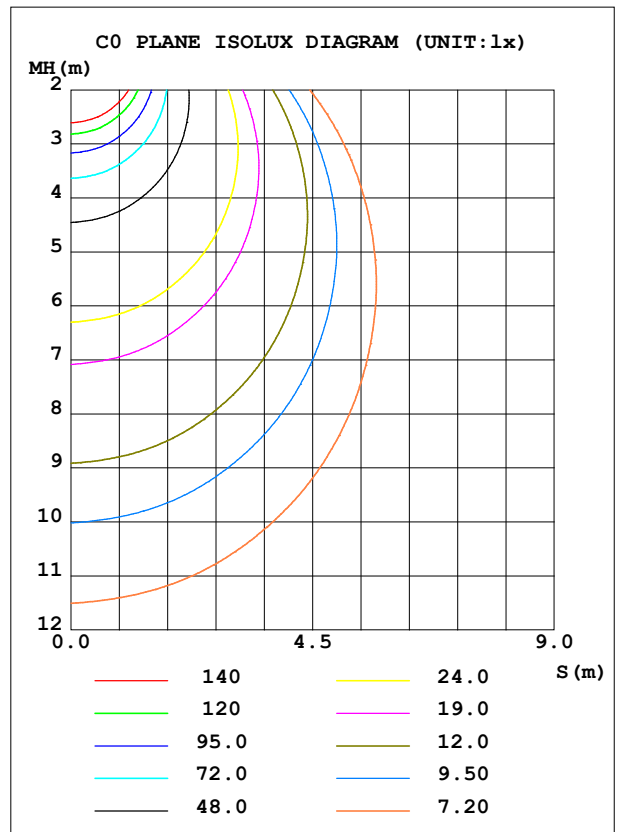
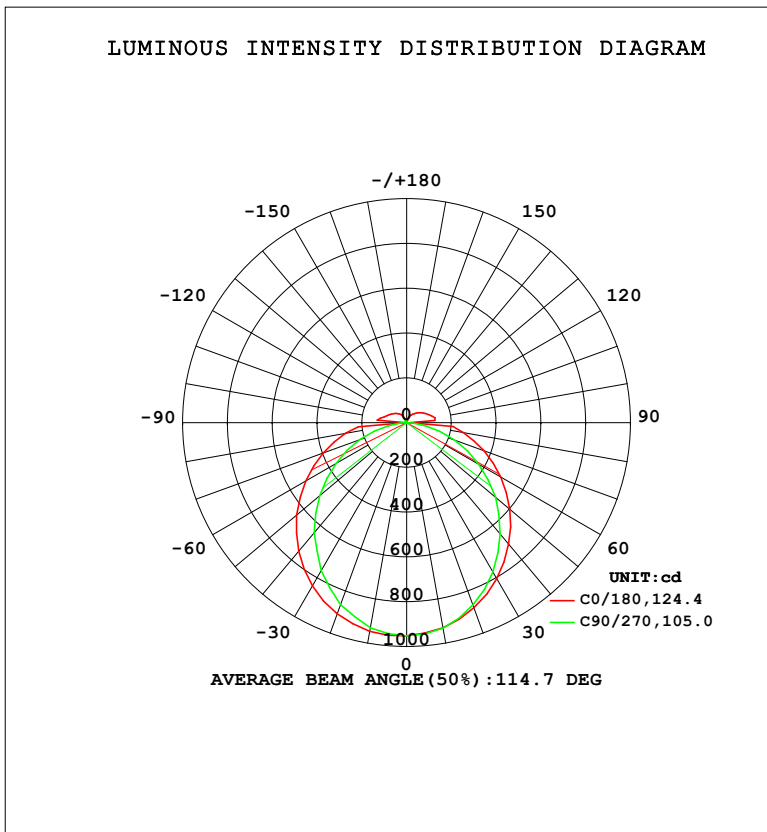


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:276.77V I:0.0908A P:24.426W PF:0.9723 Freq:60.01Hz		
Lamp Flux:3137.93x1 lm		
NAME:ASD-LSF7A-2A25		
SPEC:5000k		
MFR.: ASD Lighting Corp		

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	ASD-LSF7A-2A25	Imax (cd)	954.5	S/MH (C0/180)	1.31
NOMINAL POWER (W)	25	LOR (%)	100.0	S/MH (C90/270)	1.20
RATED VOLTAGE (V)	277	TOTAL FLUX (lm)	3137.9	η UP, DN (C0-180)	4.2, 45.7
NOMINAL FLUX (lm)	3137.93	CIE CLASS	DIRECT	η UP, DN (C180-360)	4.0, 46.1
LAMPS INSIDE	1	η up (%)	8.3	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	277	η down (%)	91.7	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 2023-12-20

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=1.2910]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

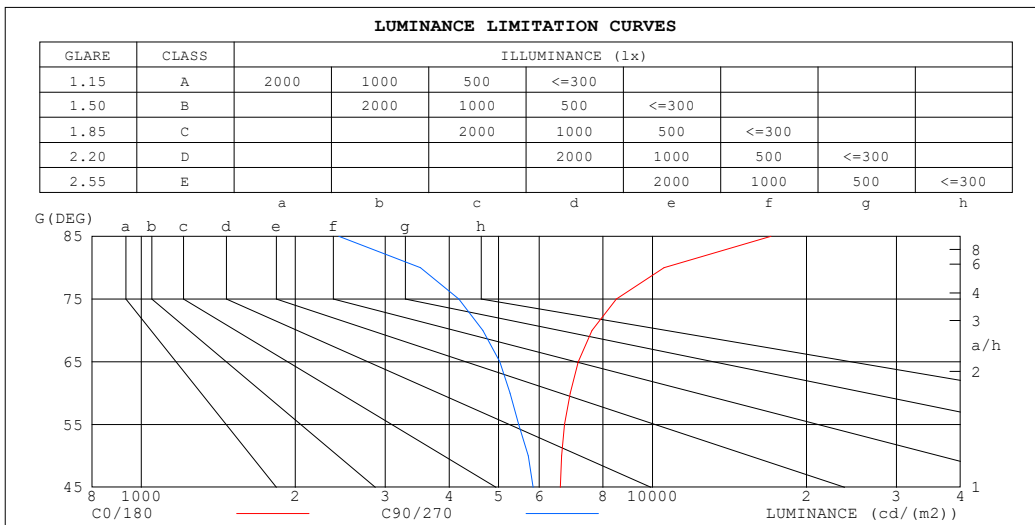
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	930.4	929.8	931.8	942.5	946.2	938.5	931.2	933.0	0- 10	90.10	90.10	2.87,2.87
20	880.0	872.8	865.3	895.5	907.8	894.1	864.8	872.4	10- 20	257.5	347.6	11.1,11.1
30	805.1	785.9	770.9	818.9	841.5	807.8	762.9	783.0	20- 30	388.1	735.8	23.4,23.4
40	708.7	677.8	650.0	712.0	750.9	707.2	642.4	676.3	30- 40	466.5	1202	38.3,38.3
50	601.1	555.5	518.7	589.7	643.3	584.6	506.4	555.4	40- 50	487.2	1689	53.8,53.8
60	485.9	428.1	371.5	457.7	520.6	452.2	364.1	426.8	50- 60	450.9	2140	68.2,68.2
70	366.6	297.5	225.0	320.8	396.5	317.1	220.7	294.1	60- 70	368.5	2509	80,80
80	257.6	177.4	86.24	188.0	277.4	186.5	83.03	171.7	70- 80	254.3	2763	88.1,88.1
90	14.74	5.487	0.7366	4.390	7.576	4.509	0.4316	6.115	80- 90	115.9	2879	91.7,91.7
100	129.6	75.96	0.4853	64.08	119.2	63.90	0.4040	69.45	90-100	56.92	2936	93.6,93.6
110	104.9	64.58	0.4044	54.98	93.77	54.58	0.7279	58.99	100-110	62.87	2999	95.6,95.6
120	87.89	54.08	0.4044	47.56	79.01	49.01	1.698	48.46	110-120	49.76	3049	97.2,97.2
130	69.87	44.39	0.6471	40.46	64.79	46.86	5.089	33.39	120-130	37.89	3086	98.4,98.4
140	53.51	34.67	0.8095	33.28	50.92	43.36	10.27	17.42	130-140	26.72	3113	99.2,99.2
150	38.06	24.59	1.213	2.089	38.09	35.49	12.62	4.953	140-150	15.99	3129	99.7,99.7
160	5.299	11.10	1.294	14.12	10.92	14.04	11.73	1.519	150-160	5.971	3135	99.9,99.9
170	8.042	5.575	1.456	8.288	10.34	10.35	7.361	1.516	160-170	2.373	3137	100,100
180	0.2534	1.197	1.537	2.626	2.166	1.989	2.103	1.516	170-180	0.4522	3138	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-12-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity:65.0%  
 Test Distance:26.000m [K=1.2910]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:276.77V I:0.0908A P:24.426W PF:0.9723 Freq:60.01Hz		
Lamp Flux:3137.93x1 lm		
NAME:ASD-LSF7A-2A25		
SPEC:5000k		
MFR.: ASD Lighting Corp		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17056	2433
80	10533	3516
75	8491	4181
70	7610	4658
65	7157	5025
60	6900	5260
55	6727	5475
50	6640	5713
45	6604	5841

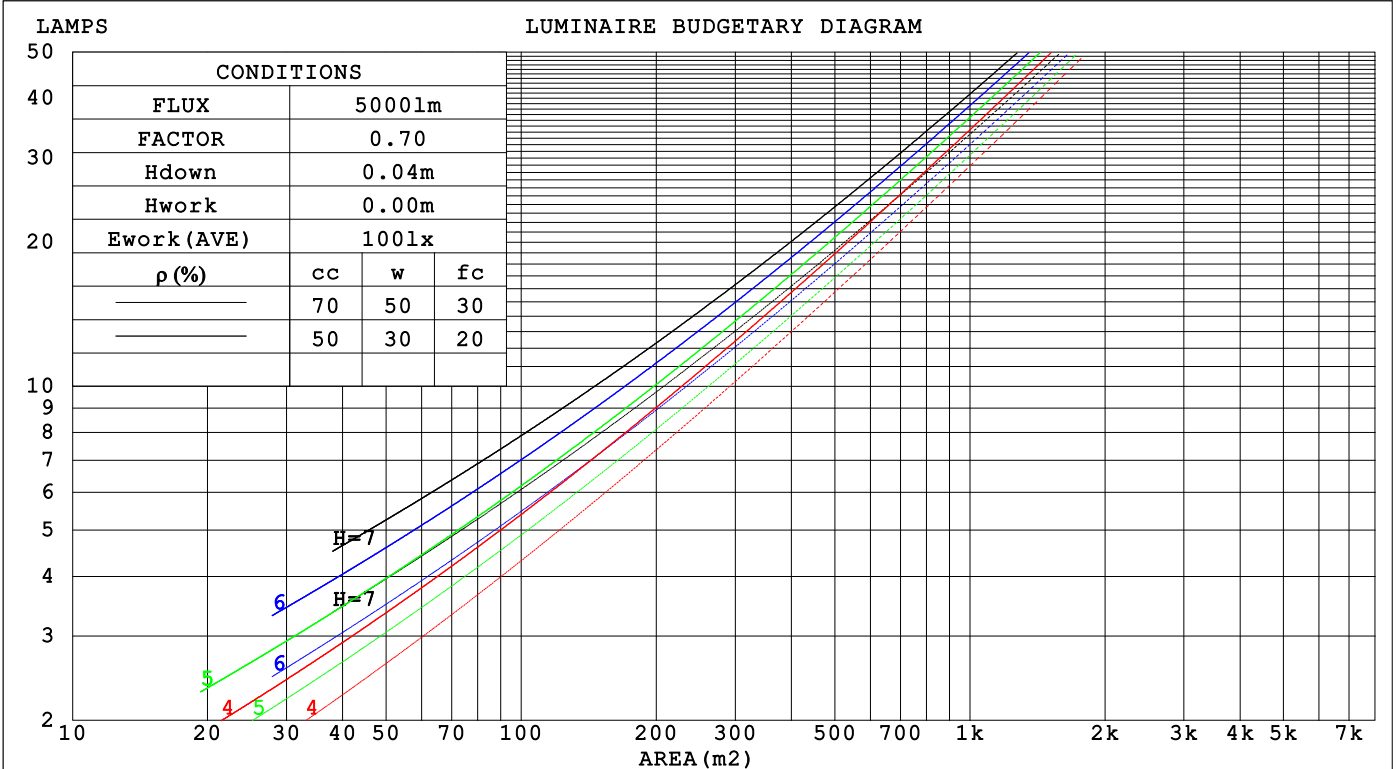
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-12-20

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity:65.0%  
 Test Distance:26.000m [K=1.2910]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:276.77V I:0.0908A P:24.426W PF:0.9723 Freq:60.01Hz		
Lamp Flux:3137.93x1 lm		
NAME:ASD-LSF7A-2A25		
SPEC:5000k		
MFR.: ASD Lighting Corp		

ρcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρw																
ρfc																
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.17	1.17	1.17	1.13	1.13	1.13	1.07	1.07	1.07	1.00	1.00	1.00	.94	.94	.94	.92
1.0	1.01	.96	.92	.97	.93	.89	.92	.88	.85	.86	.84	.81	.81	.79	.77	.74
2.0	.87	.80	.74	.84	.78	.72	.79	.74	.69	.75	.70	.66	.71	.67	.64	.61
3.0	.76	.68	.61	.74	.66	.60	.70	.63	.58	.66	.60	.56	.62	.58	.54	.51
4.0	.67	.58	.51	.65	.57	.50	.62	.55	.49	.58	.52	.47	.55	.50	.46	.43
5.0	.60	.51	.44	.58	.50	.43	.55	.48	.42	.52	.46	.41	.50	.44	.40	.37
6.0	.54	.45	.38	.52	.44	.38	.50	.42	.37	.47	.41	.36	.45	.39	.35	.33
7.0	.49	.40	.34	.47	.39	.33	.45	.38	.32	.43	.36	.32	.41	.35	.31	.29
8.0	.44	.36	.30	.43	.35	.30	.41	.34	.29	.39	.33	.28	.38	.32	.28	.26
9.0	.41	.32	.27	.40	.32	.27	.38	.31	.26	.36	.30	.25	.35	.29	.25	.23
10.0	.37	.30	.24	.37	.29	.24	.35	.28	.24	.34	.27	.23	.32	.27	.23	.21



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-12-20

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity:65.0%  
 Test Distance:26.000m [K=1.2910]  
 Remarks:

**WEC AND CCEC**

Test:U:276.77V I:0.0908A P:24.426W PF:0.9723 Freq:60.01Hz																
Lamp Flux:3137.93x1 lm																
NAME:ASD-LSF7A-2A25																
SPEC:5000k																
MFR.: ASD Lighting Corp																

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.335	.191	.060	.326	.186	.059	.308	.176	.056	.291	.168	.054	.276	.160	.052	
2.0	.306	.167	.051	.297	.164	.050	.281	.156	.048	.266	.149	.047	.252	.143	.045	
3.0	.278	.148	.044	.271	.145	.044	.256	.139	.042	.243	.133	.041	.230	.128	.039	
4.0	.254	.132	.039	.248	.130	.038	.234	.124	.037	.222	.119	.036	.211	.115	.035	
5.0	.234	.119	.034	.227	.117	.034	.216	.112	.033	.205	.108	.032	.195	.104	.031	
6.0	.216	.108	.031	.210	.106	.031	.200	.102	.030	.190	.099	.029	.180	.095	.028	
7.0	.200	.099	.028	.195	.097	.028	.185	.094	.027	.176	.090	.026	.168	.087	.026	
8.0	.186	.091	.026	.182	.090	.025	.173	.086	.025	.165	.084	.024	.157	.081	.023	
9.0	.174	.084	.024	.170	.083	.023	.162	.080	.023	.155	.078	.022	.148	.075	.022	
10.0	.164	.078	.022	.160	.077	.022	.152	.075	.021	.146	.072	.021	.139	.070	.020	

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.253	.253	.253	.217	.217	.217	.148	.148	.148	.085	.085	.085	.027	.027	.027	
1.0	.245	.219	.196	.210	.188	.168	.144	.129	.117	.083	.075	.068	.026	.024	.022	
2.0	.238	.196	.160	.204	.168	.138	.140	.117	.097	.081	.068	.057	.026	.022	.018	
3.0	.230	.179	.137	.197	.154	.119	.136	.107	.083	.078	.062	.049	.025	.020	.016	
4.0	.223	.166	.122	.191	.143	.106	.131	.100	.075	.076	.058	.044	.024	.019	.015	
5.0	.215	.155	.111	.185	.134	.097	.127	.094	.068	.074	.055	.041	.024	.018	.013	
6.0	.208	.147	.104	.179	.127	.090	.123	.089	.064	.071	.052	.038	.023	.017	.013	
7.0	.201	.140	.098	.173	.122	.085	.119	.085	.061	.069	.050	.036	.022	.016	.012	
8.0	.194	.135	.094	.167	.117	.082	.116	.082	.058	.067	.048	.035	.022	.016	.011	
9.0	.188	.130	.090	.162	.113	.079	.112	.079	.056	.065	.047	.033	.021	.015	.011	
10.0	.183	.126	.088	.157	.109	.077	.109	.077	.054	.064	.045	.032	.021	.015	.011	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-12-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity:65.0%  
 Test Distance:26.000m [K=1.2910]  
 Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:276.77V I:0.0908A P:24.426W PF:0.9723 Freq:60.01Hz		
Lamp Flux:3137.93x1 lm		
NAME:ASD-LSF7A-2A25		
SPEC:5000k		
MFR.: ASD Lighting Corp		

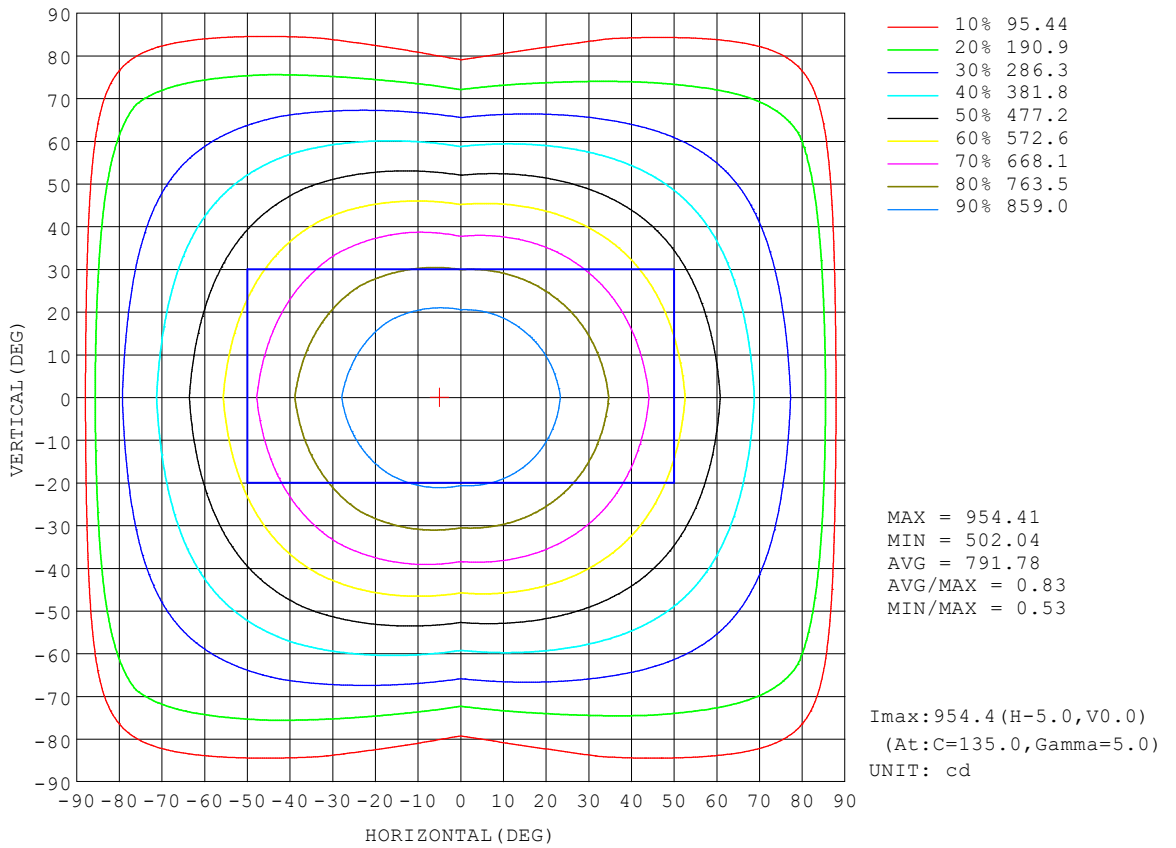
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	54	42	35	53	41	35	51	41	34	28
0.80	63	51	44	62	51	43	60	50	43	35
1.00	71	60	52	70	59	52	67	60	51	43
1.25	78	67	60	77	66	59	73	64	58	49
1.50	83	73	65	81	71	64	77	69	63	54
2.00	91	81	74	88	79	73	84	76	71	61
2.50	95	86	79	92	84	78	87	80	75	65
3.00	98	90	84	95	88	83	90	84	80	69
4.00	102	96	91	99	94	89	94	89	85	74
5.00	105	100	95	102	97	93	96	92	88	77
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:25.3°C  
 Operators:DAMIN  
 Test Date:2023-12-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity:65.0%  
 Test Distance:26.000m [K=1.2910]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:276.77V I:0.0908A P:24.426W PF:0.9723 Freq:60.01Hz		
Lamp Flux:3137.93x1 lm		
NAME:ASD-LSF7A-2A25		
SPEC:5000k		
MFR.: ASD Lighting Corp		

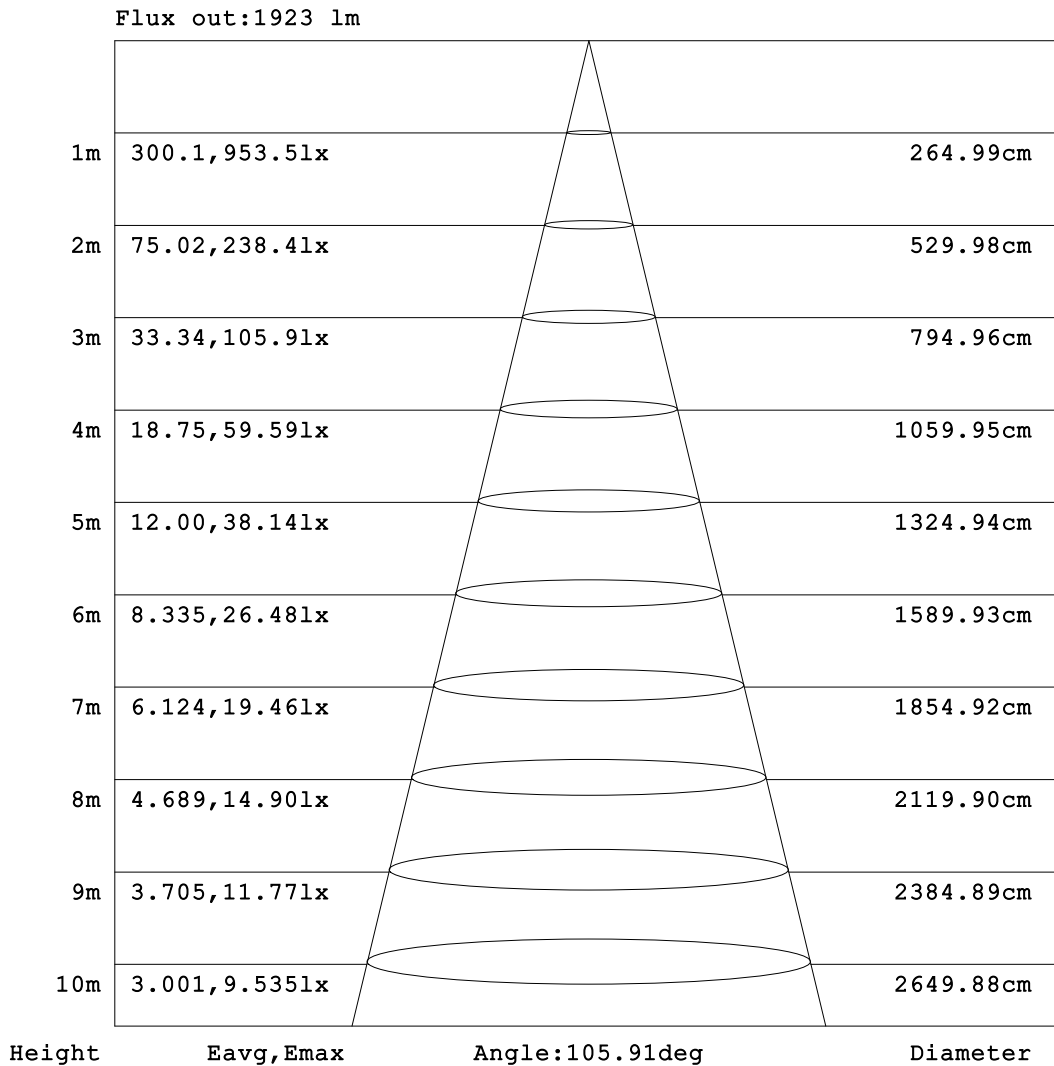


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-12-20

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity:65.0%  
 Test Distance:26.000m [K=1.2910]  
 Remarks:

**AAI Figure**

Test:U:276.77V I:0.0908A P:24.426W PF:0.9723 Freq:60.01Hz		
Lamp Flux:3137.93x1 lm		
NAME:ASD-LSF7A-2A25		
SPEC:5000k		
MFR.: ASD Lighting Corp		



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

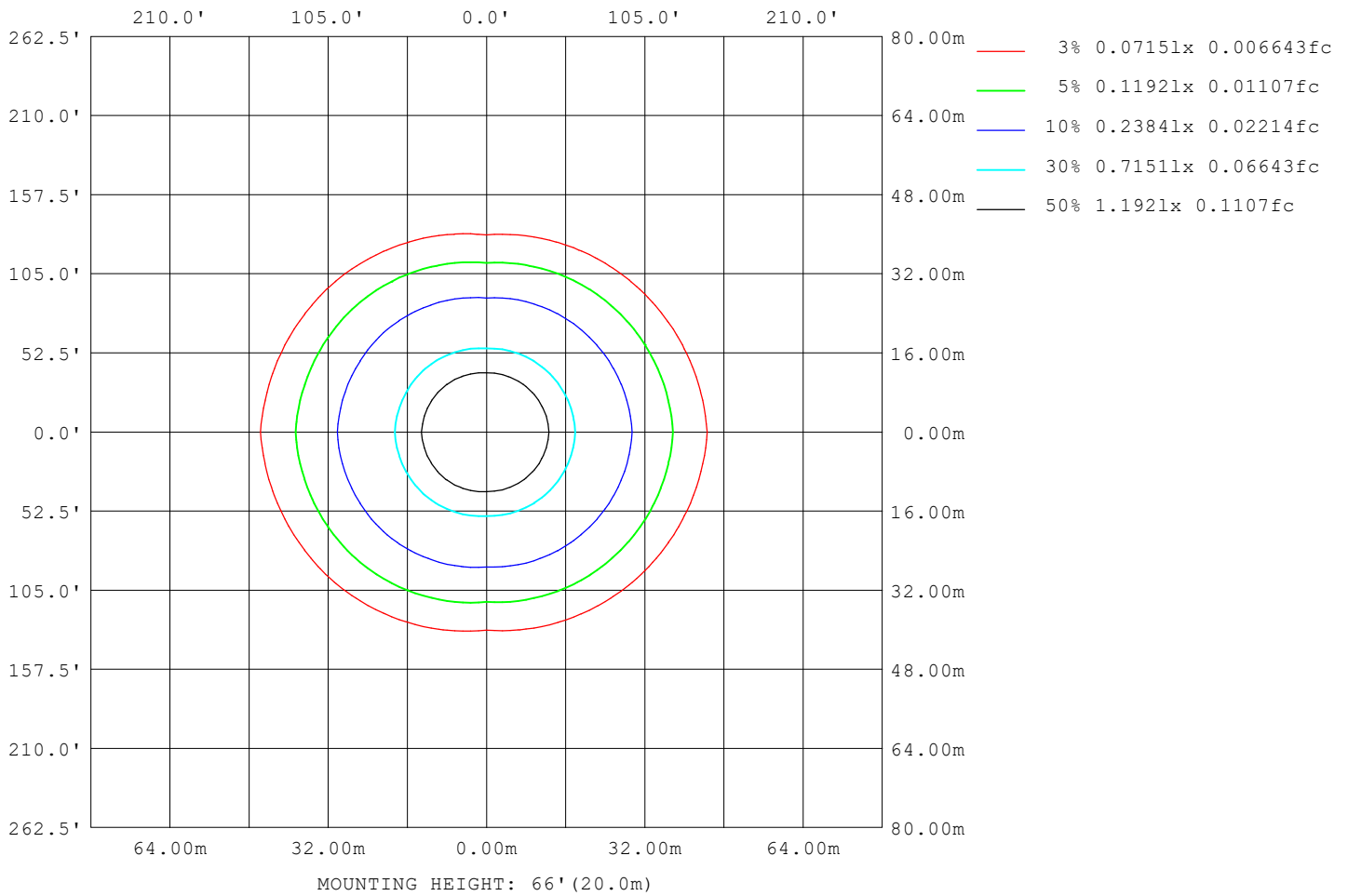
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-12-20

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity:65.0%  
 Test Distance:26.000m [K=1.2910]  
 Remarks:



**ISOLUX DIAGRAM**

Test:U:276.77V I:0.0908A P:24.426W PF:0.9723 Freq:60.01Hz		
Lamp Flux:3137.93x1 lm		
NAME:ASD-LSF7A-2A25		
SPEC:5000k		
MFR.: ASD Lighting Corp		



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-12-20

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity:65.0%  
 Test Distance:26.000m [K=1.2910]  
 Remarks:

**LED Avg.L Report**

Test:U:276.77V I:0.0908A P:24.426W PF:0.9723 Freq:60.01Hz		
Lamp Flux:3137.93x1 lm		
NAME:ASD-LSF7A-2A25		
SPEC:5000k		
MFR.: ASD Lighting Corp		

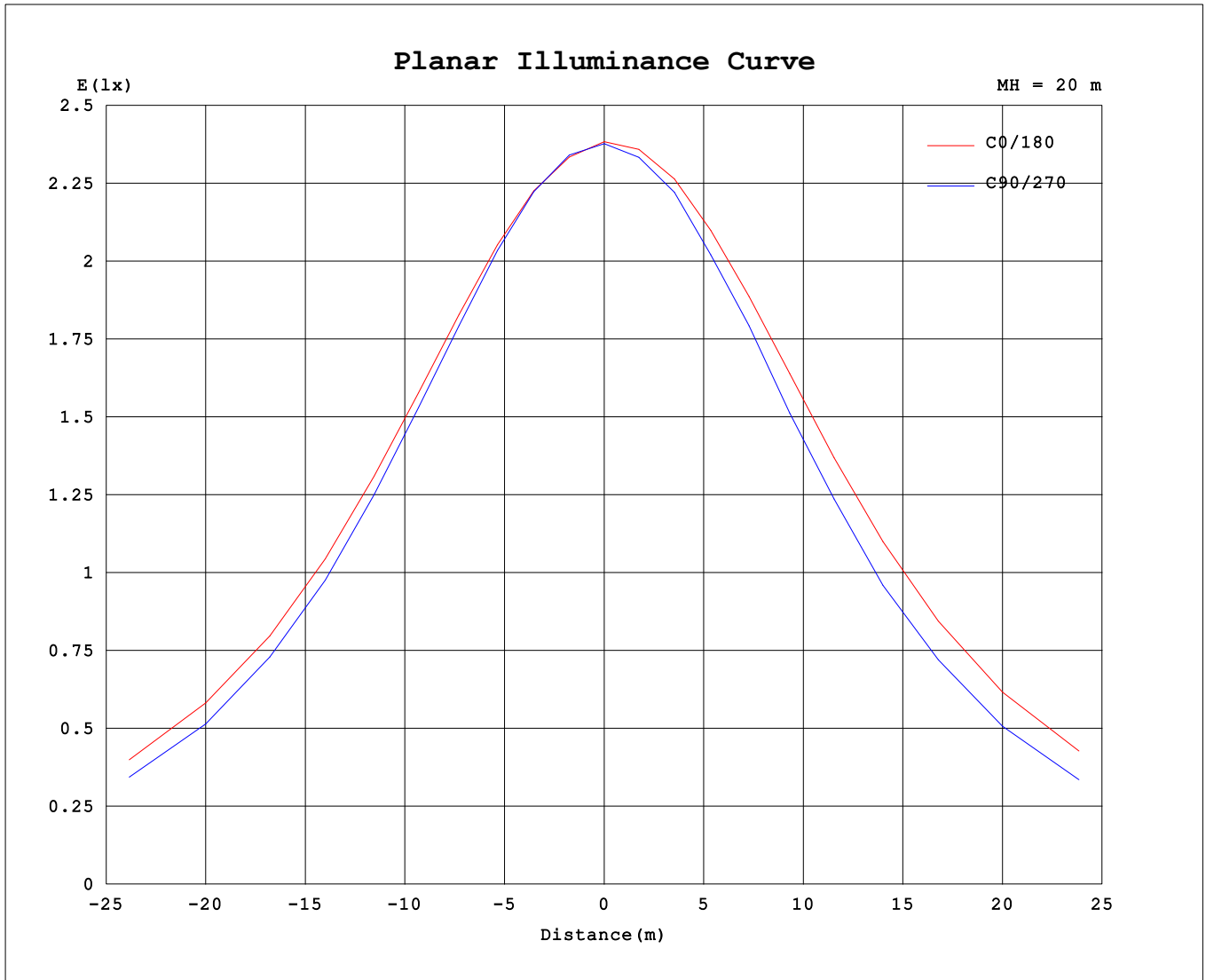
AvgL	cd/m2
L_0~180 (65) av	7417
L_0~180 (75) av	8820
L_0~180 (85) av	17369
L_90~270 (65) av	4979
L_90~270 (75) av	4132
L_90~270 (85) av	2363
L_45 (65) av	6280
L_45 (75) av	6649
L_45 (85) av	9750

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-12-20

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity:65.0%  
 Test Distance:26.000m [K=1.2910]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 2023-12-20

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=1.2910]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:276.77V I:0.0908A P:24.426W PF:0.9723 Freq:60.01Hz		
Lamp Flux:3137.93x1 lm		
NAME:ASD-LSF7A-2A25		
SPEC:5000k		
MFR.: ASD Lighting Corp		

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	45	90	135	180	225	270	315										
0	952	952	952	952	952	952	952	952										
5	943	945	948	955	953	951	945	948										
10	930	930	932	942	946	939	931	933										
15	909	909	904	923	930	923	898	908										
20	880	873	865	896	908	894	865	872										
25	846	833	823	857	879	852	814	830										
30	805	786	771	819	842	808	763	783										
35	759	733	711	767	799	759	699	731										
40	709	678	650	712	751	707	642	676										
45	658	618	583	653	696	646	575	617										
50	601	555	519	590	643	585	506	555										
55	543	491	444	525	579	519	435	490										
60	486	428	371	458	521	452	364	427										
65	426	364	300	389	459	385	294	360										
70	367	297	225	321	397	317	221	294										
75	310	237	153	253	335	250	149	231										
80	258	177	86.2	188	277	187	83.0	172										
85	209	121	29.9	121	218	121	28.2	116										
90	14.7	5.49	0.74	4.39	7.58	4.51	0.43	6.12										
95	127	73.1	0.65	72.0	133	69.7	0.32	75.5										
100	130	76.0	0.49	64.1	119	63.9	0.40	69.5										
105	116	69.8	0.40	58.7	104	58.1	0.57	64.3										
110	105	64.6	0.40	55.0	93.8	54.6	0.73	59.0										
115	96.7	59.2	0.40	51.5	86.0	51.6	1.29	53.7										
120	87.9	54.1	0.40	47.6	79.0	49.0	1.70	48.5										
125	79.0	49.4	0.40	44.4	72.0	47.9	2.83	41.6										
130	69.9	44.4	0.65	40.5	64.8	46.9	5.09	33.4										
135	62.1	39.5	0.65	36.8	58.2	45.3	8.00	24.9										
140	53.5	34.7	0.81	33.3	50.9	43.4	10.3	17.4										
145	45.9	29.6	0.89	29.1	44.6	40.1	11.5	1.83										
150	38.1	24.6	1.21	2.09	38.1	35.5	12.6	4.95										
155	30.0	2.09	1.29	17.0	18.1	4.76	12.7	2.72										
160	5.30	11.1	1.29	14.1	10.9	14.0	11.7	1.52										
165	10.8	8.75	1.46	10.8	14.2	14.1	9.46	1.52										
170	8.04	5.58	1.46	8.29	10.3	10.3	7.36	1.52										
175	4.10	3.10	1.54	5.50	6.33	6.45	4.21	1.52										
180	0.25	1.20	1.54	2.63	2.17	1.99	2.10	1.52										

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-12-20

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.464  
 Humidity:65.0%  
 Test Distance:26.000m [K=1.2910]  
 Remarks: