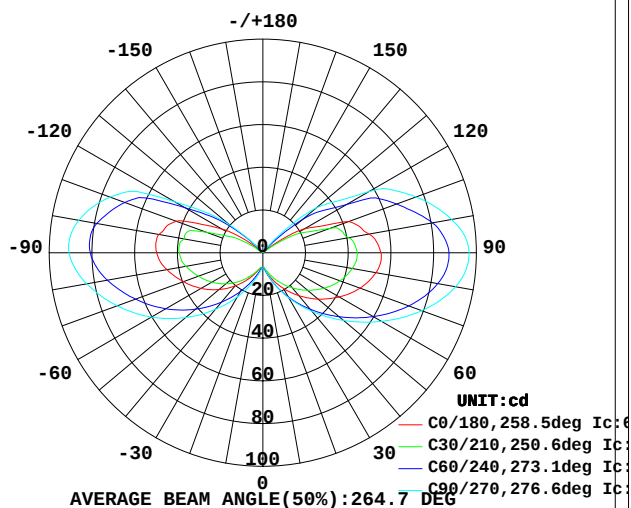


LUMINAIRE PHOTOMETRIC TEST REPORT

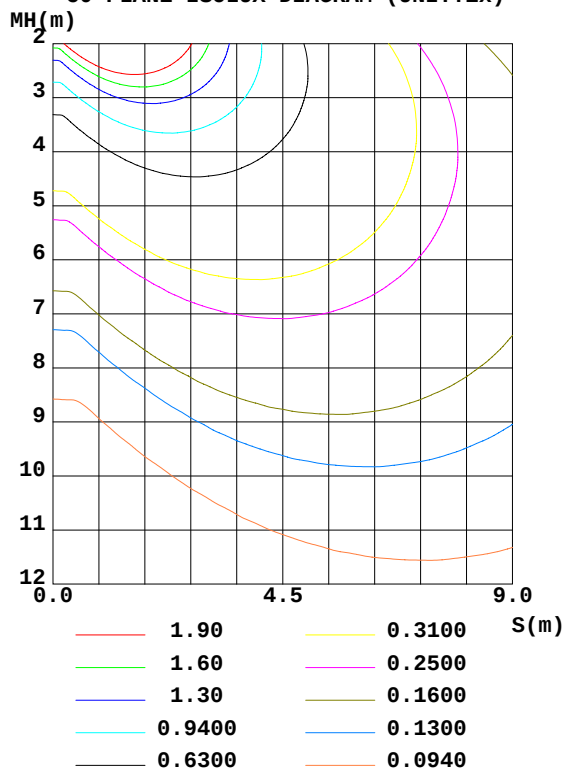
Test:U:120.1V I:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm		
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 21.26 lm/W			
MODEL	ASD-LWS28S-MV-24D22CC-RGBW-BK	I _{max} (cd)	97.29	S/MH(C0/180)	3.76
NOMINAL POWER(W)	22	LOR(%)	100.0	S/MH(C90/270)	4.77
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	429.08	η UP, DN(C0-180)	22.1, 30.3
NOMINAL FLUX(lm)	429.077	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	20.4, 27.2
LAMPS INSIDE	1	η up(%)	42.5	CIBSE SHR NOM	2.00
TEST VOLTAGE(V)	120	η down(%)	57.5	CIBSE SHR MAX	0.00

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:2025-05-08

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	8.985	8.892	8.945	6.976	7.381	7.985	9.637	8.259	0- 10	0.7231	0.7231	0.17,0.17
20	13.39	13.79	15.25	9.635	10.13	11.73	15.35	11.08	10- 20	2.917	3.641	0.85,0.85
30	19.26	20.63	24.33	13.74	14.58	17.37	23.75	15.01	20- 30	6.983	10.62	2.48,2.48
40	26.22	28.93	35.85	18.87	20.28	24.53	34.66	19.70	30- 40	13.50	24.13	5.62,5.62
50	33.75	38.16	49.28	24.70	26.83	32.70	47.24	24.75	40- 50	22.57	46.70	10.9,10.9
60	41.39	47.80	64.31	30.62	33.37	40.89	60.26	29.54	50- 60	33.60	80.30	18.7,18.7
70	48.47	57.15	79.27	36.16	39.64	48.81	72.65	33.58	60- 70	45.45	125.8	29.3,29.3
80	53.78	64.55	91.63	41.12	45.61	56.54	83.73	37.09	70- 80	56.53	182.3	42.5,42.5
90	55.28	67.29	96.59	43.39	49.78	61.11	90.76	38.64	80- 90	64.43	246.7	57.5,57.5
100	50.47	62.86	89.77	41.01	49.48	59.63	87.51	36.57	90-100	64.89	311.6	72.6,72.6
110	42.84	52.35	76.36	30.83	43.22	52.04	76.12	27.80	100-110	55.89	367.5	85.6,85.6
120	22.39	31.03	57.29	16.74	22.40	27.96	48.01	8.454	110-120	38.66	406.1	94.7,94.7
130	1.338	10.64	32.81	1.332	2.423	6.496	20.06	0.8783	120-130	17.58	423.7	98.8,98.8
140	0.7665	0.8397	5.069	1.059	1.213	1.286	1.140	0.8285	130-140	3.907	427.6	99.7,99.7
150	0.7702	0.8743	1.144	0.9781	1.132	1.194	1.109	0.7240	140-150	0.6448	428.3	99.8,99.8
160	0.8010	0.9089	1.113	0.9012	1.040	1.109	1.090	0.7240	150-160	0.4462	428.7	99.9,99.9
170	0.8665	0.9205	1.098	0.8434	0.9628	1.025	1.067	0.7394	160-170	0.2676	429.0	100,100
180	0.8935	0.9205	1.071	0.8242	0.9166	0.9551	1.067	0.7934	170-180	0.0887	429.1	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

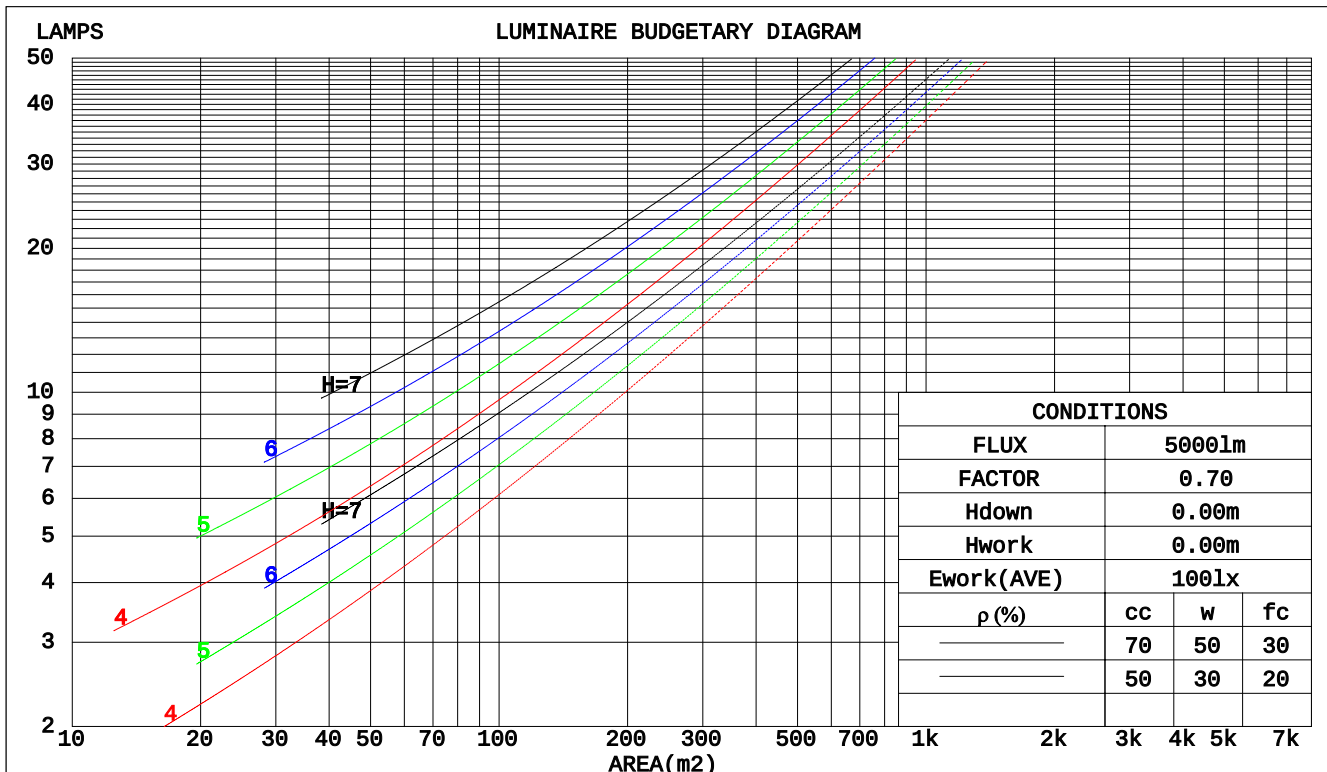
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-05-08

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:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm		
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	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	1.09	1.09	1.09	1.01	1.01	1.01	.87	.87	.87	.75	.75	.75	.63	.63	.63	.57
1.0	.84	.77	.71	.78	.72	.66	.65	.61	.56	.54	.50	.47	.44	.41	.38	.33
2.0	.70	.60	.53	.64	.56	.49	.53	.47	.41	.43	.38	.34	.34	.30	.27	.22
3.0	.59	.49	.41	.54	.45	.37	.45	.37	.31	.36	.30	.25	.28	.24	.20	.15
4.0	.51	.40	.32	.47	.37	.30	.39	.31	.25	.31	.25	.20	.24	.19	.15	.11
5.0	.44	.34	.27	.41	.31	.24	.34	.26	.20	.27	.21	.16	.21	.16	.12	.09
6.0	.39	.29	.22	.36	.27	.20	.30	.22	.17	.24	.18	.13	.19	.14	.10	.07
7.0	.35	.26	.19	.32	.23	.17	.27	.20	.14	.22	.16	.11	.17	.12	.08	.06
8.0	.32	.22	.16	.29	.21	.15	.24	.17	.12	.20	.14	.10	.15	.11	.07	.05
9.0	.29	.20	.14	.26	.18	.13	.22	.15	.11	.18	.12	.08	.14	.09	.06	.04
10.0	.26	.18	.12	.24	.16	.11	.20	.14	.09	.16	.11	.07	.13	.09	.05	.03



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2025-05-08

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:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm					
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK			TYPE:LED		WEIGHT:
SPEC.:6500K			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	.491	.279	.088	.471	.268	.085	.432	.248	.079	.397	.229	.074	.365	.212	.068		
2.0	.394	.216	.066	.375	.207	.064	.340	.189	.059	.308	.173	.054	.278	.157	.050		
3.0	.335	.178	.053	.318	.170	.051	.286	.155	.047	.256	.140	.043	.229	.127	.039		
4.0	.293	.152	.045	.277	.145	.043	.248	.132	.039	.221	.119	.036	.196	.106	.032		
5.0	.261	.133	.039	.247	.127	.037	.220	.114	.034	.195	.103	.031	.172	.092	.028		
6.0	.235	.118	.034	.222	.112	.032	.198	.101	.029	.175	.091	.027	.153	.081	.024		
7.0	.215	.106	.030	.203	.101	.029	.180	.091	.026	.158	.081	.024	.138	.072	.021		
8.0	.197	.096	.027	.186	.092	.026	.165	.082	.024	.145	.073	.021	.126	.065	.019		
9.0	.182	.088	.025	.172	.084	.024	.152	.075	.021	.134	.067	.019	.116	.059	.017		
10.0	.169	.081	.023	.160	.077	.022	.142	.069	.020	.124	.062	.018	.108	.054	.016		

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	.514	.514	.514	.440	.440	.440	.300	.300	.300	.172	.172	.172	.055	.055	.055	
1.0	.519	.481	.447	.444	.413	.384	.304	.284	.266	.175	.164	.155	.056	.053	.050	
2.0	.515	.460	.414	.441	.396	.358	.302	.274	.250	.174	.159	.146	.056	.052	.048	
3.0	.507	.445	.396	.435	.384	.343	.299	.267	.241	.172	.156	.142	.055	.051	.046	
4.0	.500	.434	.384	.429	.375	.333	.295	.261	.235	.171	.153	.139	.055	.050	.046	
5.0	.492	.425	.376	.422	.368	.327	.291	.257	.231	.168	.151	.137	.054	.049	.045	
6.0	.484	.418	.370	.416	.362	.322	.287	.253	.228	.166	.149	.136	.054	.049	.045	
7.0	.476	.411	.366	.410	.357	.319	.283	.250	.226	.164	.147	.135	.053	.048	.044	
8.0	.469	.406	.363	.404	.352	.316	.279	.247	.224	.163	.146	.134	.053	.048	.044	
9.0	.463	.402	.360	.399	.349	.314	.276	.245	.223	.161	.145	.133	.052	.047	.044	
10.0	.457	.398	.358	.394	.345	.313	.273	.243	.222	.159	.144	.133	.052	.047	.044	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-05-08

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:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm											
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK					TYPE:LED			WEIGHT:			
SPEC.:6500K					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		9.7	10.9	10.5	11.7	12.8	11.8	13.0	12.6	13.9	14.9
	3H	14.1	15.2	14.9	16.1	17.2	16.2	17.3	17.0	18.2	19.3
	4H	16.4	17.5	17.2	18.3	19.5	18.6	19.7	19.4	20.5	21.7
	6H	18.7	19.7	19.5	20.6	21.7	21.1	22.2	22.0	23.0	24.2
	8H	19.8	20.8	20.7	21.7	22.9	22.5	23.5	23.3	24.4	25.5
	12H	21.1	22.1	22.0	23.0	24.2	24.0	25.0	24.9	25.9	27.0
4H	2H	11.0	12.1	11.8	12.9	14.0	12.5	13.6	13.4	14.5	15.6
	3H	14.9	15.9	15.8	16.8	17.9	17.2	18.1	18.0	19.0	20.2
	4H	17.4	18.3	18.3	19.2	20.4	19.7	20.6	20.6	21.5	22.7
	6H	20.2	21.0	21.1	21.9	23.1	22.5	23.3	23.4	24.2	25.4
	8H	21.6	22.4	22.5	23.3	24.5	24.0	24.7	24.9	25.7	26.9
	12H	23.1	23.8	24.0	24.7	26.0	25.6	26.3	26.5	27.3	28.5
8H	4H	18.3	19.0	19.2	20.0	21.2	20.2	20.9	21.1	21.9	23.1
	6H	21.0	21.6	21.9	22.6	23.8	23.3	23.9	24.2	24.9	26.1
	8H	22.6	23.2	23.5	24.2	25.4	25.0	25.6	25.9	26.6	27.8
	12H	24.5	25.0	25.5	26.0	27.3	26.9	27.4	27.9	28.4	29.7
12H	4H	18.7	19.4	19.7	20.4	21.6	20.2	20.9	21.2	21.9	23.1
	6H	21.4	22.0	22.4	23.0	24.3	23.4	24.0	24.4	25.0	26.2
	8H	23.0	23.6	24.0	24.6	25.8	25.3	25.8	26.2	26.8	28.1
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H		+ 0.3 / - 0.4					+ 0.3 / - 0.3				
2.0H		+ 0.5 / - 0.7					+ 0.3 / - 0.4				

CIE Pub.117 Corrected 429.1 lm Total Lamp Luminous Flux.(8log(F/F0) = -2.9)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-05-08

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:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm		
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

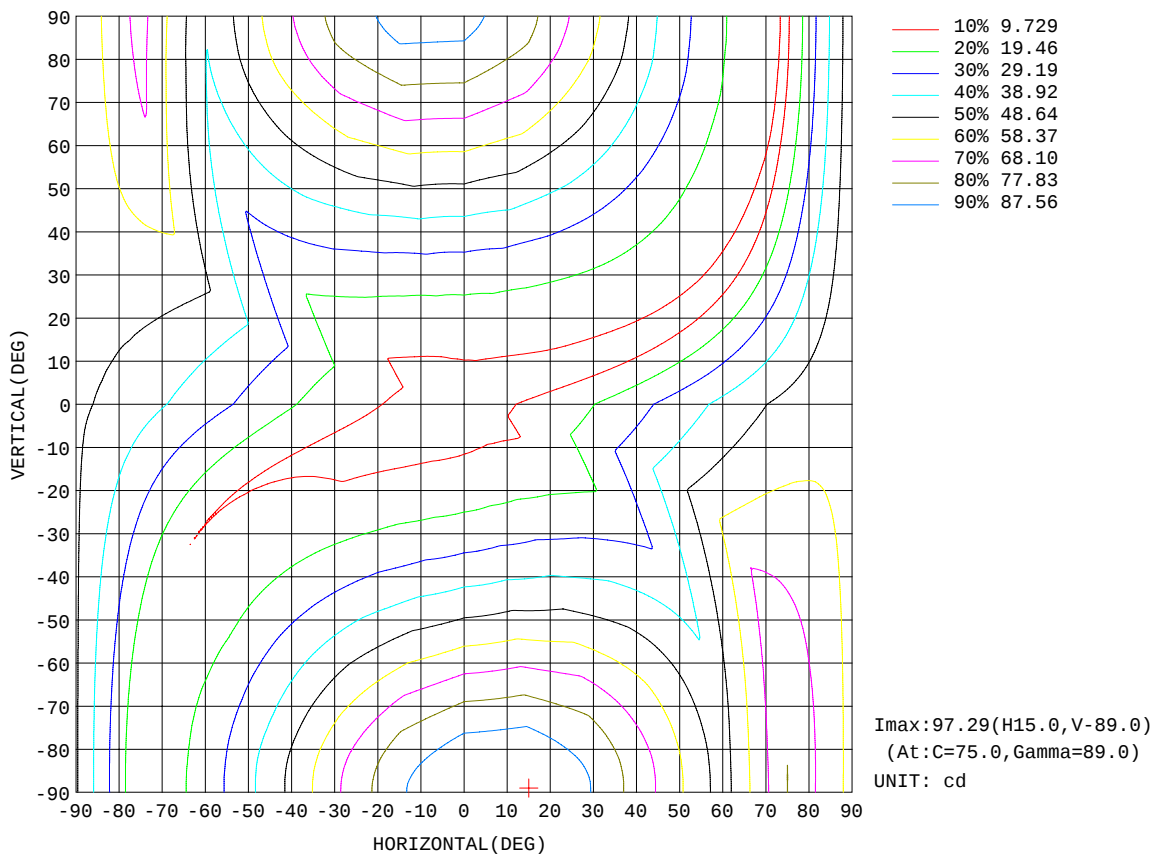
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	33	19	12	32	19	11	29	18	11	4
0.80	41	26	17	39	25	16	35	23	15	6
1.00	48	32	22	45	31	21	40	30	20	9
1.25	55	39	28	51	37	27	45	33	24	12
1.50	60	44	33	56	42	32	49	37	28	15
2.00	68	53	42	64	50	40	55	44	36	19
2.50	74	60	49	69	56	46	59	49	41	23
3.00	78	65	55	72	61	51	62	53	45	26
4.00	84	72	63	78	68	59	67	59	52	30
5.00	88	78	69	81	72	65	70	63	56	33
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:2025-05-08

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:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm		
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

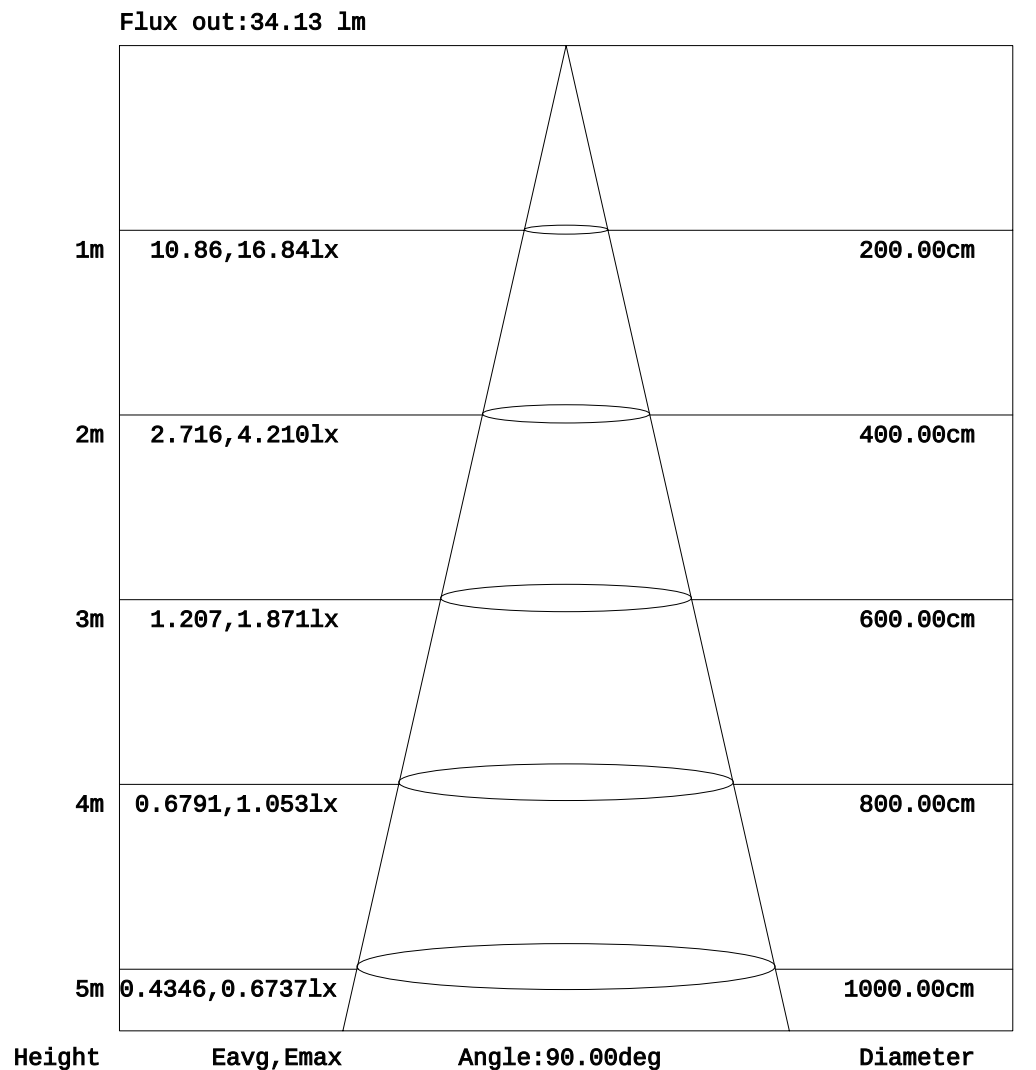


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-05-08

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:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm		
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:



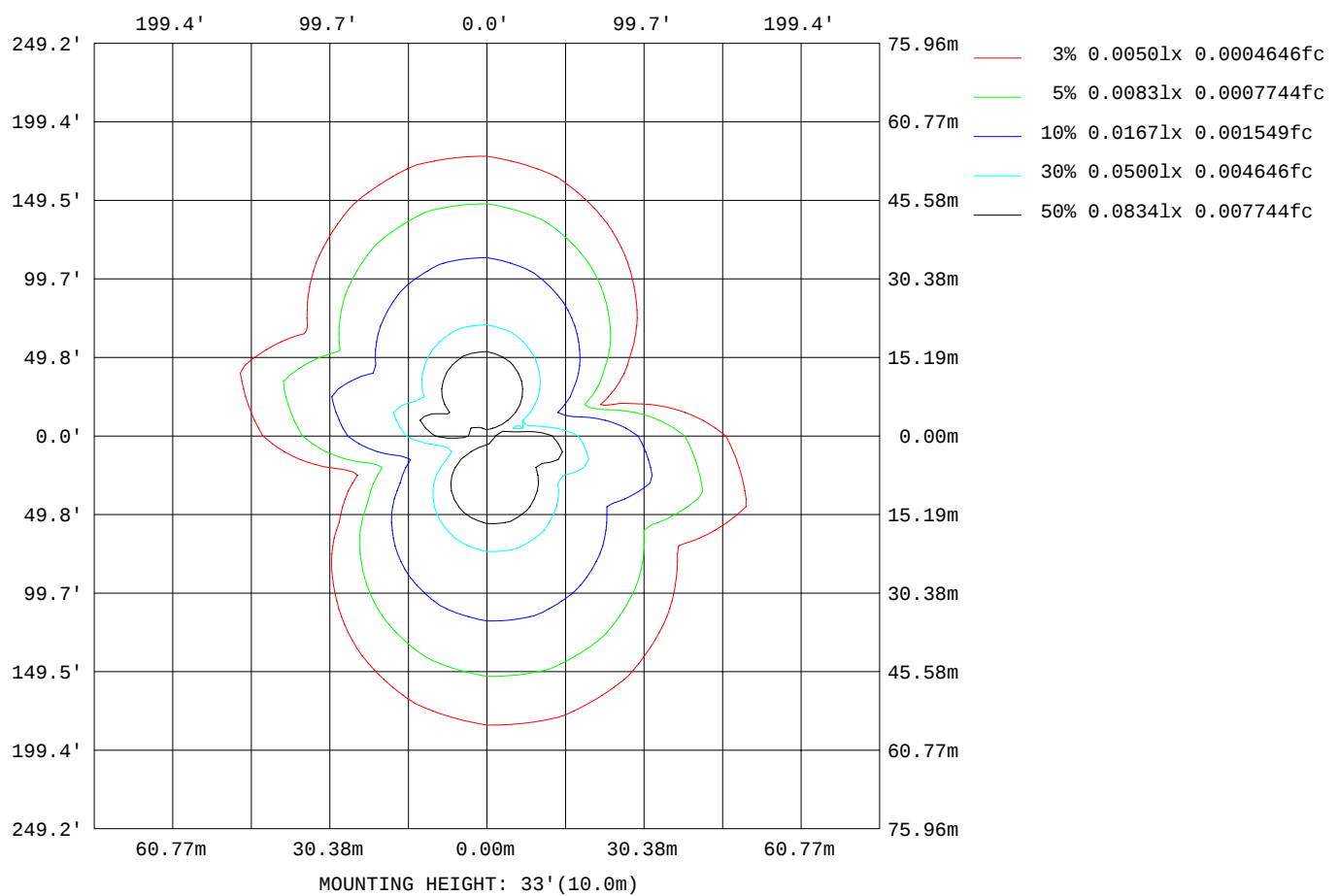
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-05-08

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:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm		
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	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: 2025-05-08

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:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm		
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

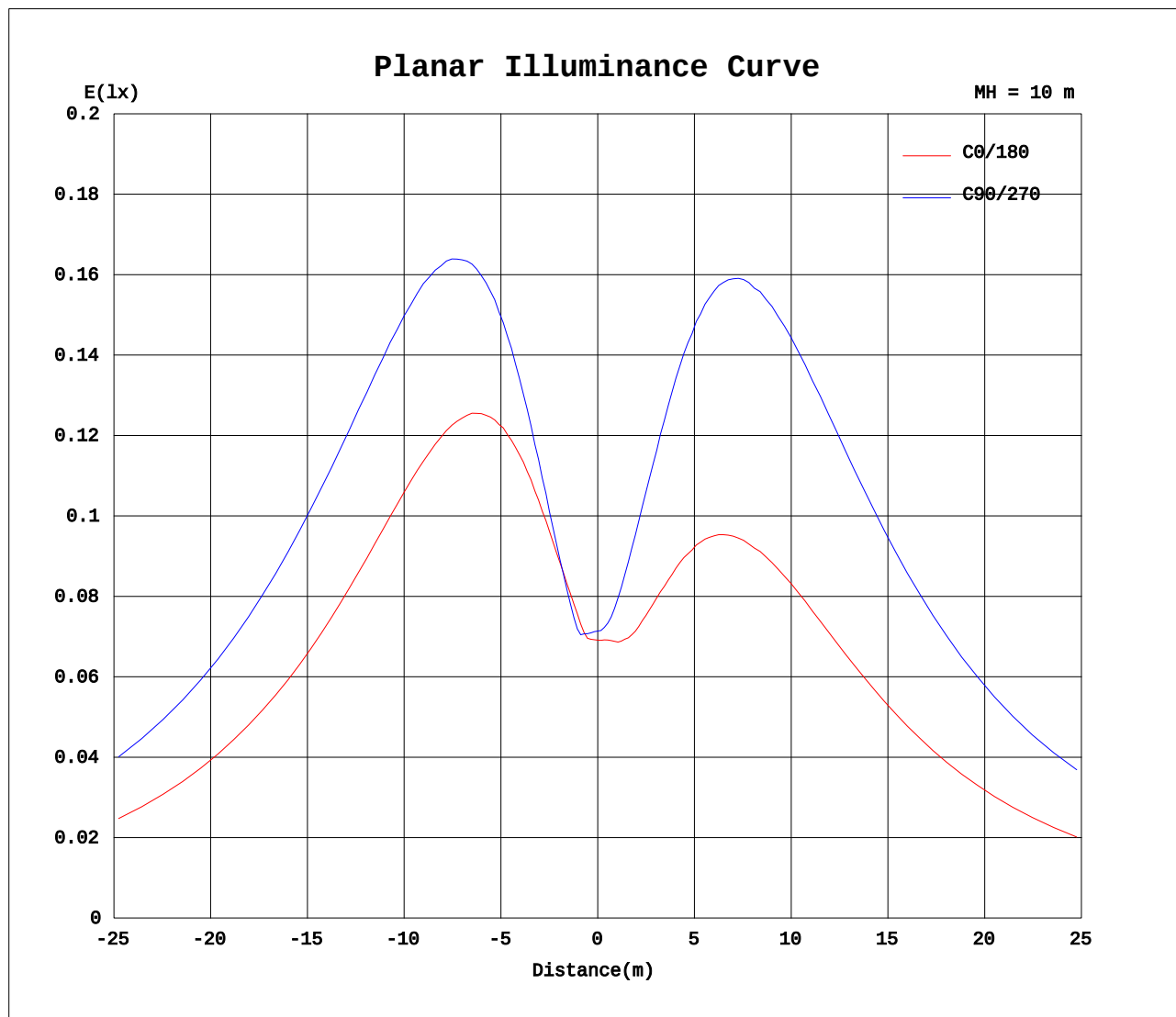
AvgL	cd/m2
L_0~180(65)av	966
L_0~180(75)av	1816
L_0~180(85)av	5940
L_90~270(65)av	1638
L_90~270(75)av	3176
L_90~270(85)av	10528
L_45(65)av	963
L_45(75)av	1817
L_45(85)av	5950

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-05-08

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: 2025-05-08

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:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm																			
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK										TYPE:LED					WEIGHT:				
SPEC.:6500K										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	6.91	7.01	6.86	6.97	7.06	7.09	7.14	7.09	7.04	6.90	6.85	6.77	6.91	7.01	6.86	6.97	7.06	7.09	7.14
5	7.40	7.54	6.98	7.23	7.34	7.25	7.13	7.13	7.00	6.89	6.79	6.77	6.96	7.12	6.92	7.09	7.32	7.59	7.80
10	8.98	9.53	8.12	8.89	9.37	9.28	8.94	8.42	7.75	6.98	6.75	6.81	7.38	8.10	7.27	7.99	8.68	9.32	9.64
15	11.0	12.1	9.63	11.1	12.1	12.2	11.7	10.8	9.65	8.11	6.75	7.02	8.51	9.89	8.21	9.58	10.8	11.8	12.1
20	13.4	15.3	11.5	13.8	15.4	15.8	15.2	14.0	12.1	9.63	7.26	7.33	10.1	12.3	9.53	11.7	13.5	14.9	15.3
25	16.2	19.0	13.7	17.0	19.4	20.1	19.4	17.8	15.1	11.5	8.08	7.66	12.2	15.2	11.2	14.4	16.8	18.8	19.2
30	19.3	23.2	16.1	20.6	23.9	25.1	24.3	22.2	18.5	13.7	9.07	7.96	14.6	18.6	13.1	17.4	20.8	23.2	23.8
35	22.6	27.9	18.7	24.7	29.0	30.6	29.8	27.0	22.3	16.2	10.2	8.30	17.3	22.5	15.3	20.8	25.3	28.4	28.9
40	26.2	32.8	21.5	28.9	34.5	36.7	35.8	32.3	26.5	18.9	11.4	8.62	20.3	26.9	17.6	24.5	30.2	34.1	34.7
45	30.0	38.1	24.4	33.4	40.4	43.3	42.4	38.1	30.9	21.7	12.7	8.86	23.5	31.6	20.1	28.5	35.6	40.3	40.8
50	33.8	43.7	27.3	38.2	46.6	50.4	49.3	44.2	35.5	24.7	14.0	9.10	26.8	36.5	22.6	32.7	41.1	46.7	47.2
55	37.6	49.4	30.3	43.0	53.2	57.9	56.7	50.6	40.3	27.7	15.4	9.34	30.2	41.5	25.1	36.8	46.8	53.3	53.8
60	41.4	55.2	33.2	47.8	59.8	65.6	64.3	57.2	45.1	30.6	16.8	9.55	33.4	46.4	27.6	40.9	52.5	59.8	60.3
65	45.0	61.0	36.0	52.7	66.4	73.2	71.9	63.9	49.9	33.5	18.2	9.64	36.6	51.3	29.9	44.9	58.1	66.2	66.6
70	48.5	66.4	38.5	57.1	72.7	80.6	79.3	70.4	54.5	36.2	19.5	9.75	39.6	56.1	32.1	48.8	63.5	72.5	72.7
75	51.4	71.2	40.7	61.2	78.5	87.3	86.0	76.4	58.8	38.8	20.7	9.86	42.7	60.9	34.3	52.8	68.8	78.4	78.3
80	53.8	75.1	42.5	64.5	83.2	92.7	91.6	81.5	62.7	41.1	22.1	10.1	45.6	65.5	36.7	56.5	74.0	84.0	83.7
85	55.3	77.5	43.9	66.8	86.3	96.3	95.4	85.1	65.4	43.1	23.1	10.0	48.2	69.3	38.4	59.4	78.2	88.5	88.1
90	55.3	77.8	44.2	67.3	87.1	97.3	96.6	86.4	66.2	43.4	23.4	10.1	49.8	71.7	39.1	61.1	80.8	91.4	90.8
95	53.7	75.7	43.3	65.9	85.1	95.1	94.7	84.9	65.1	42.8	23.4	10.2	50.3	72.5	39.3	61.6	81.2	91.3	90.5
100	50.5	71.7	40.8	62.9	80.6	90.2	89.8	80.5	62.6	41.0	22.2	8.67	49.5	70.9	37.6	59.6	79.0	88.7	87.5
105	47.0	65.0	38.5	57.4	73.7	83.8	83.5	74.4	57.3	39.1	16.6	6.03	46.9	66.7	36.9	56.0	74.3	84.1	82.6
110	42.8	58.8	33.7	52.4	66.8	76.4	76.4	68.5	52.3	30.8	12.0	4.88	43.2	62.2	28.0	52.0	68.8	77.6	76.1
115	29.4	51.6	23.1	43.5	60.0	68.6	68.8	61.8	44.1	22.5	3.81	3.67	31.4	54.8	18.7	40.5	60.9	70.0	68.2
120	22.4	36.5	16.3	31.0	45.2	56.8	57.3	47.7	32.8	16.7	2.10	2.56	22.4	37.6	11.8	28.0	42.3	50.0	48.0
125	11.3	28.5	5.68	23.6	34.7	41.6	42.0	36.7	25.4	6.86	1.89	1.77	12.8	26.4	2.37	17.9	30.0	34.9	33.6
130	1.34	15.4	0.96	10.6	24.4	32.2	32.8	27.4	12.4	1.33	1.50	1.10	2.42	14.1	1.53	6.50	17.0	21.6	20.1
135	0.87	3.85	0.89	0.92	9.62	16.5	17.3	12.2	1.92	1.16	1.21	0.87	1.28	2.46	1.29	1.32	4.68	7.66	6.46
140	0.77	0.92	0.78	0.84	1.00	4.02	5.07	1.50	1.20	1.06	1.01	0.79	1.21	1.30	1.16	1.29	1.26	1.26	1.14
145	0.77	0.92	0.71	0.85	0.99	1.07	1.17	1.15	1.16	1.02	0.91	0.68	1.17	1.27	1.11	1.24	1.22	1.24	1.11
150	0.77	0.93	0.71	0.87	0.99	1.07	1.14	1.11	1.11	0.98	0.88	0.63	1.13	1.23	1.07	1.19	1.21	1.22	1.11
155	0.78	0.95	0.72	0.89	0.99	1.07	1.13	1.09	1.08	0.94	0.86	0.63	1.09	1.19	1.02	1.16	1.16	1.21	1.10
160	0.80	0.97	0.72	0.91	0.99	1.07	1.11	1.06	1.04	0.90	0.82	0.64	1.04	1.15	0.98	1.11	1.12	1.18	1.09
165	0.84	0.99	0.75	0.93	1.00	1.09	1.10	1.03	1.01	0.88	0.81	0.66	1.00	1.11	0.95	1.07	1.09	1.15	1.09
170	0.87	0.99	0.78	0.92	1.02	1.09	1.10	1.03	0.98	0.84	0.80	0.67	0.96	1.07	0.90	1.02	1.06	1.13	1.07
175	0.87	0.97	0.80	0.92	1.02	1.05	1.08	1.02	0.96	0.84	0.79	0.70	0.92	1.04	0.87	0.99	1.02	1.10	1.07
180	0.89	0.97	0.85	0.92	1.02	1.04	1.07	1.02	0.93	0.82	0.75	0.70	0.92	1.00	0.87	0.96	1.00	1.07	1.07

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-05-08

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:0.3096A P:20.18W PF:0.5425 Lamp Flux:429.077x1 lm		
NAME:ASD-LWS28S-MV-24D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345													
0	7.09	7.04	6.90	6.85	6.77													
5	7.81	7.60	7.32	7.09	6.71													
10	9.54	8.99	8.26	7.51	6.66													
15	11.9	10.9	9.50	8.15	6.59													
20	14.9	13.2	11.1	8.91	6.52													
25	18.4	15.9	12.9	9.80	6.42													
30	22.4	19.1	15.0	10.8	6.41													
35	27.1	22.7	17.3	11.8	6.43													
40	32.2	26.6	19.7	13.0	6.53													
45	37.7	30.6	22.2	14.1	6.69													
50	43.3	34.8	24.8	15.1	6.84													
55	49.0	38.9	27.2	16.2	6.96													
60	54.6	42.9	29.5	17.2	7.10													
65	60.0	46.8	31.7	18.0	7.14													
70	65.2	50.4	33.6	18.6	7.32													
75	70.2	53.7	35.4	19.3	7.55													
80	74.7	56.8	37.1	19.9	8.06													
85	78.5	59.1	38.0	20.1	8.30													
90	80.7	60.6	38.6	20.2	8.42													
95	80.8	60.7	38.6	20.1	8.49													
100	77.5	58.5	36.6	18.9	6.53													
105	71.9	54.5	35.1	14.6	5.48													
110	66.1	50.4	27.8	9.00	4.54													
115	57.0	36.7	18.0	3.82	2.58													
120	38.5	24.7	8.45	2.60	1.71													
125	26.5	14.6	0.98	1.22	1.87													
130	13.1	3.44	0.88	0.95	1.56													
135	1.31	0.85	0.99	0.87	1.26													
140	1.02	0.86	0.83	0.92	1.02													
145	1.02	0.87	0.72	0.68	0.84													
150	1.02	0.87	0.72	0.66	0.81													
155	1.02	0.88	0.72	0.67	0.79													
160	1.02	0.88	0.72	0.67	0.77													
165	1.02	0.89	0.72	0.69	0.76													
170	1.02	0.91	0.74	0.71	0.75													
175	1.02	0.91	0.78	0.74	0.75													
180	1.01	0.92	0.79	0.75	0.72													

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-05-08

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: