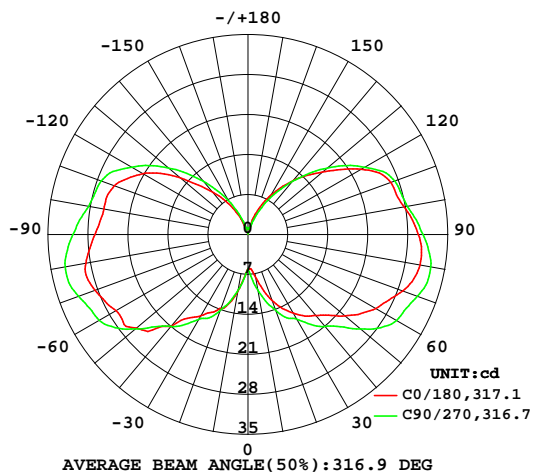


## LUMINAIRE PHOTOMETRIC TEST REPORT

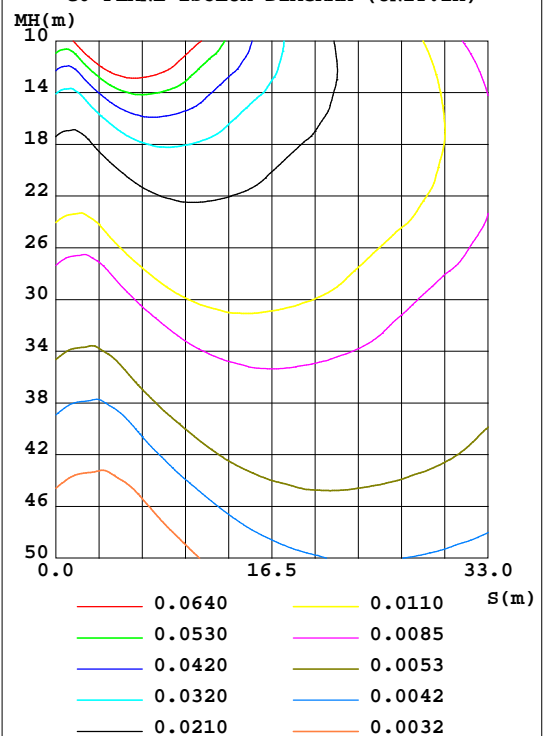
Test:U:12.00V I:0.1960A P:2.350W PF:0 Freq:0Hz Lamp Flux:281.408x1 lm		
NAME: LED LINE LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Brilliance LED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 119.75 lm/W			
MODEL		I <sub>max</sub> (cd)	32.54	S/MH(C0/180)	3.54
NOMINAL POWER(W)	2	LOR(%)	100.0	S/MH(C90/270)	3.63
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	281.41	h UP,DN(C0-180)	22.3,28.1
NOMINAL FLUX(lm)	281.408	CIE CLASS	DIFFUSE	h UP,DN(C180-360)	21.2,28.4
LAMPS INSIDE	1	h up(%)	43.5	CIBSE SHR NOM	2.00
TEST VOLTAGE(V)	230	h down(%)	56.5	CIBSE SHR MAX	2.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2019-04-22

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
Humidity:65.0%  
Test Distance:9.872m [K=1.0000]  
Remarks:

Checker:

Assessor:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	7.531	9.807	10.04	9.807					0~ 10	0.7589	0.7589	0.27,0.27
20	12.25	14.09	13.77	14.09					10~ 20	3.335	4.094	1.45,1.45
30	15.89	17.14	16.41	17.14					20~ 30	7.099	11.19	3.98,3.98
40	18.53	21.05	21.10	21.05					30~ 40	11.64	22.83	8.11,8.11
50	22.18	25.74	25.52	25.74					40~ 50	17.42	40.26	14.3,14.3
60	25.89	30.08	26.70	30.08					50~ 60	24.06	64.31	22.9,22.9
70	28.87	31.59	28.52	31.59					60~ 70	28.88	93.19	33.1,33.1
80	30.59	32.50	28.83	32.50					70~ 80	32.68	125.9	44.7,44.7
90	29.84	30.64	26.82	30.64					80~ 90	33.18	159.1	56.5,56.5
100	27.78	28.37	25.63	28.37					90~100	31.10	190.2	67.6,67.6
110	26.65	27.36	24.93	27.36					100~110	28.61	218.8	77.7,77.7
120	22.88	23.61	21.32	23.61					110~120	24.87	243.6	86.6,86.6
130	17.00	18.12	15.45	18.12					120~130	18.11	261.8	93,93
140	12.37	12.21	9.752	12.21					130~140	11.16	272.9	97,97
150	7.907	6.876	5.311	6.876					140~150	5.794	278.7	99,99
160	3.765	2.455	1.135	2.455					150~160	2.165	280.9	99.8,99.8
170	1.114	1.103	1.063	1.103					160~170	0.4383	281.3	100,100
180	1.108	1.103	1.063	1.103					170~180	0.1045	281.4	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 30.702 lm

%lum = 10.9%

%lamp = 10.9%

Conical surface Flux(120deg): 64.314 lm

%lum = 22.9%

%lamp = 22.9%

C Range: 0 - 180DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-04-22

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
 Humidity:65.0%  
 Test Distance:9.872m [K=1.0000]  
 Remarks:

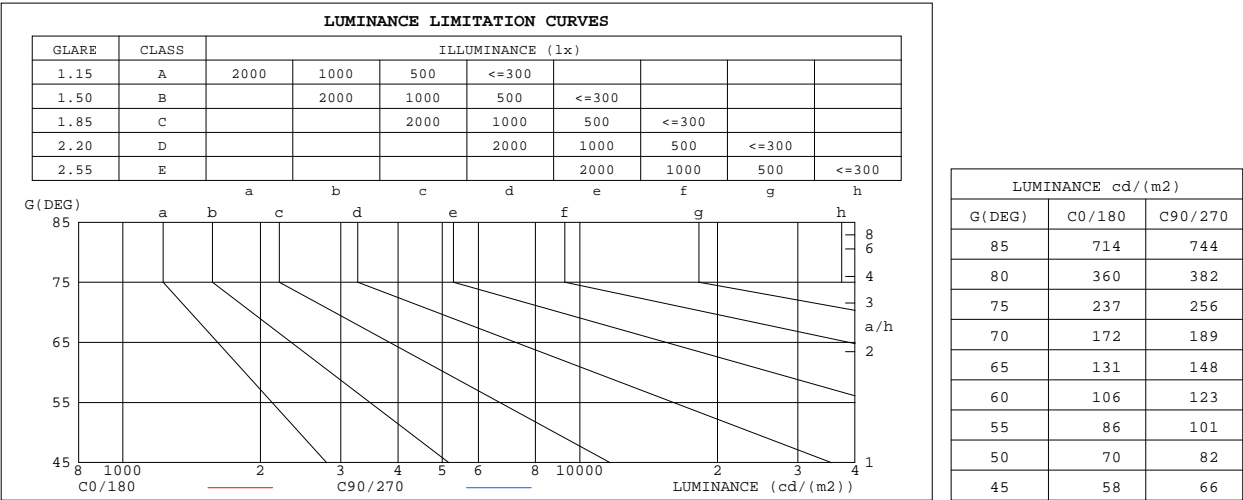
Checker:

Assessor:

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LUMINANCE LIMITATION CURVES

Test:U:12.00V I:0.1960A P:2.350W PF:0 Freq:0Hz Lamp Flux:281.408x1 lm		
NAME: LED LINE LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Brilliance LED	SUR.:	Shielding Angle:



C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2019-04-22

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
Humidity:65.0%  
Test Distance:9.872m [K=1.0000]  
Remarks:

Checker:

Assessor:

### WEC AND CCEC

Test:U:12.00V I:0.1960A P:2.350W PF:0 Freq:0Hz Lamp Flux:281.408x1 lm		
NAME: LED LINE LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Brilliance LED	SUR.:	Shielding 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			Wall Exitance Coefficients(WEC)												
0.0																
1.0	.450	.256	.081	.429	.245	.078	.390	.224	.072	.355	.205	.066	.322	.187	.060	
2.0	.370	.203	.062	.351	.193	.060	.316	.175	.055	.283	.159	.050	.253	.143	.045	
3.0	.319	.170	.051	.302	.162	.049	.270	.146	.044	.240	.131	.040	.212	.117	.036	
4.0	.282	.146	.043	.266	.139	.041	.237	.125	.037	.209	.112	.034	.184	.100	.030	
5.0	.253	.129	.037	.238	.122	.036	.211	.110	.032	.186	.098	.029	.162	.087	.026	
6.0	.229	.115	.033	.216	.109	.031	.191	.098	.028	.168	.087	.026	.146	.077	.023	
7.0	.210	.104	.029	.197	.098	.028	.174	.088	.025	.153	.078	.023	.132	.069	.020	
8.0	.193	.094	.027	.182	.090	.025	.160	.080	.023	.140	.071	.021	.121	.062	.018	
9.0	.179	.087	.024	.169	.082	.023	.149	.073	.021	.130	.065	.019	.112	.057	.016	
10.0	.167	.080	.022	.157	.076	.021	.138	.068	.019	.121	.060	.017	.104	.053	.015	

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			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.522	.522	.522	.446	.446	.446	.304	.304	.304	.175	.175	.175	.056	.056	.056	
1.0	.524	.489	.457	.448	.420	.394	.307	.289	.272	.177	.167	.158	.057	.054	.051	
2.0	.519	.468	.425	.444	.403	.367	.305	.279	.256	.176	.162	.150	.056	.052	.049	
3.0	.512	.453	.405	.439	.391	.351	.301	.271	.247	.174	.158	.145	.056	.051	.048	
4.0	.504	.441	.393	.433	.381	.341	.298	.266	.240	.172	.156	.142	.055	.051	.047	
5.0	.497	.432	.385	.427	.374	.335	.294	.261	.236	.170	.153	.140	.055	.050	.046	
6.0	.489	.425	.379	.420	.368	.330	.290	.258	.233	.168	.152	.139	.054	.050	.046	
7.0	.482	.419	.374	.415	.363	.326	.286	.254	.231	.166	.150	.138	.054	.049	.046	
8.0	.475	.413	.371	.409	.359	.324	.283	.252	.229	.165	.149	.137	.053	.049	.045	
9.0	.469	.409	.368	.404	.355	.321	.280	.249	.228	.163	.147	.136	.053	.048	.045	
10.0	.463	.405	.366	.399	.352	.320	.277	.247	.227	.161	.146	.136	.052	.048	.045	

C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2019-04-22

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
Humidity:65.0%  
Test Distance:9.872m [K=1.0000]  
Remarks:

Checker:

Assessor:

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UGR(Unified Glare Rating) Table

Test:U:12.00V I:0.1960A P:2.350W PF:0 Freq:0Hz Lamp Flux:281.408x1 lm											
NAME: LED LINE LIGHT					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.: Brilliance LED					SUR.:			Shielding 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	6.3	7.5	7.1	8.3	9.3	6.9	8.1	7.7	8.9	10.0	
	3H	9.9	11.0	10.8	11.9	13.0	10.5	11.6	11.3	12.4	13.5
	4H	12.0	13.0	12.8	13.9	15.0	12.5	13.5	13.3	14.4	15.5
	6H	14.2	15.2	15.1	16.1	17.2	14.7	15.6	15.5	16.5	17.7
	8H	15.4	16.4	16.3	17.3	18.4	15.8	16.8	16.7	17.7	18.8
	12H	16.8	17.7	17.6	18.6	19.7	17.1	18.0	18.0	19.0	20.1
4H	2H	7.5	8.5	8.4	9.4	10.5	7.9	8.9	8.7	9.8	10.9
	3H	11.2	12.1	12.1	13.0	14.2	11.6	12.5	12.5	13.4	14.6
	4H	13.4	14.2	14.3	15.1	16.3	13.7	14.6	14.6	15.5	16.7
	6H	15.7	16.5	16.6	17.4	18.6	16.1	16.8	17.0	17.8	18.9
	8H	17.0	17.7	17.9	18.6	19.8	17.3	18.0	18.2	19.0	20.2
	12H	18.4	19.1	19.3	20.0	21.2	18.7	19.4	19.6	20.3	21.6
8H	4H	14.2	14.9	15.1	15.8	17.1	14.5	15.2	15.4	16.1	17.3
	6H	16.8	17.4	17.7	18.3	19.6	17.0	17.6	18.0	18.6	19.9
	8H	18.2	18.8	19.2	19.7	21.0	18.5	19.0	19.4	20.0	21.2
	12H	19.8	20.3	20.8	21.3	22.6	20.1	20.6	21.1	21.6	22.8
12H	4H	14.4	15.1	15.4	16.0	17.3	14.7	15.3	15.6	16.3	17.5
	6H	17.1	17.7	18.1	18.6	19.9	17.4	17.9	18.3	18.9	20.1
	8H	18.7	19.1	19.6	20.1	21.4	18.9	19.4	19.9	20.4	21.6
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4					

CIE Pub.117, 281.4 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = -4.4$ )

C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2019-04-22

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
Humidity:65.0%  
Test Distance:9.872m [K=1.0000]  
Remarks:

Checker:

Assessor:

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### UTILIZATION FACTORS TABLE

Test:U:12.00V I:0.1960A P:2.350W PF:0 Freq:0Hz Lamp Flux:281.408x1 lm		
NAME: LED LINE LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Brilliance LED	SUR.:	Shielding 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) $k(RI) \times RCR = 5$									
$k = 0.60$	35	22	14	33	21	14	30	19	13	6
0.80	43	29	20	41	27	19	37	25	18	8
1.00	50	35	26	47	34	25	42	33	23	12
1.25	57	42	32	54	40	31	47	36	28	15
1.50	63	48	38	59	45	36	51	40	32	18
2.00	71	57	47	66	53	44	57	47	39	22
2.50	76	63	53	71	59	50	61	52	44	26
3.00	80	68	59	75	64	55	64	56	49	29
4.00	86	76	67	80	71	63	68	61	55	33
5.00	89	80	73	83	75	68	71	65	59	36
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 180DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-04-22

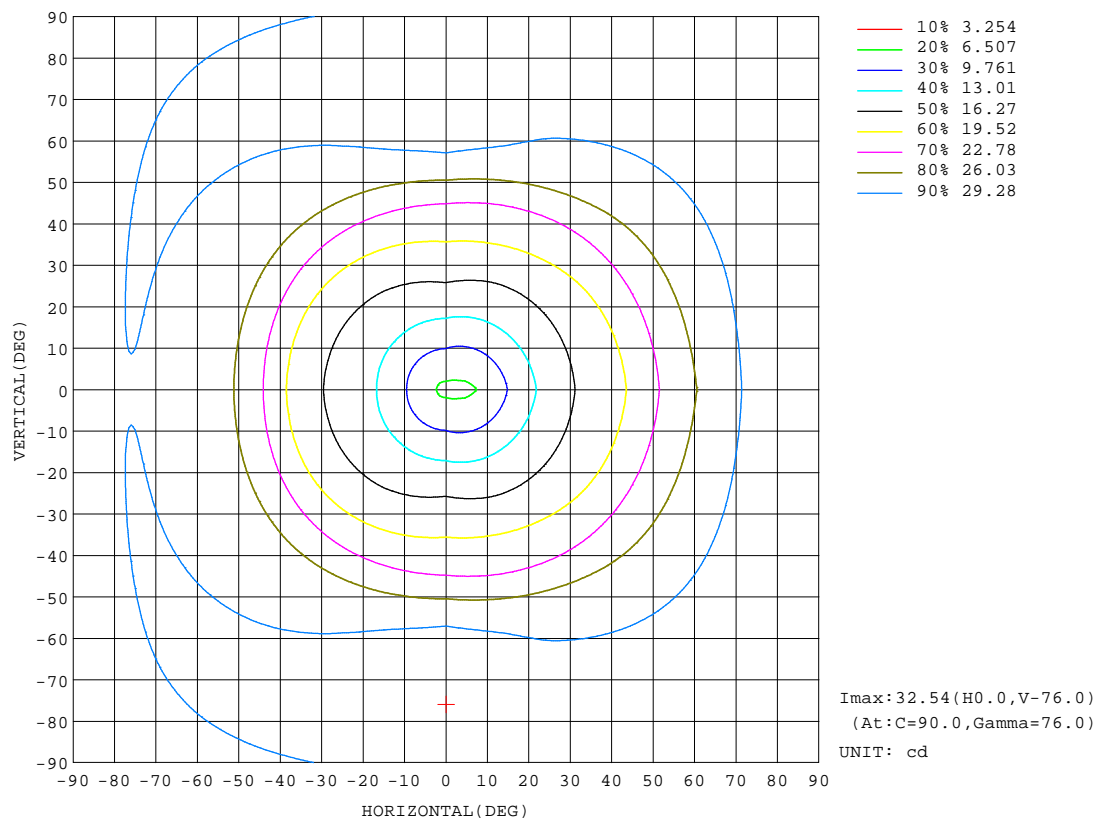
g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
 Humidity:65.0%  
 Test Distance:9.872m [K=1.0000]  
 Remarks:

Checker:

Assessor:

## ISOCANDELA DIAGRAM

Test:U:12.00V I:0.1960A P:2.350W PF:0 Freq:0Hz Lamp Flux:281.408x1 lm		
NAME: LED LINE LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Brilliance LED	SUR.:	Shielding Angle:



C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2019-04-22

g Range: 0 - 180DEG  
q Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
Humidity: 65.0%  
Test Distance: 9.872m [K=1.0000]  
Remarks:

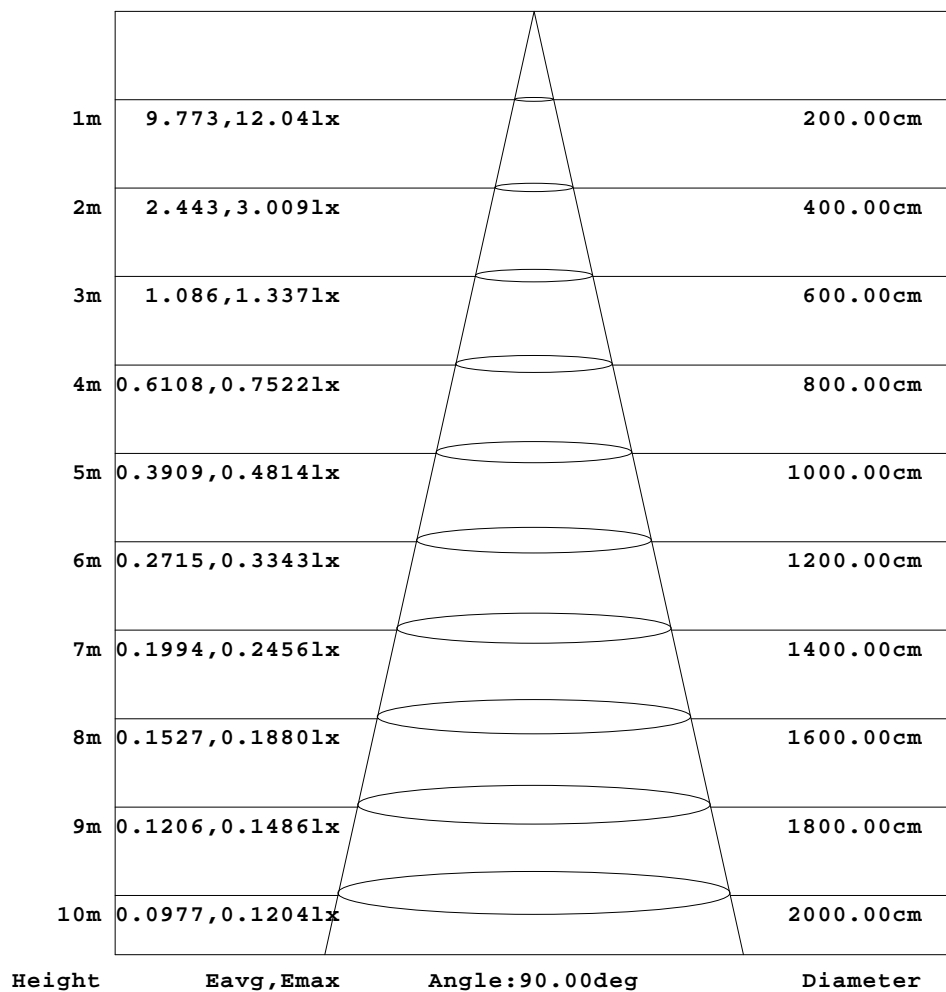
Checker:

Assessor:

## AAI Figure

Test:U:12.00V I:0.1960A P:2.350W PF:0 Freq:0Hz Lamp Flux:281.408x1 lm		
NAME: LED LINE LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Brilliance LED	SUR.:	Shielding Angle:

Flux out:30.70 lm



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

C Range: 0 - 180DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2019-04-22

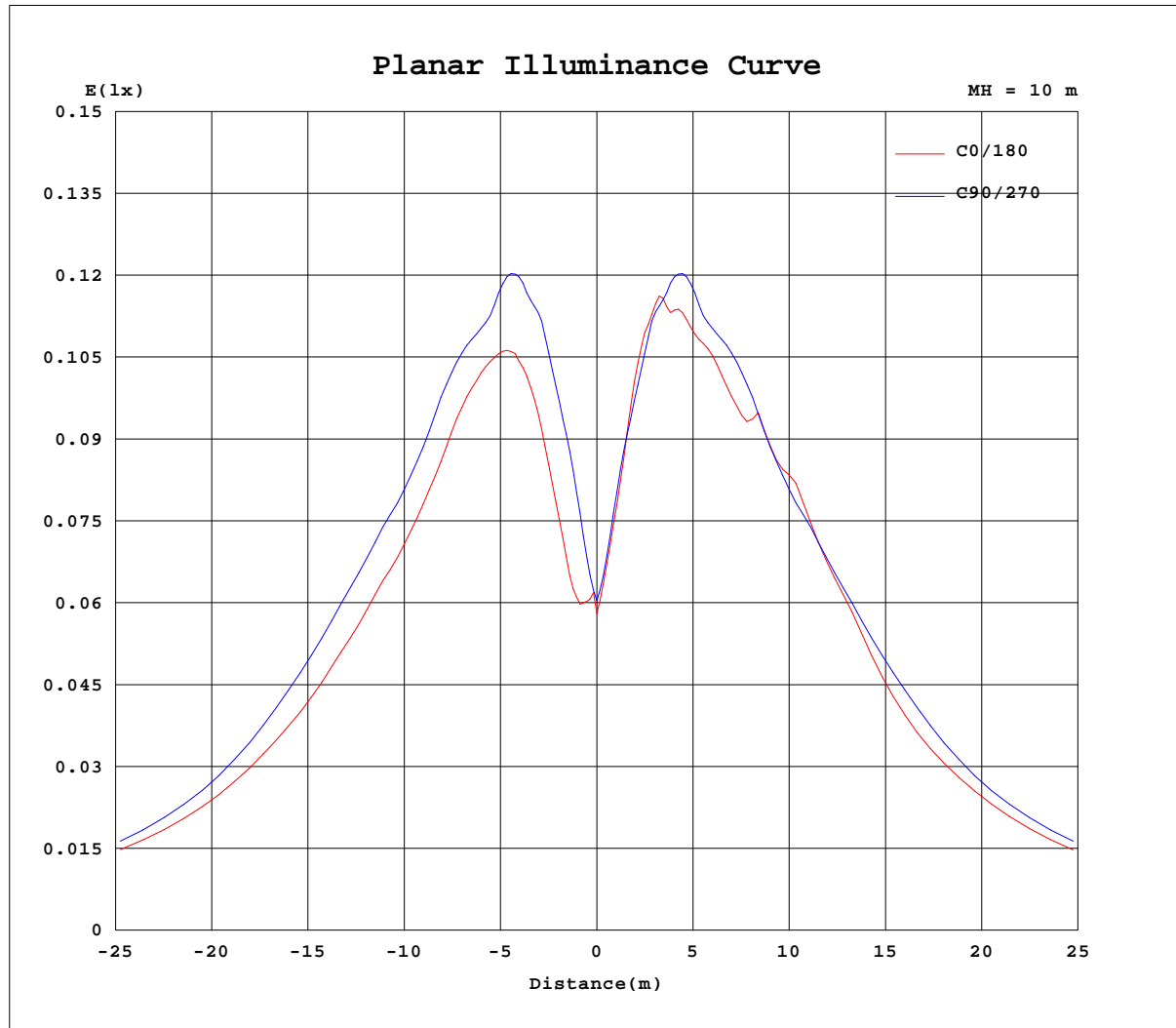
g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
 Humidity: 65.0%  
 Test Distance: 9.872m [K=1.0000]  
 Remarks:

Checker:

Assessor:



## Planar Illuminance Curve



C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2019-04-22

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
Humidity: 65.0%  
Test Distance: 9.872m [K=1.0000]  
Remarks:

Checker:

Assessor:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:12.00V I:0.1960A P:2.350W PF:0 Freq:0Hz Lamp Flux:281.408x1 lm		
NAME: LED LINE LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Brilliance LED	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEC) g (DEC)	0	90	180	270															
0	6.36	6.04	5.81	6.04															
5	6.05	7.73	7.53	7.73															
10	7.53	9.81	10.0	9.81															
15	9.83	12.1	12.3	12.1															
20	12.3	14.1	13.8	14.1															
25	14.3	16.1	15.0	16.1															
30	15.9	17.1	16.4	17.1															
35	17.4	19.3	17.8	19.3															
40	18.5	21.1	21.1	21.1															
45	20.0	22.9	23.6	22.9															
50	22.2	25.7	25.5	25.7															
55	24.1	28.4	26.7	28.4															
60	25.9	30.1	26.7	30.1															
65	27.2	30.6	27.7	30.6															
70	28.9	31.6	28.5	31.6															
75	30.1	32.5	29.2	32.5															
80	30.6	32.5	28.8	32.5															
85	30.5	31.8	27.8	31.8															
90	29.8	30.6	26.8	30.6															
95	28.9	29.6	26.0	29.6															
100	27.8	28.4	25.6	28.4															
105	26.9	27.8	25.6	27.8															
110	26.6	27.4	24.9	27.4															
115	25.5	26.1	23.3	26.1															
120	22.9	23.6	21.3	23.6															
125	19.9	21.1	18.7	21.1															
130	17.0	18.1	15.4	18.1															
135	14.7	15.1	12.2	15.1															
140	12.4	12.2	9.75	12.2															
145	10.0	9.41	7.66	9.41															
150	7.91	6.88	5.31	6.88															
155	5.77	4.52	3.41	4.52															
160	3.77	2.46	1.14	2.46															
165	1.19	1.25	1.07	1.25															
170	1.11	1.10	1.06	1.10															
175	1.11	1.10	1.06	1.10															
180	1.11	1.10	1.06	1.10															

C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2019-04-22

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
Humidity:65.0%  
Test Distance:9.872m [K=1.0000]  
Remarks:

Checker:

Assessor:

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