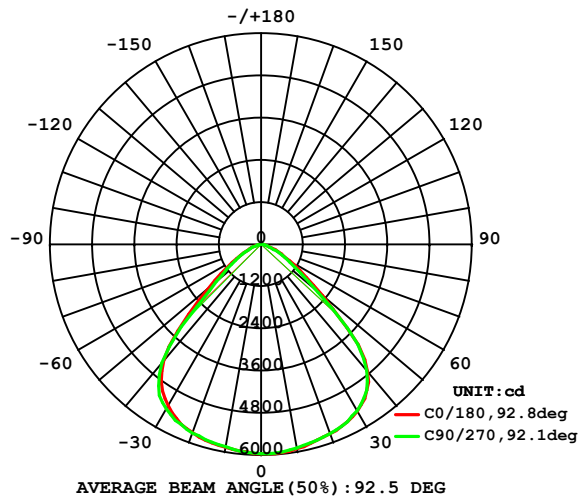


LUMINAIRE PHOTOMETRIC TEST REPORT

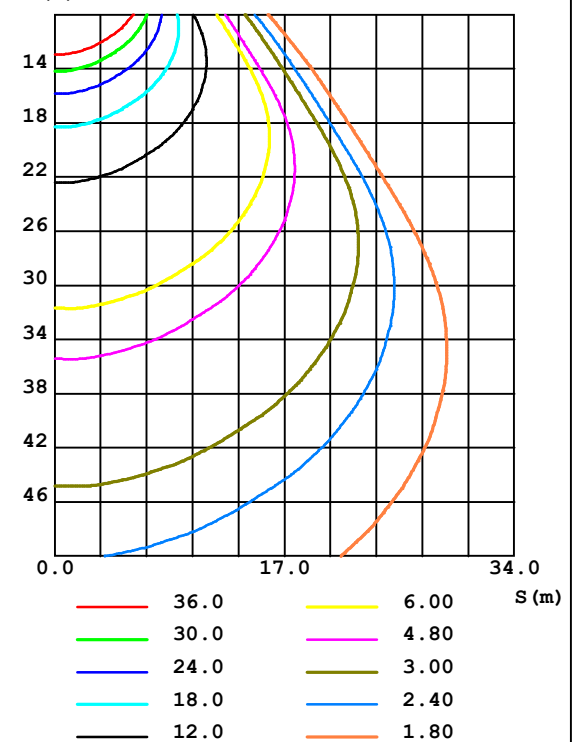
Test:U:120.0V I:0.8963A P:100.9W PF:0.9385 Lamp Flux:12427x1 lm		
NAME: ASD-UHD-CORE-MV-100BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 123.14 lm/W			
MODEL-UHD-CORE-MV-100BK-5CP		I _{max} (cd)	5976	S/MH (C0/180)	1.36
NOMINAL POWER(W)	102	LOR(%)	100.0	S/MH (C90/270)	1.36
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	12427	η UP,DN (C0-180)	0.2,51.7
NOMINAL FLUX(lm)	12427	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.1,48.0
LAMPS INSIDE	1	η up (%)	0.3	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	119.8	η down (%)	99.7	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



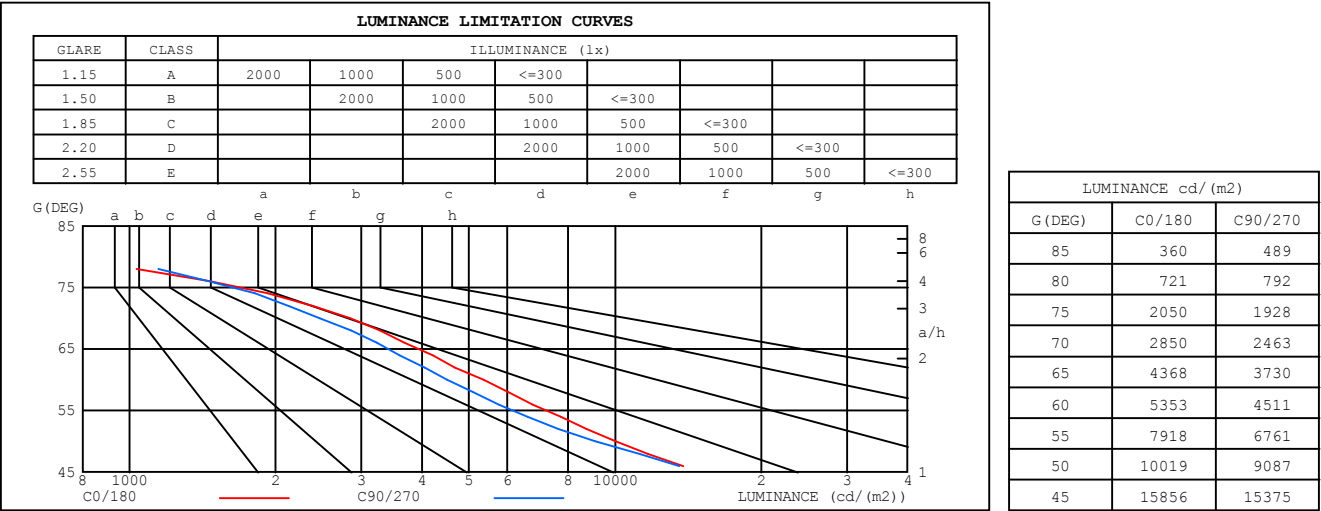
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-06-14

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	5900	5875	5861	5848					0- 10	564.5	564.5	4.54, 4.54
20	5733	5729	5702	5717					10- 20	1643	2207	17.8, 17.8
30	5482	5463	5298	5413					20- 30	2584	4791	38.6, 38.6
40	4722	4681	4308	4395					30- 40	3166	7957	64, 64
50	2289	2130	2017	1663					40- 50	2548	10505	84.5, 84.5
60	951.5	822.4	810.9	736.2					50- 60	1190	11695	94.1, 94.1
70	346.5	307.1	290.5	254.7					60- 70	528.4	12224	98.4, 98.4
80	44.52	50.15	33.27	28.70					70- 80	155.6	12379	99.6, 99.6
90	0.9538	1.224	0.4500	0.4368					80- 90	13.33	12393	99.7, 99.7
100	0.8993	0.7184	0.6003	0.5817					90-100	0.6564	12393	99.7, 99.7
110	1.850	1.668	1.201	1.026					100-110	1.036	12394	99.7, 99.7
120	4.574	4.336	2.703	2.561					110-120	2.292	12397	99.8, 99.8
130	7.724	8.084	5.725	5.539					120-130	4.575	12401	99.8, 99.8
140	10.95	11.34	8.977	8.689					130-140	6.498	12408	99.8, 99.8
150	12.90	13.64	12.13	12.10					140-150	7.088	12415	99.9, 99.9
160	14.57	15.16	14.48	14.33					150-160	6.364	12421	100, 100
170	15.25	15.87	15.38	15.31					160-170	4.269	12425	100, 100
180	15.58	15.92	15.78	15.62					170-180	1.488	12427	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



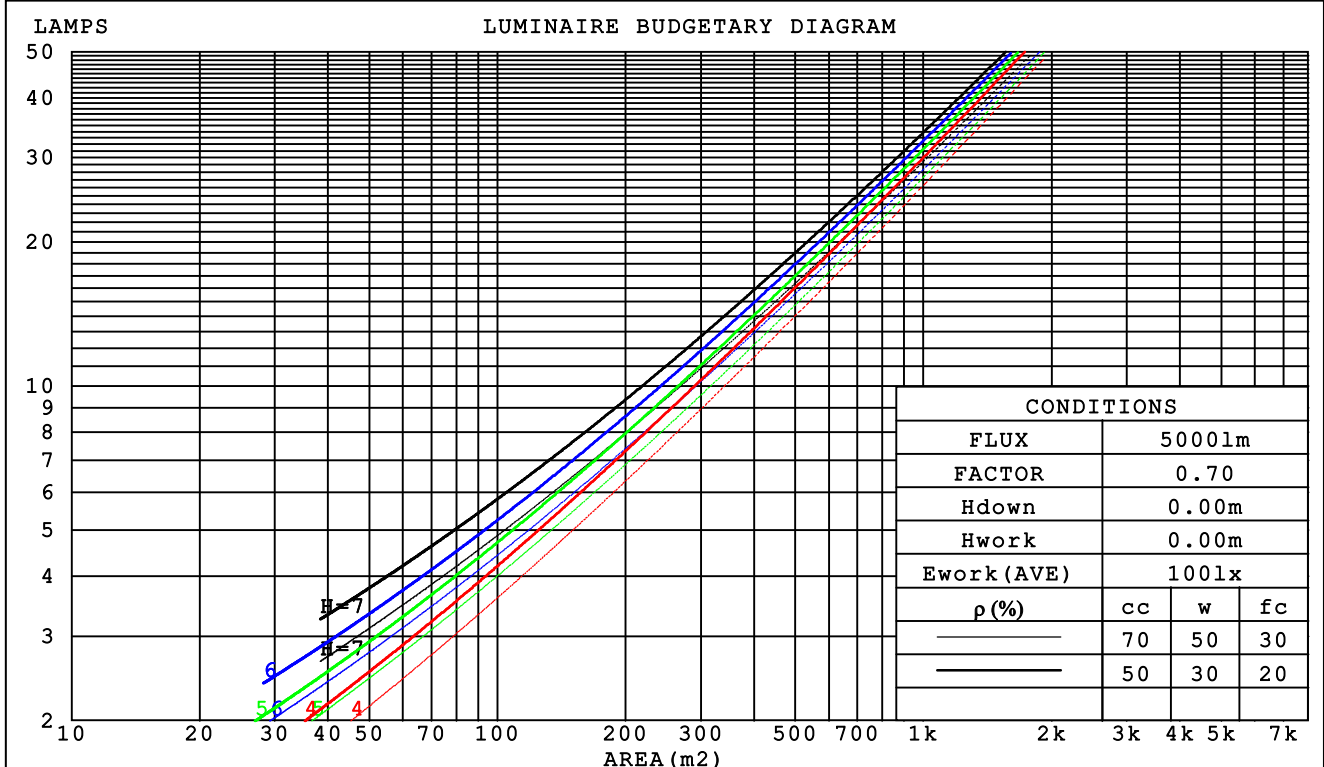
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-06-14

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.8963A P:100.9W PF:0.9385 Lamp Flux:12427x1 lm		
NAME: ASD-UHD-CORE-MV-100BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-06-14

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.0V I:0.8963A P:100.9W PF:0.9385 Lamp Flux:12427x1 lm					
NAME: ASD-UHD-CORE-MV-100BK-5CP			TYPE:		WEIGHT:
SPEC.:5000K			DIM.:		SERIAL No.:027
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	.231	.132	.042	.224	.128	.041	.211	.121	.039	.199	.115	.037	.188	.109	.035	
2.0	.226	.124	.038	.220	.121	.037	.209	.116	.036	.199	.112	.035	.189	.107	.034	
3.0	.217	.115	.035	.211	.113	.034	.201	.109	.033	.192	.105	.032	.184	.102	.032	
4.0	.205	.107	.031	.201	.105	.031	.192	.102	.030	.184	.099	.030	.177	.096	.029	
5.0	.195	.099	.029	.190	.098	.028	.183	.095	.028	.176	.093	.028	.169	.090	.027	
6.0	.184	.092	.026	.180	.091	.026	.174	.089	.026	.167	.087	.026	.161	.085	.025	
7.0	.174	.086	.024	.171	.085	.024	.165	.083	.024	.159	.082	.024	.154	.080	.023	
8.0	.165	.081	.023	.162	.080	.023	.157	.078	.022	.151	.077	.022	.147	.075	.022	
9.0	.157	.076	.021	.154	.075	.021	.149	.074	.021	.144	.072	.021	.140	.071	.021	
10.0	.149	.071	.020	.146	.071	.020	.142	.070	.020	.138	.068	.019	.134	.067	.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	.193	.193	.193	.165	.165	.165	.112	.112	.112	.065	.065	.065	.021	.021	.021	
1.0	.177	.159	.143	.151	.136	.123	.104	.094	.085	.060	.054	.049	.019	.017	.016	
2.0	.166	.134	.108	.142	.116	.093	.097	.080	.065	.056	.047	.038	.018	.015	.012	
3.0	.156	.116	.084	.134	.100	.073	.092	.070	.051	.053	.041	.030	.017	.013	.010	
4.0	.148	.102	.067	.127	.088	.058	.087	.062	.041	.051	.036	.024	.016	.012	.008	
5.0	.141	.091	.055	.121	.079	.048	.083	.055	.034	.048	.032	.020	.016	.011	.007	
6.0	.134	.083	.046	.116	.072	.040	.080	.050	.028	.046	.029	.017	.015	.010	.006	
7.0	.128	.076	.039	.110	.066	.034	.076	.046	.024	.044	.027	.014	.014	.009	.005	
8.0	.123	.070	.034	.106	.061	.029	.073	.043	.021	.042	.025	.012	.014	.008	.004	
9.0	.117	.065	.029	.101	.056	.026	.070	.040	.018	.041	.023	.011	.013	.008	.004	
10.0	.112	.061	.026	.097	.053	.023	.067	.037	.016	.039	.022	.010	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2026-06-14

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:120.0V I:0.8963A P:100.9W PF:0.9385 Lamp Flux:12427x1 lm										
NAME: ASD-UHD-CORE-MV-100BK-5CP					TYPE:			WEIGHT:		
SPEC.:5000K					DIM.:			SERIAL No.:027		
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	19.6	20.8	19.8	21.0	21.2	19.2	20.5	19.5	20.7	20.9
3H	19.7	20.9	20.0	21.1	21.3	19.3	20.5	19.6	20.7	21.0
4H	19.7	20.8	20.0	21.0	21.3	19.3	20.4	19.6	20.7	20.9
6H	19.6	20.6	19.9	20.9	21.2	19.3	20.3	19.6	20.5	20.8
8H	19.6	20.6	19.9	20.8	21.1	19.2	20.2	19.5	20.5	20.8
12H	19.5	20.5	19.9	20.8	21.1	19.2	20.1	19.5	20.4	20.7
4H 2H	19.5	20.6	19.8	20.9	21.1	19.2	20.3	19.5	20.6	20.8
3H	19.8	20.7	20.1	21.0	21.3	19.4	20.4	19.8	20.7	21.0
4H	19.8	20.6	20.2	21.0	21.3	19.5	20.3	19.8	20.6	21.0
6H	19.7	20.5	20.1	20.8	21.2	19.4	20.2	19.8	20.5	20.9
8H	19.7	20.4	20.1	20.7	21.1	19.4	20.1	19.8	20.4	20.8
12H	19.6	20.3	20.1	20.7	21.1	19.3	20.0	19.7	20.3	20.7
8H 4H	19.7	20.4	20.1	20.8	21.1	19.4	20.1	19.8	20.4	20.8
6H	19.7	20.2	20.1	20.6	21.1	19.3	19.9	19.8	20.3	20.7
8H	19.6	20.1	20.1	20.5	21.0	19.3	19.8	19.8	20.2	20.7
12H	19.6	20.0	20.0	20.4	20.9	19.3	19.7	19.7	20.1	20.6
12H 4H	19.7	20.3	20.1	20.7	21.1	19.3	20.0	19.8	20.3	20.8
6H	19.6	20.1	20.1	20.5	21.0	19.3	19.8	19.8	20.2	20.7
8H	19.6	20.0	20.1	20.4	20.9	19.3	19.7	19.7	20.1	20.6
Variations with the observer position at spacings:										
S = 1.0H	+ 1.7 / - 2.1					+ 1.8 / - 2.5				
1.5H	+ 1.0 / - 1.8					+ 1.1 / - 1.9				
2.0H	+ 3.4 / - 2.8					+ 3.6 / - 2.7				

CIE Pub.117 Corrected 12427 lm Total Lamp Luminous Flux. (8log(F/F0) = 8.8)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2026-06-14

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.8963A P:100.9W PF:0.9385 Lamp Flux:12427x1 lm		
NAME: ASD-UHD-CORE-MV-100BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

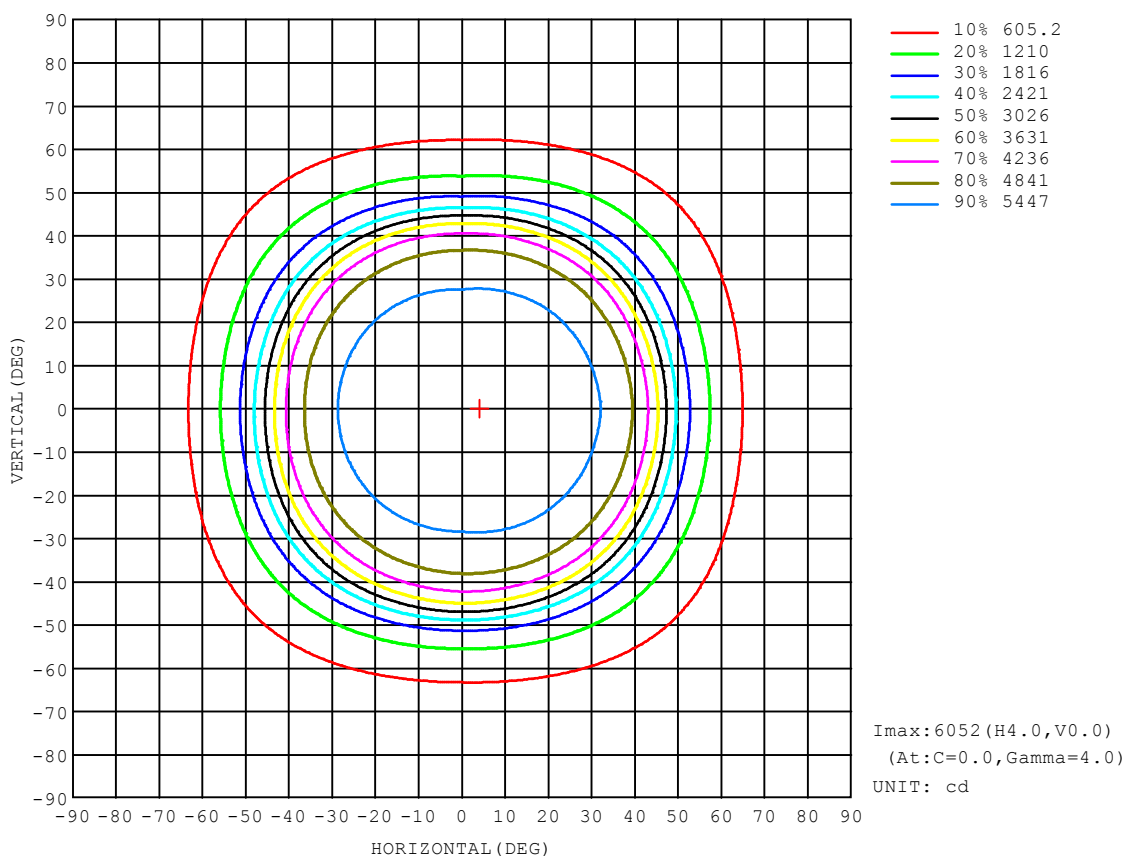
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	69	59	53	68	59	53	67	58	53	48
0.80	79	69	64	78	69	63	76	68	63	57
1.00	87	78	72	86	77	72	84	78	72	66
1.25	93	85	80	92	84	79	89	83	78	73
1.50	97	90	85	96	89	84	93	87	83	77
2.00	102	96	91	101	95	91	97	93	89	83
2.50	105	99	95	103	98	94	100	95	92	85
3.00	107	102	98	105	101	97	102	98	95	88
4.00	110	106	103	108	104	101	104	101	99	91
5.00	112	108	105	110	106	104	105	103	101	92
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2026-06-14

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.8963A P:100.9W PF:0.9385 Lamp Flux:12427x1 lm		
NAME: ASD-UHD-CORE-MV-100BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

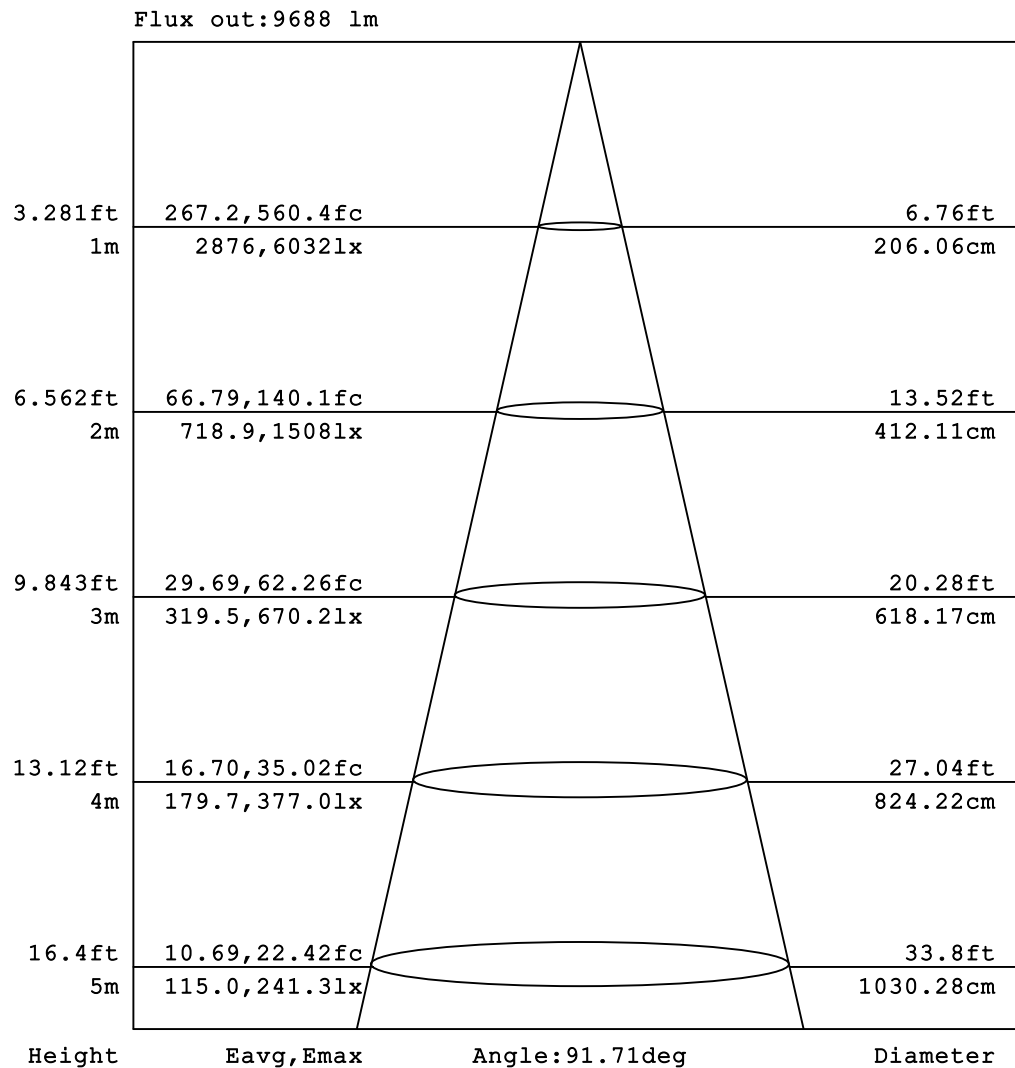


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-06-14

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.0V I:0.8963A P:100.9W PF:0.9385 Lamp Flux:12427x1 lm		
NAME: ASD-UHD-CORE-MV-100BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:



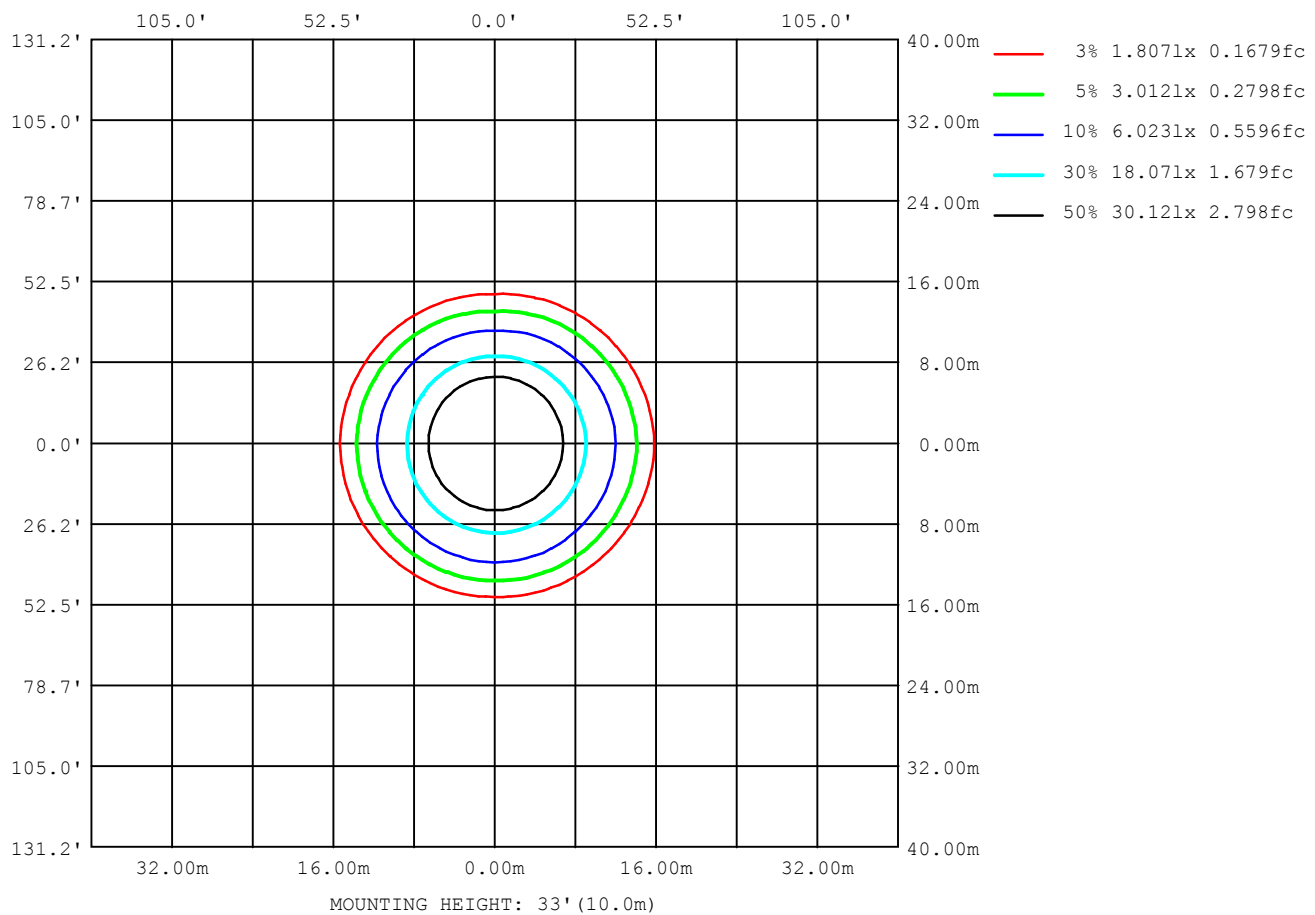
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2026-06-14

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity: 65.0%
Test Distance: 18.400m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

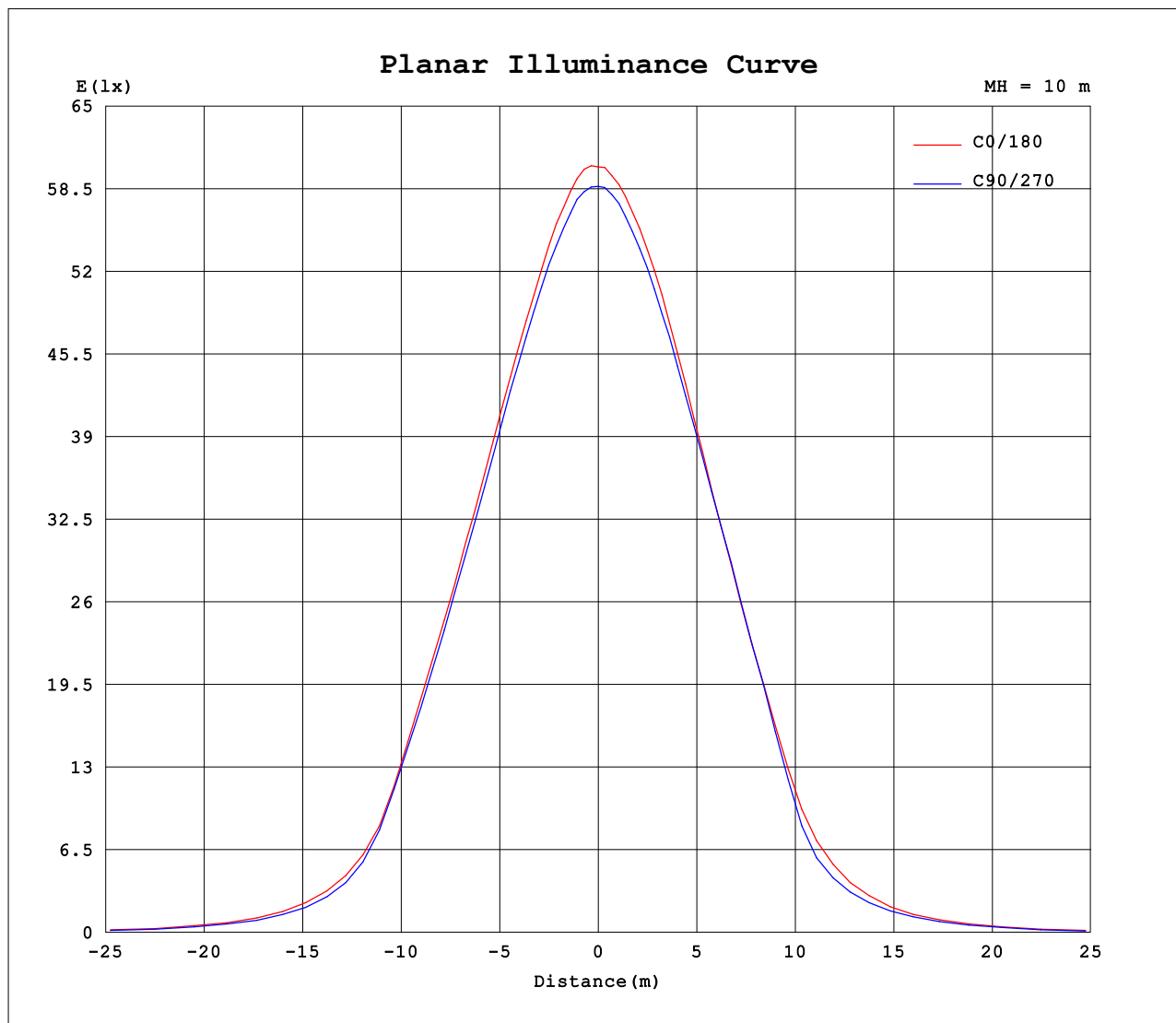
Test:U:120.0V I:0.8963A P:100.9W PF:0.9385 Lamp Flux:12427x1 lm		
NAME: ASD-UHD-CORE-MV-100BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-06-14

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2026-06-14

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity: 65.0%
Test Distance: 18.400m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.8963A P:100.9W PF:0.9385 Lamp Flux:12427x1 lm		
NAME: ASD-UHD-CORE-MV-100BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	5948	5948	5948	5948															
5	5976	5946	5922	5926															
10	5900	5875	5861	5848															
15	5842	5824	5811	5801															
20	5733	5729	5702	5717															
25	5666	5666	5593	5610															
30	5482	5463	5298	5413															
35	5286	5260	5029	5185															
40	4722	4681	4308	4395															
45	3986	3964	3415	3277															
50	2289	2130	2017	1663															
55	1615	1414	1426	1194															
60	952	822	811	736															
65	656	575	553	507															
70	347	307	290	255															
75	189	182	157	131															
80	44.5	50.1	33.3	28.7															
85	11.2	15.5	10.5	7.99															
90	0.95	1.22	0.45	0.44															
95	0.75	0.41	0.48	0.49															
100	0.90	0.72	0.60	0.58															
105	0.9985	1.00	0.78	0.64															
110	1.85	1.67	1.20	1.03															
115	2.65	2.36	1.68	1.48															
120	4.57	4.34	2.70	2.56															
125	5.90	5.88	3.80	3.67															
130	7.72	8.08	5.73	5.54															
135	9.17	9.52	7.00	6.84															
140	10.9	11.3	8.98	8.69															
145	11.9	12.3	10.2	9.87															
150	12.9	13.6	12.1	12.1															
155	13.8	14.4	13.4	13.3															
160	14.6	15.2	14.5	14.3															
165	15.0	15.5	15.0	14.8															
170	15.2	15.9	15.4	15.3															
175	15.5	15.9	15.6	15.5															
180	15.6	15.9	15.8	15.6															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-06-14

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks: