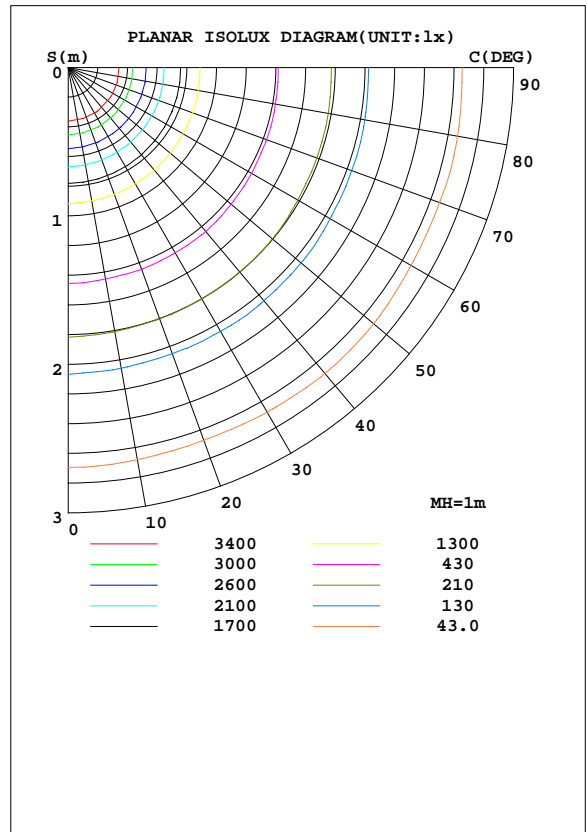
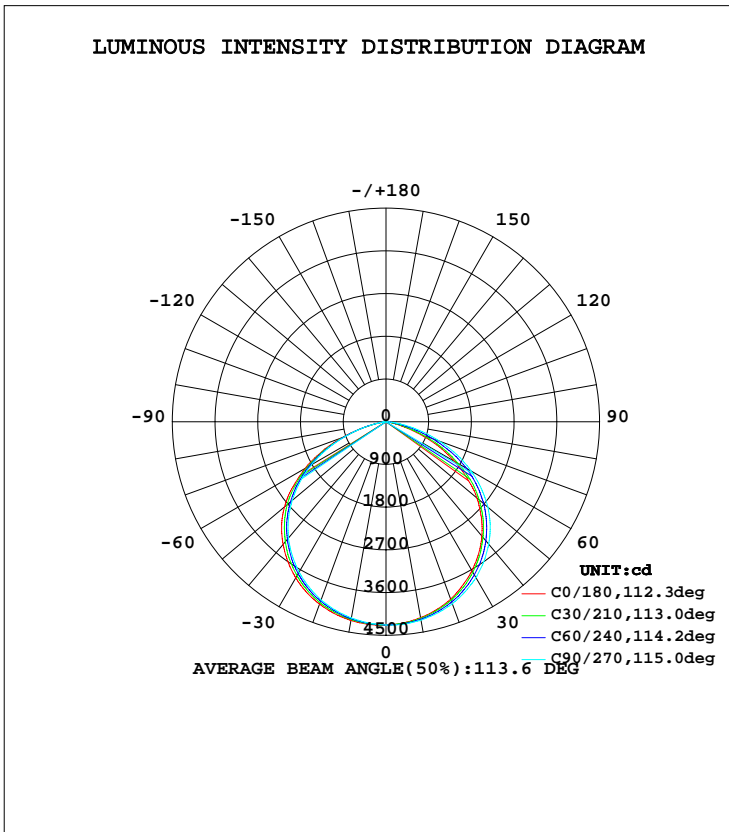


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:223.4V I:0.3742A P:81.96W PF:0.9804 Lamp Flux:11989.5x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-80-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 146.29 lm/W			
MODEL NF2W757GRT-V1 170PCS		Imax(cd)	4288	S/MH(C0/180)	1.26
NOMINAL POWER(W)	80	LOR(%)	100.0	S/MH(C90/270)	1.31
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	11989	η UP, DN(C0-180)	0.0, 48.7
NOMINAL FLUX(lm)	11989.5	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 51.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.35



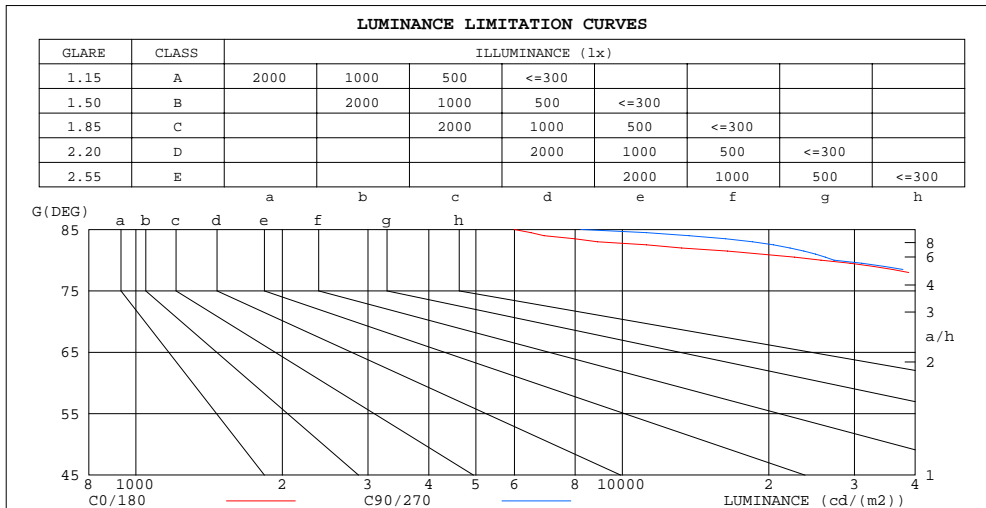
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:CHEN YU
 Test Date:2017-02-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
5	4283	4267	4253	4246	4253	4265	4280	4285	0- 5	102.2	102.2	0.85,0.85
10	4250	4221	4199	4183	4192	4215	4244	4255	5- 10	303.5	405.7	3.38,3.38
15	4185	4147	4111	4094	4101	4134	4175	4196	10- 15	496.0	901.7	7.52,7.52
20	4089	4038	3997	3972	3979	4022	4083	4106	15- 20	673.9	1576	13.1,13.1
25	3964	3899	3842	3810	3811	3873	3949	3986	20- 25	831.4	2407	20.1,20.1
30	3801	3721	3662	3619	3622	3690	3793	3832	25- 30	962.9	3370	28.1,28.1
35	3601	3510	3443	3405	3401	3477	3593	3644	30- 35	1064	4434	37,37
40	3373	3271	3199	3153	3145	3231	3368	3426	35- 40	1131	5565	46.4,46.4
45	3111	2985	2907	2866	2842	2951	3105	3163	40- 45	1159	6724	56.1,56.1
50	2792	2678	2582	2551	2504	2625	2805	2871	45- 50	1144	7868	65.6,65.6
55	2395	2320	2212	2173	2093	2277	2451	2532	50- 55	1083	8951	74.7,74.7
60	1965	1909	1814	1739	1666	1873	2069	2126	55- 60	971.2	9922	82.8,82.8
65	1494	1446	1376	1295	1220	1427	1650	1665	60- 65	813.1	10735	89.5,89.5
70	978.6	975.6	916.8	833.8	736.5	959.8	1194	1173	65- 70	614.0	11349	94.7,94.7
75	505.0	493.7	502.0	404.6	341.9	512.9	760.2	692.9	70- 75	392.1	11741	97.9,97.9
80	155.6	152.1	165.4	112.3	67.74	188.6	362.5	304.6	75- 80	189.0	11930	99.5,99.5
85	18.29	15.38	25.07	12.26	18.76	37.86	78.27	81.53	80- 85	55.32	11985	100,100
90	0.7782	0	0	0	1.471	0	0	0	85- 90	4.330	11989	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



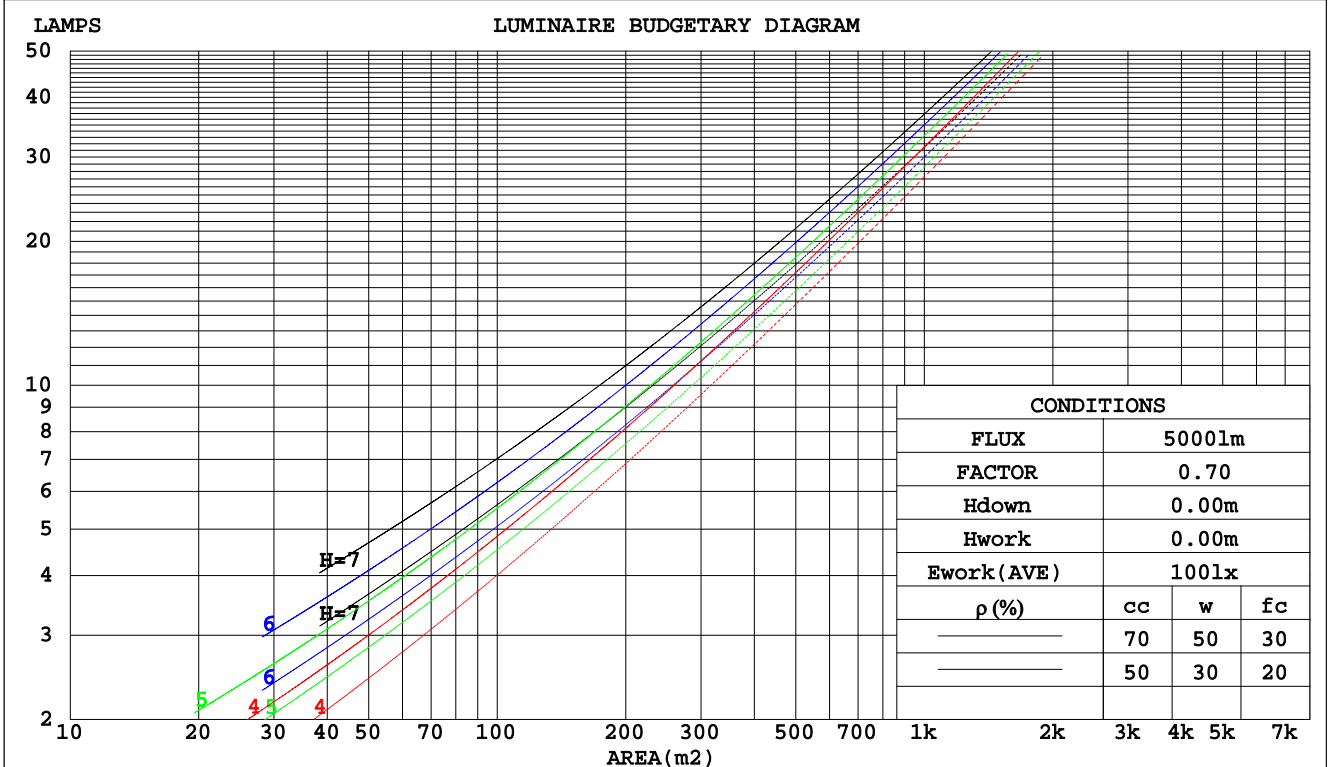
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:CHEN YU
Test Date:2017-02-17

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:9.410m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:223.4V I:0.3742A P:81.96W PF:0.9804 Lamp Flux:11989.5x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-80-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc	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	.00
1.0	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.88	.86
2.0	.92	.86	.80	.90	.84	.79	.87	.82	.77	.83	.79	.76	.80	.77	.74	.72
3.0	.81	.73	.67	.79	.72	.66	.77	.70	.65	.74	.68	.64	.71	.67	.63	.61
4.0	.72	.63	.57	.71	.63	.56	.68	.61	.56	.66	.60	.55	.64	.58	.54	.52
5.0	.64	.55	.49	.63	.55	.49	.61	.54	.48	.59	.53	.47	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.48	.42	.55	.48	.42	.53	.47	.42	.52	.46	.41	.39
7.0	.52	.44	.38	.51	.43	.37	.50	.43	.37	.49	.42	.37	.47	.41	.37	.35
8.0	.48	.39	.33	.47	.39	.33	.46	.38	.33	.44	.38	.33	.43	.37	.33	.31
9.0	.44	.36	.30	.43	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.29	.28
10.0	.40	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:CHEN YU
 Test Date:2017-02-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:223.4V I:0.3742A P:81.96W PF:0.9804 Lamp Flux:11989.5x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-80-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	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 Coefficients(WEC)									
0.0																
1.0	.285	.162	.051	.278	.158	.050	.264	.152	.048	.252	.146	.047	.241	.140	.045	
2.0	.276	.151	.046	.269	.148	.046	.258	.143	.045	.247	.139	.043	.237	.134	.042	
3.0	.259	.138	.041	.254	.136	.041	.243	.132	.040	.234	.128	.039	.225	.125	.039	
4.0	.242	.126	.037	.237	.124	.037	.228	.121	.036	.219	.118	.036	.211	.115	.035	
5.0	.225	.115	.033	.221	.113	.033	.213	.111	.033	.205	.108	.032	.198	.106	.032	
6.0	.210	.105	.030	.206	.104	.030	.199	.102	.030	.192	.100	.029	.186	.098	.029	
7.0	.196	.097	.027	.192	.096	.027	.186	.094	.027	.180	.092	.027	.174	.091	.027	
8.0	.183	.090	.025	.180	.089	.025	.175	.087	.025	.169	.086	.025	.164	.084	.025	
9.0	.172	.083	.023	.169	.083	.023	.164	.081	.023	.159	.080	.023	.155	.079	.023	
10.0	.162	.078	.022	.160	.077	.022	.155	.076	.021	.151	.075	.021	.146	.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	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.018	.015	.012	
3.0	.162	.114	.076	.139	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.052	.091	.061	.036	.053	.036	.022	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.084	.050	.024	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.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	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:CHEN YU
 Test Date:2017-02-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:223.4V I:0.3742A P:81.96W PF:0.9804 Lamp Flux:11989.5x1 lm										
NAME: LED HIGH BAY LIGHT					TYPE:YHL-ID-80-HB-VE			WEIGHT:		
SPEC.:MEAN WELL					DIM.: 5000K			SERIAL No.:20170217		
MFR.:					SUR.:70Ra			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	29.6	31.1	29.8	31.3	31.5	29.3	30.8	29.5	31.0	31.2
3H	30.7	32.0	31.0	32.3	32.5	30.4	31.8	30.7	32.0	32.2
4H	30.9	32.2	31.2	32.5	32.7	30.6	31.9	31.0	32.2	32.4
6H	30.9	32.1	31.2	32.4	32.7	30.7	31.9	31.0	32.2	32.5
8H	30.9	32.0	31.2	32.3	32.6	30.7	31.8	31.0	32.1	32.4
12H	30.8	32.0	31.2	32.2	32.5	30.6	31.7	31.0	32.0	32.3
4H 2H	30.1	31.4	30.4	31.6	31.9	29.8	31.1	30.2	31.4	31.6
3H	31.3	32.4	31.6	32.7	33.0	31.1	32.2	31.4	32.5	32.8
4H	31.6	32.6	31.9	32.9	33.3	31.4	32.4	31.8	32.7	33.1
6H	31.6	32.5	32.0	32.9	33.2	31.5	32.4	31.9	32.7	33.1
8H	31.6	32.4	32.0	32.8	33.2	31.5	32.3	31.9	32.7	33.1
12H	31.5	32.3	32.0	32.7	33.1	31.4	32.2	31.9	32.6	33.0
8H 4H	31.6	32.5	32.0	32.8	33.2	31.5	32.3	31.9	32.7	33.0
6H	31.7	32.4	32.2	32.8	33.2	31.6	32.3	32.0	32.7	33.1
8H	31.7	32.3	32.1	32.7	33.2	31.6	32.2	32.0	32.6	33.1
12H	31.7	32.2	32.1	32.6	33.1	31.6	32.1	32.0	32.5	33.0
12H 4H	31.6	32.4	32.0	32.8	33.2	31.4	32.2	31.8	32.6	33.0
6H	31.7	32.3	32.1	32.7	33.2	31.6	32.2	32.0	32.6	33.0
8H	31.7	32.2	32.1	32.6	33.1	31.6	32.1	32.0	32.5	33.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.3				
1.5H	+ 0.3 / - 0.4					+ 0.3 / - 0.5				
2.0H	+ 0.5 / - 0.5					+ 0.3 / - 0.4				

CIE Pub.117 Corrected 11989 lm Total Lamp Luminous Flux.(8log(F/F0) = 8.6)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:CHEN YU
 Test Date:2017-02-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:223.4V I:0.3742A P:81.96W PF:0.9804 Lamp Flux:11989.5x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-80-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	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	47	40	57	47	40	56	46	40	33
0.80	69	57	50	68	57	50	66	56	49	43
1.00	77	67	59	76	66	59	74	67	59	52
1.25	85	74	68	83	74	67	81	72	66	59
1.50	90	80	73	88	79	73	85	78	72	65
2.00	96	88	82	95	87	81	91	85	80	72
2.50	100	93	87	98	92	86	94	89	84	76
3.00	103	97	92	101	96	91	97	93	89	80
4.00	107	102	98	105	100	96	101	97	94	85
5.00	110	105	101	107	103	100	103	100	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:CHEN YU
 Test Date:2017-02-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:223.4V I:0.3742A P:81.96W PF:0.9804 Lamp Flux:11989.5x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-80-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:

Conical surface Flux(90deg):

6723.8 lm

%lum = 56.1%

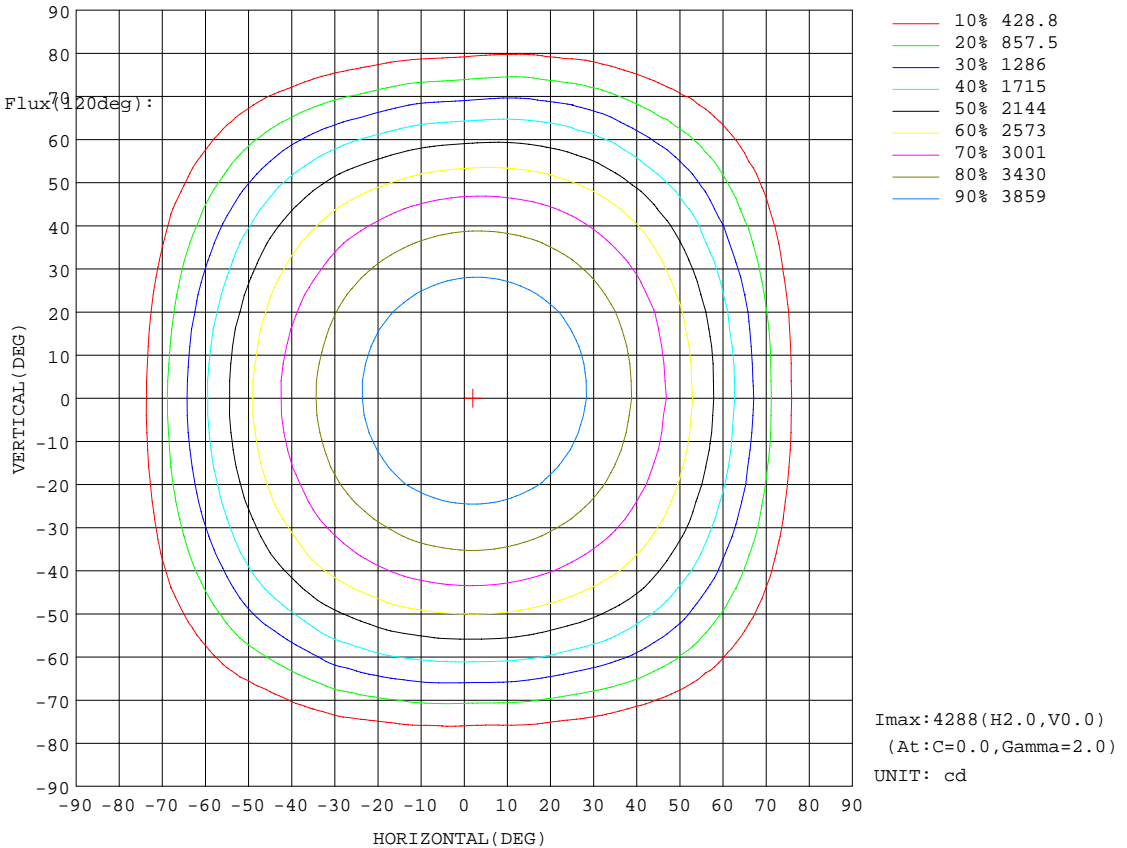
%lamp = 56.1%

Conical surface Flux(70deg):

9921.8 lm

%lum = 82.8%

%lamp = 82.8%



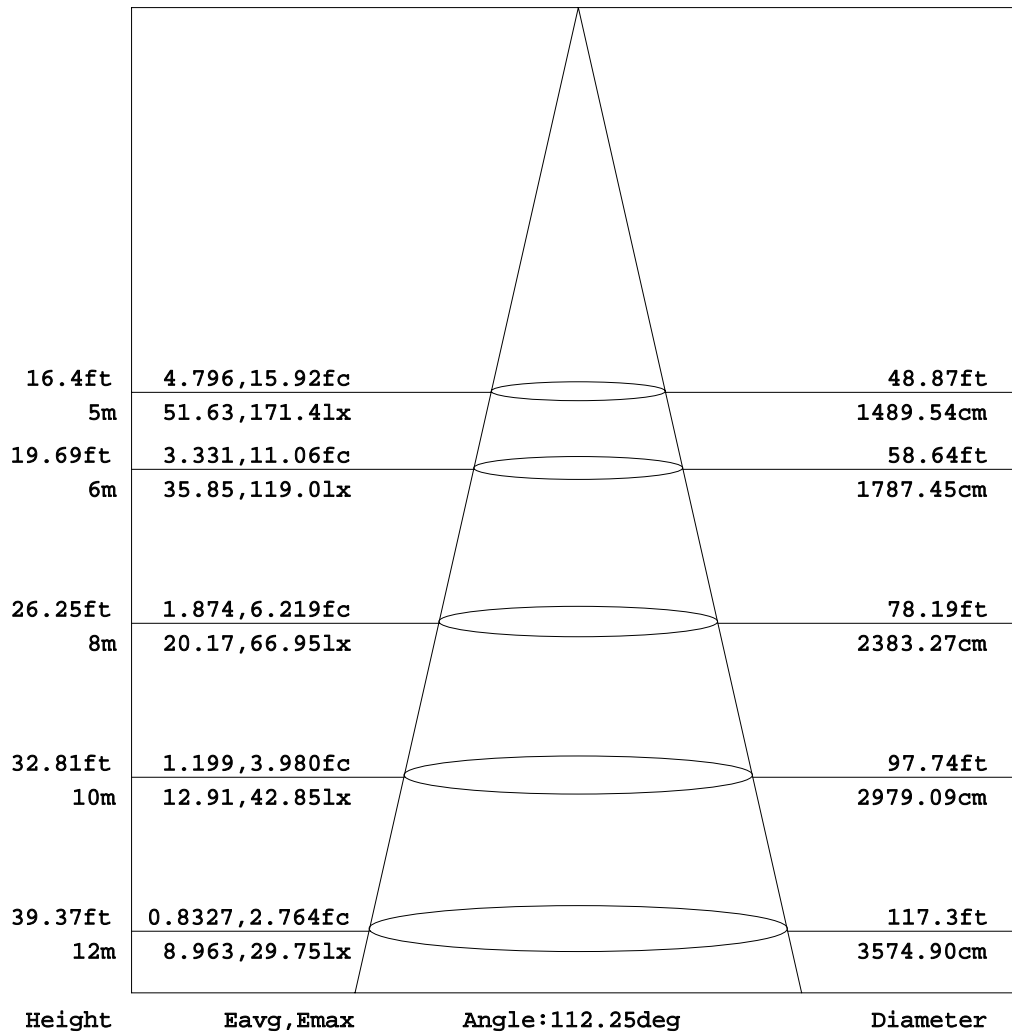
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators: CHEN YU
 Test Date: 2017-02-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.287
 Humidity: 65.0%
 Test Distance: 9.410m [K=1.0000]
 Remarks:

AAI Figure

Test:U:223.4V I:0.3742A P:81.96W PF:0.9804 Lamp Flux:11989.5x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-80-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:

Flux out:9256 lm



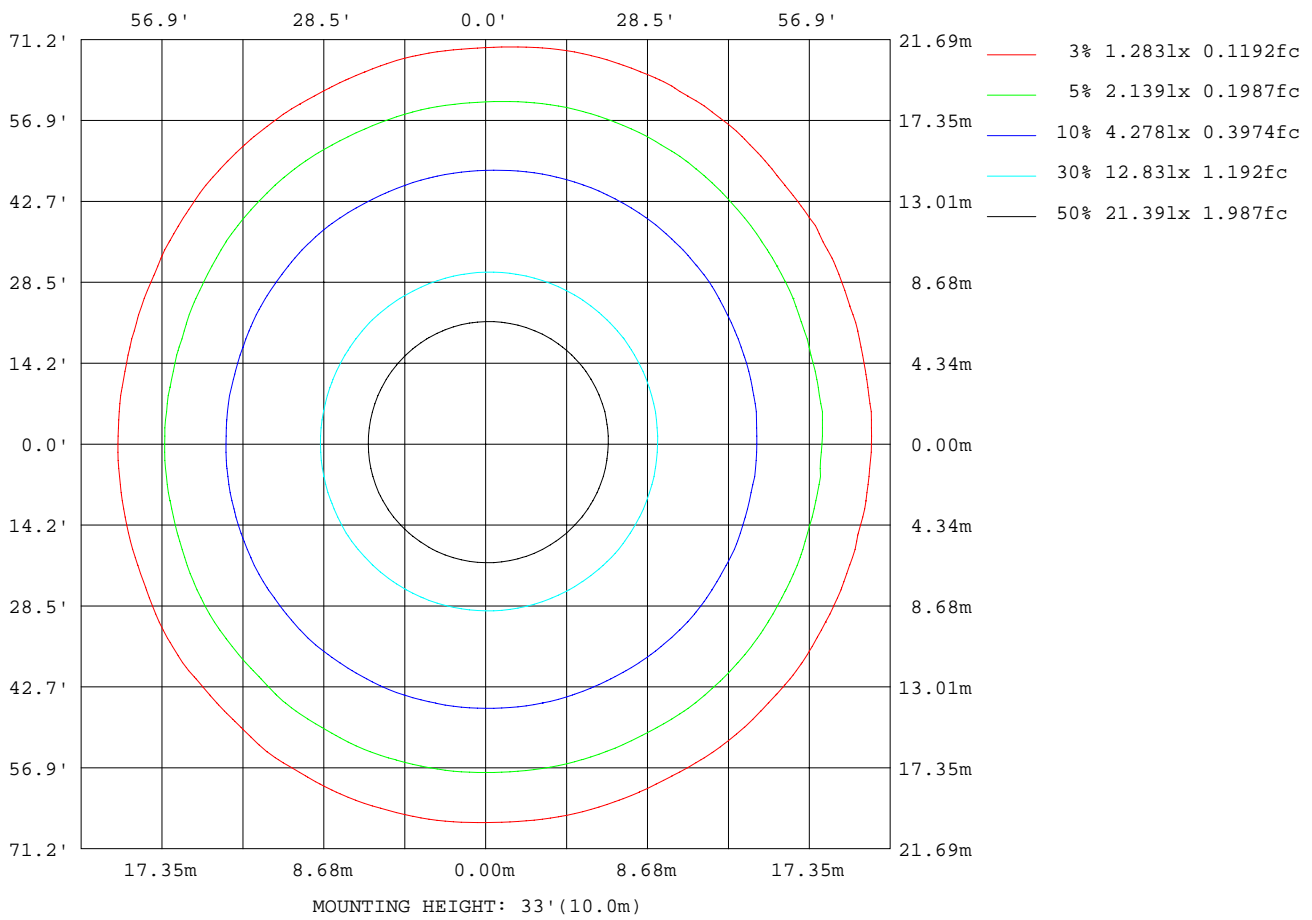
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:CHEN YU
 Test Date:2017-02-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

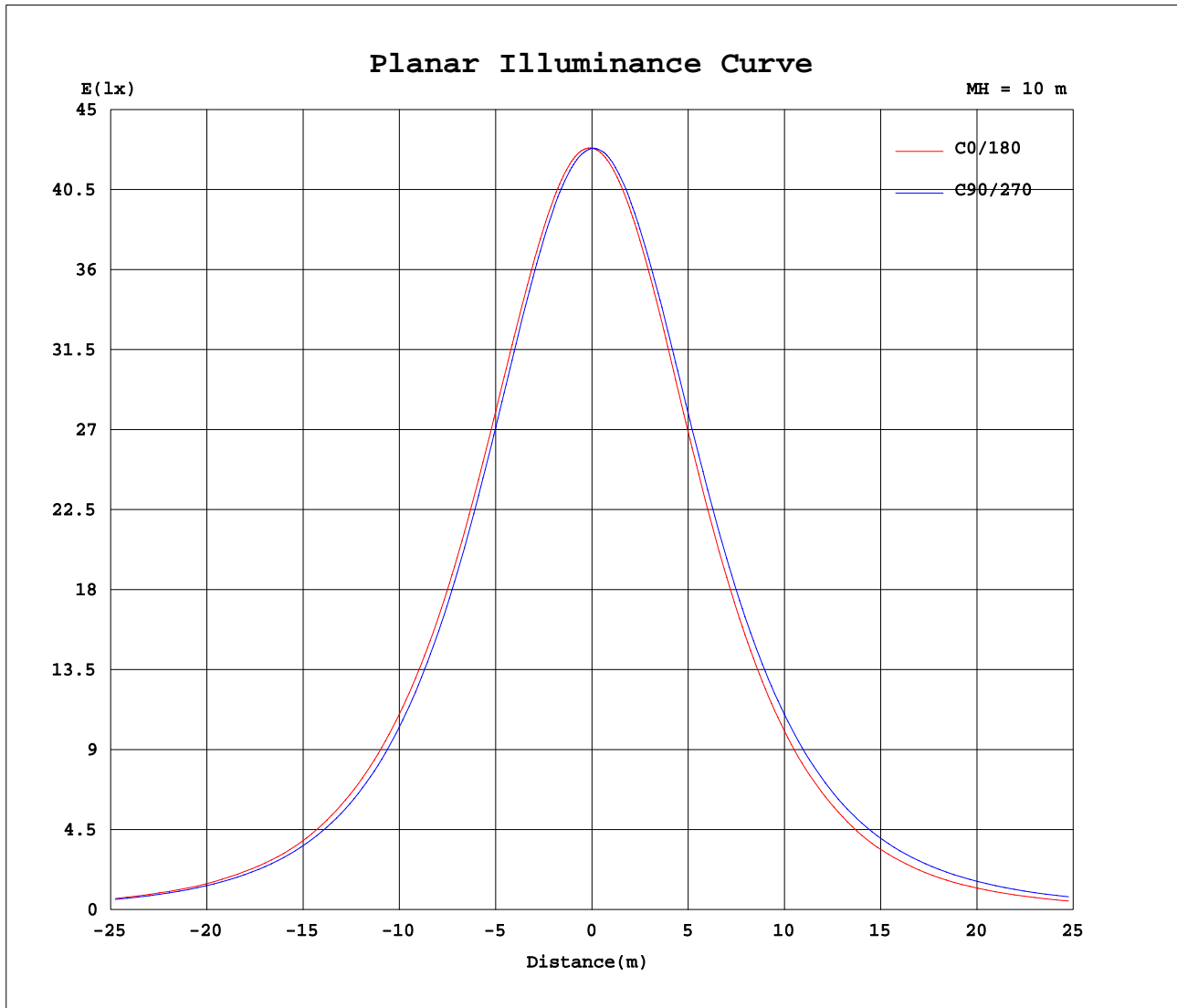
Test:U:223.4V I:0.3742A P:81.96W PF:0.9804 Lamp Flux:11989.5x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-80-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:CHEN YU
 Test Date:2017-02-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators: CHEN YU
 Test Date: 2017-02-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.287
 Humidity: 65.0%
 Test Distance: 9.410m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:223.4V I:0.3742A P:81.96W PF:0.9804 Lamp Flux:11989.5x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-80-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:

Table--3

UNIT: cd

C(DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	4284	4284	4284	4284	4284	4284	4284	4284	4284	4284	4284	4284	4284	4284	4284	4284	4284	4284	4284
5	4253	4254	4255	4257	4258	4260	4263	4265	4267	4269	4271	4273	4274	4275	4276	4278	4280	4281	4282
10	4194	4196	4200	4204	4206	4210	4212	4215	4218	4221	4225	4229	4232	4235	4238	4242	4244	4246	4248
15	4104	4110	4113	4116	4119	4123	4130	4134	4137	4142	4148	4153	4158	4162	4166	4170	4175	4178	4181
20	3985	3990	3993	3997	4003	4007	4014	4022	4028	4034	4040	4047	4055	4063	4070	4077	4083	4087	4091
25	3821	3826	3832	3840	3849	3859	3866	3873	3883	3891	3898	3908	3917	3926	3935	3942	3949	3955	3962
30	3629	3633	3641	3652	3660	3669	3682	3690	3702	3712	3723	3734	3747	3760	3772	3782	3793	3799	3806
35	3406	3409	3415	3425	3439	3451	3466	3477	3489	3505	3516	3529	3543	3558	3571	3582	3593	3603	3611
40	3148	3154	3168	3169	3179	3198	3212	3231	3247	3264	3275	3288	3304	3321	3338	3354	3368	3379	3389
45	2849	2862	2862	2874	2892	2902	2923	2951	2966	2979	2995	3013	3035	3057	3074	3090	3105	3118	3129
50	2498	2512	2527	2549	2562	2590	2605	2625	2650	2670	2687	2703	2722	2745	2768	2788	2805	2820	2834
55	2120	2116	2139	2155	2195	2214	2239	2277	2304	2326	2337	2350	2370	2396	2417	2434	2451	2473	2496
60	1670	1674	1682	1730	1748	1794	1839	1873	1904	1939	1954	1963	1986	2015	2038	2052	2069	2094	2123
65	1213	1228	1243	1276	1313	1347	1384	1427	1452	1475	1507	1518	1554	1594	1624	1634	1650	1683	1720
70	739	757	770	802	845	891	924	960	1000	1024	1043	1056	1097	1141	1172	1177	1194	1232	1276
75	338	353	359	383	418	456	490	513	538	583	616	635	670	707	725	735	760	795	830
80	68.9	79.2	89.2	105	118	142	167	189	216	235	260	275	297	326	341	348	363	394	418
85	25.7	25.9	25.7	26.4	25.8	27.0	31.2	37.9	46.3	51.8	57.6	61.6	64.7	69.9	72.8	74.2	78.3	85.8	94.6
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:CHEN YU
 Test Date:2017-02-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

