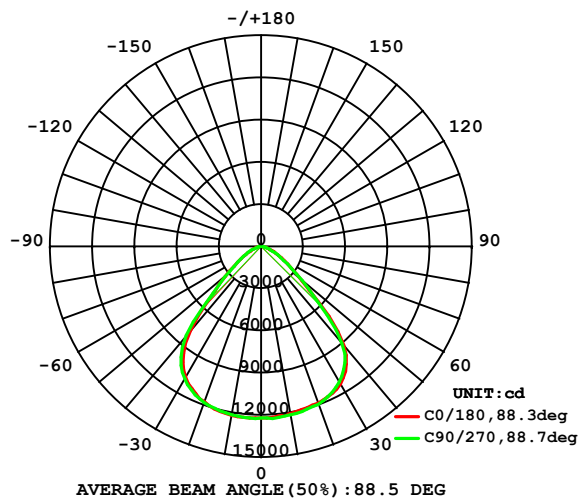


LUMINAIRE PHOTOMETRIC TEST REPORT

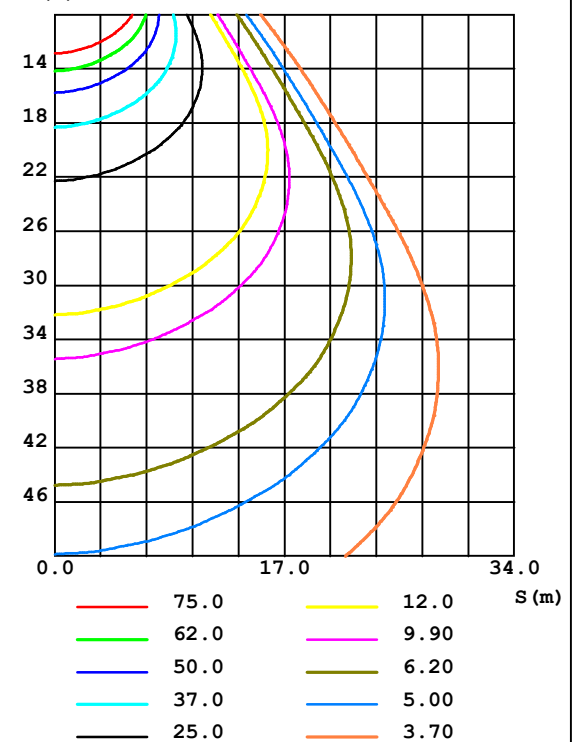
Test:U:119.9V I:1.785A P:197.9W PF:0.9281 Lamp Flux:24320.9x1 lm		
NAME: ASD-UHD-CORE-MV-200BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 122.88 lm/W			
MODEL:UHD-CORE-MV-200BK-5CP		I _{max} (cd)	12273	S/MH (C0/180)	1.31
NOMINAL POWER(W)	200	LOR (%)	100.0	S/MH (C90/270)	1.30
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	24321	η UP,DN (C0-180)	0.2,51.5
NOMINAL FLUX(lm)	24320.9	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.1,48.2
LAMPS INSIDE	1	η up (%)	0.3	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	119.9	η down (%)	99.7	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



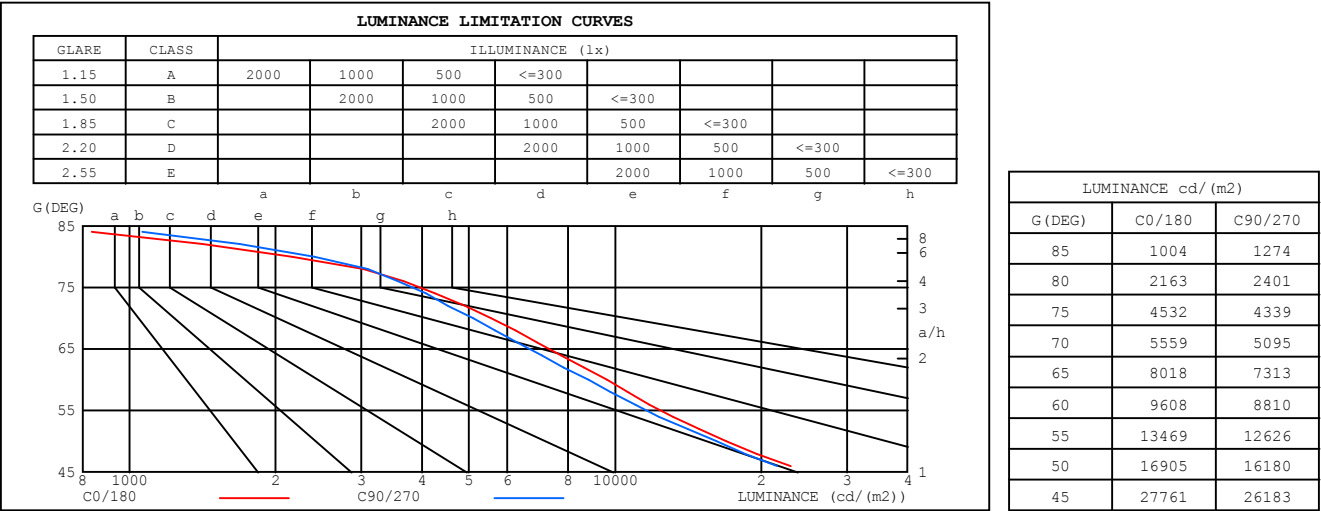
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2026-06-14

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	1206	1217	1221	1216					0~ 10	1164	1164	4.78, 4.78
20	1187	1195	1180	1184					10~ 20	3404	4567	18.8, 18.8
30	1131	1116	1073	1090					20~ 30	5313	9880	40.6, 40.6
40	914.9	897.7	783.1	829.1					30~ 40	6274	16154	66.4, 66.4
50	384.7	380.9	334.2	341.6					40~ 50	4490	20645	84.9, 84.9
60	170.1	161.3	150.9	142.6					50~ 60	2167	22811	93.8, 93.8
70	67.31	63.81	61.38	57.63					60~ 70	1025	23837	98, 98
80	13.29	15.27	11.94	10.68					70~ 80	374.1	24211	99.5, 99.5
90	0.3309	0.2156	0.1774	0.1258					80~ 90	41.05	24252	99.7, 99.7
100	0.2520	0.2188	0.1466	0.1430					90~100	1.898	24254	99.7, 99.7
110	0.4151	0.3850	0.2426	0.2333					100~110	2.648	24257	99.7, 99.7
120	0.8322	0.8329	0.4994	0.4941					110~120	4.548	24261	99.8, 99.8
130	1.557	1.562	1.052	1.025					120~130	8.665	24270	99.8, 99.8
140	2.181	2.241	1.720	1.663					130~140	12.55	24282	99.8, 99.8
150	2.669	2.737	2.356	2.297					140~150	13.99	24296	99.9, 99.9
160	3.037	3.065	2.960	2.873					150~160	12.79	24309	100, 100
170	3.198	3.236	3.215	3.109					160~170	8.751	24318	100, 100
180	3.241	3.288	3.296	3.194					170~180	3.072	24321	100, 100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		



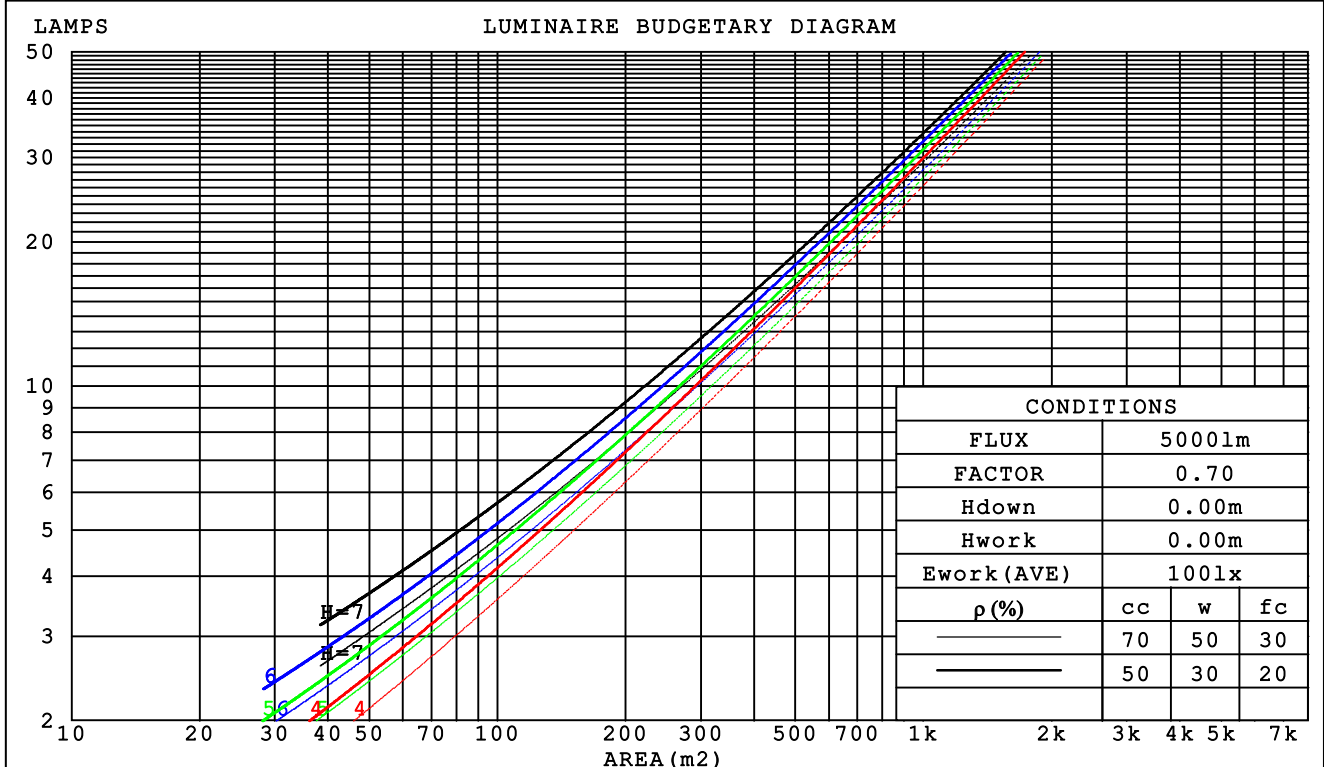
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-06-14

