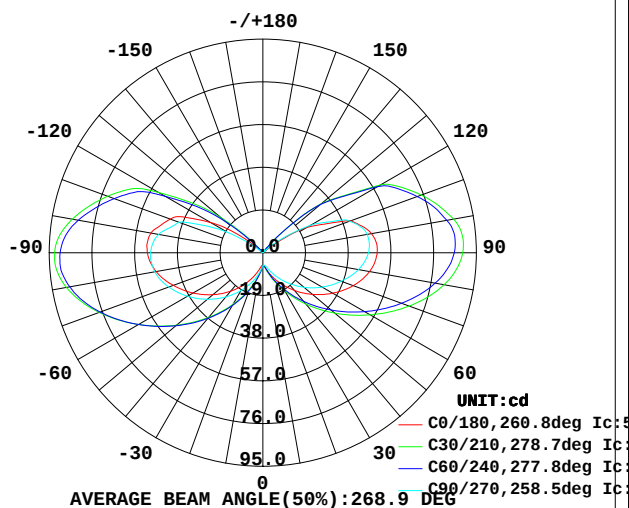


LUMINAIRE PHOTOMETRIC TEST REPORT

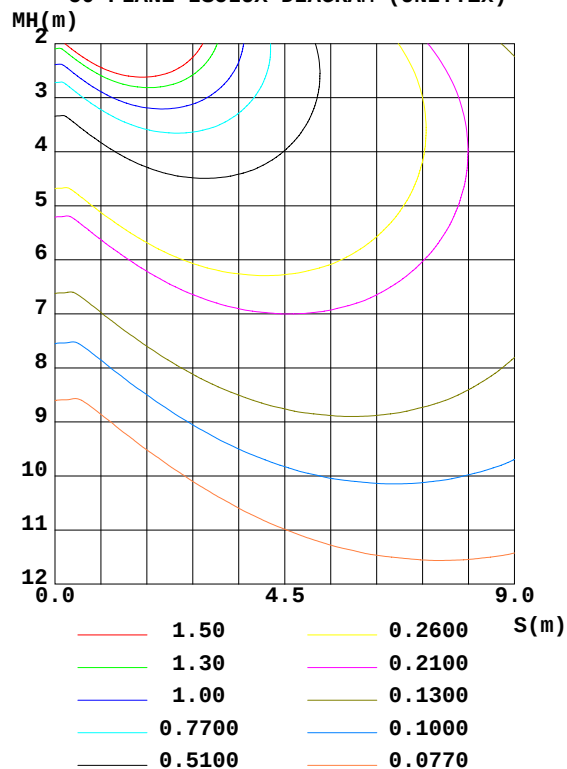
Test:U:120.1V I:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm		
NAME: ASD-LWS28S-MV-18D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.:ASD Lighting corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 17.85 lm/W			
MODEL	ASD-LWS28S-MV-18D22CC-RGBW-BK	I _{max} (cd)	97.02	S/MH(C0/180)	4.20
NOMINAL POWER(W)	22	LOR(%)	100.0	S/MH(C90/270)	4.20
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	366.04	η UP, DN(C0-180)	21.8, 26.9
NOMINAL FLUX(lm)	366.042	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	21.3, 30.0
LAMPS INSIDE	1	η up(%)	43.1	CIBSE SHR NOM	1.75
TEST VOLTAGE(V)	120	η down(%)	56.9	CIBSE SHR MAX	1.75

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	7.156	7.062	5.738	5.862	6.835	10.54	9.059	5.816	0- 10	0.6356	0.6356	0.17,0.17
20	10.71	12.14	8.173	5.700	10.77	18.21	13.70	5.677	10- 20	2.587	3.222	0.88,0.88
30	15.69	19.88	12.27	5.457	16.10	28.17	19.38	5.381	20- 30	6.100	9.322	2.55,2.55
40	21.91	30.11	17.61	5.145	22.34	40.06	25.66	5.030	30- 40	11.58	20.90	5.71,5.71
50	28.80	42.56	23.94	4.679	29.05	53.66	32.22	4.691	40- 50	19.08	39.98	10.9,10.9
60	35.99	56.65	30.57	4.155	35.86	68.30	38.70	4.364	50- 60	28.24	68.23	18.6,18.6
70	42.86	71.48	37.11	3.635	42.44	82.84	44.56	3.963	60- 70	38.25	106.5	29.1,29.1
80	48.22	84.76	43.16	3.489	48.20	94.06	48.83	3.563	70- 80	47.69	154.2	42.1,42.1
90	50.82	92.26	47.04	3.463	51.44	96.79	49.95	3.443	80- 90	54.09	208.3	56.9,56.9
100	49.09	90.12	47.12	3.494	50.54	89.81	47.08	4.113	90-100	54.72	263.0	71.8,71.8
110	41.66	79.55	41.11	3.330	43.87	76.56	39.72	3.289	100-110	47.20	310.2	84.7,84.7
120	22.55	65.63	24.45	1.225	26.99	56.09	18.31	2.450	110-120	33.57	343.7	93.9,93.9
130	0.9155	37.95	4.624	1.393	6.429	25.10	0.8358	1.048	120-130	16.55	360.3	98.4,98.4
140	0.7704	8.489	1.163	0.8970	1.205	1.201	0.7740	0.8858	130-140	4.300	364.6	99.6,99.6
150	0.7626	1.132	1.509	0.6932	1.117	1.159	0.7780	0.7588	140-150	0.6637	365.3	99.8,99.8
160	0.7741	1.121	0.9898	0.6932	1.032	1.140	0.7934	0.7318	150-160	0.4395	365.7	99.9,99.9
170	0.8163	1.055	0.9243	0.7125	0.9667	1.117	0.8242	0.7317	160-170	0.2556	366.0	100,100
180	0.9012	1.055	0.8704	0.7356	0.9397	1.090	0.8665	0.7317	170-180	0.0854	366.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

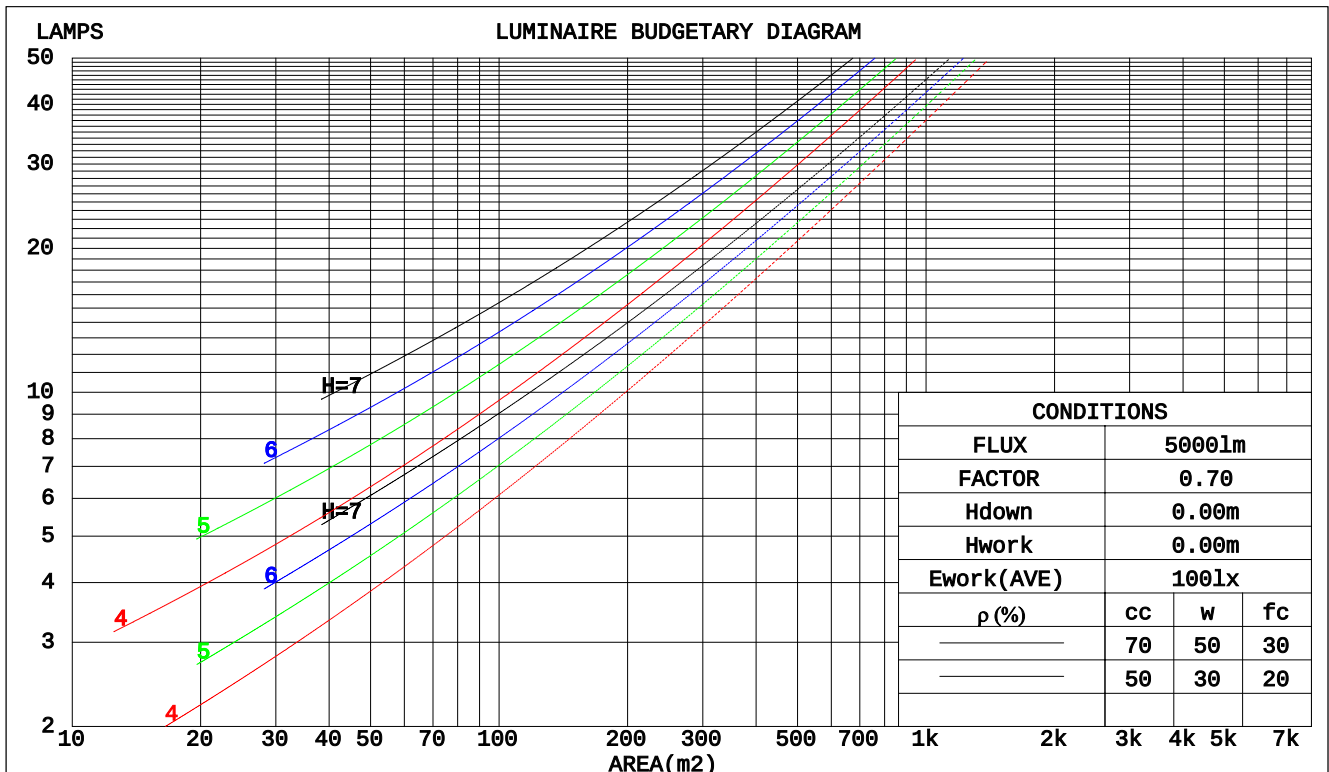
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-05-08

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:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm		
NAME: ASD-LWS28S-MV-18D22CC-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	.74	.74	.74	.62	.62	.62	.57
1.0	.84	.77	.71	.78	.72	.66	.65	.60	.56	.54	.50	.47	.43	.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	.38	.45	.37	.31	.36	.30	.25	.28	.24	.20	.15
4.0	.51	.41	.33	.47	.37	.30	.39	.31	.25	.31	.25	.20	.24	.19	.15	.11
5.0	.45	.34	.27	.41	.32	.25	.34	.26	.20	.27	.21	.16	.21	.16	.12	.09
6.0	.39	.30	.22	.36	.27	.21	.30	.23	.17	.24	.18	.14	.19	.14	.10	.07
7.0	.35	.26	.19	.32	.24	.17	.27	.20	.14	.22	.16	.11	.17	.12	.08	.06
8.0	.32	.23	.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	.17	.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:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm								
NAME: ASD-LWS28S-MV-18D22CC-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	.488	.277	.088	.467	.266	.085	.428	.246	.078	.393	.227	.073	.360	.209	.067	
2.0	.391	.214	.066	.372	.205	.063	.337	.188	.058	.305	.171	.054	.275	.155	.049	
3.0	.333	.177	.053	.316	.169	.051	.284	.154	.047	.254	.139	.043	.226	.125	.039	
4.0	.292	.152	.045	.276	.144	.043	.247	.131	.039	.219	.118	.035	.194	.105	.032	
5.0	.260	.132	.038	.246	.126	.037	.218	.114	.033	.193	.102	.030	.170	.091	.027	
6.0	.235	.118	.034	.221	.112	.032	.196	.101	.029	.173	.090	.026	.151	.080	.024	
7.0	.214	.106	.030	.202	.100	.029	.179	.090	.026	.157	.081	.023	.137	.071	.021	
8.0	.196	.096	.027	.185	.091	.026	.164	.082	.023	.144	.073	.021	.125	.064	.019	
9.0	.182	.088	.025	.171	.083	.023	.152	.075	.021	.133	.067	.019	.115	.059	.017	
10.0	.169	.081	.022	.159	.077	.021	.141	.069	.019	.123	.061	.017	.107	.054	.015	

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	.519	.519	.519	.443	.443	.443	.303	.303	.303	.174	.174	.174	.056	.056	.056	
1.0	.524	.486	.451	.448	.417	.389	.307	.287	.269	.176	.166	.156	.057	.053	.051	
2.0	.519	.465	.419	.444	.400	.362	.305	.277	.253	.176	.161	.148	.056	.052	.048	
3.0	.512	.450	.401	.439	.388	.347	.301	.270	.244	.174	.157	.144	.056	.051	.047	
4.0	.504	.439	.389	.432	.379	.338	.297	.264	.238	.172	.155	.141	.055	.050	.046	
5.0	.496	.430	.381	.426	.372	.331	.293	.260	.234	.170	.152	.139	.055	.050	.046	
6.0	.488	.422	.375	.420	.366	.327	.289	.256	.231	.168	.151	.137	.054	.049	.045	
7.0	.481	.416	.371	.414	.361	.323	.286	.253	.229	.166	.149	.136	.054	.049	.045	
8.0	.474	.411	.368	.408	.356	.321	.282	.250	.227	.164	.148	.136	.053	.048	.045	
9.0	.467	.406	.365	.402	.353	.319	.279	.248	.226	.162	.146	.135	.053	.048	.045	
10.0	.461	.402	.363	.397	.349	.317	.276	.246	.225	.161	.145	.134	.052	.048	.045	

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:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm											
NAME: ASD-LWS28S-MV-18D22CC-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		10.5	11.8	11.3	12.6	13.7	9.9	11.1	10.7	11.9	13.0
	3H	14.4	15.5	15.2	16.4	17.5	13.6	14.7	14.4	15.6	16.7
	4H	16.4	17.5	17.3	18.4	19.5	15.6	16.7	16.5	17.6	18.7
	6H	18.6	19.6	19.5	20.5	21.7	17.8	18.8	18.7	19.7	20.9
	8H	19.8	20.7	20.6	21.6	22.8	19.0	20.0	19.9	20.9	22.0
	12H	21.0	22.0	21.9	22.9	24.1	20.3	21.3	21.2	22.2	23.3
4H	2H	12.3	13.4	13.2	14.3	15.4	12.0	13.1	12.8	13.9	15.1
	3H	16.3	17.3	17.2	18.2	19.3	15.8	16.8	16.7	17.7	18.8
	4H	18.5	19.4	19.4	20.3	21.5	17.9	18.8	18.8	19.7	20.9
	6H	20.8	21.6	21.7	22.5	23.7	20.2	21.0	21.1	21.9	23.1
	8H	22.0	22.8	22.9	23.7	24.9	21.4	22.1	22.3	23.0	24.3
	12H	23.3	24.0	24.2	25.0	26.2	22.7	23.3	23.6	24.3	25.5
8H	4H	19.8	20.5	20.7	21.5	22.7	19.4	20.1	20.3	21.1	22.3
	6H	22.5	23.1	23.4	24.1	25.3	22.0	22.6	22.9	23.6	24.8
	8H	23.9	24.5	24.8	25.4	26.7	23.4	24.0	24.3	24.9	26.2
	12H	25.4	25.9	26.4	26.9	28.2	24.9	25.4	25.8	26.4	27.6
12H	4H	20.1	20.8	21.0	21.7	23.0	19.8	20.5	20.7	21.4	22.7
	6H	23.0	23.6	23.9	24.5	25.8	22.6	23.2	23.6	24.2	25.4
	8H	24.6	25.1	25.5	26.1	27.4	24.2	24.7	25.1	25.7	27.0
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		+ 0.4 / - 0.5					+ 0.4 / - 0.5				

CIE Pub.117 Corrected 366.0 lm Total Lamp Luminous Flux.(8log(F/F0) = -3.5)

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:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm		
NAME: ASD-LWS28S-MV-18D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.:ASD Lighting corp	SUR.:	PROTECTION ANGLE:

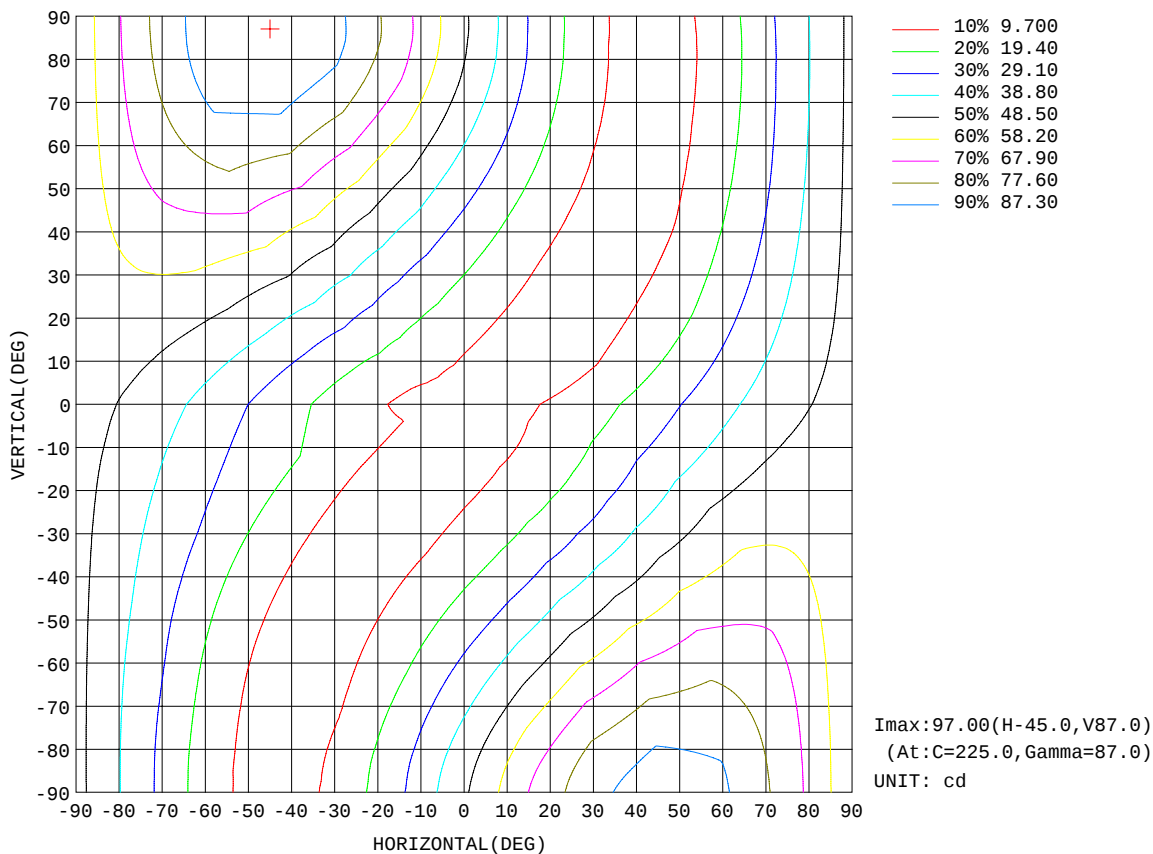
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	33	20	12	32	19	11	29	18	11	4
0.80	41	26	17	39	25	16	35	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	29	14
2.00	68	53	42	64	50	40	55	44	36	19
2.50	74	60	49	68	56	46	59	49	41	22
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:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm		
NAME: ASD-LWS28S-MV-18D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.:ASD Lighting corp	SUR.:	PROTECTION ANGLE:

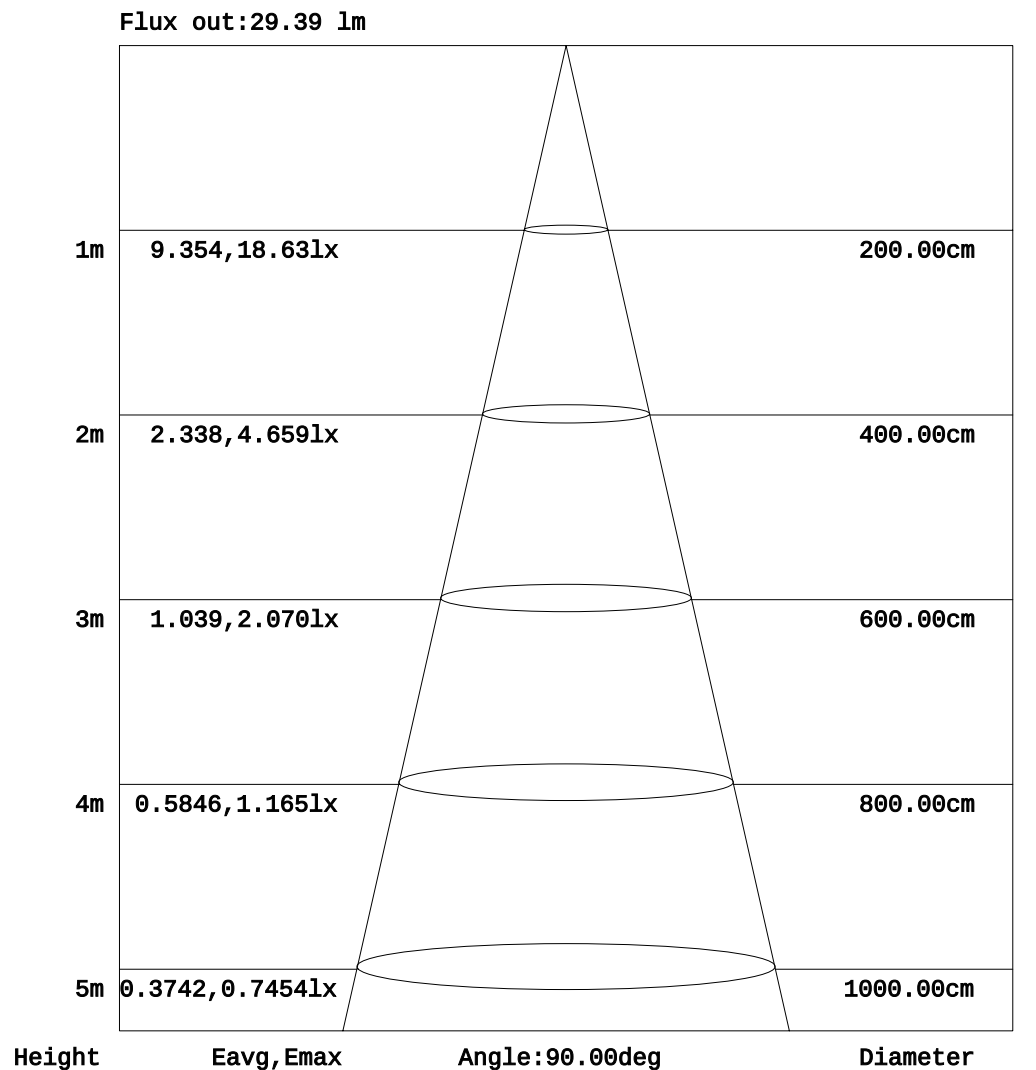


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-05-08

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:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm		
NAME: ASD-LWS28S-MV-18D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.:ASD Lighting corp	SUR.:	PROTECTION ANGLE:



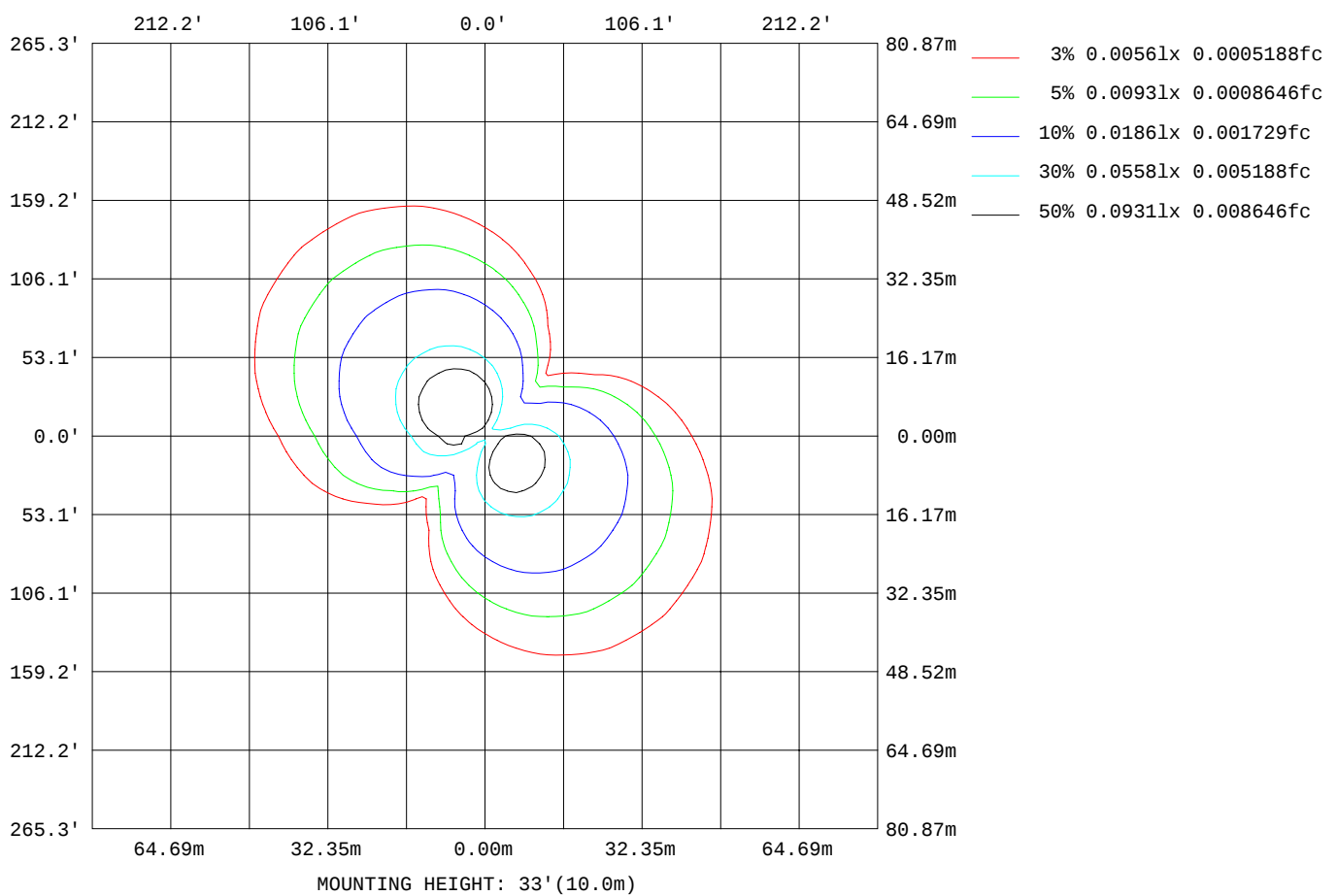
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm		
NAME: ASD-LWS28S-MV-18D22CC-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:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm		
NAME: ASD-LWS28S-MV-18D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.:ASD Lighting corp	SUR.:	PROTECTION ANGLE:

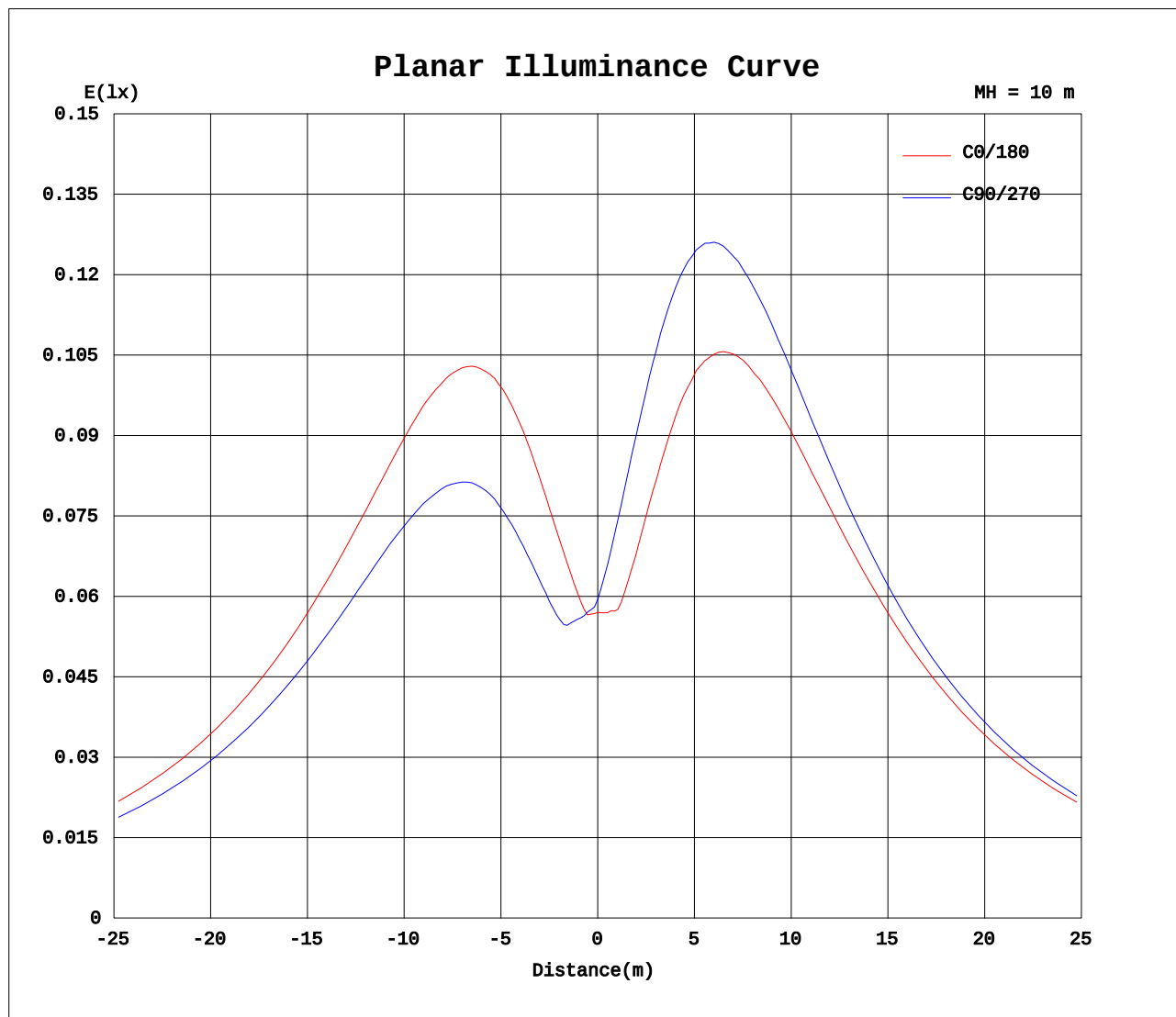
AvgL	cd/m2
L_0~180(65)av	931
L_0~180(75)av	1765
L_0~180(85)av	5747
L_90~270(65)av	895
L_90~270(75)av	1688
L_90~270(85)av	5464
L_45(65)av	875
L_45(75)av	1690
L_45(85)av	5544

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:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm		
NAME: ASD-LWS28S-MV-18D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.:ASD Lighting corp	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(°) γ (°)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	5.70	5.77	5.90	5.93	5.96	5.97	5.94	5.94	5.93	5.90	5.95	5.96	5.70	5.77	5.90	5.93	5.96	5.97	5.94
5	5.98	6.02	5.84	5.87	5.83	5.78	5.67	5.58	5.61	5.89	6.46	6.99	5.79	6.26	7.18	7.67	7.66	7.64	7.25
10	7.16	7.46	7.24	7.06	6.84	6.29	5.74	5.57	5.52	5.86	7.09	8.35	6.84	8.21	9.77	10.5	10.4	10.1	9.06
15	8.73	9.51	9.44	9.24	8.87	7.85	6.73	5.62	5.42	5.80	7.74	9.89	8.59	10.8	13.1	14.1	13.8	13.0	11.2
20	10.7	12.1	12.3	12.1	11.6	9.99	8.17	6.22	5.37	5.70	8.41	11.6	10.8	14.0	17.0	18.2	17.8	16.4	13.7
25	13.0	15.2	15.8	15.7	14.9	12.7	10.0	7.11	5.30	5.60	9.12	13.5	13.3	17.6	21.5	22.9	22.2	20.1	16.4
30	15.7	18.8	19.8	19.9	18.7	15.8	12.3	8.22	5.28	5.46	9.85	15.5	16.1	21.6	26.3	28.2	27.1	24.2	19.4
35	18.7	22.9	24.6	24.8	23.2	19.5	14.8	9.58	5.53	5.31	10.6	17.5	19.1	25.9	31.7	33.9	32.4	28.6	22.5
40	21.9	27.4	29.8	30.1	28.2	23.5	17.6	11.1	5.90	5.14	11.3	19.5	22.3	30.5	37.5	40.1	38.1	33.3	25.7
45	25.3	32.3	35.6	36.1	33.7	27.9	20.7	12.8	6.36	4.94	11.9	21.6	25.7	35.4	43.6	46.7	44.2	38.1	28.9
50	28.8	37.4	41.8	42.6	39.6	32.6	23.9	14.5	6.83	4.68	12.5	23.6	29.1	40.5	50.1	53.7	50.6	43.1	32.2
55	32.4	42.7	48.4	49.4	45.9	37.5	27.2	16.4	7.39	4.46	13.0	25.5	32.5	45.7	56.9	60.9	57.2	48.2	35.5
60	36.0	48.4	55.3	56.6	52.4	42.5	30.6	18.2	7.94	4.15	13.4	27.2	35.9	51.1	63.8	68.3	63.9	53.3	38.7
65	39.5	54.0	62.3	64.1	59.1	47.7	33.9	20.0	8.47	3.86	13.7	28.8	39.2	56.4	70.9	75.8	70.7	58.4	41.8
70	42.9	59.5	69.3	71.5	65.7	52.8	37.1	21.8	9.08	3.64	14.0	30.3	42.4	61.7	77.6	82.8	77.1	63.2	44.6
75	45.8	64.6	76.0	78.5	72.1	57.7	40.3	23.5	9.75	3.50	14.3	31.5	45.6	66.6	83.7	89.1	82.8	67.3	47.1
80	48.2	68.8	81.9	84.8	77.9	62.2	43.2	25.1	10.5	3.49	14.5	32.8	48.2	70.8	88.7	94.1	87.2	70.5	48.8
85	50.0	71.8	86.4	89.6	82.4	65.8	45.5	26.5	11.2	3.44	14.4	32.9	50.2	73.8	92.0	96.9	90.1	72.4	49.8
90	50.8	73.4	88.9	92.3	85.1	68.0	47.0	27.4	11.7	3.46	14.4	33.0	51.4	75.2	92.6	96.8	90.2	72.6	49.9
95	50.7	73.1	89.0	92.5	85.7	68.7	47.6	28.0	12.2	3.72	14.2	32.4	51.6	74.7	90.7	94.4	88.1	71.1	49.1
100	49.1	70.6	86.2	90.1	83.1	67.5	47.1	28.0	10.4	3.49	12.0	30.3	50.5	72.2	86.1	89.8	83.4	67.6	47.1
105	45.7	65.9	81.0	85.6	78.8	63.1	44.9	26.5	7.59	3.55	7.58	28.8	47.1	67.2	80.1	83.6	77.1	62.1	42.9
110	41.7	60.0	75.0	79.6	73.1	59.2	41.1	19.5	4.14	3.33	4.11	21.0	43.9	62.0	73.5	76.6	70.4	56.3	39.7
115	30.3	54.4	68.6	72.8	67.0	54.9	32.6	10.6	1.61	1.74	1.62	12.5	36.9	56.6	66.5	69.0	63.5	49.7	28.7
120	22.6	40.5	60.4	65.6	58.9	43.2	24.5	4.04	1.16	1.22	1.17	4.15	27.0	44.0	53.7	56.1	50.2	35.4	18.3
125	10.6	31.3	44.7	49.3	43.9	32.1	13.2	1.69	1.72	1.71	1.61	1.42	17.0	31.5	38.9	40.3	35.9	23.4	7.03
130	0.92	17.4	33.9	38.0	33.3	19.1	4.62	1.42	1.44	1.39	1.28	1.15	6.43	18.1	24.1	25.1	20.9	9.65	0.84
135	0.85	5.39	17.5	22.8	17.5	7.91	1.24	1.21	1.19	1.13	1.04	0.92	1.31	6.47	9.68	10.0	7.59	0.92	0.90
140	0.77	0.92	4.84	8.49	5.12	1.21	1.16	1.04	0.99	0.90	0.85	0.77	1.21	1.29	1.23	1.20	1.05	0.90	0.77
145	0.76	0.92	1.06	1.13	1.21	1.17	1.13	0.96	0.83	0.73	0.66	0.69	1.16	1.26	1.21	1.17	1.05	0.90	0.77
150	0.76	0.94	1.05	1.13	1.17	1.17	1.51	0.91	0.81	0.69	0.66	0.70	1.12	1.21	1.17	1.16	1.05	0.90	0.78
155	0.77	0.94	1.05	1.14	1.34	1.54	1.03	0.88	0.79	0.69	0.66	0.71	1.09	1.18	1.14	1.15	1.05	0.90	0.79
160	0.77	0.94	1.05	1.12	1.29	1.03	0.99	0.84	0.77	0.69	0.66	0.74	1.03	1.14	1.14	1.14	1.05	0.91	0.79
165	0.79	0.95	1.04	1.07	1.09	1.01	0.95	0.82	0.76	0.70	0.67	0.75	1.00	1.11	1.14	1.13	1.05	0.91	0.81
170	0.82	0.97	1.04	1.06	1.08	0.97	0.92	0.79	0.75	0.71	0.69	0.78	0.97	1.07	1.09	1.12	1.05	0.91	0.82
175	0.85	0.99	1.04	1.06	1.06	0.97	0.89	0.79	0.75	0.73	0.72	0.81	0.94	1.04	1.08	1.10	1.05	0.92	0.85
180	0.90	1.00	1.04	1.06	1.05	0.97	0.87	0.79	0.74	0.74	0.74	0.85	0.94	1.03	1.04	1.09	1.05	0.93	0.87

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:0.3160A P:20.51W PF:0.5402 Lamp Flux:366.042x1 lm		
NAME: ASD-LWS28S-MV-18D22CC-RGBW-BK	TYPE:LED	WEIGHT:
SPEC.:6500K	DIM.:	SERIAL No.:
MFR.:ASD Lighting corp	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

γ (DEG) \ C (DEG)	285	300	315	330	345													
0	5.94	5.93	5.90	5.95	5.96													
5	6.83	6.35	5.90	5.57	5.62													
10	7.99	6.81	5.82	5.46	5.59													
15	9.33	7.35	5.77	5.45	5.71													
20	10.8	7.88	5.68	5.42	6.53													
25	12.5	8.46	5.55	5.44	7.67													
30	14.2	9.01	5.38	5.70	9.07													
35	15.9	9.53	5.20	6.10	10.7													
40	17.6	10.0	5.03	6.65	12.6													
45	19.4	10.5	4.88	7.31	14.6													
50	21.1	10.9	4.69	8.00	16.8													
55	22.7	11.4	4.54	8.83	19.1													
60	24.3	11.7	4.36	9.68	21.4													
65	25.7	11.8	4.15	10.5	23.7													
70	26.9	12.0	3.96	11.3	25.8													
75	27.9	12.0	3.77	12.2	27.9													
80	28.7	11.9	3.56	12.9	29.8													
85	28.8	11.8	3.37	13.6	31.5													
90	28.8	11.7	3.44	14.5	32.7													
95	28.5	11.7	3.89	15.2	33.5													
100	27.0	9.60	4.11	15.5	33.6													
105	23.9	5.50	3.54	10.9	31.8													
110	16.1	4.00	3.29	5.61	25.8													
115	7.91	3.01	2.89	3.39	19.6													
120	2.01	2.31	2.45	2.51	10.7													
125	1.03	1.52	1.76	1.58	2.56													
130	0.83	0.87	1.05	1.07	1.19													
135	0.79	0.79	0.93	1.02	1.22													
140	0.87	0.86	0.89	1.09	1.21													
145	0.74	0.79	0.93	0.97	1.10													
150	0.68	0.68	0.76	0.85	1.06													
155	0.68	0.68	0.74	0.85	1.01													
160	0.68	0.68	0.73	0.81	0.98													
165	0.68	0.70	0.73	0.80	0.95													
170	0.72	0.71	0.73	0.78	0.91													
175	0.72	0.73	0.73	0.77	0.89													
180	0.75	0.74	0.73	0.74	0.85													

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: