E-TEXTILE DEVELOPMENT ITEM VOL.4

These samples are under development, the quality may be slightly changed when they are officially launched

- It used plastic optical fibers of the side luminous type and sparkle with only LED lights.
- Featuring optical fibers finely woven together to produce a trim that glows with light.
- Washable polyester woven as jacquard to prevent shrinkage suitable for a variety of functional as well as stylish applications.*
- * An electrical wiring part is removed.

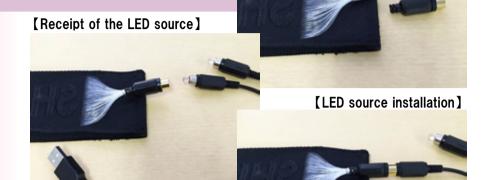
PLASTIC OPTICLAL FIBER RIBBON



■ The specification = needle jacquard loom Witdh : 3mm ~ 60mm Material : RAYTELA[™] (Toray Industries, inc.) φ0.25mm, polyester and polyester mono filament

[Power supply off]





[Power supply on]



■LED light source... The shell type LED (white and blue)

•Power consumption :700mW (about 140 mA of current x 5 V of voltage) •Illumination :20,000mcd

■Power supply... Battery BOX of the double A battery 2 specification

Harness... USB with a stereo cable type ϕ 3.5mm

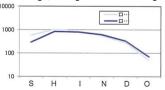
The character thickness 5mm	
130mm	

	Illumination result of measurement (unit :lx) : Measuring point 						
	The LED source side	۶		+	$[\mathbf{N}]$	Ð	0
Lot No. A	Average	570	1025	850	540	280	50
	Min.	390	840	580	470	210	40
	Max.	720	1310	1160	630	320	60
	Average	290	830	790	610	330	70
Lot No. B	Min.	220	610	630	530	300	60
	Max.	400	900	870	680	380	80

(=20cd)

"S" by which the character crowds," H"," I"," I sense light besides the measurement point by a lux meter sensor and have gone out to the numerical value highly, but when it's compared by the character of the "D" and the "O" for which other luminous influence is difficult to undergo, N" is good emission of light.

The difference is judged by the illumination (the "S" side) by lot A and lot B for a short while, but there are no great differences as the general illumination of the whole, and there are no great differences in 2 lots.



Illumination method for measurement

1. Use measuring instrument

Lux meter : Made by Konica Minolta Digital lux meter T-1M

2. The illumination measurement environment

It depends on darkroom-ization (by lux meter measurement, less than 0.01 lx).



application for patent

[Point processing]

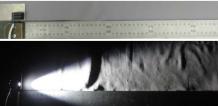
being processed 特許申請中

RAYTELA[™] is a registered trademark of Toray Industries, inc. レイテラ[™] は、東レ株式会社の登録商標です

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3. Use light source White LED (for emission intensity, the right table reference)



White LED Result of measurement

The illumination (lx) ※ By less than 50 mm,	Brightness (cd/m ²)		
The distance of 50mm	The distance of 100mm	The distance of 2m	
76,000	21,000	206,000	

SHINDO

2015 DEVELOPMENT COLLECTION Octber 2015

