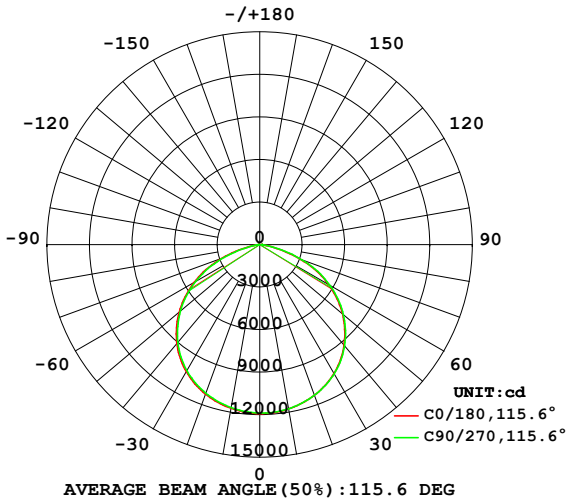
LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: φ350*170mm	SPEC.:	SERIAL No.:
MFR.:	SUR.:φ0.35	PROTECTION ANGLE:

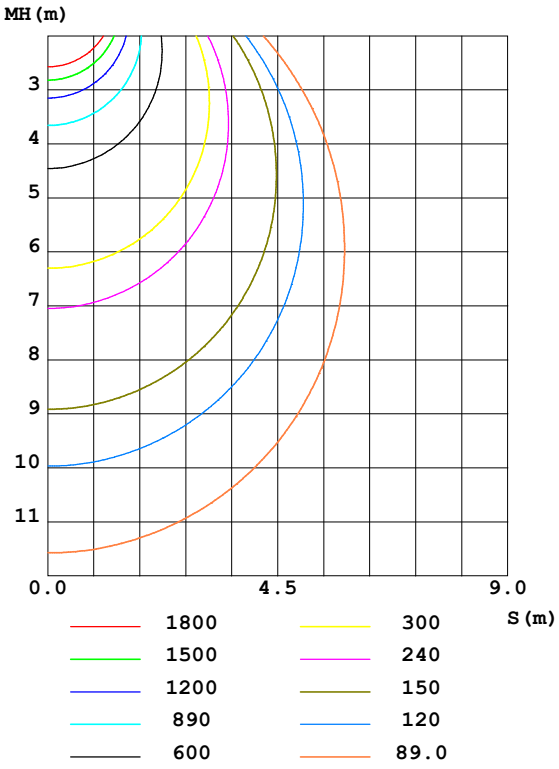
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 170.43 lm/W	
MODEL	UFO200W-120D	Imax(cd)	11919	S/MH(C0/180)	1.31
NOMINAL POWER(W)	199.7	LOR(%)	100.0	S/MH(C90/270)	1.31
RATED VOLTAGE(V)	236	TOTAL FLUX(lm)	34035	η UP,DN(C0-180)	0.0,51.1
NOMINAL FLUX(lm)	34034.7	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.9
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	235.6	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):115.6 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:chen xue chang
Test Date:2022-03-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum,lamp
10	1177	1175	1172	1167					0- 10	1128	1128	3.31,3.31
20	1130	1130	1121	1115					10- 20	3255	4383	12.9,12.9
30	1048	1051	1036	1027					20- 30	5013	9396	27.6,27.6
40	925.7	931.9	910.2	899.2					30- 40	6156	15552	45.7,45.7
50	762.8	770.6	741.9	731.4					40- 50	6464	22016	64.7,64.7
60	558.9	568.7	535.5	522.9					50- 60	5836	27851	81.8,81.8
70	306.9	319.0	282.7	267.0					60- 70	4218	32070	94.2,94.2
80	62.14	70.38	47.01	39.88					70- 80	1744	33814	99.4,99.4
90	14.31	14.29	10.45	10.42					80- 90	221.0	34035	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

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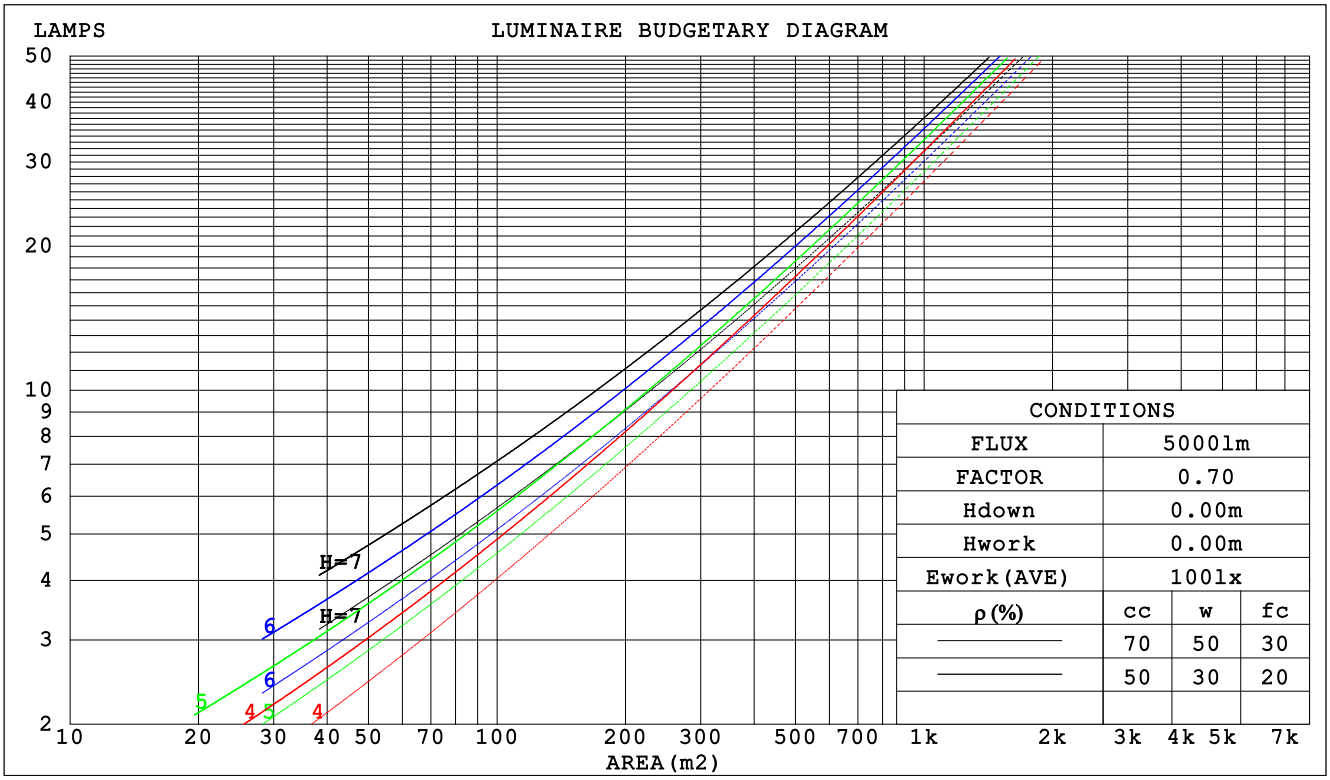
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: φ350*170mm	SPEC.:	SERIAL No.:
MFR.:	SUR.:φ0.35	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.05	1.01	.97	1.03	.99	.96	.98	.95	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.77	.73	.71
3.0	.81	.73	.66	.79	.72	.66	.76	.70	.65	.73	.68	.63	.71	.66	.62	.60
4.0	.71	.63	.56	.70	.62	.56	.68	.61	.55	.65	.59	.54	.63	.58	.54	.51
5.0	.64	.55	.48	.63	.54	.48	.60	.53	.47	.59	.52	.47	.57	.51	.46	.44
6.0	.57	.48	.42	.56	.48	.42	.55	.47	.41	.53	.46	.41	.51	.45	.41	.39
7.0	.52	.43	.37	.51	.43	.37	.50	.42	.37	.48	.41	.36	.47	.41	.36	.34
8.0	.47	.39	.33	.47	.39	.33	.45	.38	.33	.44	.37	.32	.43	.37	.32	.30
9.0	.43	.35	.30	.43	.35	.30	.42	.34	.29	.41	.34	.29	.40	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.27	.38	.31	.26	.37	.31	.26	.25



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:chen xue chang
Test Date:2022-03-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: φ350*170mm	SPEC.:	SERIAL No.:
MFR.:	SUR.:φ0.35	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)									
0.0																
1.0	.289	.164	.052	.282	.161	.051	.269	.154	.049	.257	.148	.048	.246	.142	.046	
2.0	.279	.153	.047	.273	.150	.046	.261	.145	.045	.251	.141	.044	.241	.136	.043	
3.0	.262	.139	.042	.256	.137	.041	.246	.133	.041	.237	.130	.040	.228	.126	.039	
4.0	.244	.127	.037	.239	.125	.037	.230	.122	.036	.221	.119	.036	.213	.116	.035	
5.0	.227	.115	.033	.222	.114	.033	.214	.112	.033	.207	.109	.032	.200	.107	.032	
6.0	.211	.106	.030	.207	.105	.030	.200	.102	.030	.193	.100	.030	.187	.098	.029	
7.0	.197	.097	.028	.193	.096	.027	.187	.095	.027	.181	.093	.027	.175	.091	.027	
8.0	.184	.090	.025	.181	.089	.025	.175	.088	.025	.170	.086	.025	.165	.085	.025	
9.0	.173	.084	.023	.170	.083	.023	.165	.082	.023	.160	.080	.023	.156	.079	.023	
10.0	.163	.078	.022	.160	.077	.022	.156	.076	.021	.151	.075	.021	.147	.074	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.075	.140	.099	.065	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.023	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

Uncorrected UGR Table

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: φ350*170mm	SPEC.:	SERIAL No.:
MFR.:	SUR.:φ0.35	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	29.8	31.3	30.0	31.5	31.7	29.8	31.3	30.1	31.5	31.7
3H	31.1	32.5	31.4	32.7	32.9	31.2	32.6	31.5	32.8	33.0
4H	31.4	32.7	31.7	33.0	33.2	31.6	32.9	31.9	33.1	33.4
6H	31.5	32.7	31.8	33.0	33.3	31.7	32.9	32.0	33.2	33.4
8H	31.5	32.7	31.8	32.9	33.2	31.6	32.8	32.0	33.1	33.4
12H	31.4	32.6	31.8	32.9	33.2	31.6	32.7	31.9	33.0	33.3
4H 2H	30.4	31.7	30.7	31.9	32.2	30.4	31.7	30.7	32.0	32.2
3H	31.8	32.9	32.2	33.2	33.5	31.9	33.0	32.2	33.3	33.6
4H	32.2	33.3	32.6	33.6	33.9	32.3	33.4	32.7	33.7	34.0
6H	32.3	33.3	32.7	33.6	34.0	32.5	33.4	32.9	33.8	34.1
8H	32.3	33.2	32.7	33.5	33.9	32.5	33.3	32.9	33.7	34.1
12H	32.3	33.1	32.7	33.5	33.9	32.5	33.2	32.9	33.6	34.0
8H 4H	32.3	33.2	32.7	33.5	33.9	32.4	33.3	32.9	33.7	34.0
6H	32.5	33.2	33.0	33.6	34.0	32.7	33.4	33.1	33.8	34.2
8H	32.5	33.1	33.0	33.6	34.0	32.7	33.3	33.1	33.7	34.2
12H	32.5	33.0	33.0	33.5	34.0	32.7	33.2	33.1	33.6	34.1
12H 4H	32.3	33.1	32.7	33.5	33.9	32.4	33.2	32.8	33.6	34.0
6H	32.5	33.1	33.0	33.5	34.0	32.6	33.3	33.1	33.7	34.1
8H	32.5	33.0	33.0	33.5	34.0	32.7	33.2	33.1	33.6	34.1

Variations with the observer position at spacings:		
S = 1.0H	+ 0.2 / - 0.3	+ 0.2 / - 0.3
1.5H	+ 0.2 / - 0.4	+ 0.2 / - 0.4
2.0H	+ 0.3 / - 0.4	+ 0.3 / - 0.4

CIE Pub.117 Corrected 34035 lm Total Lamp Luminous Flux.(8log(F/F0) = 12.3)

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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: φ350*170mm	SPEC.:	SERIAL No.:
MFR.:	SUR.:φ0.35	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) x RCR = 5									
k = 0.60	58	46	39	57	46	39	56	46	39	33
0.80	68	57	49	67	56	49	65	55	49	42
1.00	77	66	59	76	65	59	73	67	58	51
1.25	84	74	67	83	73	67	80	72	66	59
1.50	89	80	73	88	79	72	85	77	71	64
2.00	96	88	82	94	87	81	91	84	79	72
2.50	100	93	87	98	91	86	94	89	84	76
3.00	103	97	92	101	95	90	97	92	88	80
4.00	107	102	97	105	100	96	101	97	93	85
5.00	109	105	101	107	103	100	103	99	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

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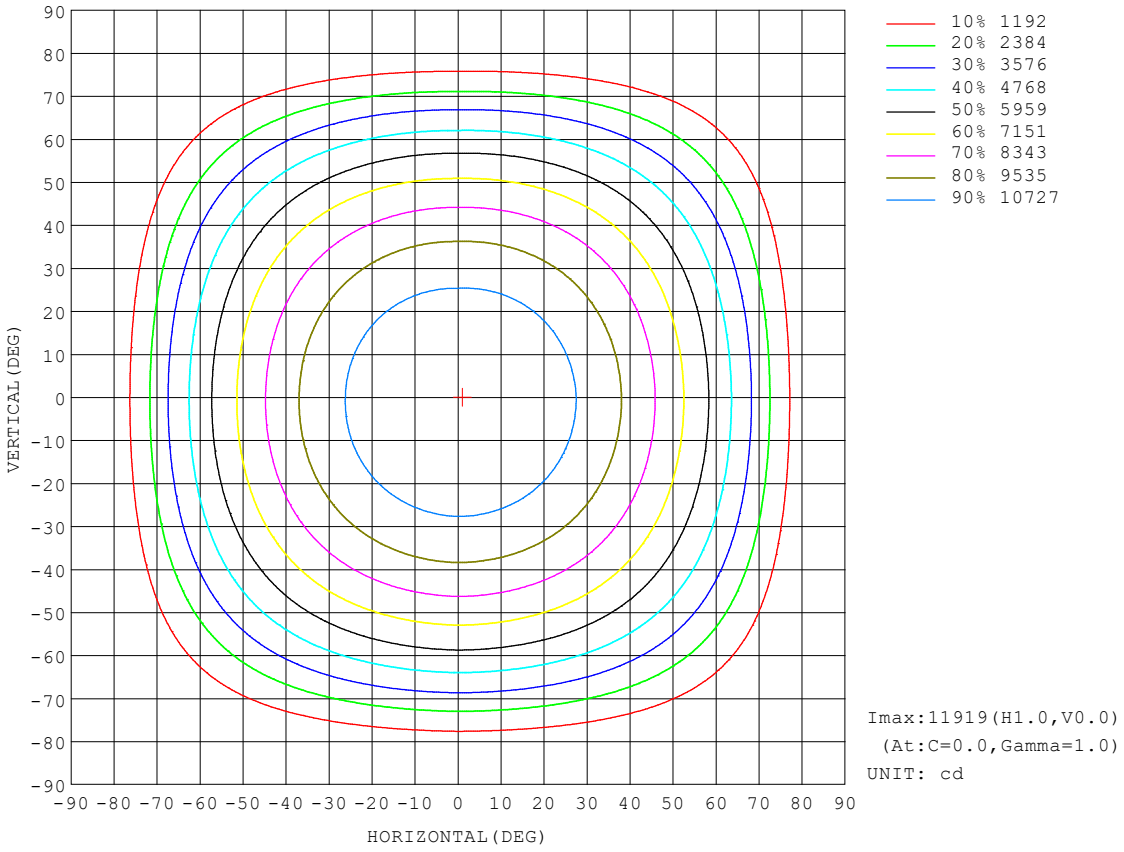
Humidity:65.0%
Test Distance:6.900m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: φ350*170mm	SPEC.:	SERIAL No.:
MFR.:	SUR.:φ0.35	PROTECTION ANGLE:



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AAI Figure

NAME: LED High Bay	TYPE:	WEIGHT:
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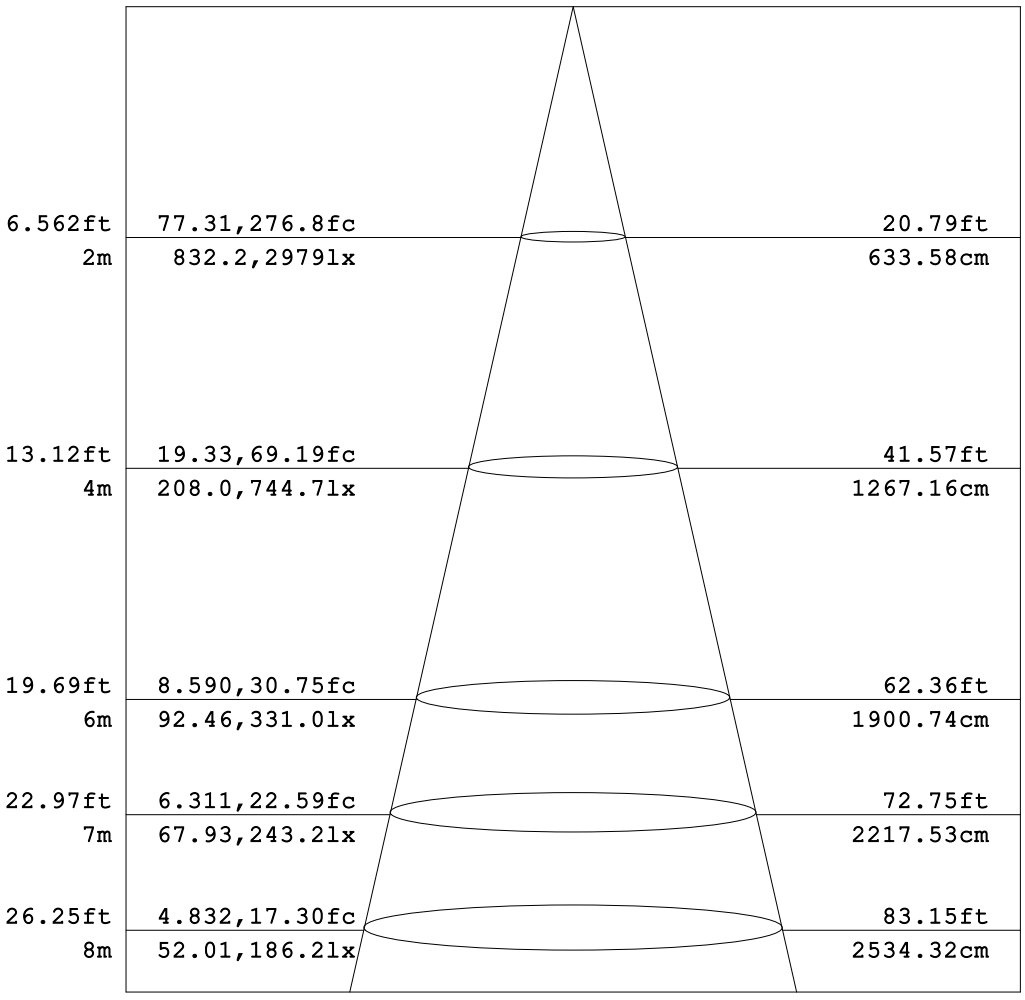
Flux out:26782 lm



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

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ISOLUX DIAGRAM

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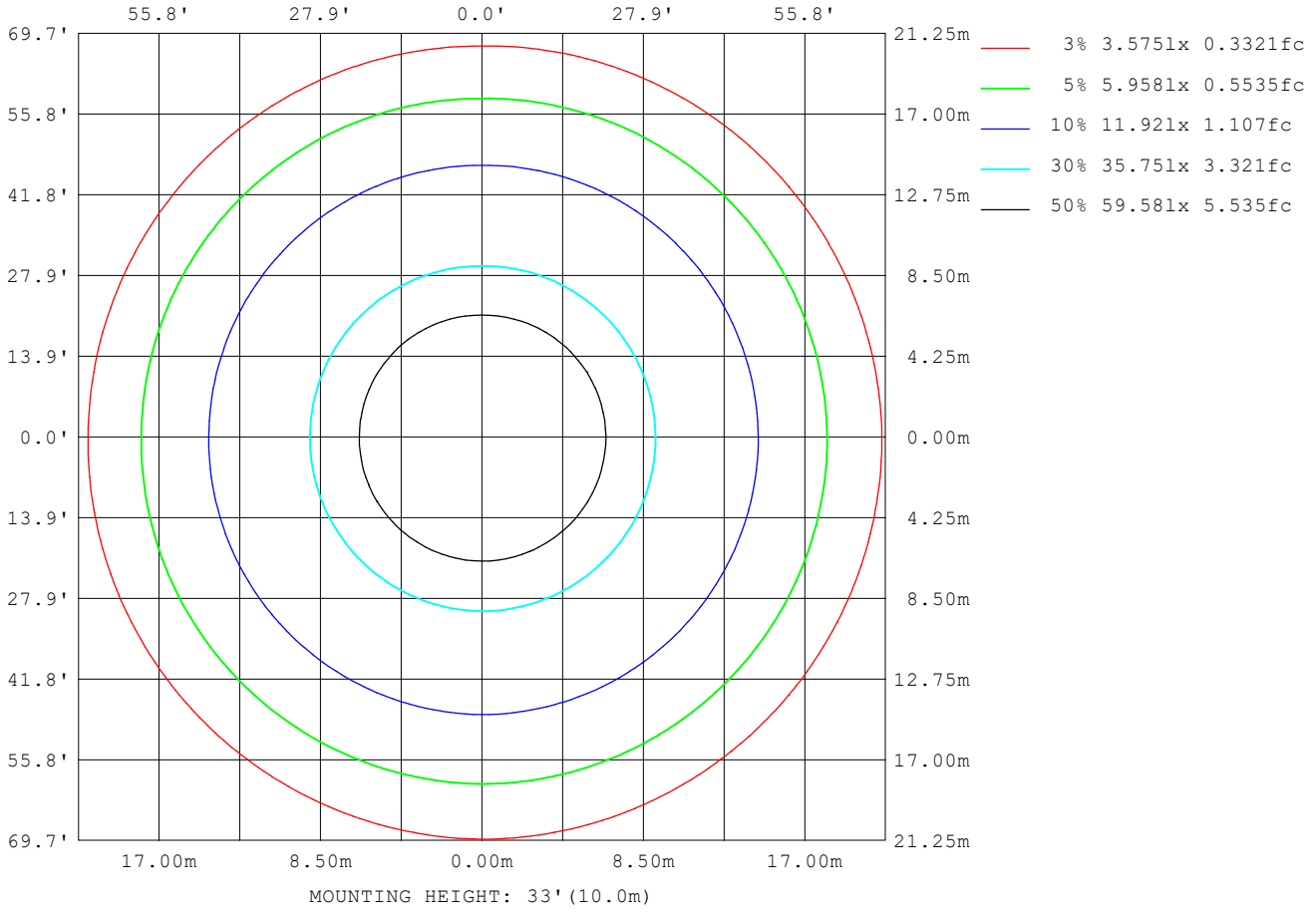
MFR.:	SUR.:φ0.35	PROTECTION ANGLE:



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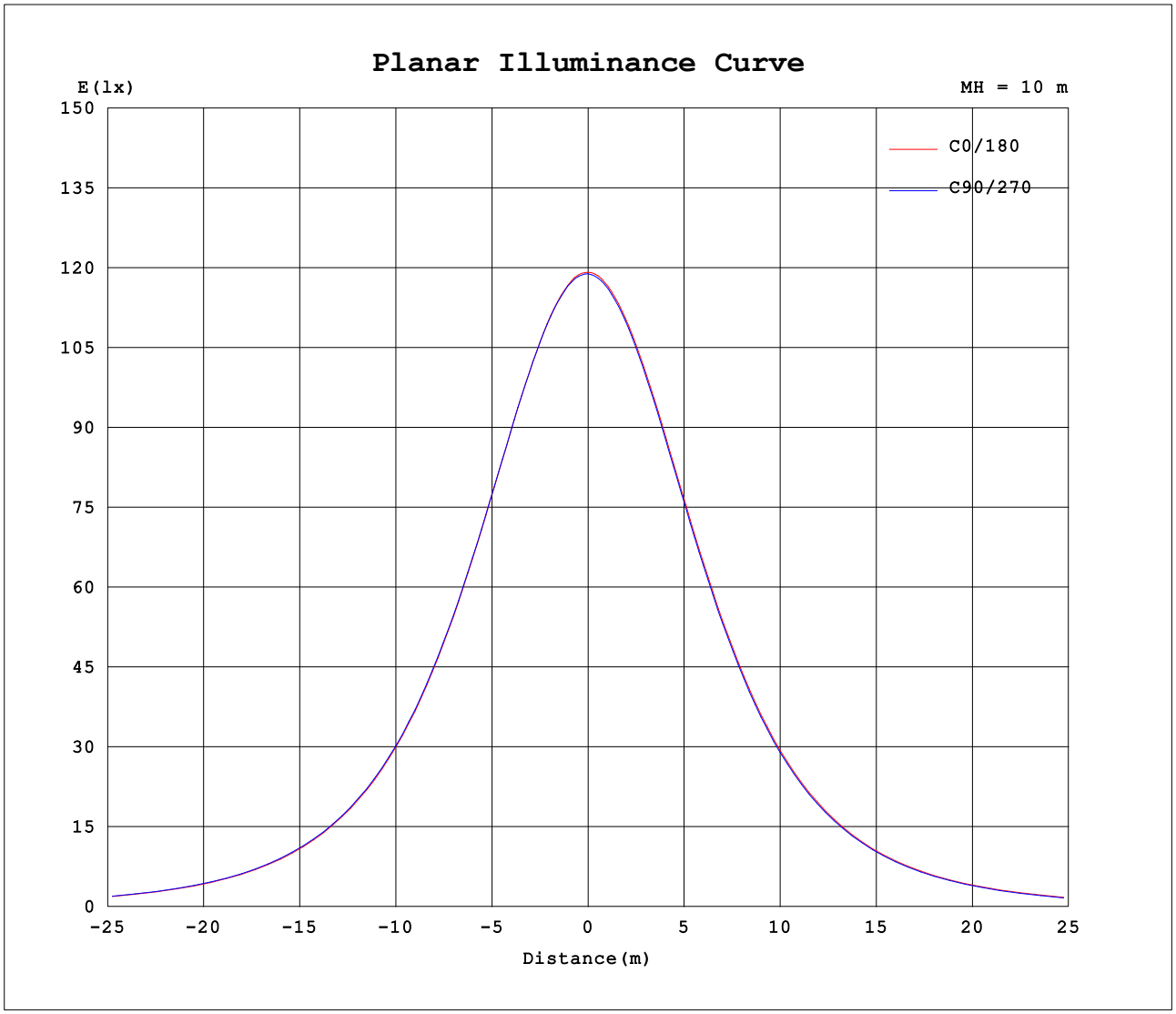
Planar Illuminance Curve



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LUMINOUS DISTRIBUTION INTENSITY DATA

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DIM.: φ350*170mm	SPEC.:	SERIAL No.:
MFR.:	SUR.:φ0.35	PROTECTION ANGLE:

Table--1 UNIT: ×10cd

C(DEG) / γ (DEG)	0	90	180	270
0	1192	1189	1192	1189
5	1189	1186	1186	1182
10	1177	1175	1172	1167
15	1157	1156	1151	1145
20	1130	1130	1121	1115
25	1095	1095	1083	1076
30	1048	1051	1036	1027
35	993	997	978	969
40	926	932	910	899
45	848	856	830	820
50	763	771	742	731
55	666	675	644	633
60	559	569	536	523
65	444	453	418	406
70	307	319	283	267
75	172	185	152	137
80	62.1	70.4	47.0	39.9
85	15.2	16.3	10.3	10.3
90	14.3	14.3	10.4	10.4

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