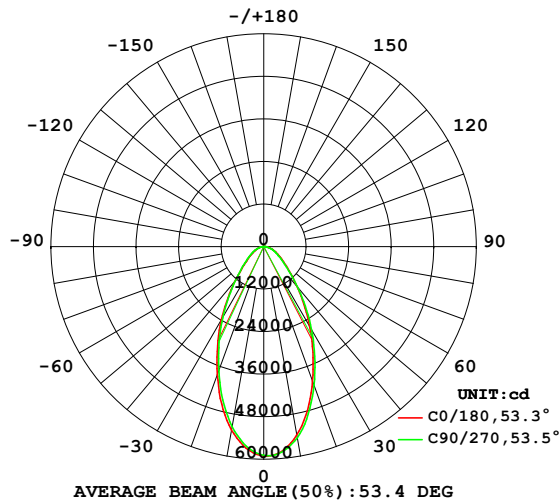


LUMINAIRE PHOTOMETRIC TEST REPORT

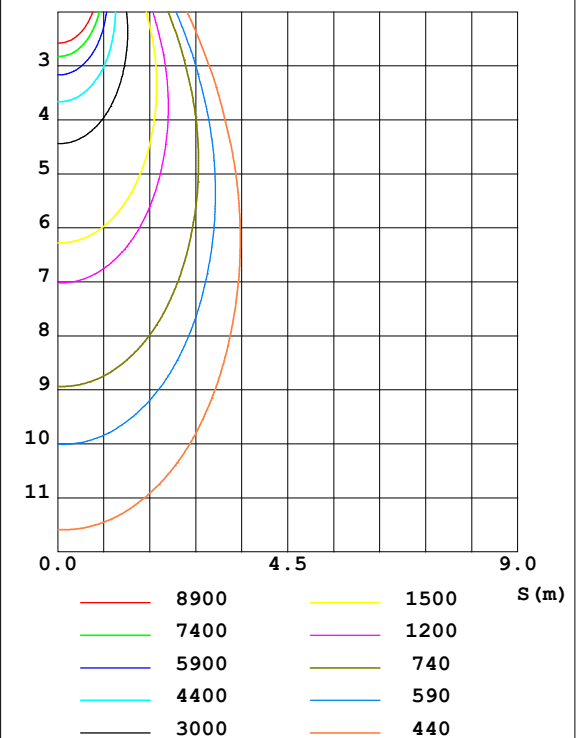
NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: $\Phi 490 \times H170MM$	SPEC.:	SERIAL No.:
MFR.:	SUR.: $\Phi 0.49$	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 155.25 lm/W			
MODEL	UFO400W-60D	Imax(cd)	59112	S/MH(C0/180)	0.82
NOMINAL POWER(W)	404	LOR(%)	100.0	S/MH(C90/270)	0.84
RATED VOLTAGE(V)	232	TOTAL FLUX(lm)	62721	η UP,DN(C0-180)	0.0,53.2
NOMINAL FLUX(lm)	62721	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,46.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	232.4	η down(%)	100.0	CIBSE SHR MAX	0.90

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: chen xue chang
Test Date: 2022-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 7.300m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	5390	5472	5252	5153					0- 10	5345	5345	8.52, 8.52
20	4035	4157	3834	3714					10- 20	13006	18351	29.3, 29.3
30	2592	2700	2406	2325					20- 30	14621	32972	52.6, 52.6
40	1456	1481	1247	1242					30- 40	11757	44729	71.3, 71.3
50	806.1	772.4	634.6	669.6					40- 50	7656	52385	83.5, 83.5
60	488.7	450.2	361.0	392.9					50- 60	4963	57349	91.4, 91.4
70	286.6	265.0	196.5	215.6					60- 70	3247	60596	96.6, 96.6
80	111.3	104.5	61.15	65.78					70- 80	1684	62279	99.3, 99.3
90	22.17	22.34	18.10	18.11					80- 90	441.7	62721	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: $\times 10\text{cd}$									UNIT: lm		

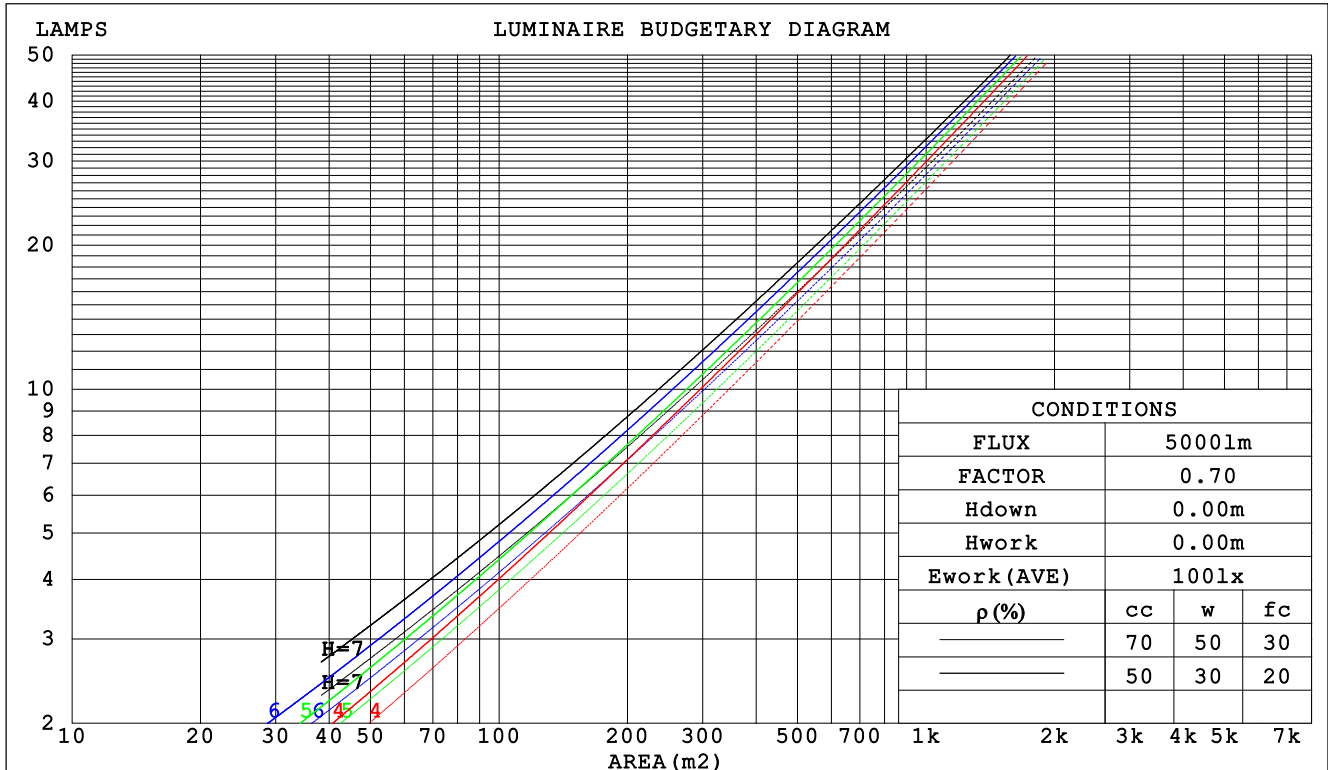
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: chen xue chang
 Test Date: 2022-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity: 65.0%
 Test Distance: 7.300m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: $\Phi 490 \times H170MM$	SPEC.:	SERIAL No.:
MFR.:	SUR.: $\Phi 0.49$	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	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	.00
1.0	1.08	1.05	1.02	1.06	1.03	1.00	1.02	.99	.97	.98	.96	.94	.94	.93	.92	.90
2.0	.98	.93	.88	.96	.91	.87	.93	.89	.86	.90	.86	.84	.87	.84	.82	.80
3.0	.89	.83	.78	.88	.82	.77	.85	.80	.76	.83	.78	.75	.80	.77	.74	.72
4.0	.82	.75	.70	.81	.74	.69	.78	.73	.68	.76	.71	.68	.74	.70	.67	.65
5.0	.75	.68	.63	.74	.68	.63	.72	.67	.62	.71	.66	.62	.69	.65	.61	.59
6.0	.70	.63	.57	.69	.62	.57	.67	.61	.57	.66	.60	.56	.64	.60	.56	.54
7.0	.65	.58	.53	.64	.57	.53	.63	.57	.52	.61	.56	.52	.60	.55	.52	.50
8.0	.61	.53	.49	.60	.53	.49	.59	.53	.48	.58	.52	.48	.57	.52	.48	.46
9.0	.57	.50	.45	.56	.50	.45	.55	.49	.45	.54	.49	.45	.53	.48	.45	.43
10.0	.53	.47	.42	.53	.46	.42	.52	.46	.42	.51	.46	.42	.50	.45	.42	.40



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: chen xue chang
Test Date: 2022-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 7.300m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: Φ 490*H170MM	SPEC.:	SERIAL No.:
MFR.:	SUR.: Φ 0.49	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	.230	.131	.041	.223	.127	.040	.210	.121	.039	.199	.115	.037	.188	.109	.035		
2.0	.219	.120	.037	.213	.117	.036	.202	.112	.035	.192	.108	.034	.183	.103	.033		
3.0	.206	.110	.033	.201	.108	.032	.191	.104	.032	.183	.100	.031	.174	.097	.030		
4.0	.193	.100	.030	.189	.099	.029	.181	.096	.029	.173	.093	.028	.165	.090	.027		
5.0	.182	.092	.027	.178	.091	.027	.170	.089	.026	.163	.086	.026	.157	.084	.025		
6.0	.171	.086	.025	.167	.085	.024	.161	.082	.024	.155	.080	.024	.149	.078	.023		
7.0	.161	.080	.023	.158	.079	.022	.152	.077	.022	.147	.075	.022	.142	.074	.022		
8.0	.152	.074	.021	.150	.074	.021	.144	.072	.021	.139	.071	.020	.135	.069	.020		
9.0	.144	.070	.019	.142	.069	.019	.137	.068	.019	.133	.067	.019	.129	.065	.019		
10.0	.137	.066	.018	.135	.065	.018	.131	.064	.018	.127	.063	.018	.123	.062	.018		

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.175	.157	.141	.150	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.163	.132	.107	.139	.114	.092	.095	.079	.064	.055	.046	.038	.018	.015	.012	
3.0	.152	.114	.083	.130	.098	.072	.090	.068	.051	.052	.040	.030	.017	.013	.010	
4.0	.143	.100	.067	.123	.086	.058	.084	.060	.041	.049	.035	.024	.016	.011	.008	
5.0	.135	.089	.054	.116	.077	.047	.080	.054	.033	.046	.031	.020	.015	.010	.007	
6.0	.128	.080	.045	.110	.069	.039	.076	.048	.028	.044	.028	.017	.014	.009	.005	
7.0	.121	.072	.038	.104	.063	.033	.072	.044	.024	.042	.026	.014	.014	.008	.005	
8.0	.115	.066	.033	.099	.058	.029	.069	.040	.020	.040	.024	.012	.013	.008	.004	
9.0	.110	.061	.029	.094	.053	.025	.065	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.105	.057	.025	.090	.050	.022	.063	.035	.016	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:chen xue chang
Test Date:2022-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.300m [K=1.0000]
Remarks:

Uncorrected UGR Table

NAME: LED High Bay					TYPE:					WEIGHT:				
DIM.: $\Phi 490 \times H170MM$					SPEC.:					SERIAL No.:				
MFR.:					SUR.: $\Phi 0.49$					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					25.6	26.8	25.9	27.0	27.2	25.5	26.7	25.7	26.8	27.0
3H					26.6	27.7	26.9	27.9	28.1	26.4	27.5	26.6	27.7	27.9
4H					27.0	28.0	27.3	28.3	28.5	26.8	27.8	27.0	28.0	28.3
6H					27.3	28.3	27.6	28.5	28.8	27.0	28.0	27.3	28.2	28.5
8H					27.4	28.3	27.7	28.6	28.8	27.1	28.0	27.4	28.3	28.6
12H					27.4	28.3	27.7	28.6	28.9	27.1	28.0	27.5	28.3	28.6
4H 2H					26.0	27.0	26.2	27.2	27.5	25.8	26.9	26.1	27.1	27.3
3H					27.1	28.0	27.5	28.3	28.6	26.9	27.8	27.3	28.1	28.4
4H					27.7	28.5	28.0	28.8	29.1	27.5	28.3	27.8	28.6	28.9
6H					28.1	28.8	28.4	29.1	29.5	27.8	28.5	28.2	28.9	29.2
8H					28.2	28.9	28.6	29.2	29.6	27.9	28.6	28.3	29.0	29.3
12H					28.3	28.9	28.7	29.2	29.6	28.0	28.6	28.4	29.0	29.4
8H 4H					27.8	28.5	28.2	28.9	29.2	27.6	28.3	28.0	28.7	29.0
6H					28.3	28.9	28.8	29.3	29.7	28.1	28.7	28.6	29.1	29.5
8H					28.5	29.0	29.0	29.4	29.9	28.3	28.8	28.8	29.2	29.7
12H					28.6	29.1	29.1	29.5	30.0	28.4	28.9	28.9	29.3	29.8
12H 4H					27.8	28.4	28.2	28.8	29.2	27.6	28.2	28.0	28.6	29.0
6H					28.4	28.8	28.8	29.3	29.7	28.1	28.6	28.6	29.1	29.5
8H					28.6	29.0	29.0	29.4	29.9	28.4	28.8	28.8	29.2	29.7
Variations with the observer position at spacings:														
S = 1.0H					+ 0.4 / - 0.5					+ 0.4 / - 0.6				
1.5H					+ 0.4 / - 0.3					+ 0.5 / - 0.4				
2.0H					+ 0.7 / - 0.4					+ 0.8 / - 0.6				

CIE Pub.117 Corrected 62721 lm Total Lamp Luminous Flux. (8log(F/F0) = 14.4)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: chen xue chang
Test Date: 2022-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 7.300m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: $\Phi 490 \times H170MM$	SPEC.:	SERIAL No.:
MFR.:	SUR.: $\Phi 0.49$	PROTECTION ANGLE:

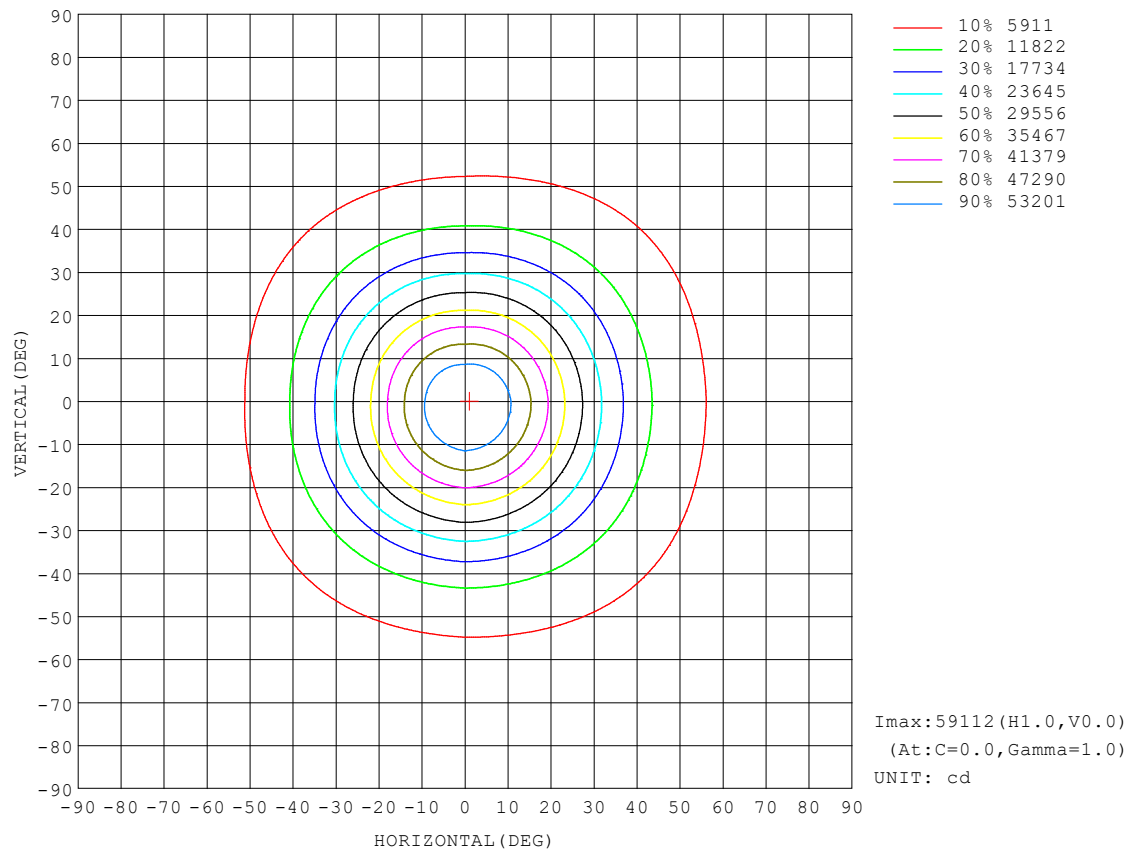
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	74	65	60	73	65	60	72	64	59	55
0.80	83	74	69	82	74	69	80	73	68	63
1.00	89	81	76	88	80	75	86	81	75	70
1.25	94	87	82	93	86	82	91	85	81	75
1.50	98	91	86	97	90	86	94	89	85	79
2.00	103	97	92	101	96	91	98	94	90	84
2.50	105	100	96	104	99	95	100	96	93	86
3.00	108	103	99	106	101	98	102	99	96	88
4.00	111	107	103	108	105	102	105	102	99	91
5.00	112	109	106	110	107	105	106	104	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: chen xue chang
 Test Date: 2022-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity: 65.0%
 Test Distance: 7.300m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: $\Phi 490 \times H170MM$	SPEC.:	SERIAL No.:
MFR.:	SUR.: $\Phi 0.49$	PROTECTION ANGLE:

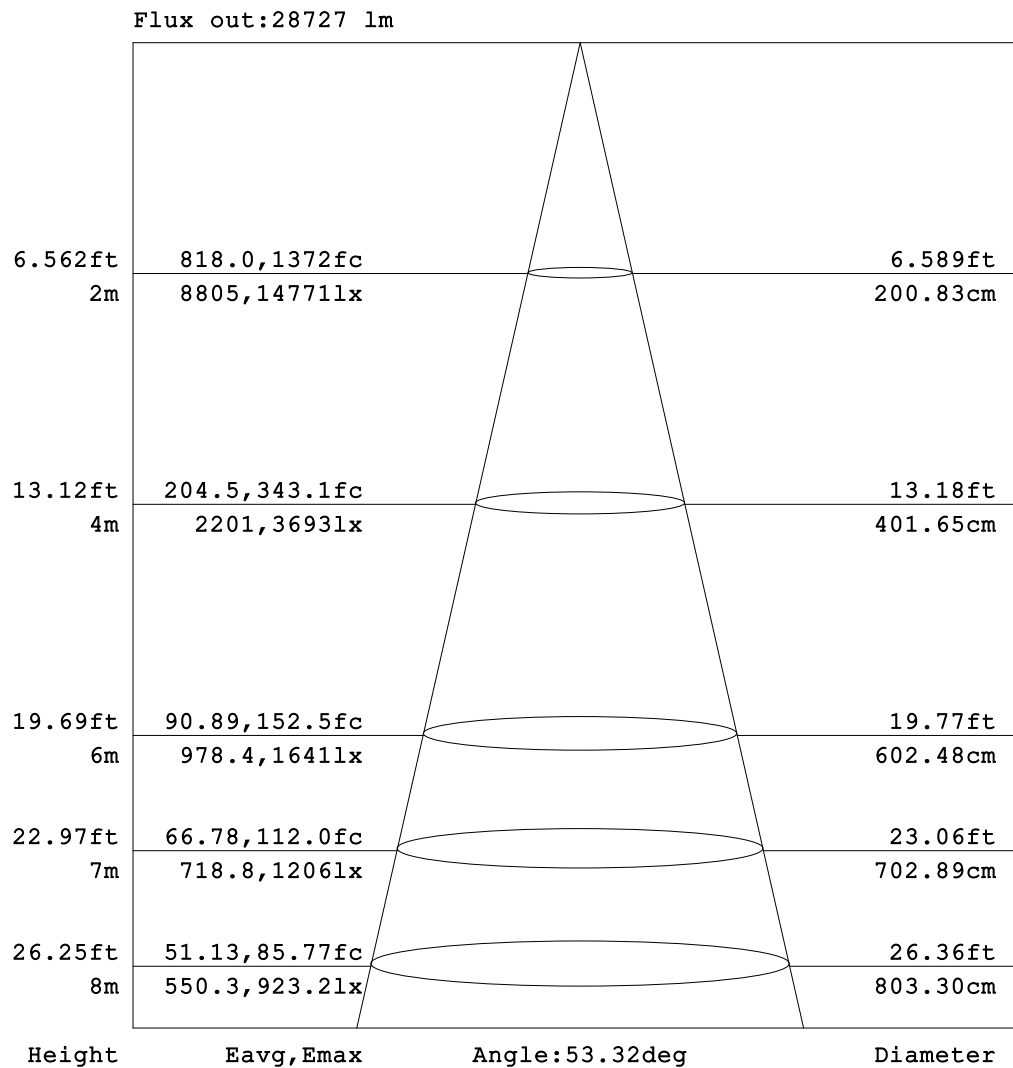


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: chen xue chang
Test Date: 2022-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 7.300m [K=1.0000]
Remarks:

AAI Figure

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: $\Phi 490 \times H170MM$	SPEC.:	SERIAL No.:
MFR.:	SUR.: $\Phi 0.49$	PROTECTION ANGLE:



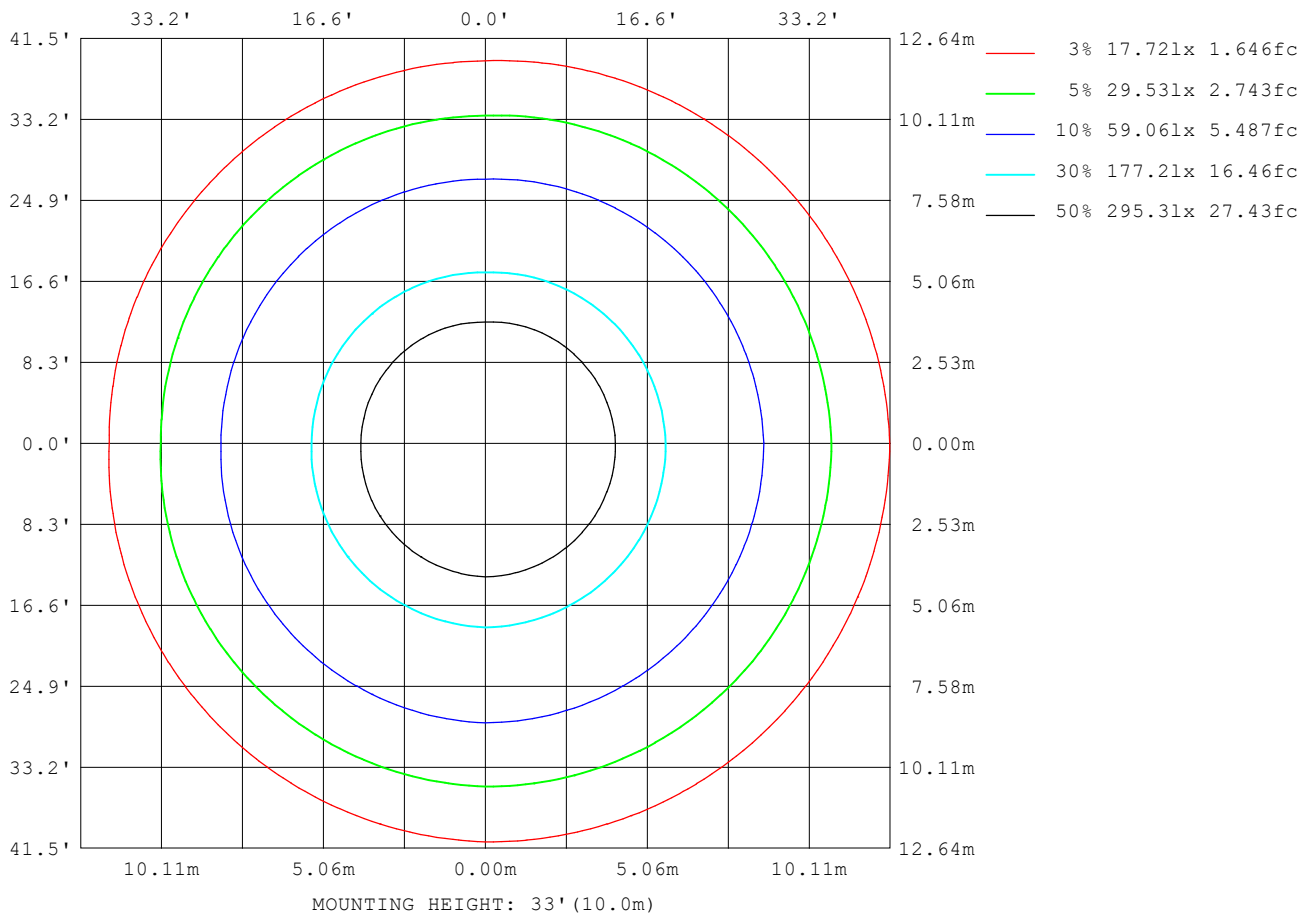
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: chen xue chang
Test Date: 2022-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 7.300m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

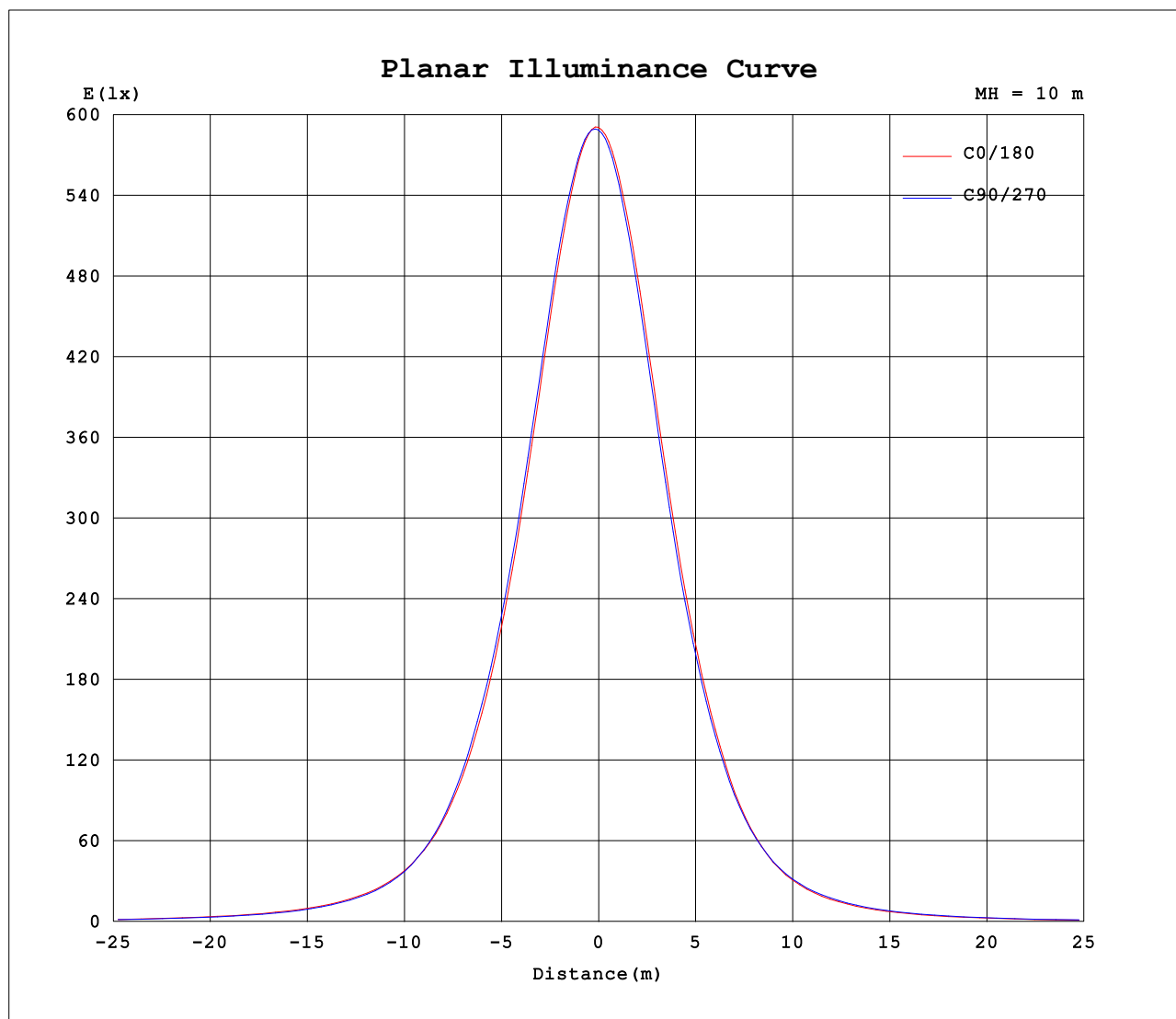
NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: $\Phi 490 \times H170MM$	SPEC.:	SERIAL No.:
MFR.:	SUR.: $\Phi 0.49$	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: chen xue chang
Test Date: 2022-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 7.300m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: chen xue chang
Test Date: 2022-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 7.300m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.300m [K=1.0000]
Remarks:

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