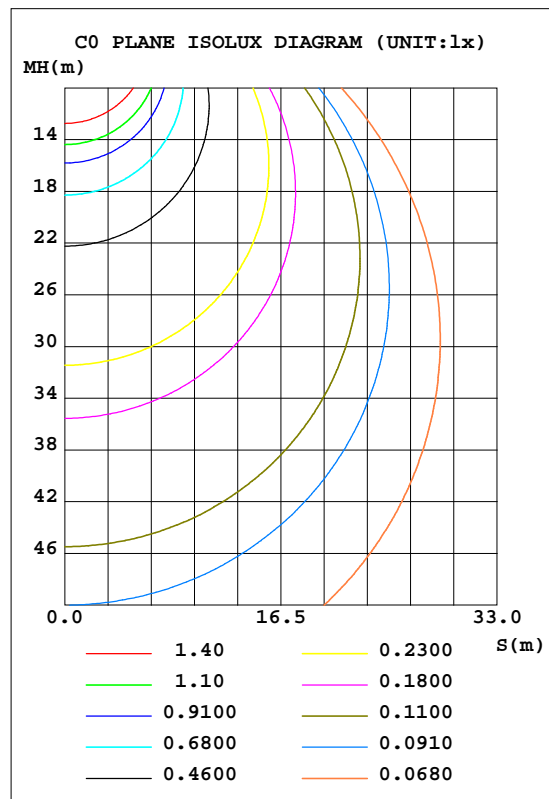
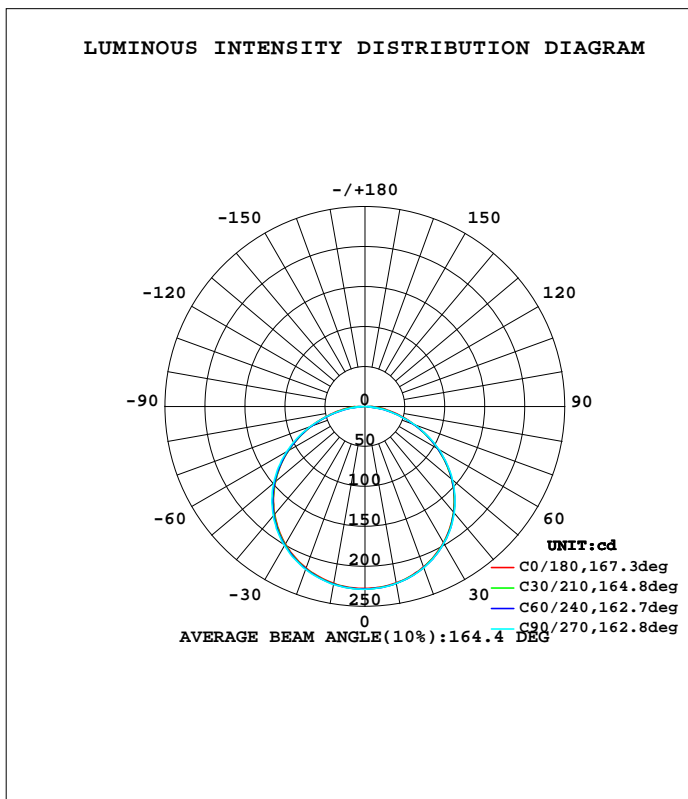


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: LED-FLS48W-NW	TYPE:Strip	WEIGHT:0.1Kg`
DIM.: 1000*8*2mm	SPEC.:9.6W	SERIAL No.:1
	SUR.:120	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 79.07 lm/W
MODEL	3528/LED	I _{max} (cd)	228.8	S/MH(C0/180)	1.28	
NOMINAL POWER(W)	9.6	LOR(%)	100.0	S/MH(C90/270)	1.29	
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	693.21	h UP, DN(C0-180)	0.0, 49.2	
NOMINAL FLUX(lm)	693.211	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0, 50.8	
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	12	h down(%)	100.0	CIBSE SHR MAX	1.50	



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:mo fu mei
 Test Date:2013-08-07

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: Strip,1M,9.6W/M,LED:LN33

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	224.0	224.7	224.8	225.0	224.6	225.4	225.9	226.0	0- 10	21.65	21.65	3.12,3.12
20	213.7	214.5	214.6	214.9	215.0	215.9	216.8	216.6	10- 20	62.45	84.10	12.1,12.1
30	196.6	197.6	197.6	198.2	199.0	199.5	201.3	200.6	20- 30	95.92	180.0	26,26
40	172.5	173.5	173.8	174.5	175.8	176.4	178.6	177.7	30- 40	117.6	297.7	42.9,42.9
50	141.6	142.6	143.0	144.2	146.2	146.6	149.1	148.0	40- 50	124.3	421.9	60.9,60.9
60	105.2	105.4	106.3	107.8	110.7	110.7	113.2	111.9	50- 60	114.1	536.1	77.3,77.3
70	65.54	64.13	64.94	67.54	71.19	70.16	72.11	71.51	60- 70	87.98	624.0	90,90
80	31.19	26.23	24.97	30.09	34.45	30.61	30.85	32.90	70- 80	51.19	675.2	97.4,97.4
90	8.171	4.772	0.0205	7.563	12.05	6.709	2.210	7.526	80- 90	17.98	693.2	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:cd									UNIT:lm		

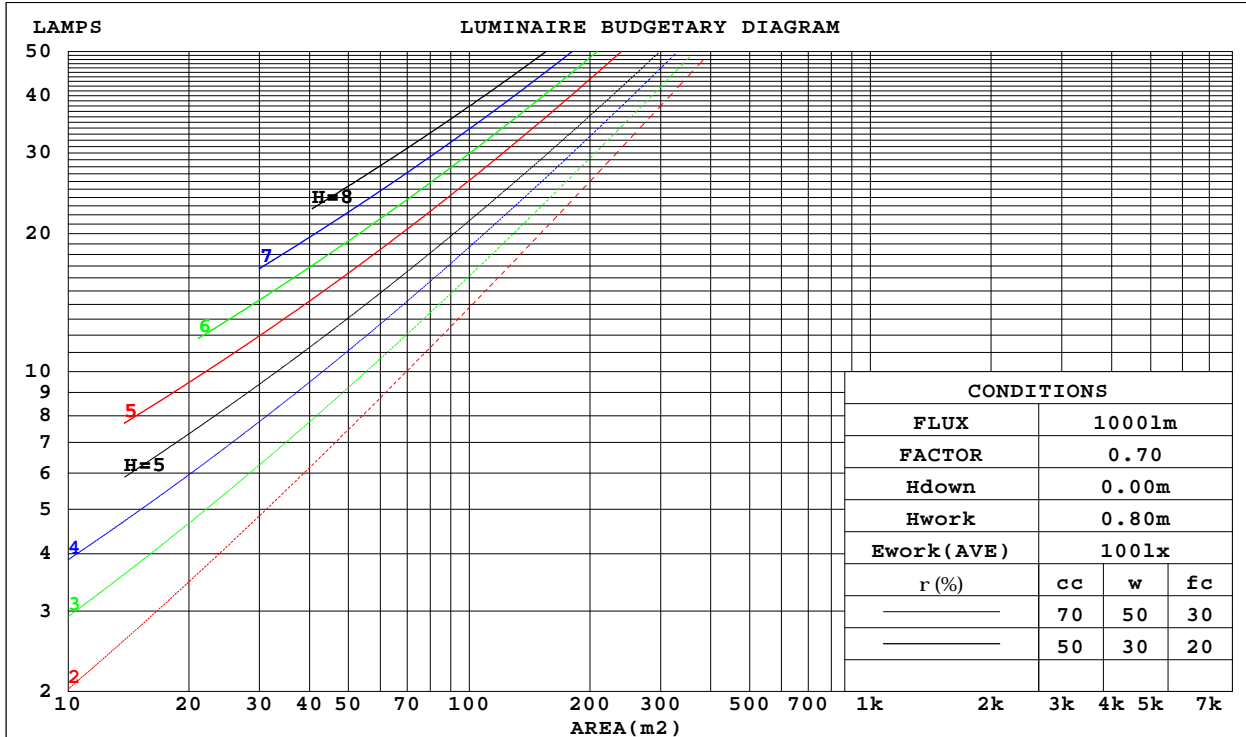
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:mo fu mei
 Test Date:2013-08-07

g Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: Strip,1M,9.6W/M,LED:LN33

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: LED-FLS48W-NW	TYPE:Strip	WEIGHT:0.1Kg`
DIM.: 1000*8*2mm	SPEC.:9.6W	SERIAL No.:1
	SUR.:120	PROTECTION ANGLE:

r _{cc}	80%			70%			50%			30%			10%			0
r _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r _{fc}	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	1.03	.99	.95	1.01	.97	.93	.97	.93	.90	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.81	.76	.72	.78	.74	.71	.68
3.0	.78	.70	.63	.77	.69	.63	.74	.67	.62	.71	.65	.61	.69	.64	.60	.57
4.0	.69	.60	.53	.68	.60	.53	.65	.58	.52	.63	.57	.52	.61	.55	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.57	.50	.45	.55	.49	.44	.42
6.0	.56	.46	.40	.55	.46	.40	.53	.45	.39	.51	.44	.39	.49	.43	.39	.37
7.0	.50	.41	.35	.49	.41	.35	.48	.40	.35	.46	.40	.34	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.36	.31	.43	.36	.31	.41	.35	.31	.29
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.28	.26
10.0	.39	.31	.25	.38	.31	.25	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:mo fu mei
 Test Date:2013-08-07

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: Strip,1M,9.6W/M,LED:LN33

WEC AND CCEC

NAME: LED-FLS48W-NW	TYPE:Strip	WEIGHT:0.1Kg`
DIM.: 1000*8*2mm	SPEC.:9.6W	SERIAL No.:1
	SUR.:120	PROTECTION ANGLE:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.321	.183	.058	.314	.179	.057	.301	.172	.055	.288	.166	.053	.277	.161	.052	
2.0	.299	.164	.050	.293	.161	.050	.281	.156	.049	.270	.152	.047	.260	.147	.046	
3.0	.276	.147	.044	.270	.145	.044	.260	.141	.043	.250	.137	.042	.241	.133	.041	
4.0	.254	.132	.039	.249	.130	.038	.239	.127	.038	.231	.124	.037	.223	.121	.037	
5.0	.234	.119	.035	.230	.118	.034	.221	.115	.034	.214	.113	.034	.207	.110	.033	
6.0	.217	.109	.031	.213	.107	.031	.205	.105	.031	.199	.103	.030	.192	.101	.030	
7.0	.201	.099	.028	.198	.099	.028	.191	.097	.028	.185	.095	.028	.179	.093	.027	
8.0	.188	.092	.026	.185	.091	.026	.179	.089	.026	.173	.088	.025	.168	.086	.025	
9.0	.176	.085	.024	.173	.084	.024	.168	.083	.024	.163	.082	.023	.158	.080	.023	
10.0	.165	.079	.022	.163	.079	.022	.158	.077	.022	.154	.076	.022	.149	.075	.022	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	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	.181	.156	.133	.155	.134	.115	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.173	.132	.097	.148	.114	.084	.102	.079	.059	.059	.046	.034	.019	.015	.011	
3.0	.166	.114	.074	.142	.099	.064	.097	.069	.045	.056	.040	.026	.018	.013	.009	
4.0	.158	.101	.058	.136	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.052	.032	.017	.017	.011	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.028	.112	.060	.025	.077	.042	.018	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.102	.053	.019	.071	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:mo fu mei
 Test Date:2013-08-07

g Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: Strip,1M,9.6W/M,LED:LN33

Uncorrected UGR Table

NAME: LED-FLS48W-NW		TYPE:Strip					WEIGHT:0.1Kg`				
DIM.: 1000*8*2mm		SPEC.:9.6W					SERIAL No.:1				
		SUR.:120					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	2H	24.3	25.8	24.5	26.0	26.2	24.3	25.9	24.6	26.1	26.3
	3H	25.8	27.2	26.1	27.4	27.7	25.8	27.2	26.1	27.5	27.7
	4H	26.4	27.8	26.7	28.0	28.3	26.4	27.7	26.7	28.0	28.2
	6H	26.9	28.2	27.2	28.5	28.7	26.7	28.0	27.0	28.3	28.6
	8H	27.1	28.3	27.4	28.6	28.9	26.8	28.0	27.2	28.3	28.6
	12H	27.3	28.5	27.6	28.8	29.1	26.9	28.0	27.2	28.3	28.7
	4H	24.9	26.2	25.2	26.5	26.8	24.9	26.3	25.2	26.5	26.8
	3H	26.6	27.7	26.9	28.0	28.4	26.6	27.8	26.9	28.1	28.4
	4H	27.3	28.4	27.7	28.7	29.0	27.2	28.3	27.6	28.6	29.0
	6H	27.9	28.9	28.3	29.2	29.6	27.7	28.7	28.1	29.0	29.4
	8H	28.2	29.1	28.6	29.5	29.9	27.8	28.7	28.3	29.1	29.5
	12H	28.4	29.3	28.9	29.7	30.1	27.9	28.8	28.4	29.1	29.6
	8H	27.5	28.4	27.9	28.8	29.2	27.5	28.4	27.9	28.7	29.1
	6H	28.3	29.1	28.8	29.5	29.9	28.1	28.8	28.5	29.2	29.7
	8H	28.7	29.4	29.1	29.8	30.2	28.3	29.0	28.7	29.4	29.8
	12H	29.1	29.6	29.5	30.1	30.6	28.4	29.0	28.9	29.5	29.9
	12H	27.5	28.4	28.0	28.7	29.2	27.5	28.3	27.9	28.7	29.1
	6H	28.4	29.0	28.8	29.5	29.9	28.1	28.8	28.6	29.2	29.7
	8H	28.8	29.4	29.3	29.8	30.3	28.4	29.0	28.9	29.4	29.9
Variations with the observer position at spacings:											
S = 1.0H		+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 693.2 lm Total Lamp Luminous Flux.(8log(F/F0) = -1.3)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:mo fu mei
 Test Date:2013-08-07

g Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: Strip,1M,9.6W/M,LED:LN33

UTILIZATION FACTORS TABLE

NAME: LED-FLS48W-NW	TYPE:Strip	WEIGHT:0.1Kg`
DIM.: 1000*8*2mm	SPEC.:9.6W	SERIAL No.:1
	SUR.:120	PROTECTION ANGLE:

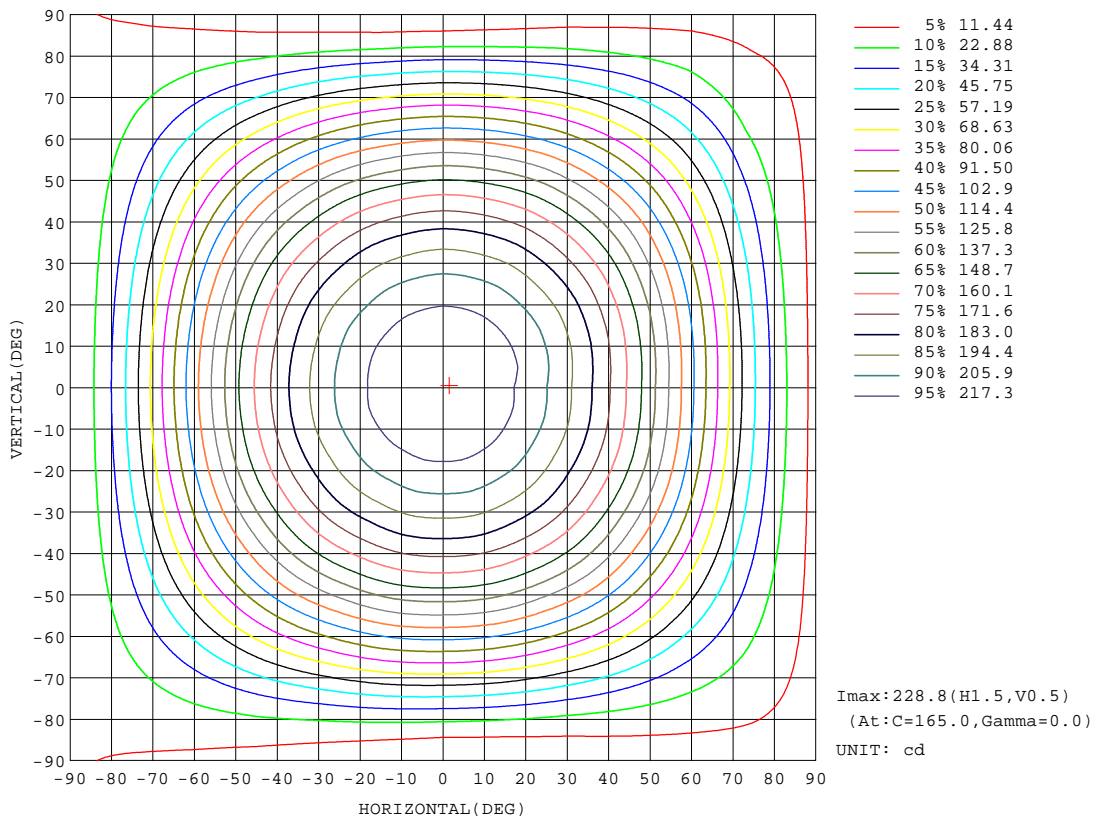
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	45	38	56	45	38	55	44	37	31
0.80	67	55	47	66	54	47	64	54	47	40
1.00	75	64	56	74	63	56	72	65	55	48
1.25	82	71	64	81	71	64	78	69	63	55
1.50	87	77	70	86	76	69	82	74	68	61
2.00	94	85	79	92	84	78	89	82	76	69
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	99	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	97	101	98	94	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:mo fu mei
 Test Date:2013-08-07

g Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: Strip,1M,9.6W/M,LED:LN33

ISOCANDELA DIAGRAM

NAME: LED-FLS48W-NW	TYPE:Strip	WEIGHT:0.1Kg`
DIM.: 1000*8*2mm	SPEC.:9.6W	SERIAL No.:1
	SUR.:120	PROTECTION ANGLE:



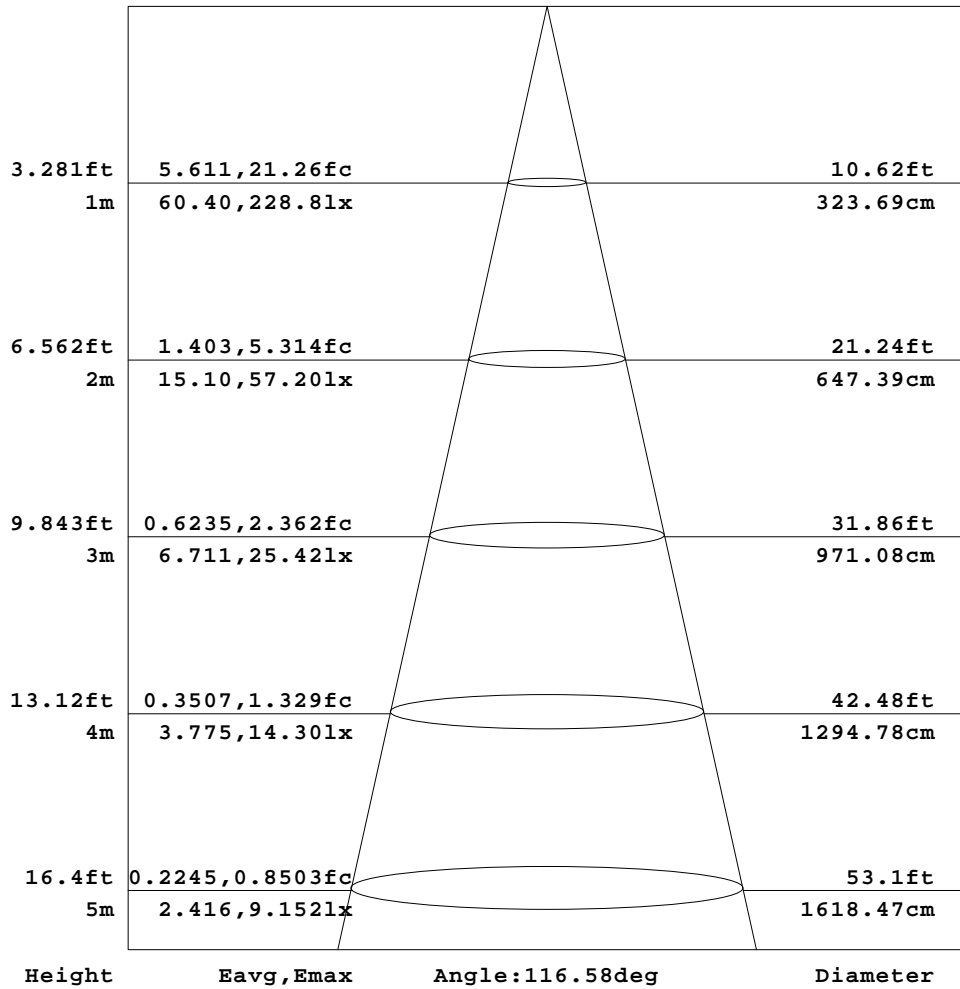
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:mo fu mei
 Test Date:2013-08-07

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: Strip,1M,9.6W/M,LED:LN33

AAI Figure

NAME: LED-FLS48W-NW	TYPE:Strip	WEIGHT:0.1Kg`
DIM.: 1000*8*2mm	SPEC.:9.6W	SERIAL No.:1
	SUR.:120	PROTECTION ANGLE:

Flux out:525.6 lm



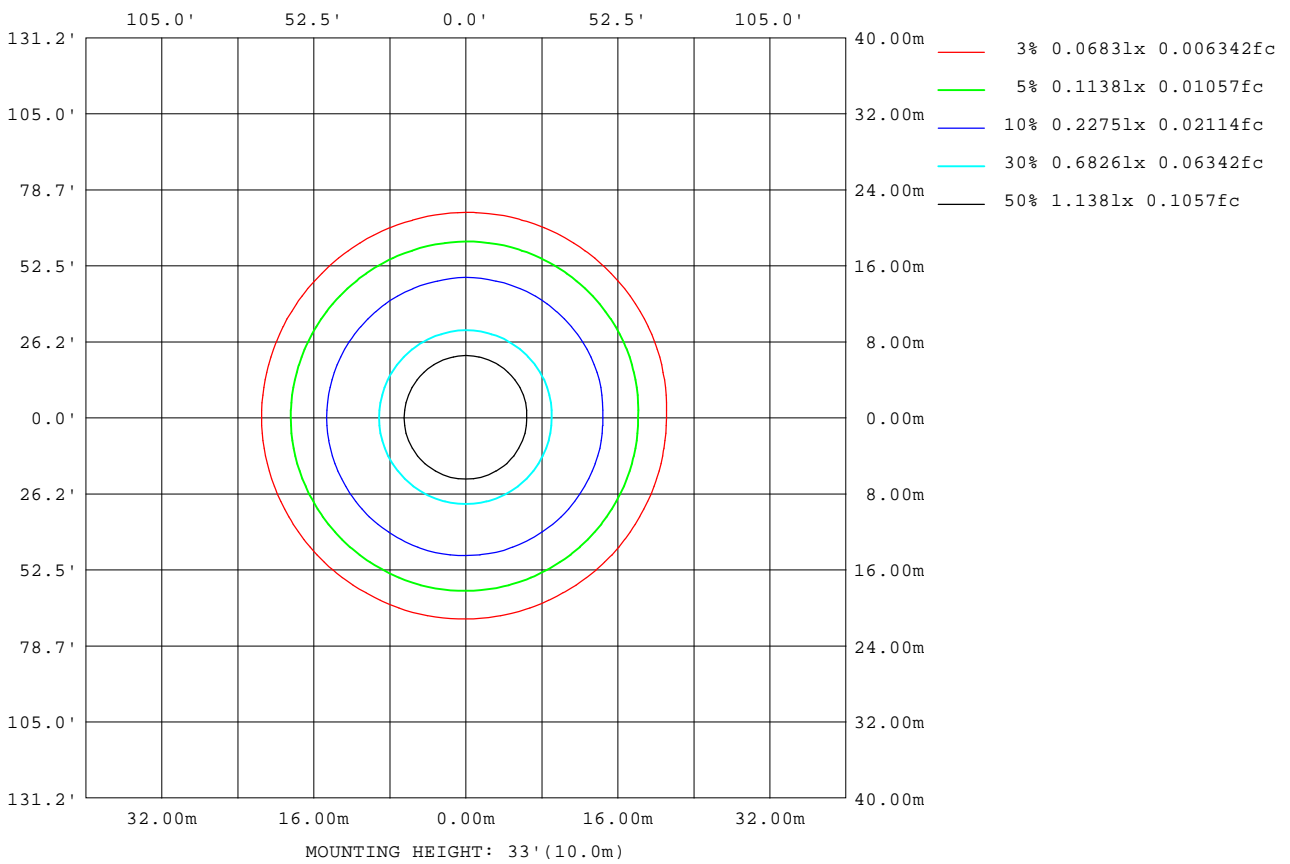
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:mo fu mei
 Test Date:2013-08-07

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: Strip,1M,9.6W/M,LED:LN33

ISOLUX DIAGRAM

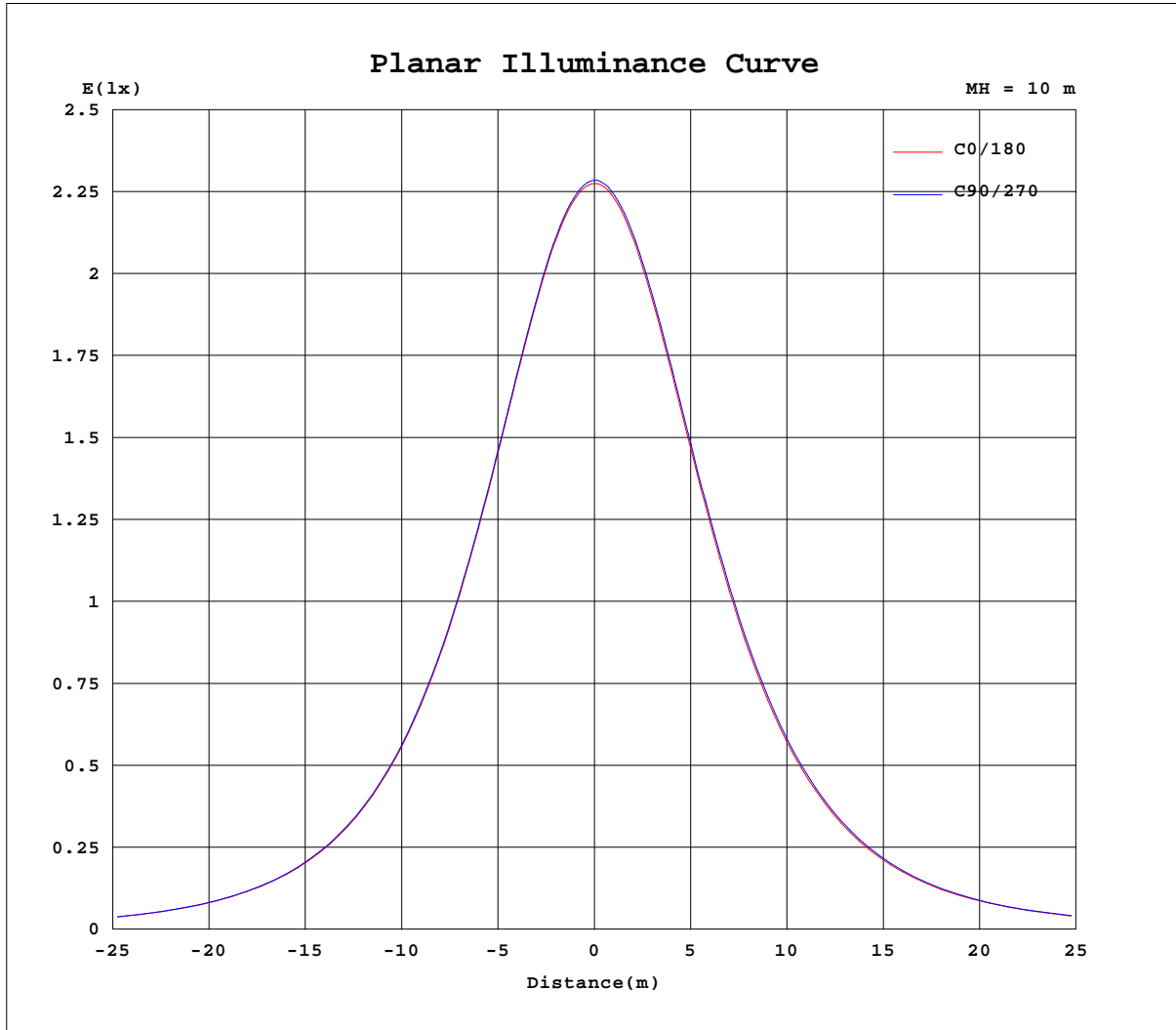
NAME: LED-FLS48W-NW	TYPE:Strip	WEIGHT:0.1Kg`
DIM.: 1000*8*2mm	SPEC.:9.6W	SERIAL No.:1
	SUR.:120	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:mo fu mei
 Test Date:2013-08-07

Page Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: Strip,1M,9.6W/M,LED:LN33

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: mo fu mei
 Test Date: 2013-08-07

Page Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity: 65.0%
 Test Distance: 7.000m [K=1.0000]
 Remarks: Strip, 1M, 9.6W/M, LED: LN33

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: LED-FLS48W-NW	TYPE:Strip	WEIGHT:0.1Kg`
DIM.: 1000*8*2mm	SPEC.:9.6W	SERIAL No.:1
	SUR.:120	PROTECTION ANGLE:

Table--1 UNIT: cd

C(DEG) g (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	228	228	228	228	228	228	228	229	229	229	229	229	228	228	228	228	228	228	228
5	227	227	227	227	227	227	227	228	227	228	228	228	227	227	227	228	228	228	228
10	224	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	226	226	226
15	220	220	220	220	221	221	221	221	220	221	221	221	221	221	221	221	222	222	222
20	214	214	214	215	214	215	215	215	215	215	215	215	215	215	216	216	216	216	217
25	206	207	206	207	207	207	207	207	207	207	207	208	208	208	209	209	209	209	210
30	197	197	197	198	197	198	198	198	198	198	198	199	199	199	200	200	201	201	201
35	185	186	186	186	186	187	187	187	186	187	187	188	188	188	189	189	190	190	191
40	173	173	173	174	173	174	174	174	174	175	174	176	176	176	177	176	177	178	179
45	158	158	158	159	159	160	159	160	159	160	160	161	162	162	162	162	163	164	165
50	142	142	142	143	142	143	143	144	143	144	144	145	146	146	147	147	148	148	149
55	124	125	124	125	124	126	125	126	126	127	127	128	129	129	129	129	130	131	132
60	105	105	105	105	105	106	106	107	107	108	108	110	111	110	111	111	112	112	113
65	85.3	85.3	84.6	85.0	84.8	85.7	86.1	87.0	86.8	87.9	88.6	90.0	91.2	91.0	91.0	90.9	91.5	92.0	93.1
70	65.5	65.1	64.0	64.1	63.8	64.5	64.9	66.1	66.2	67.5	68.5	69.9	71.2	70.7	70.5	70.2	70.6	71.0	72.1
75	47.1	46.1	44.4	43.9	43.2	43.6	44.1	45.3	46.0	47.7	48.9	50.3	51.7	50.9	50.4	49.6	49.7	49.8	50.9
80	31.2	30.0	27.8	26.2	24.7	24.6	25.0	26.5	27.8	30.1	31.7	33.2	34.4	33.2	32.1	30.6	30.1	29.9	30.8
85	18.0	16.9	14.9	13.1	11.2	10.1	9.90	11.9	14.1	16.7	18.5	19.9	21.1	19.6	17.8	15.8	14.4	13.6	14.2
90	8.17	7.38	6.13	4.77	3.58	2.41	0.02	3.51	5.52	7.56	9.45	10.6	12.0	10.7	8.76	6.71	5.11	3.79	2.21

C Range: 0 - 360DEG	C Range: 0 - 90DEG
C Interval: 15.0DEG	C Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Temperature:25.3DEG	Humidity:65.0%
Operators:mo fu mei	Test Distance:7.000m [K=1.0000]
Test Date:2013-08-07	Remarks: Strip,1M,9.6W/M,LED:LN33

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: LED-FLS48W-NW	TYPE:Strip	WEIGHT:0.1Kg`
DIM.: 1000*8*2mm	SPEC.:9.6W	SERIAL No.:1
	SUR.:120	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEG) g (DEG)	285	300	315	330	345														
0	229	229	229	229	229														
5	228	228	228	228	228														
10	226	226	226	226	226														
15	222	222	222	222	221														
20	217	217	217	216	216														
25	210	210	210	209	208														
30	201	201	201	200	199														
35	191	191	190	190	188														
40	178	179	178	177	175														
45	165	165	164	163	161														
50	149	149	148	147	145														
55	132	132	131	130	128														
60	113	113	112	111	109														
65	93.2	93.1	92.1	91.1	89.0														
70	72.3	72.3	71.5	70.7	68.7														
75	51.2	51.5	51.3	50.7	48.8														
80	31.3	32.3	32.9	32.6	31.2														
85	15.2	16.8	17.5	17.9	16.0														
90	4.26	6.57	7.53	7.33	7.74														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:mo fu mei
 Test Date:2013-08-07

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: Strip,1M,9.6W/M,LED:LN33