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:119.9V I:1.785A P:197.9W PF:0.9281 Lamp Flux:24320.9x1 lm		
NAME: ASD-UHD-CORE-MV-200BK-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:119.9V I:1.785A P:197.9W PF:0.9281 Lamp Flux:24320.9x1 lm					
NAME: ASD-UHD-CORE-MV-200BK-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	.131	.042	.224	.128	.041	.211	.121	.039	.199	.115	.037	.188	.109	.035			
2.0	.225	.123	.038	.219	.120	.037	.207	.115	.036	.197	.111	.035	.188	.106	.033			
3.0	.214	.114	.034	.209	.112	.034	.199	.108	.033	.190	.104	.032	.182	.101	.031			
4.0	.203	.106	.031	.199	.104	.031	.190	.101	.030	.182	.098	.029	.174	.095	.029			
5.0	.192	.098	.028	.188	.097	.028	.180	.094	.028	.173	.091	.027	.167	.089	.027			
6.0	.182	.091	.026	.178	.090	.026	.171	.088	.026	.165	.086	.025	.159	.084	.025			
7.0	.172	.085	.024	.169	.084	.024	.163	.082	.024	.157	.080	.023	.152	.079	.023			
8.0	.163	.080	.022	.160	.079	.022	.155	.077	.022	.150	.076	.022	.145	.074	.022			
9.0	.155	.075	.021	.152	.074	.021	.147	.073	.021	.143	.071	.020	.138	.070	.020			
10.0	.147	.071	.020	.145	.070	.019	.140	.069	.019	.136	.068	.019	.132	.066	.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	.165	.134	.108	.142	.116	.094	.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	.059	.087	.062	.041	.050	.036	.024	.016	.012	.008	
5.0	.140	.091	.055	.121	.079	.048	.083	.055	.034	.048	.032	.020	.016	.011	.007	
6.0	.134	.083	.046	.115	.072	.040	.079	.050	.028	.046	.029	.017	.015	.010	.006	
7.0	.128	.076	.039	.110	.065	.034	.076	.046	.024	.044	.027	.014	.014	.009	.005	
8.0	.122	.070	.034	.105	.060	.029	.073	.042	.021	.042	.025	.012	.014	.008	.004	
9.0	.117	.065	.030	.100	.056	.026	.070	.039	.018	.041	.023	.011	.013	.008	.004	
10.0	.112	.060	.026	.096	.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:119.9V I:1.785A P:197.9W PF:0.9281 Lamp Flux:24320.9x1 lm											
NAME: ASD-UHD-CORE-MV-200BK-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	2H	21.4	22.6	21.6	22.8	23.0	21.1	22.4	21.4	22.6	22.8
	3H	21.6	22.7	21.8	22.9	23.2	21.3	22.5	21.6	22.7	22.9
	4H	21.6	22.7	21.9	22.9	23.2	21.3	22.4	21.6	22.7	22.9
	6H	21.5	22.6	21.9	22.8	23.1	21.3	22.3	21.6	22.6	22.8
	8H	21.5	22.5	21.8	22.7	23.0	21.3	22.2	21.6	22.5	22.8
	12H	21.4	22.4	21.8	22.7	23.0	21.2	22.1	21.6	22.4	22.7
4H	2H	21.4	22.5	21.7	22.7	22.9	21.2	22.3	21.5	22.5	22.7
	3H	21.7	22.6	22.0	22.9	23.2	21.4	22.4	21.8	22.7	23.0
	4H	21.7	22.6	22.1	22.9	23.2	21.5	22.4	21.9	22.7	23.0
	6H	21.7	22.5	22.1	22.8	23.2	21.5	22.2	21.9	22.6	23.0
	8H	21.7	22.4	22.1	22.7	23.1	21.5	22.2	21.9	22.5	22.9
	12H	21.6	22.3	22.1	22.7	23.1	21.4	22.1	21.9	22.4	22.8
8H	4H	21.7	22.4	22.1	22.7	23.1	21.5	22.1	21.9	22.5	22.9
	6H	21.7	22.3	22.1	22.7	23.1	21.5	22.0	21.9	22.4	22.9
	8H	21.7	22.2	22.1	22.6	23.0	21.5	21.9	21.9	22.4	22.8
	12H	21.6	22.0	22.1	22.5	23.0	21.4	21.8	21.9	22.3	22.8
12H	4H	21.6	22.3	22.1	22.6	23.1	21.4	22.0	21.8	22.4	22.8
	6H	21.7	22.1	22.1	22.6	23.0	21.4	21.9	21.9	22.4	22.8
	8H	21.6	22.0	22.1	22.5	23.0	21.4	21.8	21.9	22.3	22.8
Variations with the observer position at spacings:											
S = 1.0H		+ 1.4 / - 2.1					+ 1.5 / - 2.2				
1.5H		+ 1.6 / - 1.6					+ 1.6 / - 1.6				
2.0H		+ 2.9 / - 2.2					+ 2.8 / - 2.1				

CIE Pub.117 Corrected 24321 lm Total Lamp Luminous Flux. (8log(F/F0) = 11.1)

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:119.9V I:1.785A P:197.9W PF:0.9281 Lamp Flux:24320.9x1 lm		
NAME: ASD-UHD-CORE-MV-200BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

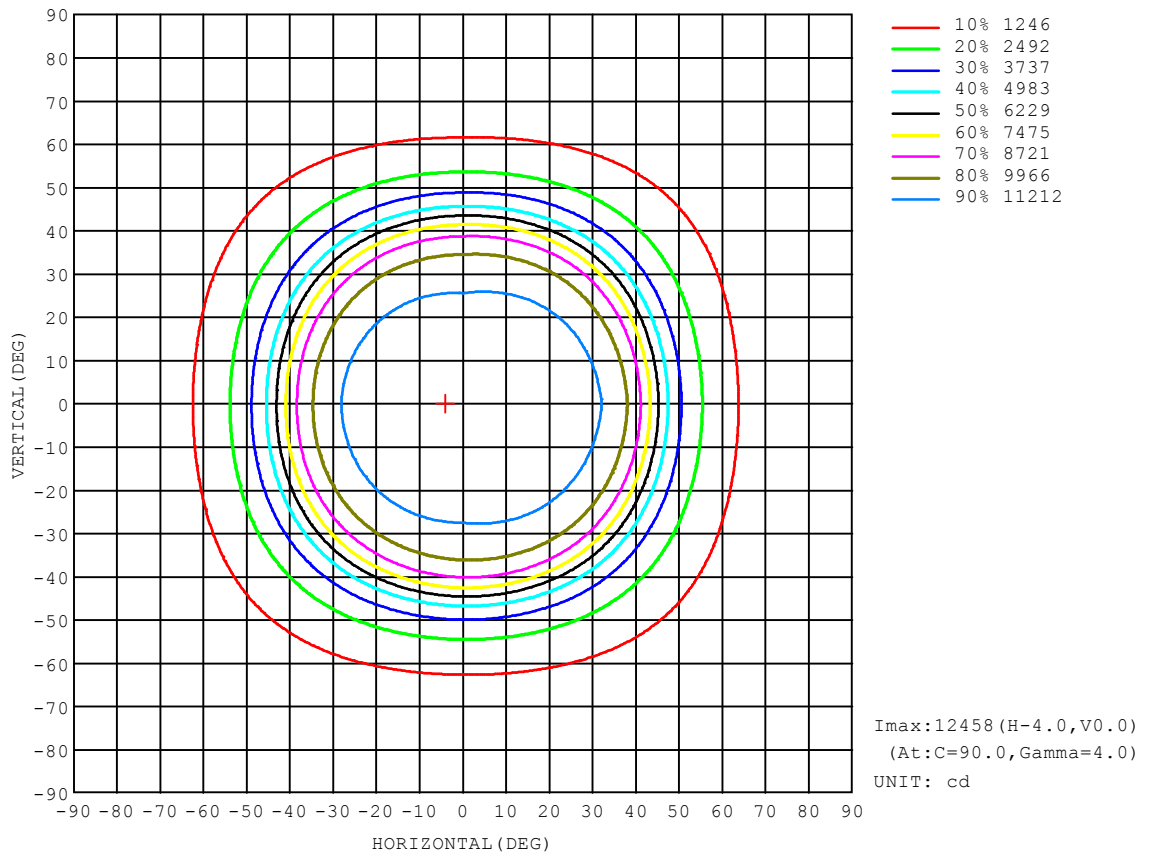
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	70	61	55	70	61	55	69	60	55	50
0.80	80	71	65	79	71	65	78	70	65	59
1.00	87	79	74	86	79	73	84	79	73	67
1.25	94	86	81	92	85	80	90	84	79	74
1.50	98	90	85	96	90	85	93	88	84	78
2.00	103	96	92	101	95	91	98	93	90	83
2.50	105	100	95	103	98	94	100	96	93	85
3.00	108	103	99	106	101	98	102	98	95	88
4.00	110	106	103	108	105	102	104	101	99	91
5.00	112	109	106	110	107	104	105	103	101	93
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:119.9V I:1.785A P:197.9W PF:0.9281 Lamp Flux:24320.9x1 lm		
NAME: ASD-UHD-CORE-MV-200BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

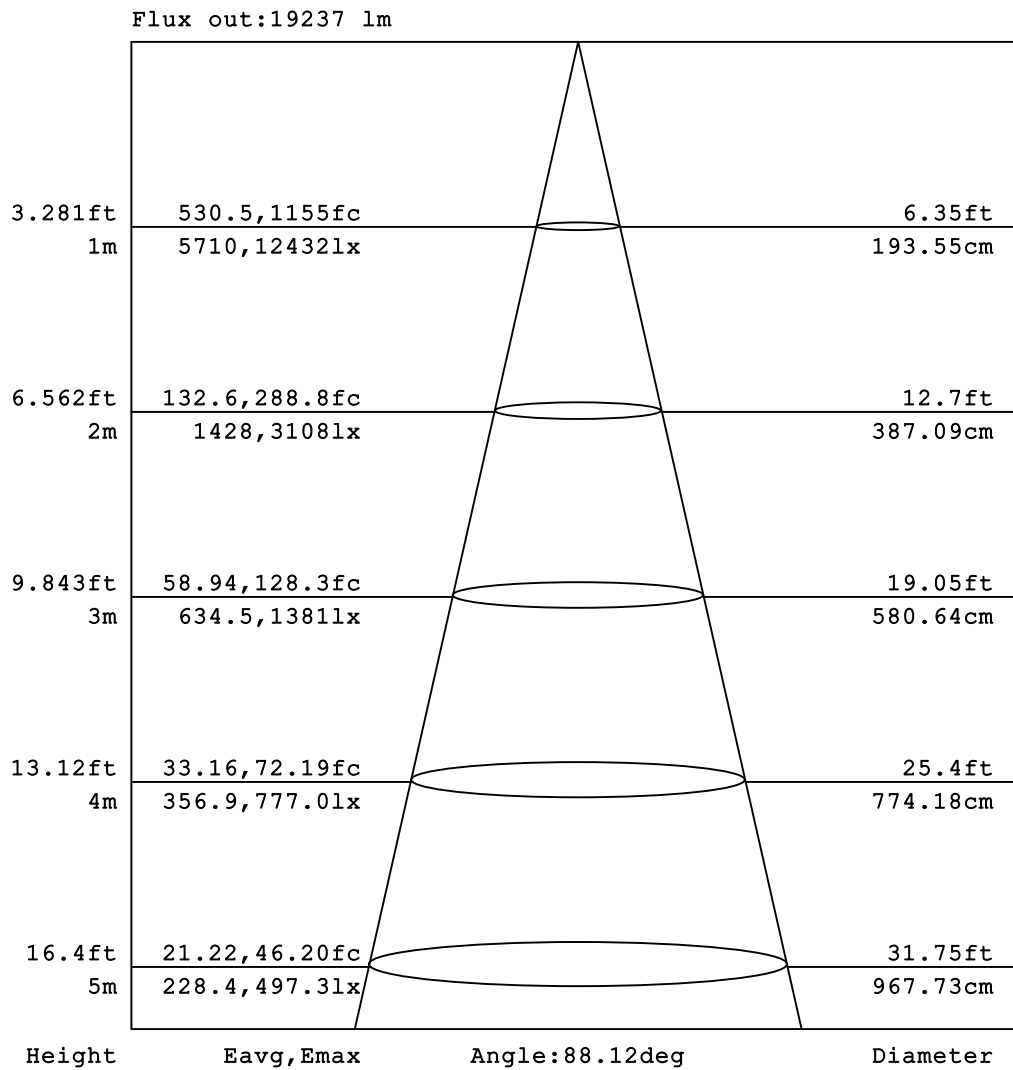


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-06-14

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:119.9V I:1.785A P:197.9W PF:0.9281 Lamp Flux:24320.9x1 lm		
NAME: ASD-UHD-CORE-MV-200BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:



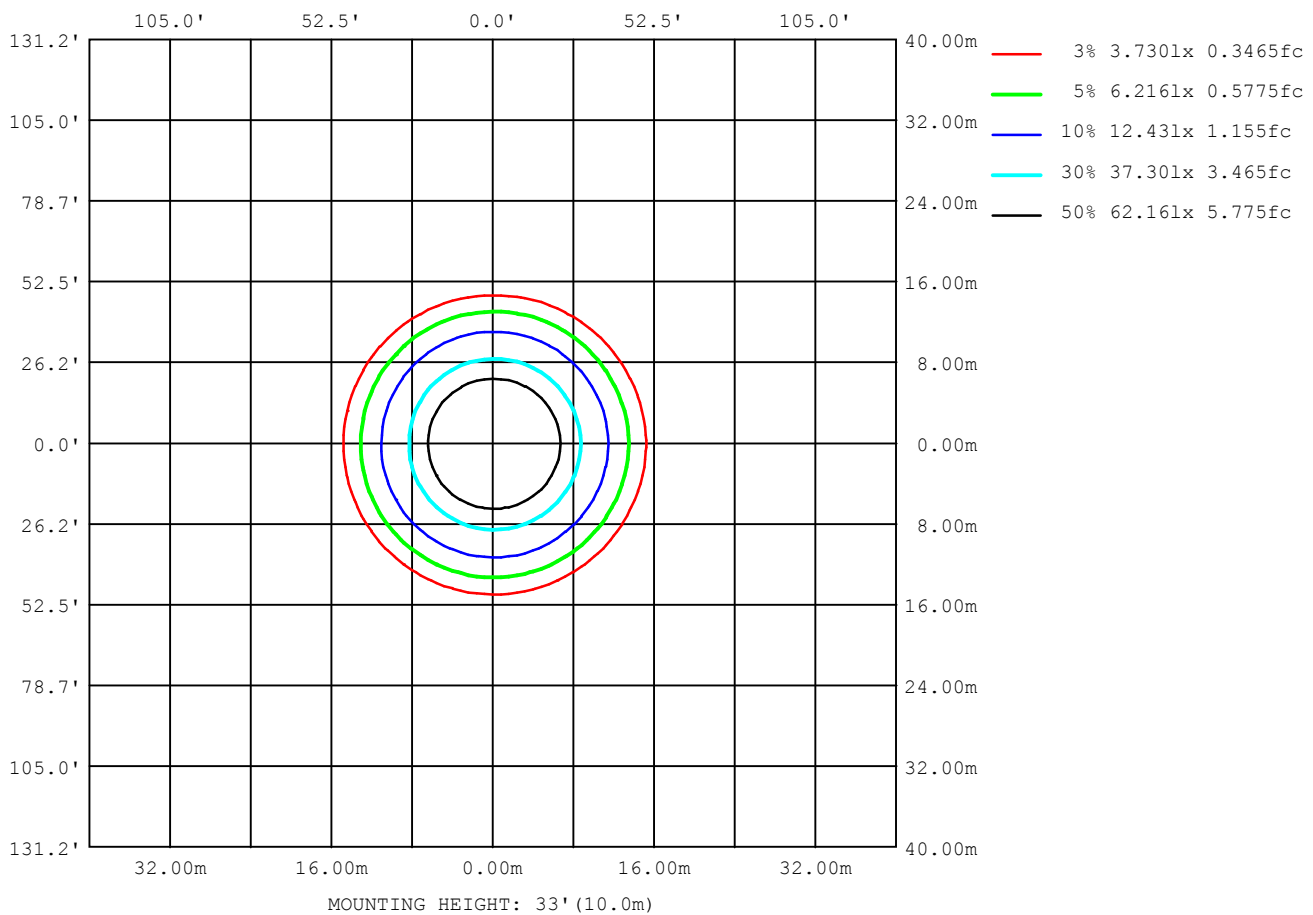
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

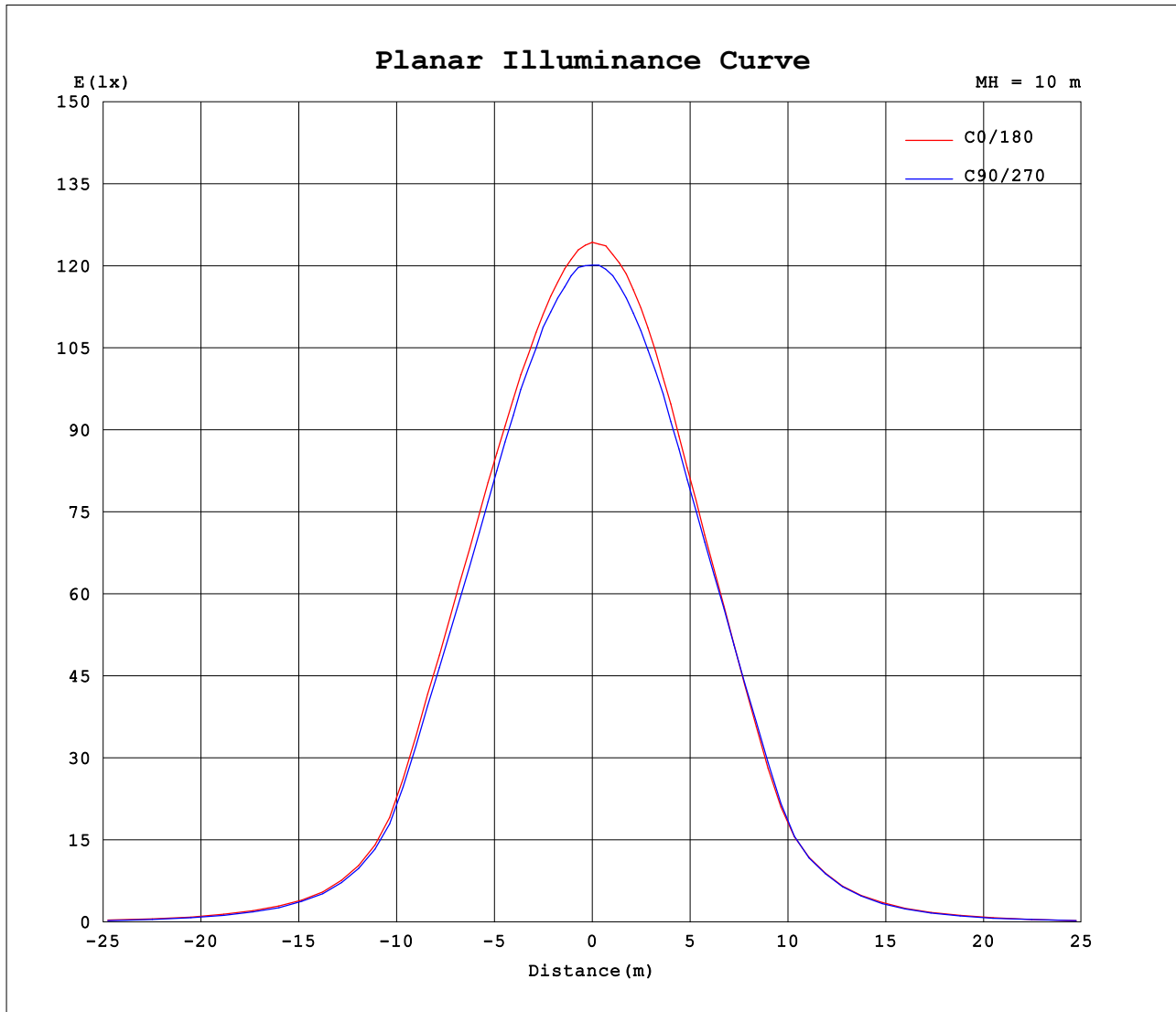
Test:U:119.9V I:1.785A P:197.9W PF:0.9281 Lamp Flux:24320.9x1 lm		
NAME: ASD-UHD-CORE-MV-200BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:



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:119.9V I:1.785A P:197.9W PF:0.9281 Lamp Flux:24320.9x1 lm		
NAME: ASD-UHD-CORE-MV-200BK-5CP	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:027
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: ×10cd

C (DEG) γ (DEG)	0	90	180	270															
0	1223	1223	1223	1223															
5	1218	1227	1225	1224															
10	1206	1217	1221	1216															
15	1197	1211	1209	1205															
20	1187	1195	1180	1184															
25	1171	1173	1147	1155															
30	1131	1116	1073	1090															
35	1074	1056	998	1024															
40	915	898	783	829															
45	695	678	558	595															
50	385	381	334	342															
55	273	265	241	241															
60	170	161	151	143															
65	120	113	107	101															
70	67.3	63.8	61.4	57.6															
75	41.5	41.1	38.0	35.7															
80	13.3	15.3	11.9	10.7															
85	3.10	4.06	3.42	2.56															
90	0.33	0.22	0.18	0.13															
95	0.23	0.17	0.12	0.13															
100	0.25	0.22	0.15	0.14															
105	0.29	0.35	0.18	0.15															
110	0.42	0.38	0.24	0.23															
115	0.52	0.50	0.32	0.31															
120	0.83	0.83	0.50	0.49															
125	1.13	1.13	0.69	0.67															
130	1.56	1.56	1.05	1.02															
135	1.81	1.85	1.31	1.28															
140	2.18	2.24	1.72	1.66															
145	2.40	2.45	1.96	1.91															
150	2.67	2.74	2.36	2.30															
155	2.84	2.90	2.66	2.59															
160	3.04	3.06	2.96	2.87															
165	3.11	3.15	3.09	2.99															
170	3.20	3.24	3.21	3.11															
175	3.22	3.26	3.25	3.17															
180	3.24	3.29	3.30	3.19															

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: