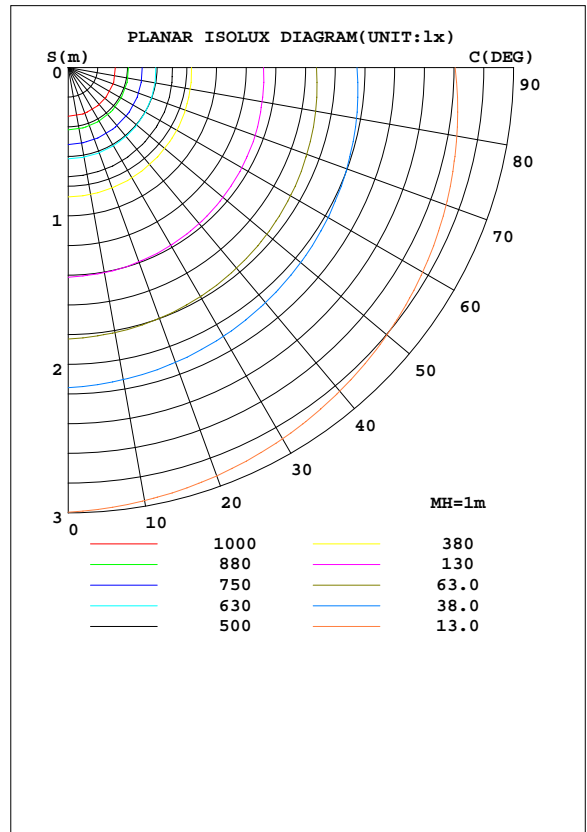
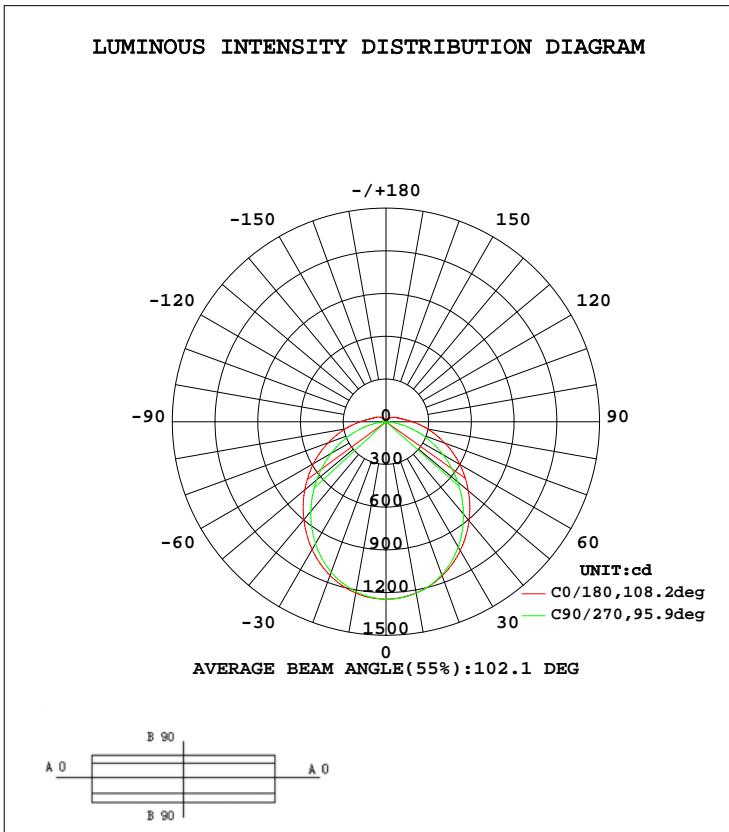


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.4V I:0.2436A P:29.08W PF:0.9914 Lamp Flux:3853.49x1 lm		
NAME: LED三防灯	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: KILI-LED Lighting Limited	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 132.51 lm/W			
MODEL	vfc030	I _{max} (cd)	1247	S/MH(C0/180)	1.24
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.19
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	3853.5	η UP, DN(C0-180)	3.2, 46.2
NOMINAL FLUX(lm)	3853.49	CIE CLASS	DIRECT	η UP, DN(C180-360)	3.2, 47.3
LAMPS INSIDE	1	η up(%)	6.4	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120.4	η down(%)	93.6	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: %
 Test Distance:9.190m [K=0.9684]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
10	1222	1219	1212	1213	1221	1221	1223	1233	0- 10	117.7	117.7	3.05,3.05
20	1148	1139	1124	1137	1152	1147	1144	1167	10- 20	335.2	452.9	11.8,11.8
30	1037	1016	990.0	1022	1044	1030	1015	1049	20- 30	502.0	954.9	24.8,24.8
40	897.3	862.3	821.4	871.5	907.2	878.0	847.0	895.4	30- 40	595.4	1550	40.2,40.2
50	744.7	692.7	634.7	702.4	755.2	709.1	657.6	722.7	40- 50	608.5	2159	56,56
60	587.9	521.8	445.5	530.5	598.7	536.3	460.2	547.4	50- 60	550.4	2709	70.3,70.3
70	431.3	355.2	263.3	362.6	439.6	369.5	271.9	378.4	60- 70	438.7	3148	81.7,81.7
80	291.0	209.6	92.38	216.2	298.7	218.4	96.46	224.3	70- 80	295.6	3444	89.4,89.4
90	181.6	110.7	0.6921	113.4	187.0	113.8	0.6264	120.1	80- 90	161.6	3605	93.6,93.6
100	116.6	64.55	1.078	64.55	116.4	64.22	1.111	68.59	90-100	87.12	3692	95.8,95.8
110	86.34	47.99	1.997	47.84	84.80	47.04	1.942	50.77	100-110	56.11	3748	97.3,97.3
120	66.76	34.05	3.026	36.08	64.48	35.17	2.886	35.52	110-120	40.09	3788	98.3,98.3
130	49.97	23.26	4.097	27.60	47.49	26.95	3.837	23.62	120-130	27.05	3815	99,99
140	36.05	16.55	5.023	21.53	34.02	20.25	4.740	16.67	130-140	17.46	3833	99.5,99.5
150	25.24	12.27	6.252	16.35	23.72	16.36	5.984	11.94	140-150	10.70	3844	99.7,99.7
160	17.40	10.08	7.282	11.88	16.00	11.85	7.078	10.19	150-160	6.073	3850	99.9,99.9
170	11.54	8.931	8.012	9.118	9.368	9.249	8.013	8.574	160-170	2.933	3853	100,100
180	6.780	8.187	8.551	8.322	6.804	8.235	8.544	8.306	170-180	0.8184	3853	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

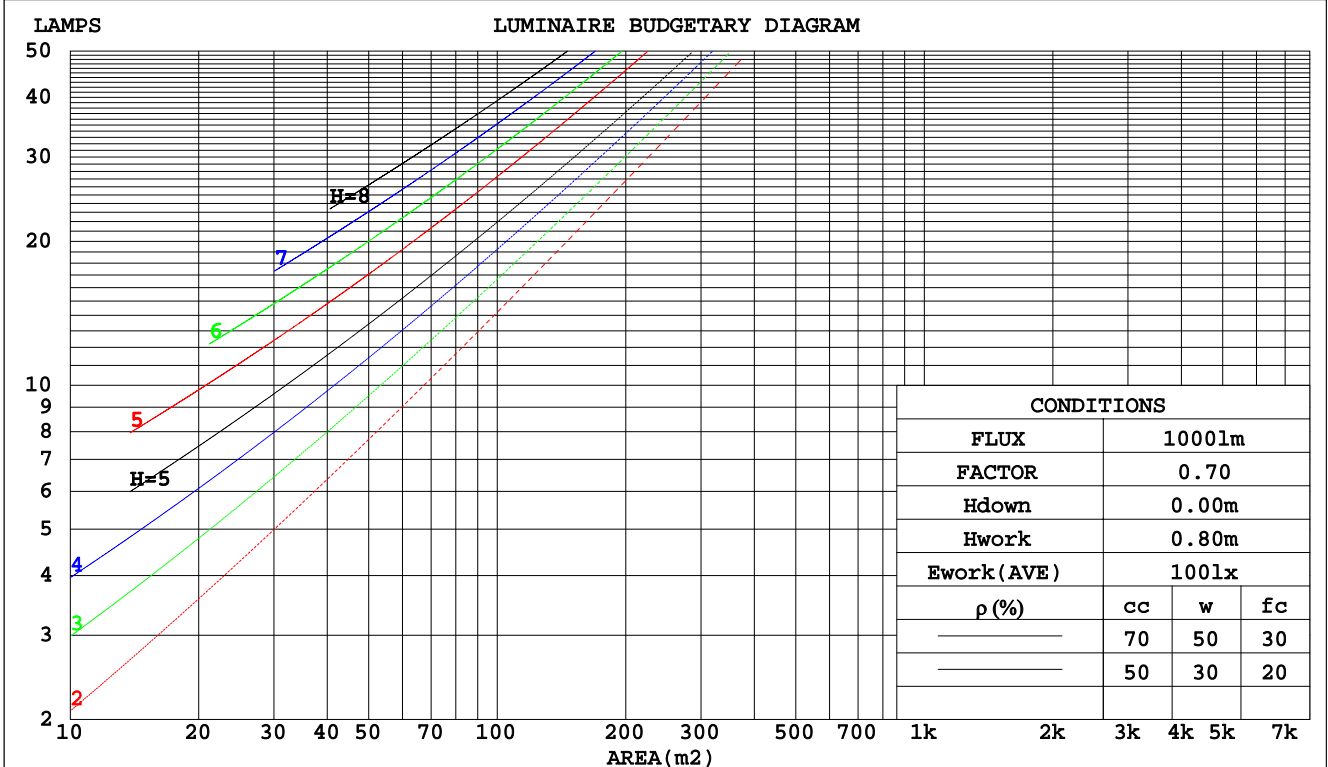
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.4V I:0.2436A P:29.08W PF:0.9914 Lamp Flux:3853.49x1 lm		
NAME: LED三防灯	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: KILI-LED Lighting Limited	SUR.:	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	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.96	.96	.96	.94
1.0	1.01	.96	.92	.98	.94	.90	.93	.89	.86	.88	.85	.82	.83	.81	.79	.76
2.0	.88	.80	.74	.85	.79	.73	.80	.75	.70	.76	.72	.68	.72	.69	.65	.63
3.0	.77	.68	.62	.75	.67	.61	.71	.64	.59	.67	.62	.57	.64	.59	.55	.53
4.0	.68	.59	.52	.66	.58	.51	.63	.56	.50	.60	.54	.49	.57	.52	.47	.45
5.0	.61	.51	.45	.59	.51	.44	.56	.49	.43	.54	.47	.42	.51	.45	.41	.39
6.0	.55	.45	.39	.53	.45	.39	.51	.43	.38	.48	.42	.37	.46	.41	.36	.34
7.0	.49	.41	.34	.48	.40	.34	.46	.39	.33	.44	.38	.33	.42	.36	.32	.30
8.0	.45	.37	.31	.44	.36	.30	.42	.35	.30	.41	.34	.29	.39	.33	.29	.27
9.0	.41	.33	.28	.41	.33	.27	.39	.32	.27	.37	.31	.26	.36	.30	.26	.24
10.0	.38	.30	.25	.37	.30	.25	.36	.29	.24	.35	.28	.24	.33	.28	.24	.22



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 31DEG
 Operators: 01
 Test Date: 2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: %
 Test Distance: 9.190m [K=0.9684]
 Remarks:

WEC AND CCEC

Test:U:120.4V I:0.2436A P:29.08W PF:0.9914 Lamp Flux:3853.49x1 lm		
NAME: LED三防灯	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: KILI-LED Lighting Limited	SUR.:	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	.336	.191	.061	.327	.186	.059	.310	.178	.057	.294	.170	.054	.280	.162	.052	
2.0	.304	.167	.051	.296	.163	.050	.281	.156	.049	.267	.150	.047	.254	.144	.045	
3.0	.277	.147	.044	.270	.144	.043	.256	.139	.042	.244	.133	.041	.232	.128	.040	
4.0	.253	.132	.039	.247	.129	.038	.234	.124	.037	.223	.120	.036	.213	.116	.035	
5.0	.233	.118	.034	.227	.116	.034	.216	.112	.033	.206	.108	.032	.196	.105	.031	
6.0	.215	.108	.031	.210	.106	.030	.200	.102	.030	.190	.099	.029	.182	.096	.028	
7.0	.199	.099	.028	.195	.097	.028	.186	.094	.027	.177	.091	.026	.169	.088	.026	
8.0	.186	.091	.026	.181	.089	.025	.173	.087	.025	.166	.084	.024	.159	.081	.024	
9.0	.174	.084	.023	.170	.083	.023	.163	.080	.023	.156	.078	.022	.149	.076	.022	
10.0	.163	.078	.022	.160	.077	.022	.153	.075	.021	.147	.073	.021	.141	.071	.020	

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	.240	.240	.240	.205	.205	.205	.140	.140	.140	.080	.080	.080	.026	.026	.026	
1.0	.232	.205	.182	.198	.176	.156	.136	.121	.108	.078	.070	.063	.025	.023	.020	
2.0	.224	.182	.146	.192	.156	.126	.131	.108	.088	.076	.063	.052	.024	.020	.017	
3.0	.216	.164	.123	.185	.142	.107	.127	.099	.075	.073	.058	.044	.024	.019	.014	
4.0	.208	.151	.108	.179	.131	.094	.123	.091	.066	.071	.053	.039	.023	.017	.013	
5.0	.201	.141	.097	.172	.122	.085	.119	.085	.060	.069	.050	.035	.022	.016	.012	
6.0	.193	.133	.090	.166	.115	.078	.115	.081	.055	.066	.047	.033	.021	.015	.011	
7.0	.186	.126	.084	.160	.109	.073	.111	.077	.052	.064	.045	.031	.021	.015	.010	
8.0	.180	.120	.080	.155	.104	.069	.107	.073	.049	.062	.043	.029	.020	.014	.010	
9.0	.174	.116	.076	.150	.100	.066	.104	.070	.047	.060	.042	.028	.020	.014	.009	
10.0	.168	.111	.074	.145	.097	.064	.100	.068	.046	.059	.040	.027	.019	.013	.009	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks:

Uncorrected UGR Table

Test:U:120.4V I:0.2436A P:29.08W PF:0.9914 Lamp Flux:3853.49x1 lm										
NAME: LED三防灯					TYPE:			WEIGHT:		
DIM.:					SPEC.:			SERIAL No.:		
MFR.: KILI-LED Lighting Limited					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	37.0	38.4	37.3	38.7	39.1	36.1	37.5	36.4	37.8	38.2
3H	38.9	40.3	39.3	40.6	41.0	37.4	38.8	37.8	39.1	39.5
4H	39.9	41.2	40.3	41.6	41.9	37.9	39.2	38.3	39.6	40.0
6H	40.9	42.1	41.4	42.5	42.9	38.2	39.4	38.7	39.8	40.2
8H	41.5	42.7	41.9	43.1	43.5	38.3	39.5	38.7	39.9	40.3
12H	42.1	43.2	42.6	43.6	44.1	38.3	39.4	38.8	39.8	40.3
4H 2H	37.5	38.8	37.9	39.1	39.5	36.8	38.1	37.2	38.4	38.8
3H	39.7	40.8	40.1	41.2	41.6	38.4	39.5	38.8	39.9	40.4
4H	40.8	41.8	41.3	42.3	42.7	39.1	40.1	39.5	40.5	41.0
6H	42.0	42.9	42.5	43.4	43.9	39.5	40.4	40.0	40.9	41.4
8H	42.7	43.5	43.2	44.0	44.5	39.7	40.5	40.2	41.0	41.5
12H	43.4	44.2	44.0	44.7	45.3	39.7	40.5	40.3	41.0	41.6
8H 4H	41.1	41.9	41.6	42.4	42.9	39.6	40.4	40.1	40.9	41.4
6H	42.5	43.2	43.1	43.7	44.3	40.3	41.0	40.8	41.5	42.1
8H	43.3	44.0	43.9	44.5	45.1	40.6	41.2	41.1	41.7	42.3
12H	44.3	44.9	44.9	45.4	46.0	40.8	41.3	41.3	41.9	42.5
12H 4H	41.1	41.9	41.6	42.4	42.9	39.7	40.5	40.2	41.0	41.5
6H	42.6	43.2	43.2	43.8	44.4	40.5	41.2	41.1	41.7	42.3
8H	43.5	44.1	44.1	44.6	45.2	40.9	41.5	41.5	42.0	42.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.2					+ 0.1 / - 0.4				

CIE Pub.117 Corrected 3853 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.7)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.4V I:0.2436A P:29.08W PF:0.9914 Lamp Flux:3853.49x1 lm		
NAME: LED三防灯	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: KILI-LED Lighting Limited	SUR.:	PROTECTION ANGLE:

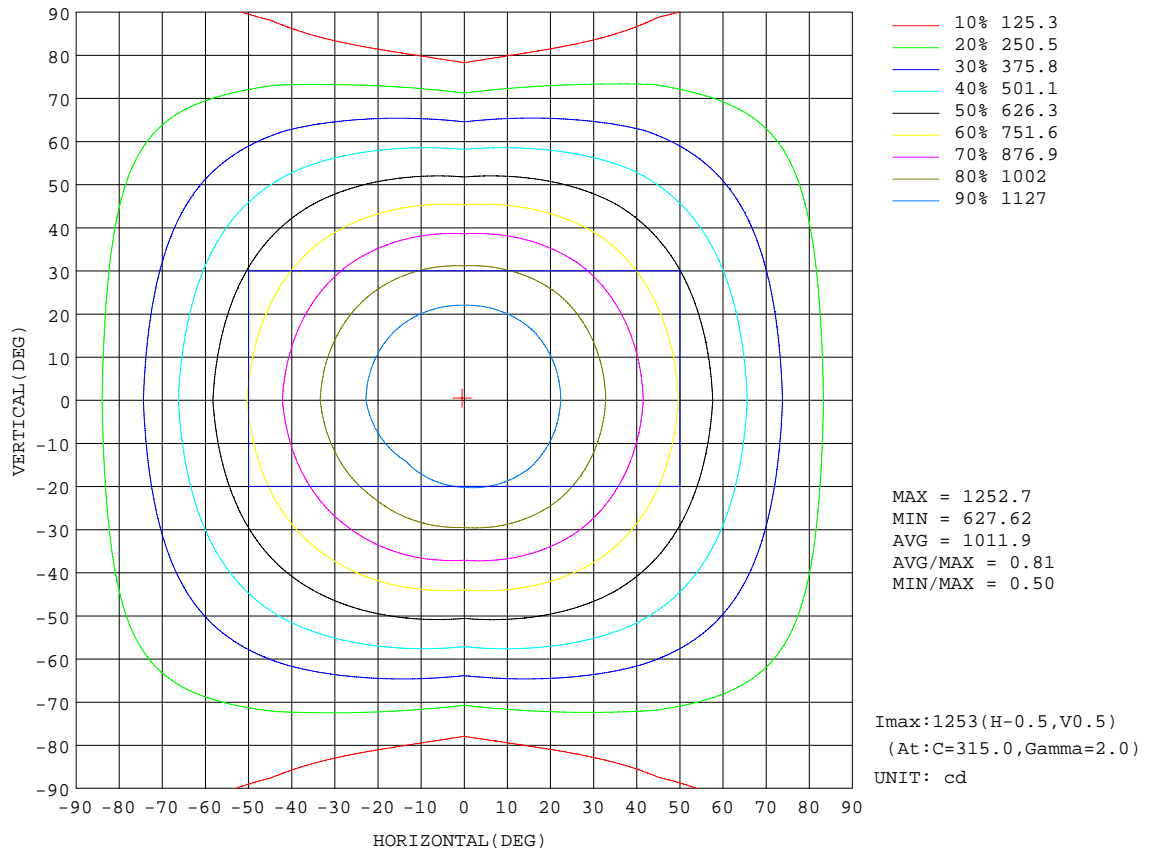
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	43	36	54	43	36	53	42	36	29
0.80	64	52	45	63	52	45	61	51	44	37
1.00	73	61	53	71	60	53	68	61	52	45
1.25	79	68	61	78	67	60	74	66	59	51
1.50	84	74	66	82	73	66	79	70	64	56
2.00	91	82	75	89	80	74	85	78	72	63
2.50	95	87	80	93	85	79	88	82	76	67
3.00	99	91	85	96	89	83	91	85	81	71
4.00	103	96	91	100	94	89	95	90	86	75
5.00	106	100	95	103	98	93	97	93	89	78
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.4V I:0.2436A P:29.08W PF:0.9914 Lamp Flux:3853.49x1 lm		
NAME: LED三防灯	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: KILI-LED Lighting Limited	SUR.:	PROTECTION ANGLE:

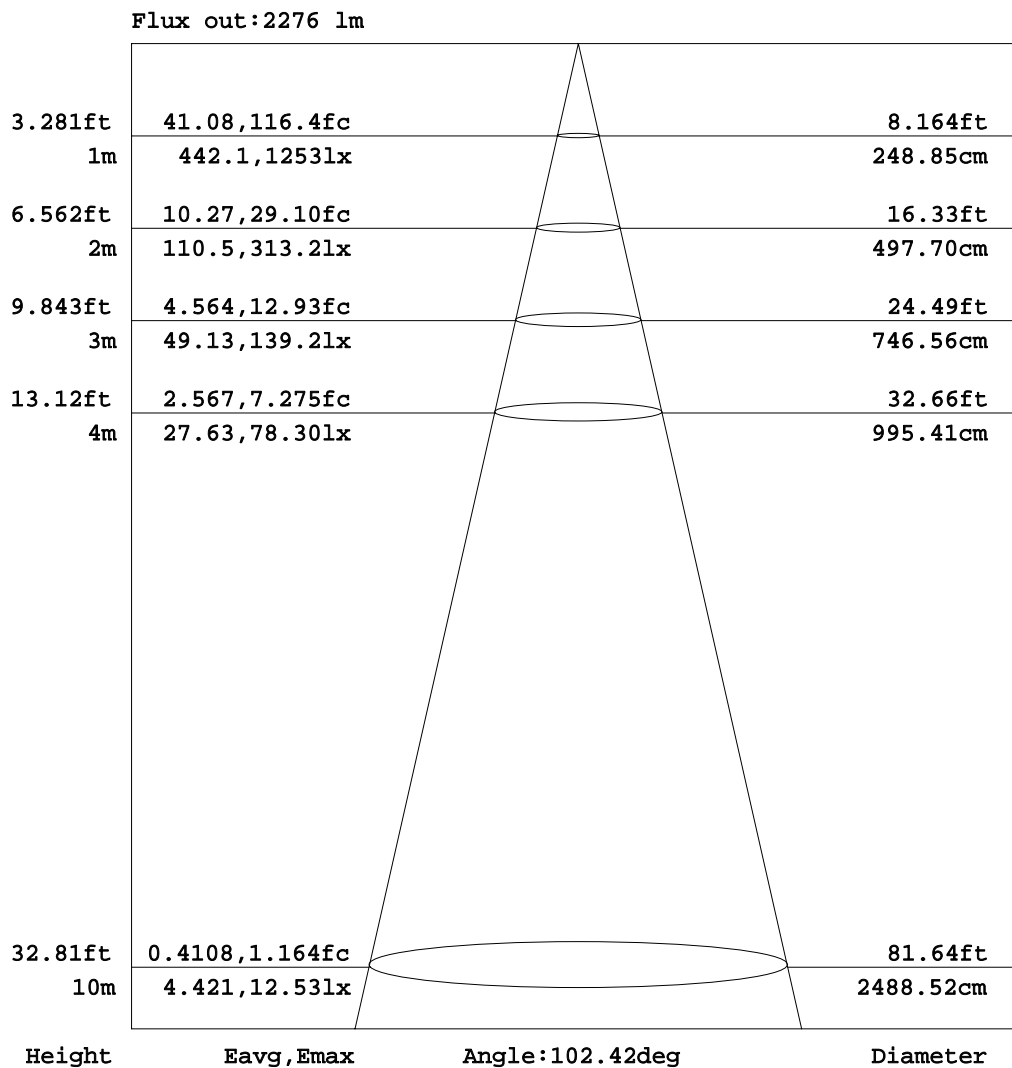


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 31DEG
 Operators: 01
 Test Date: 2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: %
 Test Distance: 9.190m [K=0.9684]
 Remarks:

AAI Figure

Test:U:120.4V I:0.2436A P:29.08W PF:0.9914 Lamp Flux:3853.49x1 lm		
