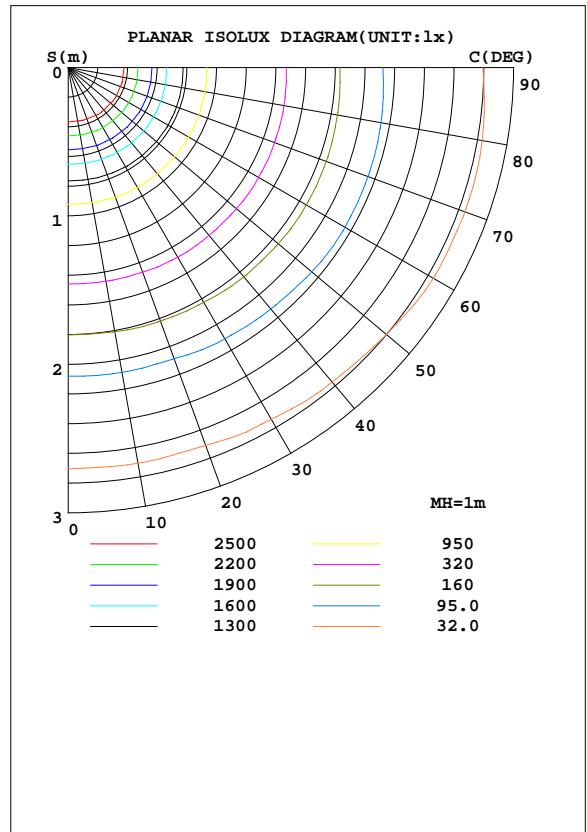
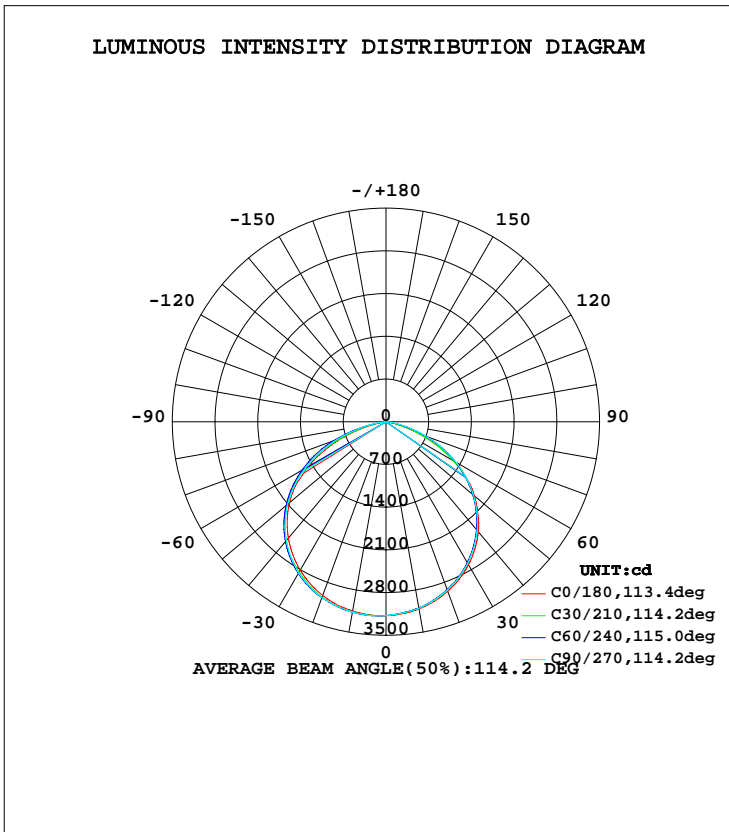


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:223.4V I:0.2731A P:59.77W PF:0.9797 Lamp Flux:8905.48x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-60-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 148.99 lm/W			
MODEL NF2W757GRT-V1 135PCS		Imax(cd)	3187	S/MH(C0/180)	1.27
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	8905.5	η UP, DN(C0-180)	0.0, 51.7
NOMINAL FLUX(lm)	8905.48	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 48.3
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



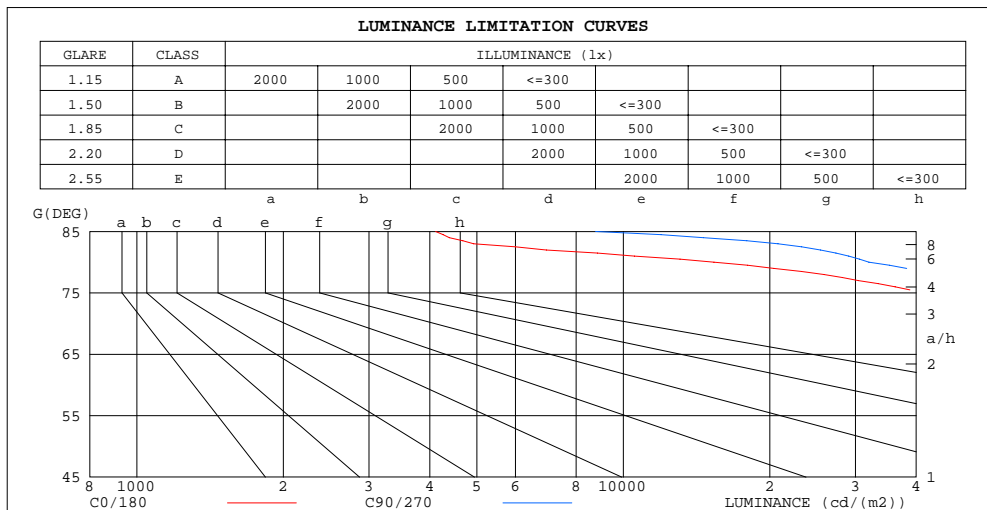
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:CHEN YU
 Test Date:2017-02-17

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	3176	3184	3185	3173	3157	3145	3145	3155	0- 5	75.80	75.80	0.85,0.85
10	3148	3167	3169	3145	3115	3100	3104	3116	5- 10	225.2	301.0	3.38,3.38
15	3104	3128	3125	3094	3049	3027	3028	3059	10- 15	368.3	669.3	7.52,7.52
20	3031	3062	3067	3024	2958	2930	2937	2972	15- 20	500.5	1170	13.1,13.1
25	2932	2976	2975	2921	2844	2810	2817	2862	20- 25	617.6	1787	20.1,20.1
30	2809	2864	2861	2793	2705	2667	2677	2727	25- 30	715.6	2503	28.1,28.1
35	2662	2725	2714	2642	2542	2500	2510	2569	30- 35	791.0	3294	37,37
40	2489	2560	2545	2462	2355	2308	2324	2388	35- 40	840.3	4134	46.4,46.4
45	2290	2360	2337	2255	2128	2092	2107	2179	40- 45	860.9	4995	56.1,56.1
50	2065	2136	2104	2021	1893	1848	1871	1950	45- 50	850.1	5845	65.6,65.6
55	1804	1867	1831	1755	1612	1581	1606	1692	50- 55	805.9	6651	74.7,74.7
60	1460	1572	1531	1453	1303	1282	1325	1410	55- 60	725.0	7376	82.8,82.8
65	1107	1225	1204	1109	941.9	956.5	1019	1098	60- 65	608.1	7984	89.7,89.7
70	744.2	839.2	856.8	738.2	570.5	625.5	706.9	753.6	65- 70	459.3	8444	94.8,94.8
75	373.7	450.9	504.7	371.9	261.1	311.3	406.6	409.3	70- 75	291.2	8735	98.1,98.1
80	93.36	133.7	194.3	104.0	50.29	104.4	159.9	159.8	75- 80	134.1	8869	99.6,99.6
85	12.54	9.712	26.75	10.39	13.16	20.93	29.91	37.38	80- 85	33.95	8903	100,100
90	0.6031	0	0	0	1.051	0	0	0	85- 90	2.553	8905	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		



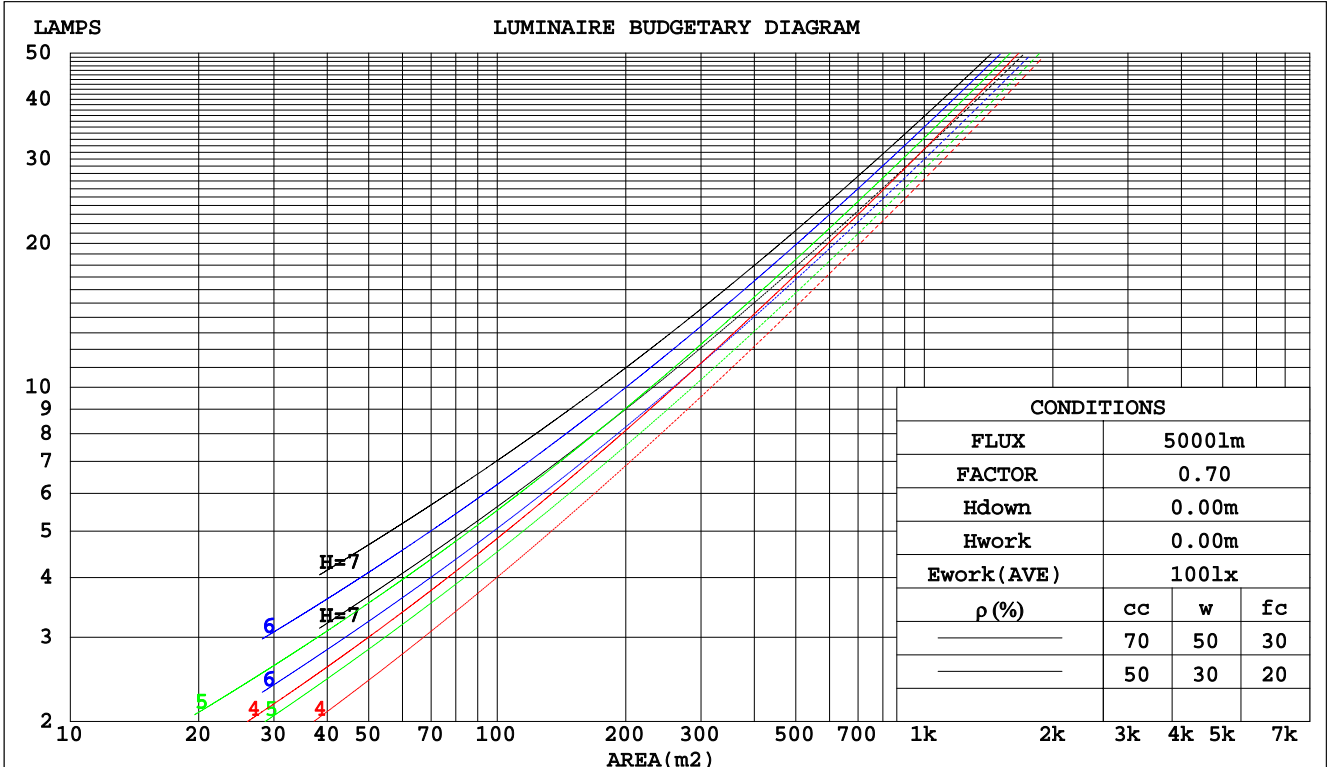
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:CHEN YU
Test Date:2017-02-17

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:0.2731A P:59.77W PF:0.9797 Lamp Flux:8905.48x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-60-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																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	.98	1.03	.99	.96	.99	.96	.93	.95	.93	.90	.91	.89	.88	.86
2.0	.92	.86	.80	.90	.84	.79	.87	.82	.77	.84	.79	.76	.81	.77	.74	.72
3.0	.81	.73	.67	.80	.72	.66	.77	.70	.65	.74	.69	.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	.48	.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	.52	.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:0.2731A P:59.77W PF:0.9797 Lamp Flux:8905.48x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-60-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	.284	.161	.051	.277	.158	.050	.263	.151	.048	.251	.145	.047	.240	.139	.045	
2.0	.275	.151	.046	.269	.148	.046	.257	.143	.044	.247	.138	.043	.237	.134	.042	
3.0	.259	.138	.041	.253	.136	.041	.243	.132	.040	.234	.128	.039	.225	.125	.039	
4.0	.241	.125	.037	.237	.124	.037	.228	.121	.036	.219	.118	.035	.211	.115	.035	
5.0	.225	.115	.033	.221	.113	.033	.212	.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	.178	.156	.136	.153	.134	.117	.104	.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:0.2731A P:59.77W PF:0.9797 Lamp Flux:8905.48x1 lm										
NAME: LED HIGH BAY LIGHT					TYPE:YHL-ID-60-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	28.8	30.3	29.1	30.5	30.7	29.1	30.6	29.3	30.8	31.0
3H	29.9	31.3	30.2	31.5	31.8	30.4	31.8	30.7	32.0	32.3
4H	30.2	31.5	30.5	31.7	32.0	30.8	32.1	31.1	32.4	32.6
6H	30.1	31.4	30.5	31.6	31.9	31.0	32.2	31.3	32.5	32.7
8H	30.1	31.3	30.4	31.6	31.8	31.0	32.1	31.3	32.4	32.7
12H	30.0	31.2	30.4	31.5	31.8	30.9	32.1	31.3	32.3	32.7
4H 2H	29.5	30.8	29.8	31.0	31.3	29.6	30.9	30.0	31.2	31.5
3H	30.7	31.8	31.0	32.1	32.4	31.2	32.3	31.5	32.6	32.9
4H	31.0	32.0	31.3	32.3	32.6	31.7	32.7	32.0	33.0	33.3
6H	31.0	31.9	31.4	32.2	32.6	31.9	32.8	32.3	33.1	33.5
8H	30.9	31.8	31.4	32.1	32.5	31.9	32.7	32.3	33.1	33.5
12H	30.9	31.7	31.3	32.1	32.5	31.8	32.6	32.3	33.0	33.4
8H 4H	31.1	31.9	31.5	32.3	32.7	31.7	32.6	32.1	32.9	33.3
6H	31.1	31.8	31.6	32.2	32.7	32.0	32.7	32.4	33.1	33.5
8H	31.1	31.7	31.6	32.1	32.6	32.0	32.6	32.5	33.0	33.5
12H	31.1	31.6	31.5	32.0	32.5	32.0	32.5	32.5	33.0	33.4
12H 4H	31.0	31.8	31.5	32.2	32.6	31.7	32.5	32.1	32.8	33.2
6H	31.1	31.7	31.6	32.1	32.6	31.9	32.6	32.4	33.0	33.4
8H	31.1	31.6	31.6	32.1	32.5	32.0	32.5	32.5	32.9	33.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H	+ 0.3 / - 0.5					+ 0.3 / - 0.5				
2.0H	+ 0.4 / - 0.5					+ 0.2 / - 0.5				

CIE Pub.117 Corrected 8905 lm Total Lamp Luminous Flux.(8log(F/F0) = 7.6)

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:0.2731A P:59.77W PF:0.9797 Lamp Flux:8905.48x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-60-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) $k(RI) \times RCR = 5$									
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	75	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	82	91	85	80	72
2.50	100	93	87	98	92	86	95	89	85	77
3.00	104	97	92	101	96	91	97	93	89	81
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:0.2731A P:59.77W PF:0.9797 Lamp Flux:8905.48x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-60-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:

Conical surface Flux(90deg):

4995.3 lm

%lum = 56.1%

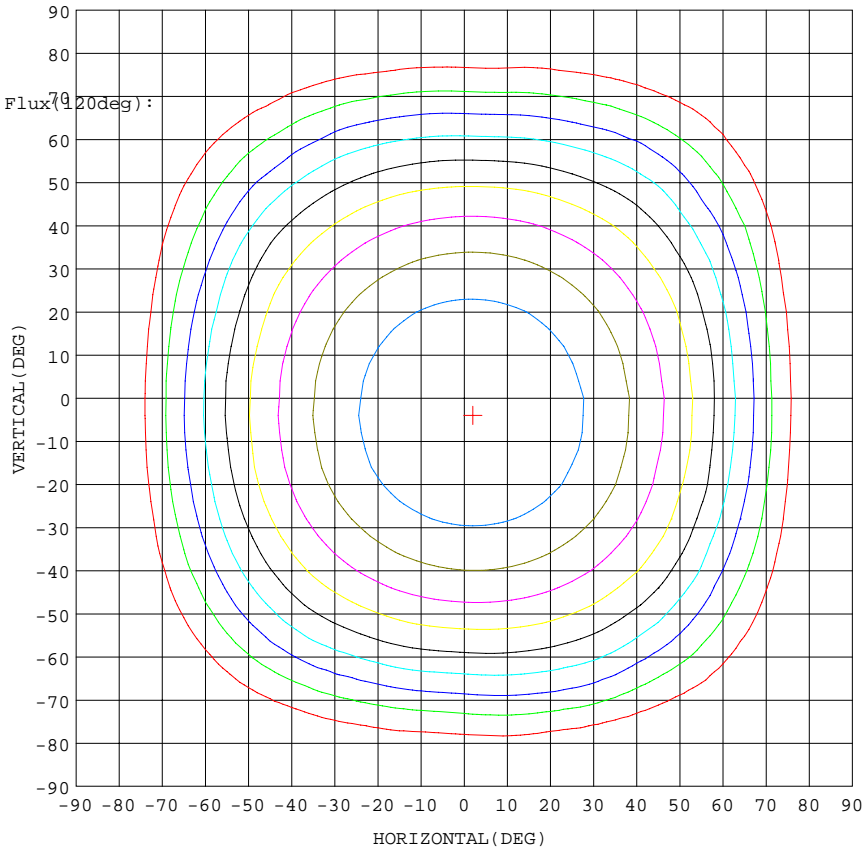
%lamp = 56.1%

Conical surface Flux(70deg):

7376.3 lm

%lum = 82.8%

%lamp = 82.8%



I_{max}:3187(H2.0,V-4.0)
(At:C=65.0,Gamma=4.5)

UNIT: cd

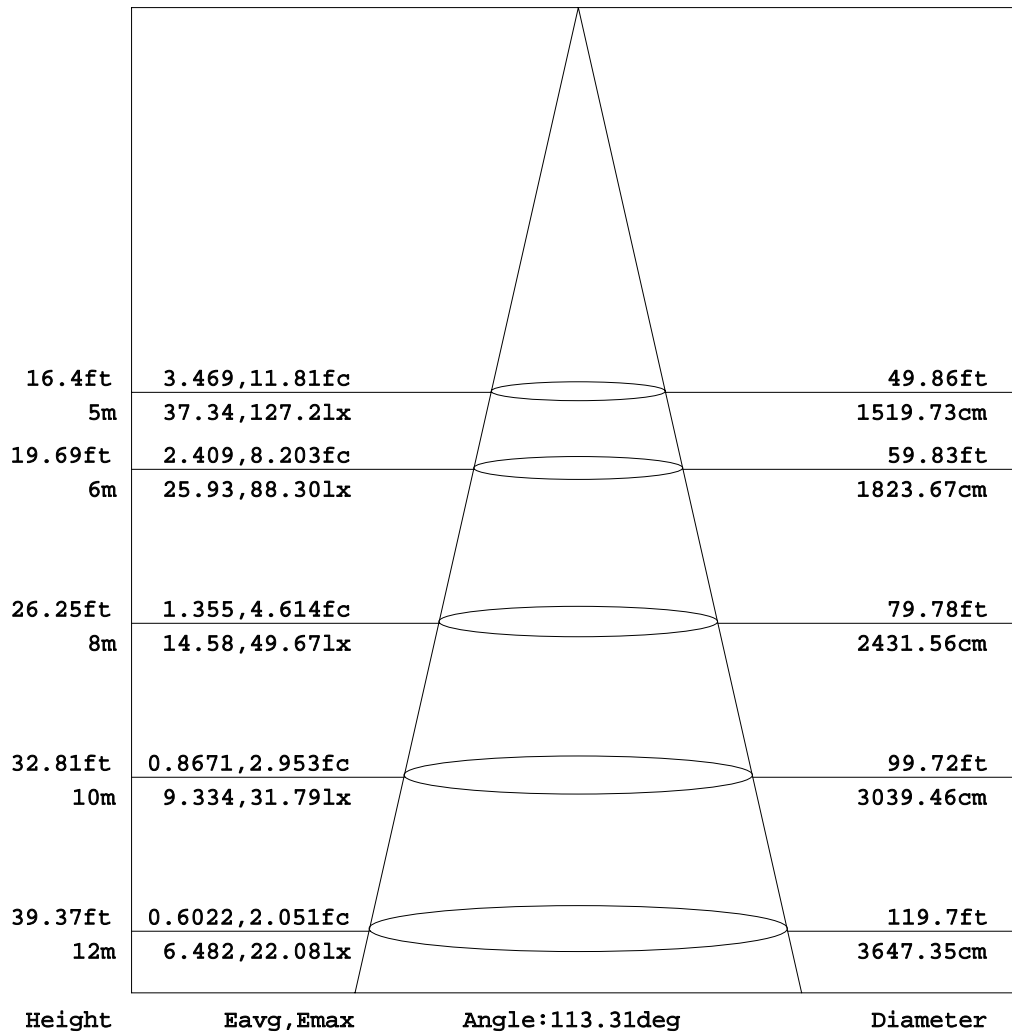
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:CHEN YU
Test Date:2017-02-17

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:0.2731A P:59.77W PF:0.9797 Lamp Flux:8905.48x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-60-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:

Flux out:6953 lm



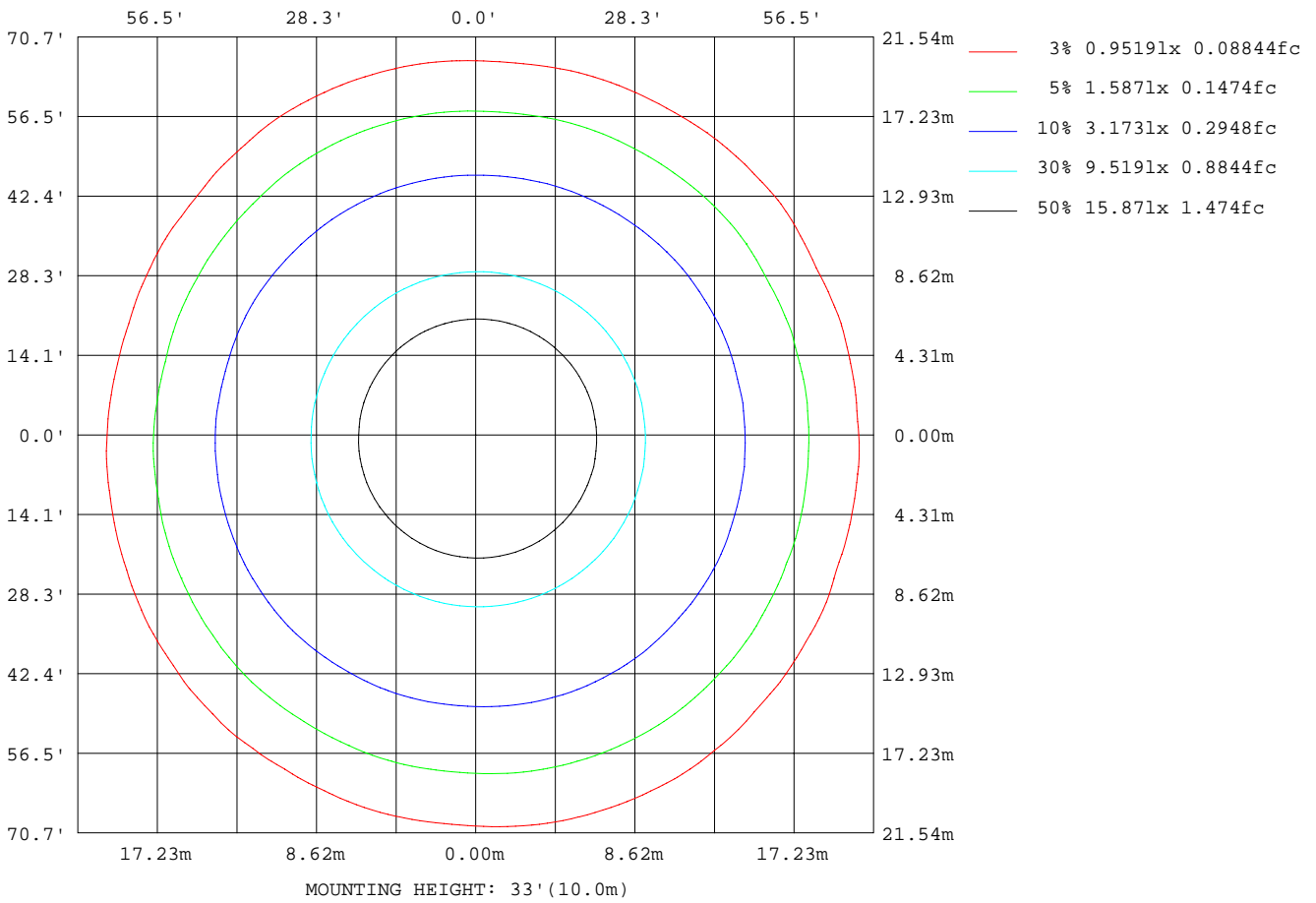
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

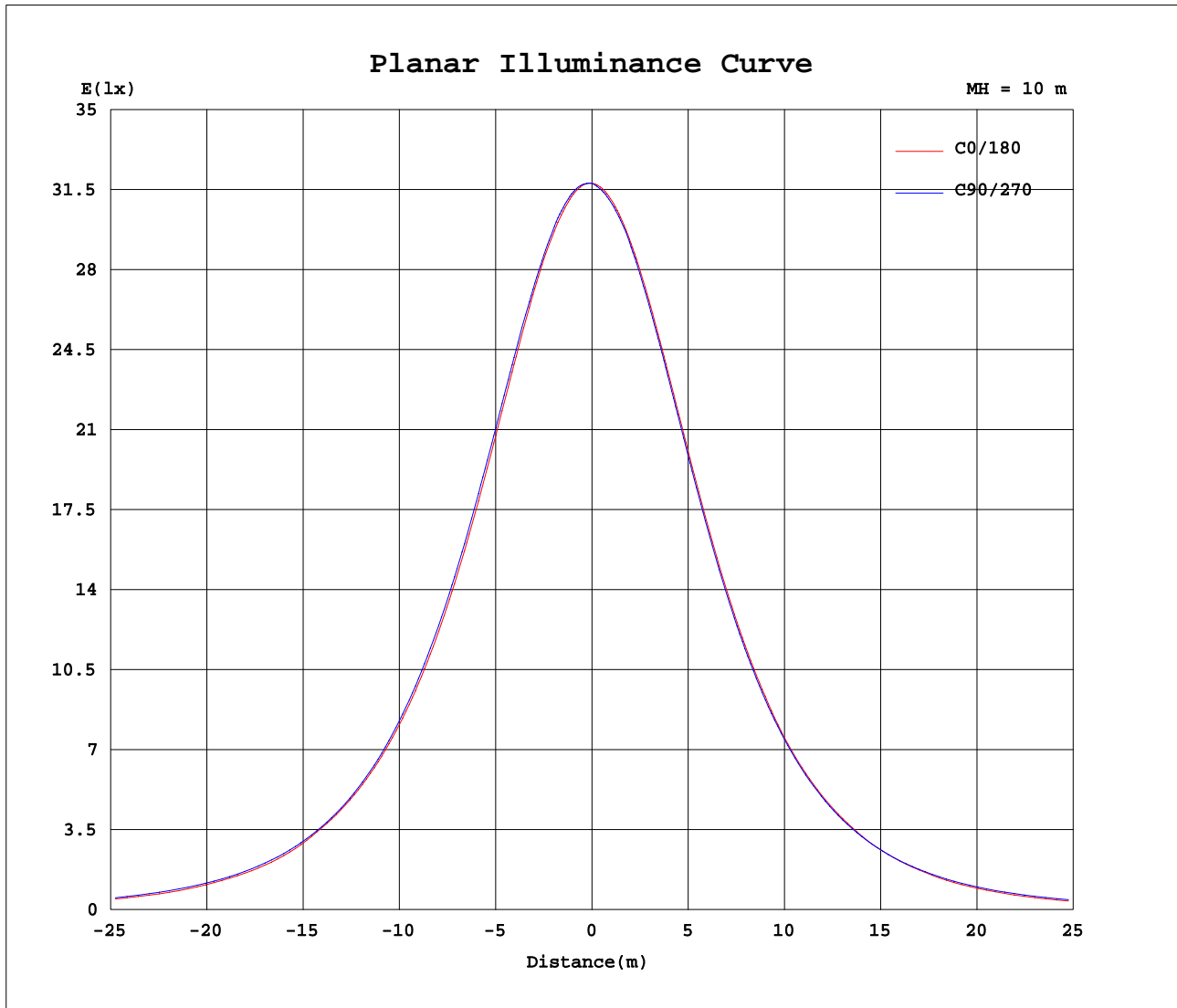
Test:U:223.4V I:0.2731A P:59.77W PF:0.9797 Lamp Flux:8905.48x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-60-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:



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:0.2731A P:59.77W PF:0.9797 Lamp Flux:8905.48x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:YHL-ID-60-HB-VE	WEIGHT:
SPEC.:MEAN WELL	DIM.: 5000K	SERIAL No.:20170217
MFR.:	SUR.:70Ra	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	3177	3177	3177	3177	3177	3177	3177	3177	3177	3177	3177	3177	3177	3177	3177	3177	3177	3177	3177
5	3176	3176	3177	3178	3179	3180	3181	3182	3183	3184	3185	3186	3186	3186	3186	3186	3186	3185	3185
10	3148	3149	3151	3154	3157	3160	3162	3164	3166	3167	3168	3169	3170	3170	3170	3170	3170	3170	3169
15	3104	3104	3106	3109	3112	3116	3121	3125	3129	3128	3128	3128	3129	3130	3129	3129	3128	3127	3125
20	3031	3031	3033	3038	3045	3053	3060	3059	3060	3062	3064	3067	3068	3070	3071	3071	3070	3070	3067
25	2932	2932	2937	2944	2955	2960	2961	2965	2970	2976	2982	2984	2984	2985	2985	2983	2981	2978	2975
30	2809	2810	2816	2829	2838	2840	2846	2854	2863	2864	2868	2870	2871	2871	2871	2870	2868	2865	2861
35	2662	2662	2672	2689	2690	2698	2712	2717	2722	2725	2728	2732	2731	2731	2729	2727	2723	2719	2714
40	2489	2489	2503	2512	2520	2537	2542	2549	2555	2560	2559	2562	2563	2562	2561	2559	2555	2551	2545
45	2290	2288	2311	2309	2329	2339	2348	2356	2356	2360	2363	2368	2367	2365	2363	2358	2352	2345	2337
50	2065	2063	2077	2080	2094	2108	2124	2126	2128	2136	2136	2138	2138	2136	2133	2128	2121	2113	2104
55	1804	1801	1810	1823	1828	1851	1858	1867	1864	1867	1876	1882	1880	1877	1873	1866	1856	1844	1831
60	1460	1466	1475	1503	1510	1524	1534	1556	1566	1572	1580	1591	1590	1586	1582	1573	1564	1548	1531
65	1107	1119	1122	1124	1128	1166	1182	1195	1214	1225	1253	1272	1274	1269	1265	1258	1247	1226	1204
70	744	741	747	744	746	777	782	811	823	839	864	894	919	916	919	916	904	882	857
75	374	370	378	385	390	401	412	424	430	451	483	504	526	528	532	546	545	529	505
80	93.4	93.9	97.3	99.7	98.8	102	108	116	119	134	143	158	174	185	191	213	222	205	194
85	12.5	11.2	10.6	10.2	9.69	9.53	7.99	8.18	8.87	9.71	14.3	18.6	22.6	25.6	27.0	30.0	30.6	28.1	26.7
90	0.60	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:

