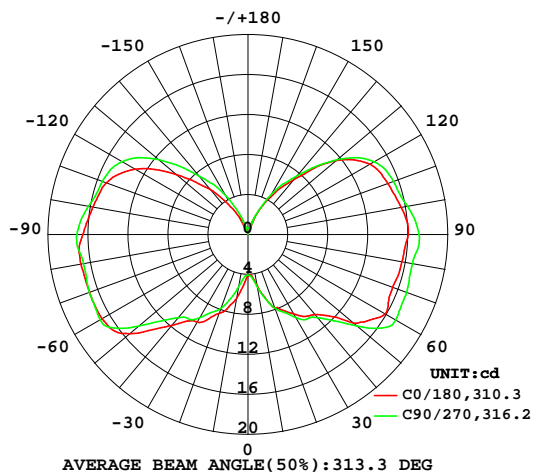


## LUMINAIRE PHOTOMETRIC TEST REPORT

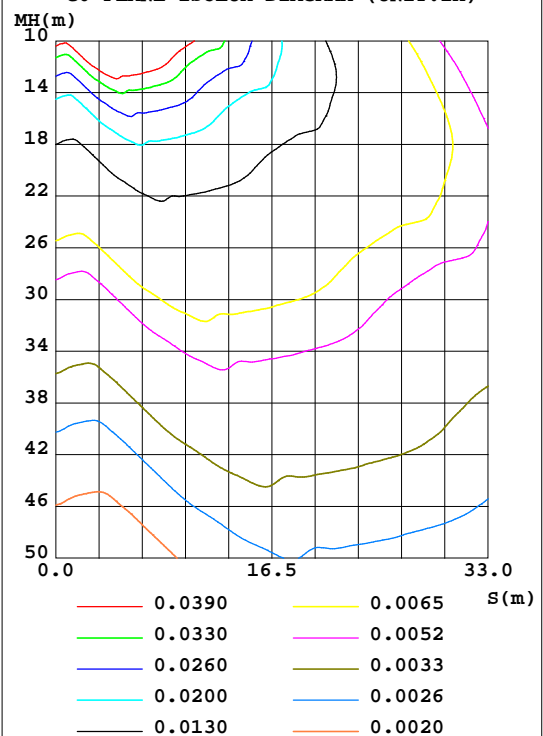
Test:U:12.00V I:0.1310A P:1.570W PF:0 Freq:0Hz Lamp Flux:161.66x1 lm		
NAME: LED LINE LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Brilliance LED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 102.97 lm/W			
MODEL		Imax(cd)	17.17	S/MH(C0/180)	3.33
NOMINAL POWER(W)	2	LOR(%)	100.0	S/MH(C90/270)	3.32
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	161.66	h UP,DN(C0-180)	22.8,26.9
NOMINAL FLUX(lm)	161.66	CIE CLASS	DIFFUSE	h UP,DN(C180-360)	22.1,28.2
LAMPS INSIDE	1	h up(%)	44.9	CIBSE SHR NOM	2.00
TEST VOLTAGE(V)	230	h down(%)	55.1	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	5.126	5.269	6.423	5.269					0~ 10	0.4589	0.4589	0.28,0.28
20	7.866	7.830	8.378	7.830					10~ 20	1.966	2.425	1.5,1.5
30	9.182	9.593	10.11	9.593					20~ 30	4.076	6.501	4.02,4.02
40	10.46	10.86	11.87	10.86					30~ 40	6.489	12.99	8.04,8.04
50	13.81	14.27	15.44	14.27					40~ 50	9.715	22.70	14,14
60	15.87	17.09	16.89	17.09					50~ 60	14.29	36.99	22.9,22.9
70	15.42	16.89	16.89	16.89					60~ 70	16.48	53.47	33.1,33.1
80	15.64	16.71	16.98	16.71					70~ 80	17.45	70.93	43.9,43.9
90	16.04	17.10	16.54	17.10					80~ 90	18.18	89.11	55.1,55.1
100	15.57	16.22	15.77	16.22					90~100	17.87	107.0	66.2,66.2
110	14.90	15.51	15.10	15.51					100~110	16.46	123.4	76.4,76.4
120	14.09	14.56	13.07	14.56					110~120	14.68	138.1	85.4,85.4
130	11.50	11.65	9.344	11.65					120~130	11.43	149.5	92.5,92.5
140	7.212	7.670	5.891	7.670					130~140	7.049	156.6	96.9,96.9
150	4.115	4.540	2.799	4.540					140~150	3.529	160.1	99.1,99.1
160	1.513	1.584	0.6720	1.584					150~160	1.231	161.4	99.8,99.8
170	0.6662	0.6490	0.6490	0.6490					160~170	0.2415	161.6	100,100
180	0.6548	0.6490	0.6433	0.6490					170~180	0.0621	161.7	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 17.307 lm

%lum = 10.7%

%lamp = 10.7%

Conical surface Flux(120deg): 36.994 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:

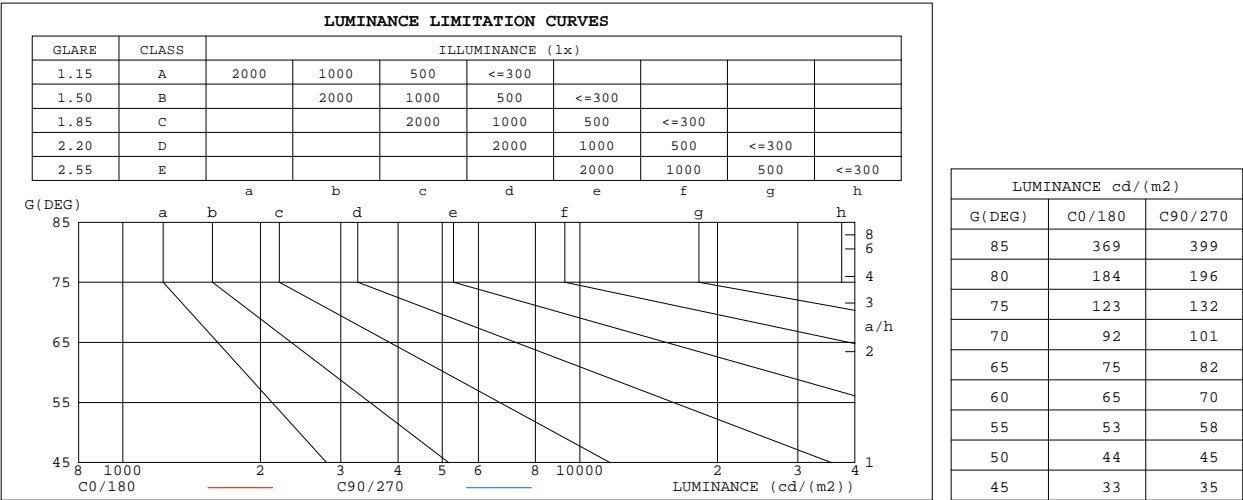
Checker:

Assessor:

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LUMINANCE LIMITATION CURVES

Test:U:12.00V I:0.1310A P:1.570W PF:0 Freq:0Hz Lamp Flux:161.66x1 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

Checker:

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:

Assessor:

### WEC AND CCEC

Test:U:12.00V I:0.1310A P:1.570W PF:0 Freq:0Hz Lamp Flux:161.66x1 lm		
NAME: LED LINE LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Brilliance LED	SUR.:	Shielding Angle:

r <sub>cc</sub>	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Wall Exitance Coefficients(WEC)												
0.0																
1.0	.440	.250	.079	.419	.239	.076	.380	.218	.070	.344	.198	.064	.311	.180	.058	
2.0	.364	.199	.061	.345	.190	.058	.309	.172	.053	.275	.155	.048	.245	.138	.044	
3.0	.315	.168	.050	.297	.159	.048	.265	.143	.044	.234	.128	.039	.206	.114	.035	
4.0	.279	.145	.043	.263	.137	.041	.233	.123	.037	.205	.110	.033	.179	.097	.030	
5.0	.250	.128	.037	.236	.121	.035	.208	.108	.032	.182	.096	.029	.158	.085	.025	
6.0	.227	.114	.033	.214	.108	.031	.188	.097	.028	.164	.085	.025	.142	.075	.022	
7.0	.208	.103	.029	.196	.097	.028	.172	.087	.025	.150	.077	.022	.129	.067	.020	
8.0	.192	.094	.026	.180	.089	.025	.158	.079	.023	.138	.070	.020	.119	.061	.018	
9.0	.178	.086	.024	.167	.081	.023	.147	.073	.021	.128	.064	.018	.110	.056	.016	
10.0	.166	.079	.022	.156	.075	.021	.137	.067	.019	.119	.059	.017	.102	.051	.015	

r <sub>cc</sub>	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	20%			20%			20%			20%			20%			0
R <sub>CR</sub>	R <sub>CR</sub> :Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.532	.532	.532	.455	.455	.455	.311	.311	.311	.178	.178	.178	.057	.057	.057	
1.0	.534	.500	.469	.457	.429	.403	.313	.295	.279	.180	.171	.162	.058	.055	.052	
2.0	.529	.479	.436	.453	.412	.377	.310	.285	.263	.179	.166	.154	.057	.054	.050	
3.0	.522	.464	.417	.448	.400	.361	.307	.278	.254	.177	.162	.149	.057	.053	.049	
4.0	.515	.452	.404	.442	.391	.351	.304	.272	.247	.176	.159	.146	.057	.052	.048	
5.0	.507	.443	.396	.435	.383	.344	.300	.268	.243	.174	.157	.144	.056	.051	.048	
6.0	.500	.436	.390	.429	.377	.340	.296	.264	.240	.172	.155	.143	.055	.051	.047	
7.0	.493	.430	.386	.424	.372	.336	.293	.261	.238	.170	.154	.142	.055	.050	.047	
8.0	.486	.424	.382	.418	.368	.333	.289	.258	.236	.168	.152	.141	.054	.050	.047	
9.0	.480	.420	.380	.413	.364	.331	.286	.256	.235	.167	.151	.140	.054	.050	.046	
10.0	.474	.416	.378	.408	.361	.330	.283	.254	.234	.165	.150	.140	.054	.049	.046	

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:0.1310A P:1.570W PF:0 Freq:0Hz Lamp Flux:161.66x1 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	6.5	7.7	7.3	8.5	9.6	6.8	8.0	7.6	8.8	9.9	
	3H	9.7	10.8	10.6	11.7	12.8	10.1	11.2	11.0	12.1	13.2
	4H	11.6	12.6	12.4	13.5	14.6	12.0	13.0	12.8	13.9	15.0
	6H	13.6	14.6	14.5	15.5	16.6	14.0	15.0	14.9	15.9	17.0
	8H	14.7	15.7	15.6	16.6	17.7	15.2	16.1	16.0	17.0	18.2
	12H	16.1	16.9	16.9	17.9	19.0	16.5	17.4	17.4	18.3	19.5
4H	2H	7.6	8.6	8.4	9.5	10.6	7.8	8.8	8.7	9.7	10.8
	3H	10.9	11.8	11.8	12.7	13.9	11.2	12.1	12.1	13.0	14.2
	4H	12.9	13.7	13.8	14.6	15.8	13.2	14.0	14.1	14.9	16.1
	6H	15.0	15.8	16.0	16.7	17.9	15.4	16.1	16.3	17.1	18.3
	8H	16.3	16.9	17.2	17.9	19.1	16.6	17.3	17.5	18.3	19.5
	12H	17.7	18.3	18.6	19.3	20.5	18.1	18.7	19.0	19.7	20.9
8H	4H	13.6	14.3	14.5	15.3	16.5	13.9	14.6	14.8	15.5	16.7
	6H	16.1	16.6	17.0	17.6	18.9	16.3	16.9	17.3	17.9	19.1
	8H	17.5	18.0	18.4	19.0	20.3	17.8	18.3	18.7	19.3	20.5
	12H	19.1	19.6	20.1	20.6	21.8	19.4	19.9	20.4	20.9	22.2
12H	4H	13.8	14.5	14.8	15.4	16.7	14.1	14.7	15.0	15.7	16.9
	6H	16.4	16.9	17.4	17.9	19.2	16.6	17.2	17.6	18.1	19.4
	8H	17.9	18.4	18.9	19.4	20.7	18.2	18.6	19.1	19.6	20.9
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, 161.7 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -6.3)

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:0.1310A P:1.570W PF:0 Freq:0Hz Lamp Flux:161.66x1 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	5
0.80	43	29	20	41	27	19	36	25	18	8
1.00	50	36	26	47	34	25	42	32	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	17
2.00	71	57	47	66	54	44	57	47	39	22
2.50	76	63	53	71	59	50	61	52	44	25
3.00	80	69	59	74	64	56	64	56	49	28
4.00	86	76	67	79	70	63	68	61	55	32
5.00	89	80	73	83	75	68	71	65	59	35
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

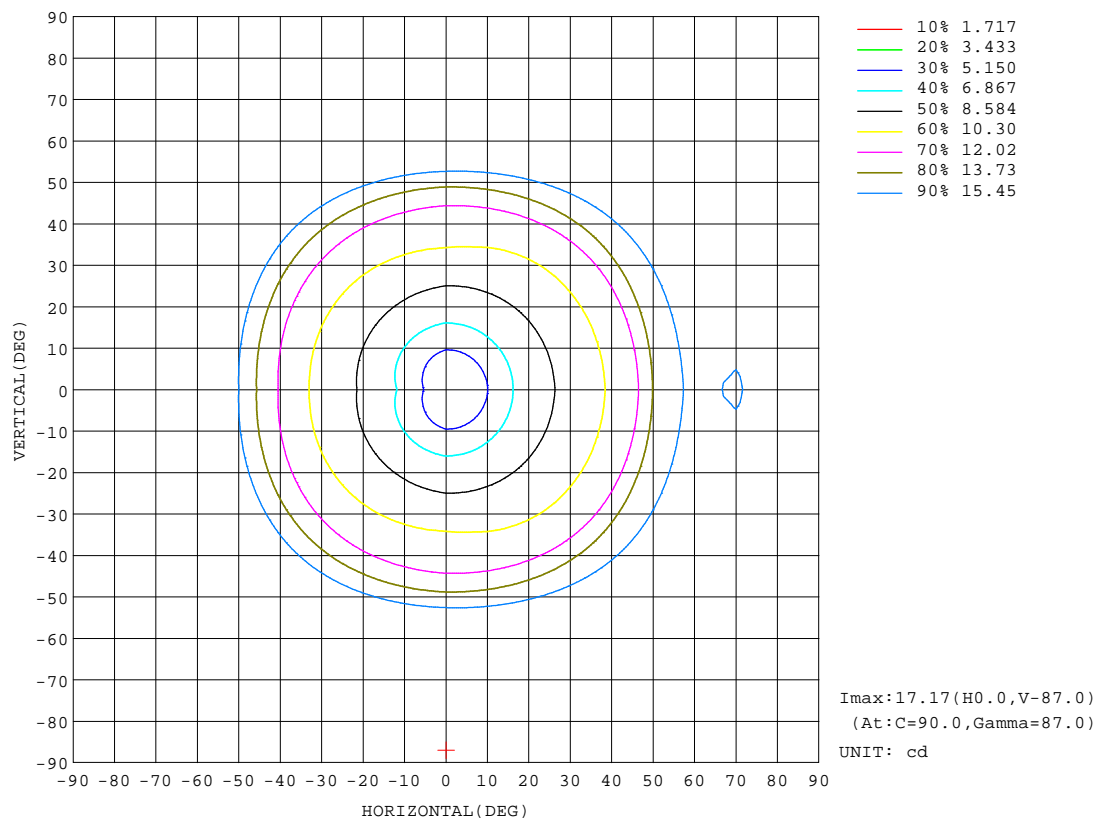
g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
 Humidity: 65.0%  
 Test Distance: 9.872m [K=1.0000]  
 Remarks:

Checker:

Assessor:

## ISOCANDELA DIAGRAM

Test:U:12.00V I:0.1310A P:1.570W PF:0 Freq:0Hz Lamp Flux:161.66x1 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:

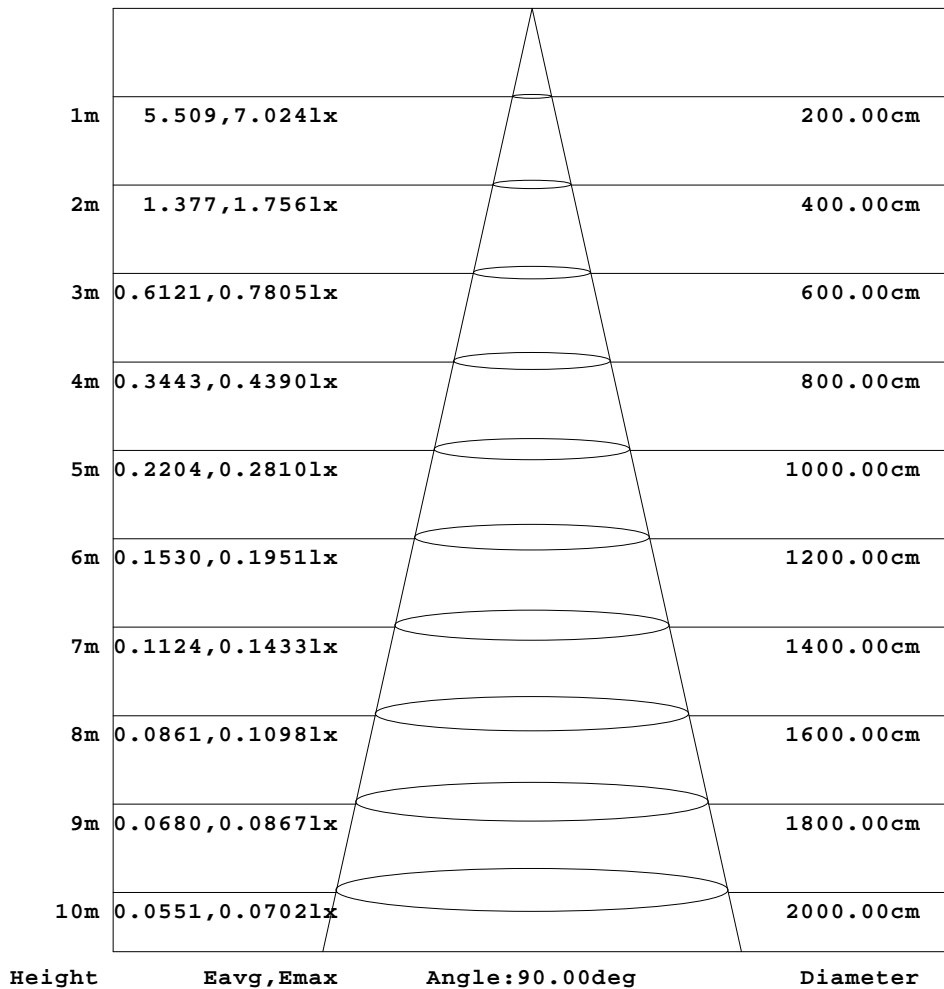
Checker:

Assessor:

## AAI Figure

Test:U:12.00V I:0.1310A P:1.570W PF:0 Freq:0Hz Lamp Flux:161.66x1 lm		
NAME: LED LINE LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Brilliance LED	SUR.:	Shielding Angle:

Flux out:17.31 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

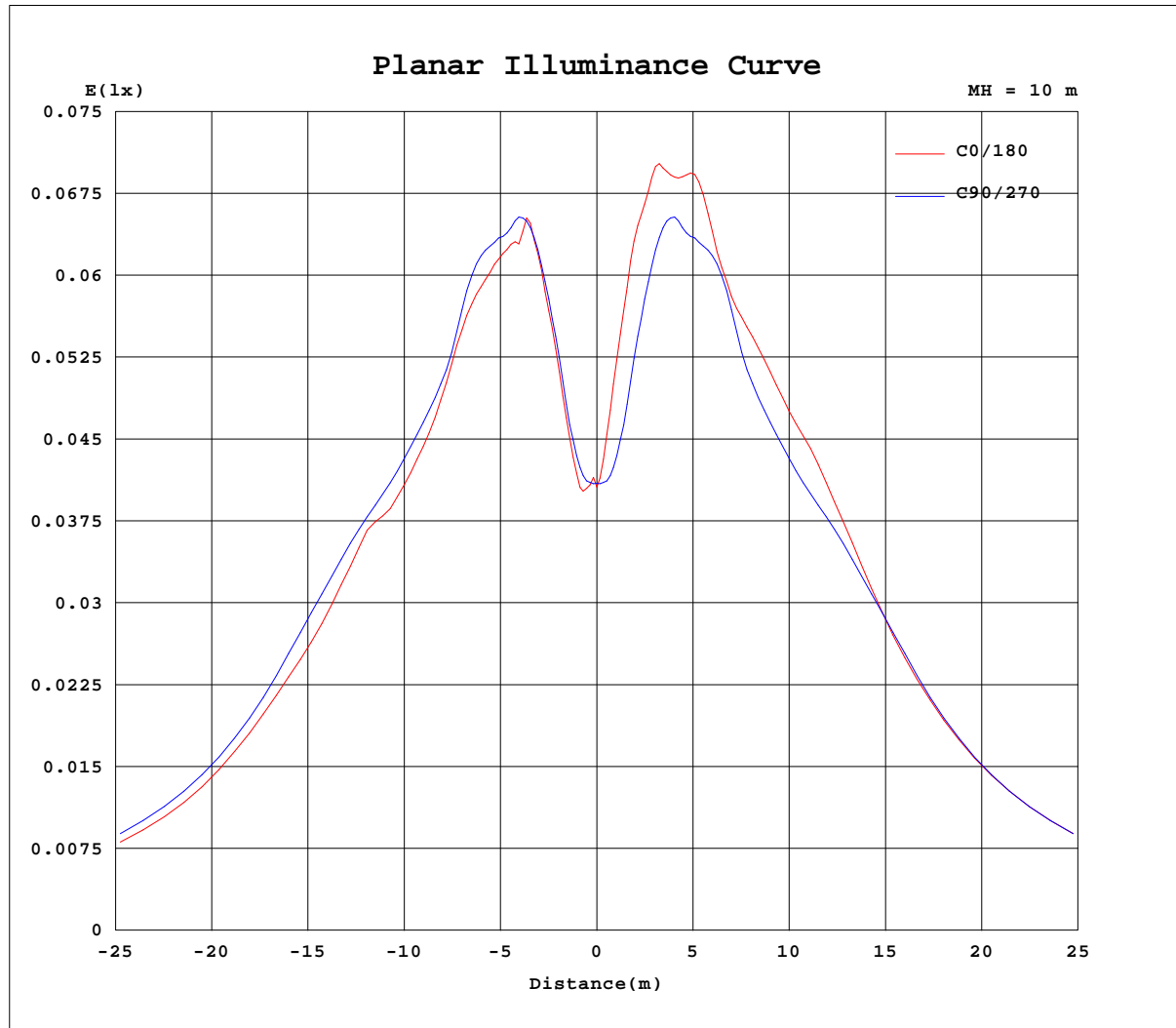
g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.361  
 Humidity: 65.0%  
 Test Distance: 9.872m [K=1.0000]  
 Remarks:

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:

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## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:12.00V I:0.1310A P:1.570W PF:0 Freq:0Hz Lamp Flux:161.66x1 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	4.22	4.10	4.06	4.10															
5	4.11	4.29	5.06	4.29															
10	5.13	5.27	6.42	5.27															
15	6.49	6.60	7.52	6.60															
20	7.87	7.83	8.38	7.83															
25	8.38	8.58	9.30	8.58															
30	9.18	9.59	10.1	9.59															
35	10.0	10.3	10.6	10.3															
40	10.5	10.9	11.9	10.9															
45	11.6	12.2	13.5	12.2															
50	13.8	14.3	15.4	14.3															
55	14.9	16.3	16.6	16.3															
60	15.9	17.1	16.9	17.1															
65	15.5	16.9	16.9	16.9															
70	15.4	16.9	16.9	16.9															
75	15.6	16.7	16.9	16.7															
80	15.6	16.7	17.0	16.7															
85	15.8	17.0	17.0	17.0															
90	16.0	17.1	16.5	17.1															
95	16.0	16.8	16.1	16.8															
100	15.6	16.2	15.8	16.2															
105	15.2	15.7	15.5	15.7															
110	14.9	15.5	15.1	15.5															
115	14.6	15.2	14.3	15.2															
120	14.1	14.6	13.1	14.6															
125	13.0	13.4	11.4	13.4															
130	11.5	11.6	9.34	11.6															
135	9.45	9.66	7.45	9.66															
140	7.21	7.67	5.89	7.67															
145	5.69	6.17	4.24	6.17															
150	4.11	4.54	2.80	4.54															
155	2.79	2.88	1.61	2.88															
160	1.51	1.58	0.67	1.58															
165	0.67	0.69	0.65	0.69															
170	0.67	0.65	0.65	0.65															
175	0.65	0.65	0.64	0.65															
180	0.65	0.65	0.64	0.65															

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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