NAME: LED三防灯	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: KILI-LED Lighting Limited	SUR.:	PROTECTION ANGLE:



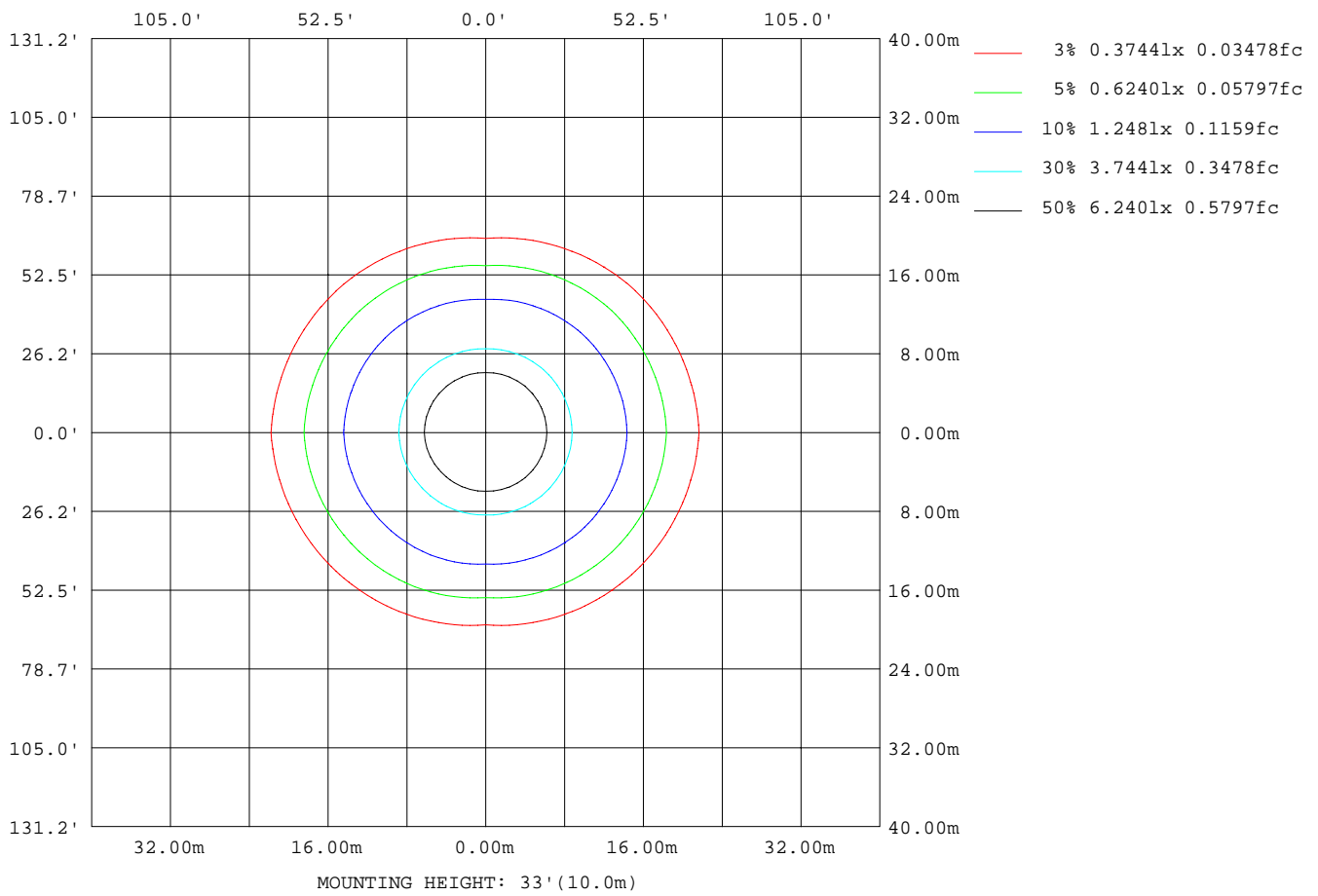
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 31DEG
 Operators: 01
 Test Date: 2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: %
 Test Distance: 9.190m [K=0.9684]
 Remarks:

ISOLUX DIAGRAM

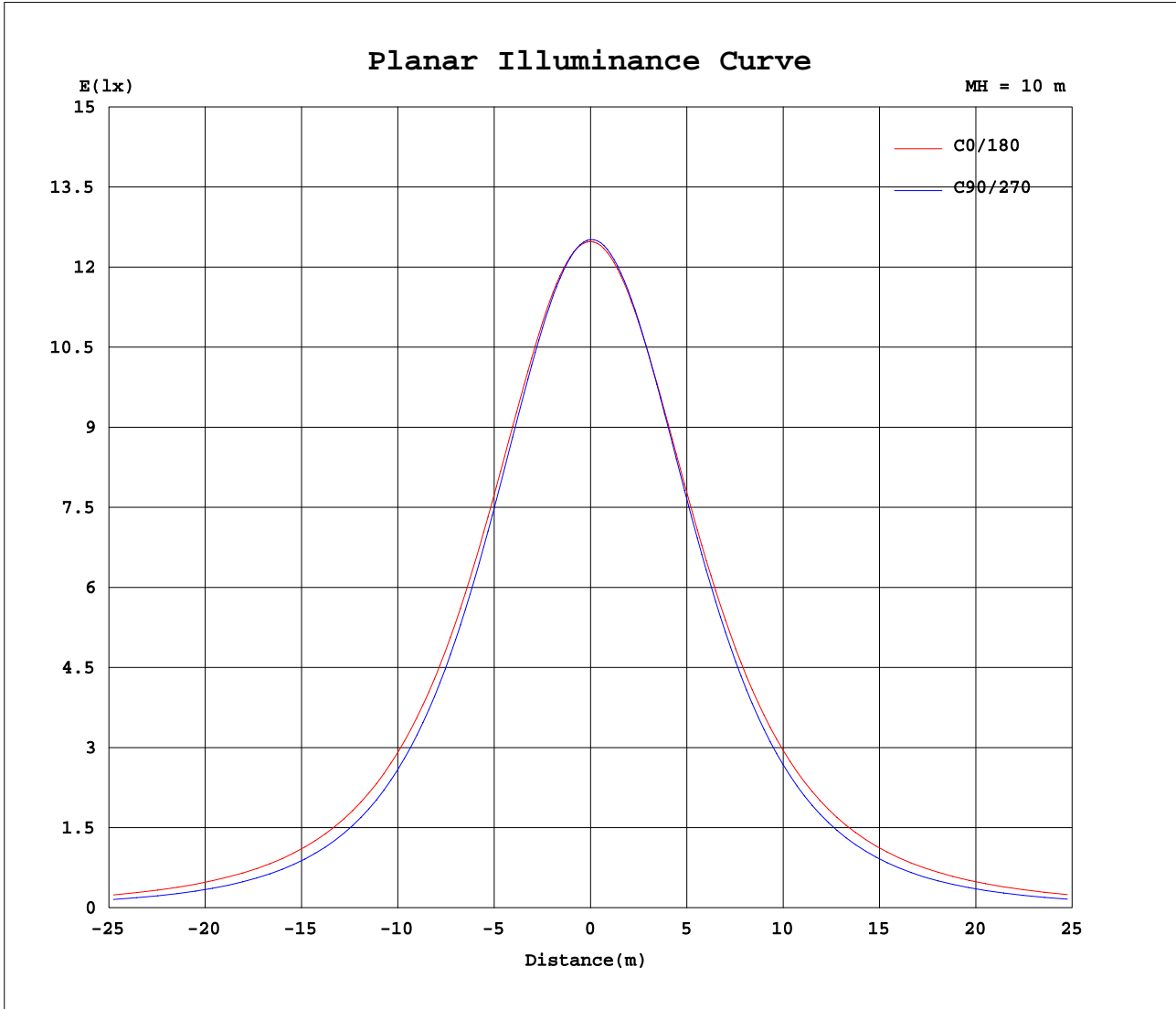
Test:U:120.4V I:0.2436A P:29.08W PF:0.9914 Lamp Flux:3853.49x1 lm		
NAME: LED三防灯	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: KILI-LED Lighting Limited	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 31DEG
 Operators: 01
 Test Date: 2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: %
 Test Distance: 9.190m [K=0.9684]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 31DEG
 Operators: 01
 Test Date: 2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: %
 Test Distance: 9.190m [K=0.9684]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.4V I:0.2436A P:29.08W PF:0.9914 Lamp Flux:3853.49x1 lm		
NAME: LED三防灯	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: KILI-LED Lighting Limited	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	45	90	135	180	225	270	315										
0	1246	1246	1246	1246	1246	1246	1246	1246										
5	1240	1239	1236	1234	1239	1239	1241	1246										
10	1222	1219	1212	1213	1221	1221	1223	1233										
15	1191	1185	1175	1180	1192	1190	1190	1207										
20	1148	1139	1124	1137	1152	1147	1144	1167										
25	1097	1082	1062	1084	1102	1093	1085	1114										
30	1037	1016	990	1022	1044	1030	1015	1049										
35	970	942	909	950	979	957	935	976										
40	897	862	821	872	907	878	847	895										
45	822	778	729	788	832	795	754	810										
50	745	693	635	702	755	709	658	723										
55	666	607	540	616	677	622	560	635										
60	588	522	445	530	599	536	460	547										
65	510	436	353	444	520	451	365	462										
70	431	355	263	363	440	369	272	378										
75	358	278	173	285	366	291	181	298										
80	291	210	92.4	216	299	218	96.5	224										
85	230	153	27.6	158	238	159	28.8	165										
90	182	111	0.69	113	187	114	0.63	120										
95	144	81.7	0.74	82.4	146	82.4	0.83	88.6										
100	117	64.6	1.08	64.5	116	64.2	1.11	68.6										
105	98.3	55.4	1.54	55.3	97.1	54.8	1.51	55.8										
110	86.3	48.0	2.00	47.8	84.8	47.0	1.94	50.8										
115	76.2	41.6	2.50	41.7	74.2	40.7	2.42	43.8										
120	66.8	34.1	3.03	36.1	64.5	35.2	2.89	35.5										
125	58.0	28.1	3.56	31.6	55.6	30.8	3.38	28.7										
130	50.0	23.3	4.10	27.6	47.5	26.9	3.84	23.6										
135	42.7	19.5	4.56	24.2	40.4	23.7	4.29	19.8										
140	36.0	16.5	5.02	21.5	34.0	20.3	4.74	16.7										
145	30.3	14.2	5.62	19.1	28.5	18.2	5.34	14.0										
150	25.2	12.3	6.25	16.3	23.7	16.4	5.98	11.9										
155	21.0	10.9	6.82	13.9	20.0	14.1	6.52	10.8										
160	17.4	10.1	7.28	11.9	16.0	11.9	7.08	10.2										
165	14.2	9.52	7.64	10.2	12.5	10.2	7.58	9.50										
170	11.5	8.93	8.01	9.12	9.37	9.25	8.01	8.57										
175	8.59	8.32	8.28	8.53	7.05	8.62	8.35	8.16										
180	6.78	8.19	8.55	8.32	6.80	8.23	8.54	8.31										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-10-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks: