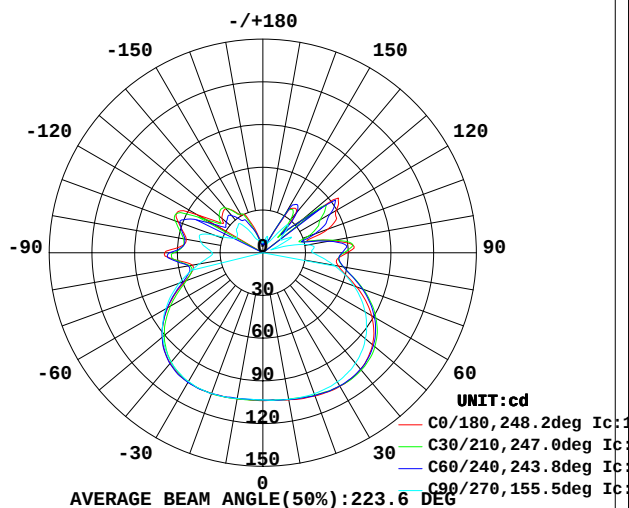


LUMINAIRE PHOTOMETRIC TEST REPORT

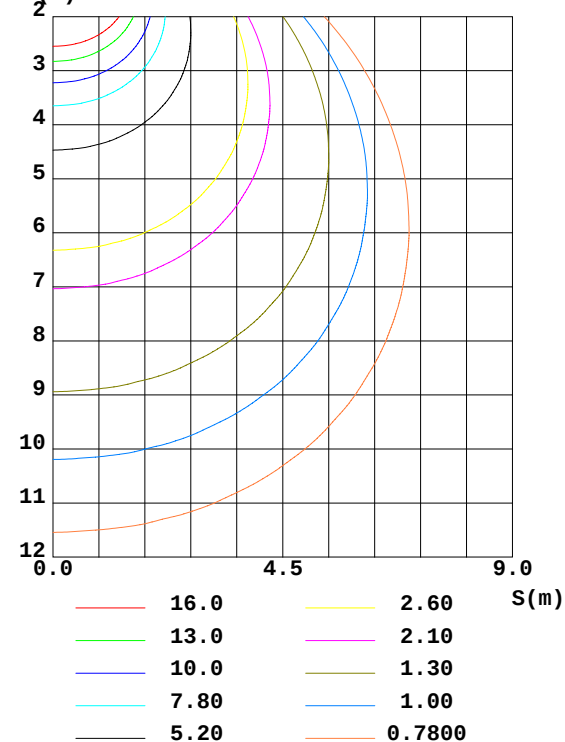
Test:U:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm		
NAME: ASD-LWS12-12D12AC-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 71.25 lm/W			
MODEL	ASD-LWS12-12D12AC-NK	I _{max} (cd)	108.4	S/MH(C0/180)	1.52
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.52
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	855	η UP, DN(C0-180)	13.6, 36.2
NOMINAL FLUX(lm)	855	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	14.8, 35.4
LAMPS INSIDE	1	η up(%)	28.4	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	71.6	CIBSE SHR MAX	1.55

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:2025-06-19

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	104.9	104.5	104.5	104.4	104.2	104.0	103.9	104.0	0- 10	9.919	9.919	1.46,1.46
20	107.1	106.7	105.3	103.7	105.2	104.8	105.2	104.3	10- 20	29.74	39.65	5.82,5.82
30	108.3	108.2	104.6	100.7	105.0	104.2	104.5	102.2	20- 30	48.67	88.33	13,13
40	106.8	107.3	101.1	94.46	101.3	99.77	100.2	97.35	30- 40	64.78	153.1	22.5,22.5
50	100.5	102.1	94.00	84.82	92.20	89.81	91.71	89.74	40- 50	75.44	228.5	33.5,33.5
60	88.12	90.78	82.89	71.72	77.13	73.97	78.68	78.47	50- 60	78.23	306.8	45,45
70	70.03	73.43	68.13	56.21	58.01	55.43	62.57	62.46	60- 70	71.95	378.7	55.6,55.6
80	53.90	55.93	50.83	37.06	50.46	52.38	45.44	44.53	70- 80	59.20	437.9	64.3,64.3
90	59.22	56.93	35.26	19.43	68.92	65.99	35.72	21.18	80- 90	49.97	487.9	71.6,71.6
100	48.74	54.07	32.57	26.81	54.70	55.30	44.17	23.56	90-100	46.92	534.8	78.5,78.5
110	48.72	45.02	6.053	17.23	63.23	64.75	35.99	23.31	100-110	40.07	574.9	84.4,84.4
120	59.66	58.29	21.20	11.69	53.50	47.36	21.41	10.35	110-120	33.67	608.6	89.3,89.3
130	35.92	45.13	16.58	18.33	37.48	37.79	24.17	12.91	120-130	27.38	635.9	93.3,93.3
140	36.06	32.71	23.93	15.18	40.50	39.40	26.67	19.72	130-140	19.79	655.7	96.2,96.2
150	25.93	36.36	9.056	11.21	30.47	29.91	15.72	16.20	140-150	15.80	671.5	98.6,98.6
160	6.882	6.067	8.968	8.409	19.95	17.70	9.370	3.713	150-160	6.361	677.9	99.5,99.5
170	7.411	7.578	9.493	7.760	6.903	6.207	9.534	7.394	160-170	2.722	680.6	99.9,99.9
180	7.964	8.234	7.059	7.160	7.949	8.215	7.071	7.171	170-180	0.6976	681.3	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

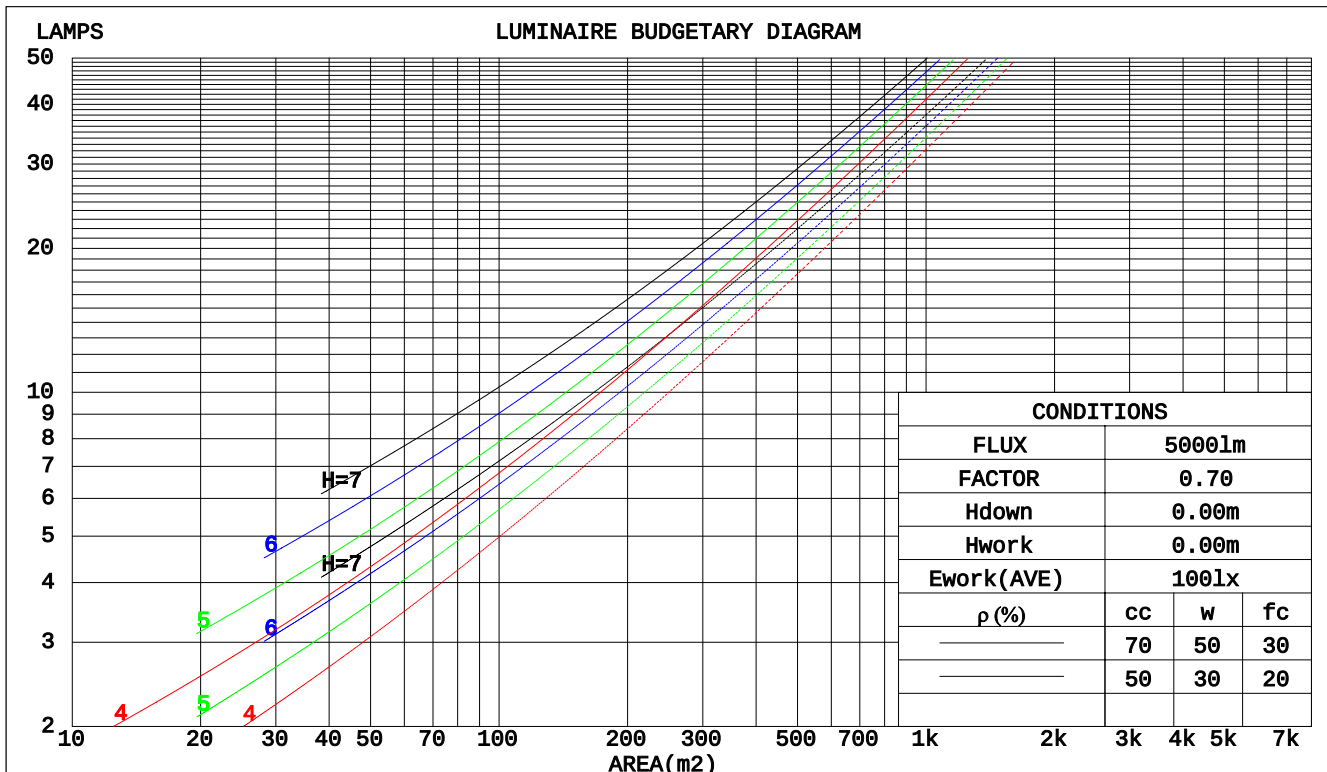
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-06-19

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:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm		
NAME: ASD-LWS12-12D12AC-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	1.12	1.12	1.12	1.06	1.06	1.06	.95	.95	.95	.85	.85	.85	.76	.76	.76	.72
1.0	.93	.88	.83	.88	.83	.79	.79	.75	.71	.70	.67	.64	.62	.60	.57	.53
2.0	.80	.72	.65	.75	.68	.62	.67	.61	.56	.59	.55	.51	.52	.49	.46	.42
3.0	.69	.60	.53	.65	.57	.50	.58	.51	.46	.51	.46	.42	.45	.41	.37	.34
4.0	.60	.51	.44	.57	.48	.42	.51	.44	.38	.45	.39	.35	.40	.35	.31	.28
5.0	.53	.44	.37	.50	.42	.35	.45	.38	.32	.40	.34	.29	.35	.30	.27	.24
6.0	.47	.38	.31	.45	.36	.30	.40	.33	.28	.36	.30	.25	.32	.27	.23	.20
7.0	.43	.34	.27	.40	.32	.26	.36	.29	.24	.32	.26	.22	.29	.24	.20	.17
8.0	.39	.30	.24	.37	.29	.23	.33	.26	.21	.30	.24	.19	.26	.21	.18	.15
9.0	.35	.27	.21	.33	.26	.20	.30	.24	.19	.27	.21	.17	.24	.19	.16	.14
10.0	.32	.24	.19	.31	.23	.18	.28	.21	.17	.25	.19	.16	.22	.18	.14	.12



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2025-06-19

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:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm								
NAME: ASD-LWS12-12D12AC-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	.383	.218	.069	.367	.209	.067	.337	.194	.062	.310	.179	.057	.285	.165	.053	
2.0	.331	.181	.056	.316	.174	.054	.289	.161	.050	.265	.148	.046	.242	.137	.043	
3.0	.294	.156	.047	.281	.150	.045	.256	.139	.042	.234	.128	.039	.212	.118	.036	
4.0	.264	.137	.040	.253	.132	.039	.230	.122	.036	.209	.112	.034	.190	.103	.031	
5.0	.240	.123	.035	.230	.118	.034	.209	.109	.032	.190	.100	.030	.172	.092	.028	
6.0	.220	.110	.032	.210	.106	.031	.192	.098	.029	.174	.090	.027	.158	.083	.025	
7.0	.203	.100	.028	.194	.097	.028	.177	.089	.026	.161	.082	.024	.145	.076	.022	
8.0	.188	.092	.026	.180	.089	.025	.164	.082	.023	.149	.076	.022	.135	.069	.020	
9.0	.175	.085	.024	.168	.082	.023	.153	.076	.021	.139	.070	.020	.126	.064	.018	
10.0	.164	.079	.022	.157	.076	.021	.143	.070	.020	.130	.065	.018	.118	.059	.017	

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	.407	.407	.407	.348	.348	.348	.237	.237	.237	.136	.136	.136	.044	.044	.044	
1.0	.403	.374	.347	.345	.321	.298	.236	.221	.206	.136	.128	.120	.044	.041	.039	
2.0	.397	.351	.313	.340	.302	.270	.233	.209	.189	.134	.122	.111	.043	.039	.036	
3.0	.390	.335	.292	.334	.289	.253	.229	.201	.177	.133	.117	.105	.043	.038	.034	
4.0	.382	.323	.278	.328	.279	.241	.226	.195	.170	.131	.114	.101	.042	.037	.033	
5.0	.375	.313	.268	.322	.271	.233	.222	.189	.165	.128	.111	.098	.041	.036	.032	
6.0	.368	.306	.261	.316	.265	.228	.218	.185	.161	.126	.109	.096	.041	.036	.032	
7.0	.361	.299	.256	.310	.259	.223	.214	.182	.158	.125	.107	.094	.040	.035	.031	
8.0	.354	.294	.252	.305	.255	.220	.211	.179	.156	.123	.106	.093	.040	.035	.031	
9.0	.348	.289	.250	.300	.251	.218	.208	.176	.155	.121	.104	.092	.039	.034	.031	
10.0	.342	.285	.247	.295	.248	.216	.205	.174	.153	.119	.103	.091	.039	.034	.030	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-06-19

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:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm											
NAME: ASD-LWS12-12D12AC-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		13.5	14.7	14.1	15.4	16.1	13.3	14.6	13.9	15.2	16.0
3H		15.8	16.9	16.4	17.6	18.4	15.6	16.8	16.3	17.5	18.3
4H		16.9	18.0	17.6	18.7	19.5	16.9	18.0	17.5	18.6	19.5
6H		18.2	19.2	18.9	19.9	20.8	18.1	19.1	18.8	19.8	20.7
8H		19.0	19.9	19.7	20.7	21.5	18.8	19.8	19.5	20.5	21.3
12H		19.9	20.9	20.6	21.6	22.5	19.5	20.5	20.2	21.2	22.1
4H	2H	14.3	15.4	14.9	16.0	16.9	14.1	15.2	14.8	15.9	16.8
	3H	16.8	17.7	17.5	18.5	19.3	16.7	17.6	17.4	18.4	19.2
	4H	18.1	19.0	18.8	19.7	20.6	18.1	18.9	18.8	19.7	20.6
	6H	19.6	20.3	20.3	21.1	22.1	19.5	20.3	20.3	21.1	22.0
	8H	20.4	21.1	21.2	21.9	22.9	20.3	21.0	21.0	21.8	22.7
	12H	21.5	22.2	22.3	23.0	23.9	21.1	21.8	21.9	22.6	23.6
8H	4H	18.6	19.4	19.4	20.1	21.1	18.6	19.3	19.4	20.1	21.1
	6H	20.4	21.0	21.2	21.8	22.8	20.3	21.0	21.1	21.8	22.8
	8H	21.4	22.0	22.3	22.8	23.8	21.3	21.9	22.2	22.7	23.7
	12H	22.8	23.2	23.6	24.1	25.1	22.5	22.9	23.3	23.8	24.8
12H	4H	18.7	19.4	19.5	20.2	21.2	18.7	19.4	19.5	20.2	21.1
	6H	20.6	21.2	21.4	22.0	23.0	20.6	21.1	21.4	22.0	23.0
	8H	21.8	22.3	22.6	23.1	24.2	21.7	22.2	22.5	23.0	24.1
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		+ 0.3 / - 0.4					+ 0.3 / - 0.5				

CIE Pub.117 Corrected 681.3 lm Total Lamp Luminous Flux.(8log(F/F0) = -1.3)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-06-19

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:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm		
NAME: ASD-LWS12-12D12AC-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

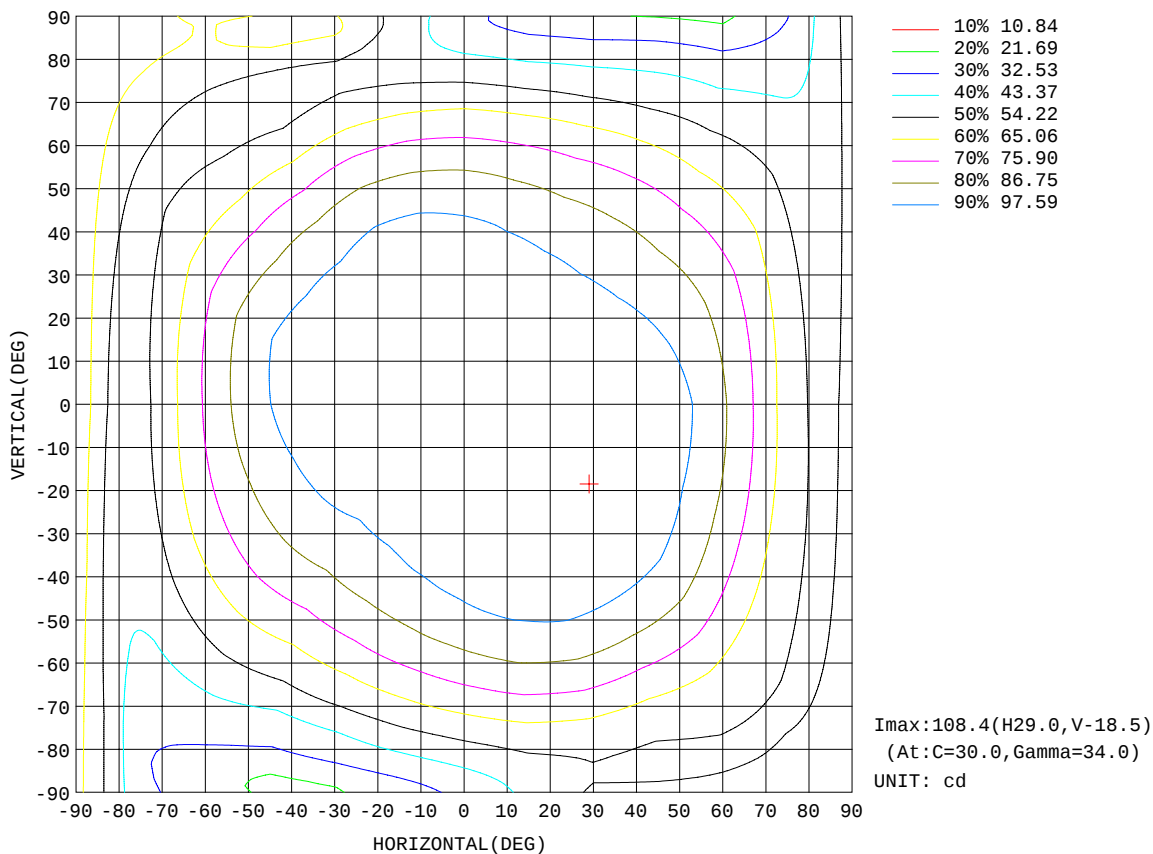
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	44	31	24	42	31	24	40	29	23	16
0.80	53	40	31	51	39	31	47	37	30	21
1.00	61	47	39	58	46	38	54	46	36	27
1.25	68	55	46	65	53	45	59	49	42	31
1.50	73	60	51	70	58	50	63	54	47	35
2.00	80	69	60	77	66	58	69	61	54	41
2.50	85	74	66	81	71	64	73	65	59	44
3.00	89	79	71	84	76	69	76	69	64	48
4.00	94	85	79	89	82	75	80	74	69	52
5.00	97	90	83	92	85	80	82	77	73	55
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:2025-06-19

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:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm		
NAME: ASD-LWS12-12D12AC-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

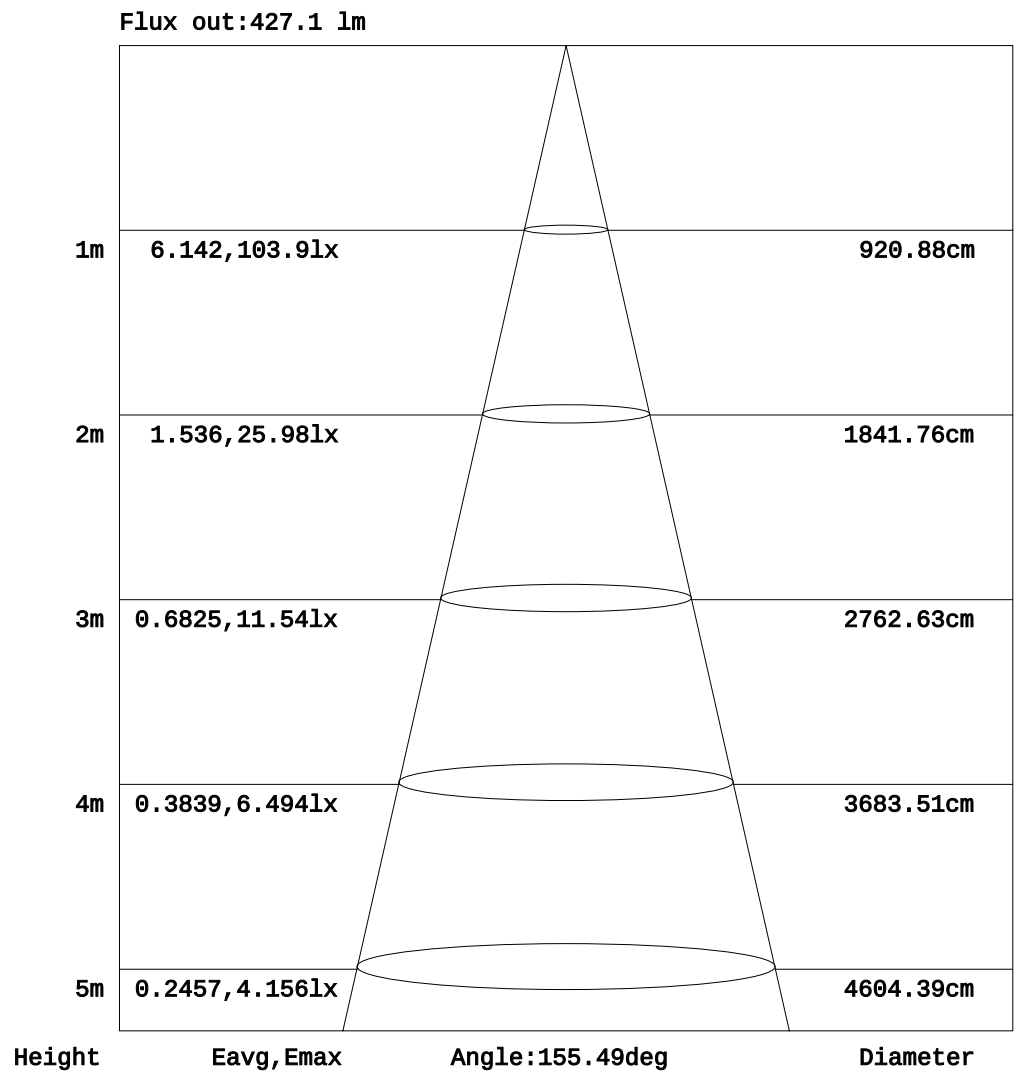


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-19

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:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm		
NAME:ASD-LWS12-12D12AC-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:



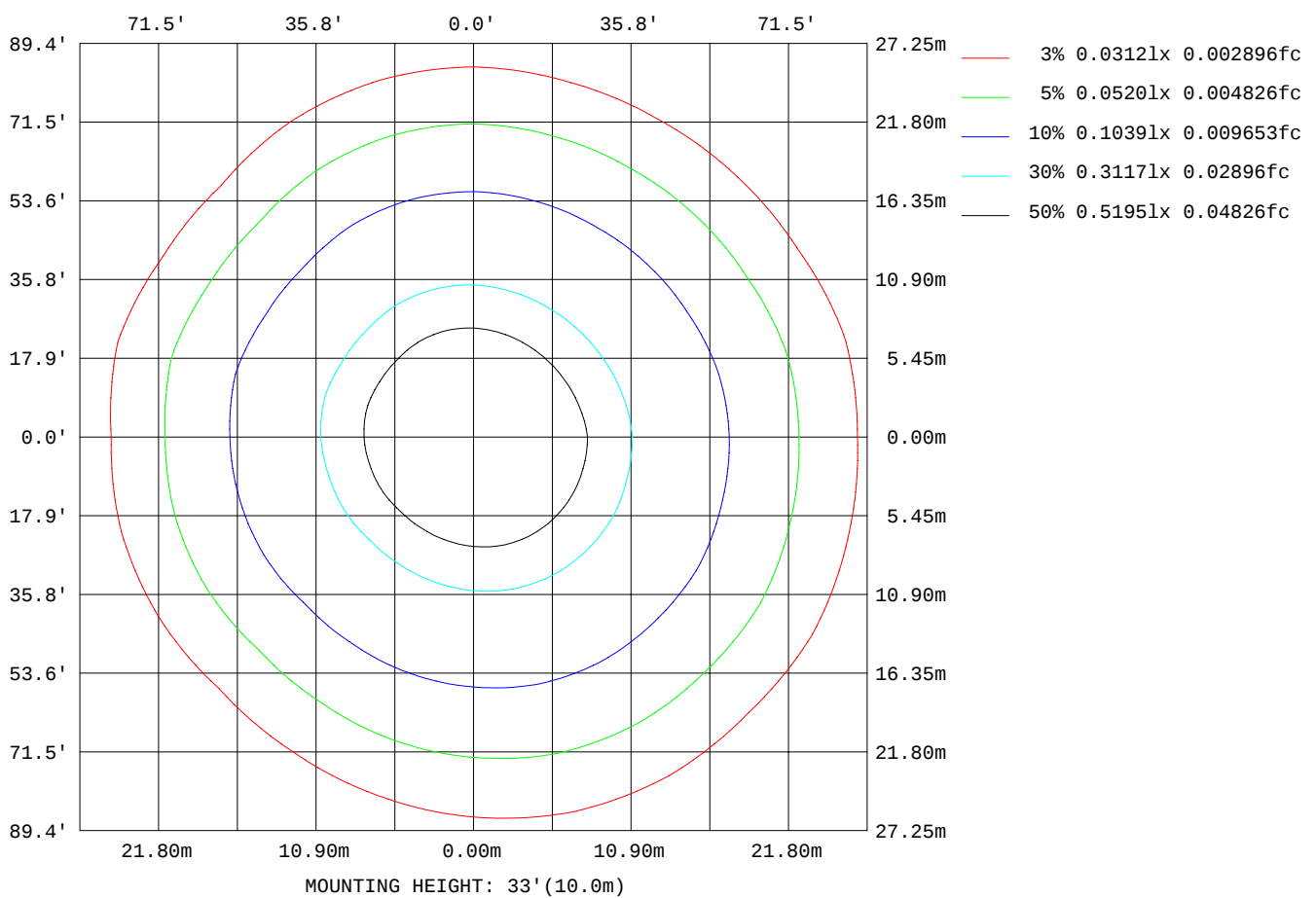
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-06-19

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:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm		
NAME: ASD-LWS12-12D12AC-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: 2025-06-19

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:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm		
NAME: ASD-LWS12-12D12AC-NK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

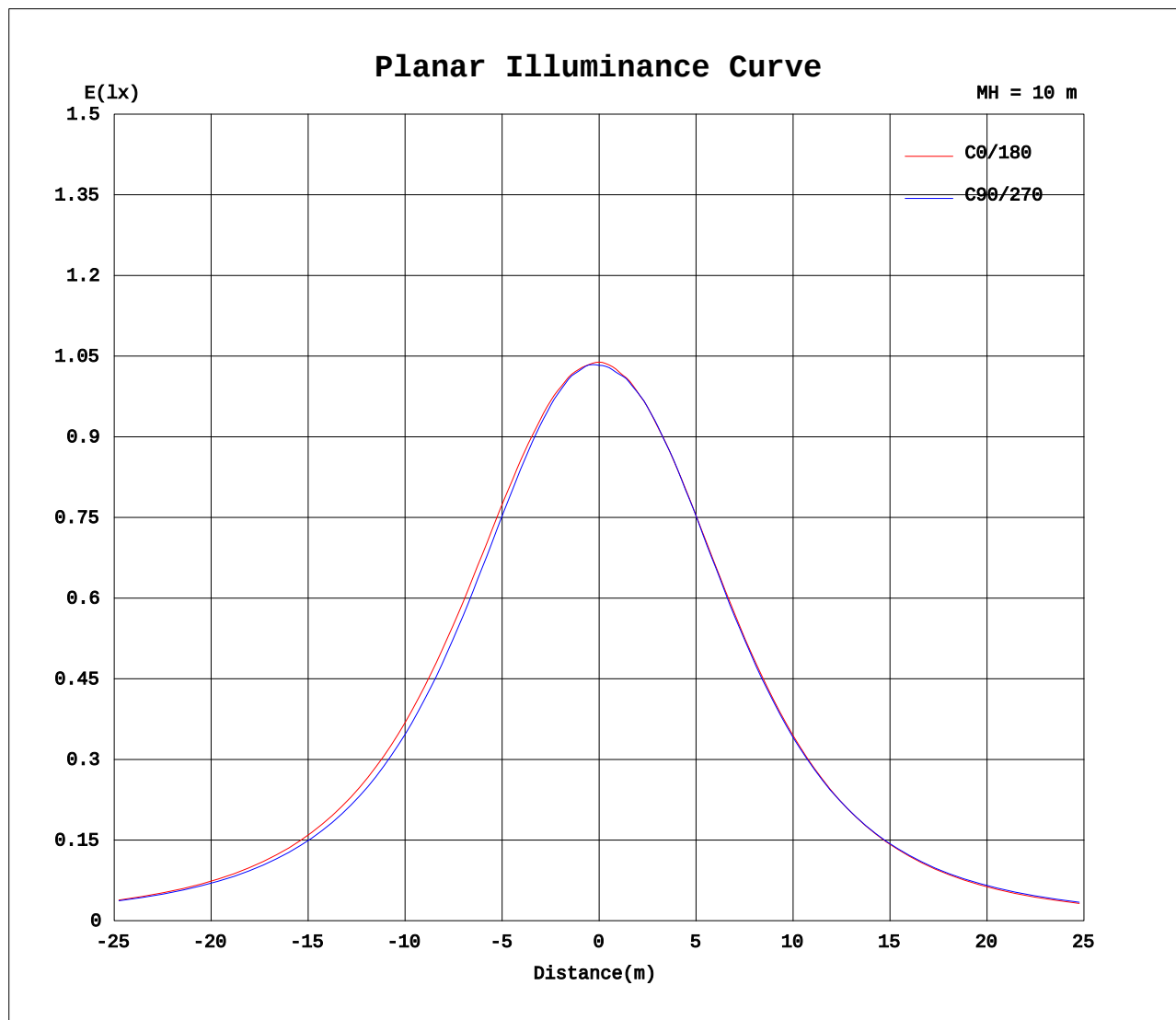
AvgL	cd/m2
L_0~180(65)av	1745
L_0~180(75)av	2162
L_0~180(85)av	6491
L_90~270(65)av	1739
L_90~270(75)av	2189
L_90~270(85)av	4625
L_45(65)av	1671
L_45(75)av	2060
L_45(85)av	5157

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-19

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: 2025-06-19

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:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm																	
NAME: ASD-LWS12-12D12AC-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	104	104	104	104	103	103	103	103	103	103	103	103	104	104	104	104	103	103	103
5	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	103	103	103
10	105	105	104	105	105	105	104	105	104	104	104	104	104	104	104	104	104	104	104
15	106	106	105	106	106	105	105	105	104	104	105	105	105	105	105	104	105	105	105
20	107	107	106	107	107	106	105	105	104	104	104	105	105	105	105	105	105	105	105
25	108	108	107	108	108	107	105	104	103	103	104	105	105	106	105	105	106	106	105
30	108	108	108	108	108	107	105	103	101	101	102	103	105	106	105	104	105	105	104
35	108	108	108	108	108	106	103	101	98.8	97.9	99.9	101	104	105	103	103	104	104	103
40	107	107	108	107	107	104	101	98.1	95.6	94.5	96.7	98.3	101	102	100	99.8	102	101	100
45	104	104	106	105	105	102	98.1	94.5	91.4	90.1	92.5	94.2	97.4	99.0	96.0	95.6	97.8	97.9	96.5
50	100	101	103	102	101	98.6	94.0	90.0	86.5	84.8	87.4	89.1	92.2	93.9	90.4	89.8	92.3	92.8	91.7
55	95.2	95.7	98.1	97.2	96.6	93.9	88.9	84.7	80.8	78.8	81.4	83.0	85.3	87.4	83.3	82.5	85.5	86.3	85.7
60	88.1	89.2	91.7	90.8	90.4	87.9	82.9	78.4	74.1	71.7	74.6	75.9	77.1	79.5	75.1	74.0	77.6	78.8	78.7
65	79.8	81.4	84.0	82.7	83.0	80.8	76.0	71.1	66.4	64.0	66.8	68.1	67.7	70.5	65.8	64.4	68.5	70.5	71.0
70	70.0	72.5	75.0	73.4	74.4	72.6	68.1	63.3	59.0	56.2	58.7	59.6	58.0	61.3	57.1	55.4	59.5	61.9	62.6
75	60.3	63.2	65.5	63.6	65.3	64.0	59.7	54.9	49.1	46.0	50.0	51.1	51.6	54.7	51.9	50.4	53.7	54.1	53.7
80	53.9	56.5	57.5	55.9	57.7	55.9	50.8	45.4	40.0	37.1	40.3	42.8	50.5	53.0	52.4	52.4	53.3	48.8	45.4
85	52.4	53.8	53.4	52.4	53.8	49.5	42.3	35.9	30.4	27.0	31.6	35.6	60.7	61.5	61.1	65.5	62.8	48.2	38.3
90	59.2	57.2	57.0	56.9	55.7	45.9	35.3	27.5	20.7	19.4	27.1	34.9	68.9	68.3	62.6	66.0	65.8	50.4	35.7
95	63.5	58.9	63.4	64.5	58.9	45.9	35.8	31.1	26.7	26.1	33.3	40.8	57.0	57.5	56.2	55.2	56.1	49.4	39.7
100	48.7	44.4	50.8	54.1	47.1	38.1	32.6	35.6	27.8	26.8	36.2	45.4	54.7	55.8	56.7	55.3	55.7	51.5	44.2
105	32.2	28.5	30.0	35.1	29.4	17.3	20.4	24.0	23.5	26.1	30.0	46.6	58.1	58.5	60.5	59.4	58.9	53.4	46.2
110	48.7	42.2	33.9	45.0	38.8	20.9	6.05	12.4	13.9	17.2	21.4	33.0	63.2	62.2	65.6	64.7	62.1	51.7	36.0
115	57.2	51.2	42.1	55.8	49.1	32.7	13.5	7.08	5.97	8.02	13.0	23.8	66.6	59.5	66.0	65.4	56.3	38.8	24.2
120	59.7	57.2	46.5	58.3	54.7	40.5	21.2	17.2	12.3	11.7	15.2	24.6	53.5	44.3	47.6	47.4	40.2	29.5	21.4
125	64.6	63.7	53.5	64.1	62.0	30.0	15.6	21.7	20.1	20.5	22.0	25.5	37.2	32.4	35.9	34.4	31.6	28.9	21.9
130	35.9	31.5	35.2	45.1	34.2	17.2	16.6	18.2	16.2	18.3	21.7	26.0	37.5	33.7	40.2	37.8	33.6	30.0	24.2
135	17.5	22.0	17.5	21.7	18.2	29.8	24.3	15.8	12.8	15.0	17.9	26.3	39.8	35.5	42.4	39.8	35.1	30.3	25.2
140	36.1	38.7	30.3	32.7	37.1	36.4	23.9	15.6	15.0	15.2	16.7	26.2	40.5	35.8	41.3	39.4	34.0	28.4	26.7
145	38.2	40.9	36.9	38.9	41.5	37.9	13.7	9.90	12.7	14.2	13.7	19.8	36.0	31.0	35.1	33.6	28.9	24.3	22.4
150	25.9	23.1	31.4	36.4	28.8	16.6	9.06	4.80	7.40	11.2	11.2	15.5	30.5	27.1	31.4	29.9	26.6	20.5	15.7
155	9.49	9.06	10.9	12.1	10.4	9.30	6.78	8.60	7.17	9.50	9.68	12.8	29.5	23.5	26.2	25.9	21.3	16.2	10.5
160	6.88	7.72	6.06	6.07	7.09	8.60	8.97	12.7	8.04	8.41	10.2	9.46	20.0	17.7	16.3	17.7	16.3	13.2	9.37
165	8.41	9.04	6.41	7.83	9.30	9.86	12.0	13.4	9.75	8.12	9.45	7.82	12.2	11.8	9.46	10.5	10.4	8.80	9.24
170	7.41	5.94	8.31	7.58	6.38	6.93	9.49	10.8	9.30	7.76	7.42	5.91	6.90	6.46	6.26	6.21	6.34	7.79	9.53
175	6.33	6.43	6.08	6.18	6.16	6.75	8.28	7.74	7.22	7.08	7.30	7.05	5.54	5.48	5.84	5.86	5.94	6.82	7.67
180	7.96	7.52	8.25	8.23	7.71	7.47	7.06	6.83	6.73	7.16	7.33	7.55	7.95	7.49	8.25	8.21	7.73	7.45	7.07

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-06-19

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:120.1V I:0.1043A P:12.36W PF:0.9866 Lamp Flux:855x1 lm		
NAME: ASD-LWS12-12D12AC-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	103	103	103	103	103													
5	103	103	103	104	104													
10	104	104	104	104	104													
15	104	105	105	105	105													
20	105	104	104	105	106													
25	104	103	104	104	106													
30	103	102	102	103	105													
35	101	100	100	102	104													
40	98.3	97.3	97.4	98.9	102													
45	94.6	93.4	93.9	95.9	99.5													
50	89.8	88.8	89.7	91.9	96.1													
55	84.1	83.3	84.6	86.7	91.3													
60	77.5	77.0	78.5	80.7	85.5													
65	69.8	69.6	71.3	73.5	78.5													
70	61.0	60.9	62.5	65.1	70.5													
75	51.9	51.9	53.3	56.0	61.7													
80	43.0	43.0	44.5	46.4	52.5													
85	34.1	33.2	35.0	35.2	43.2													
90	27.4	22.4	21.2	19.3	32.1													
95	31.4	22.5	17.8	19.5	29.9													
100	35.0	24.7	23.6	29.7	34.0													
105	33.8	29.0	25.6	32.0	29.6													
110	27.4	26.7	23.3	22.7	17.0													
115	20.6	20.0	17.1	14.2	8.40													
120	14.1	12.8	10.3	7.27	13.0													
125	14.2	9.52	7.56	13.1	17.2													
130	18.3	13.8	12.9	17.4	21.6													
135	22.0	17.0	16.7	19.5	19.1													
140	20.4	19.8	19.7	16.6	20.0													
145	19.4	17.9	18.7	14.8	14.4													
150	14.2	15.5	16.2	8.96	7.51													
155	10.1	12.2	9.68	3.37	5.16													
160	9.20	8.49	3.71	7.24	6.27													
165	11.3	10.1	6.85	9.82	11.4													
170	10.00	9.13	7.39	9.41	11.9													
175	7.58	7.22	7.38	8.44	9.70													
180	6.83	6.73	7.17	7.32	7.54													

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-06-19

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: