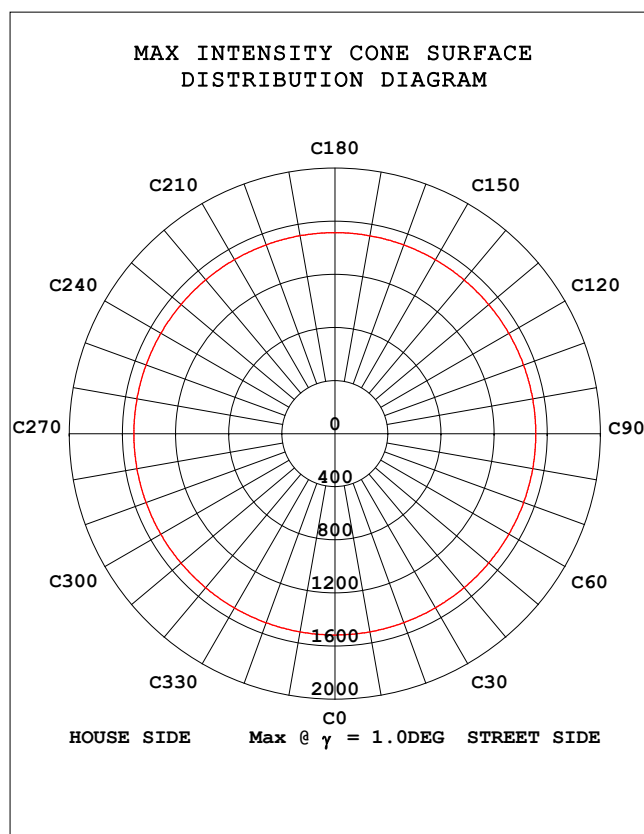
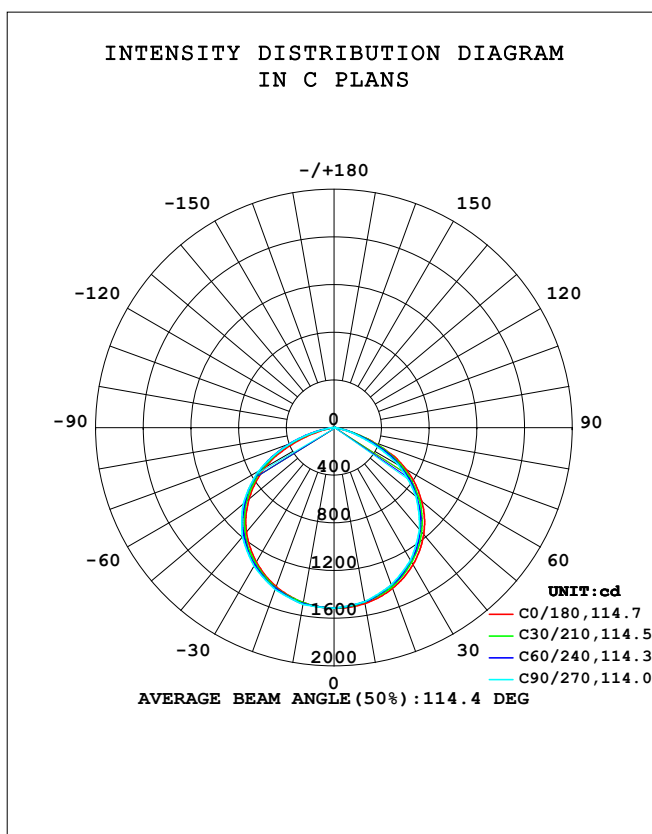


# STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 162.38 lm/W			
MODEL	H-21-V01-RZ-T5-1-TG	Imax(cd)	1516	$\eta$ street_up(%)	0.0
NOMINAL POWER(W)	20	LOR(%)	100.0	$\eta$ street_down(%)	48.1
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	4220	$\eta$ house_up(%)	0.0
NOMINAL FLUX(lm)	4220.09	MAXIMUM @ (C, $\gamma$ )	0,1.0	$\eta$ house_down(%)	51.9
LAMPS INSIDE	1	$\eta$ up(%)	0.0	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	120	$\eta$ down(%)	100.0	SLI	15.814

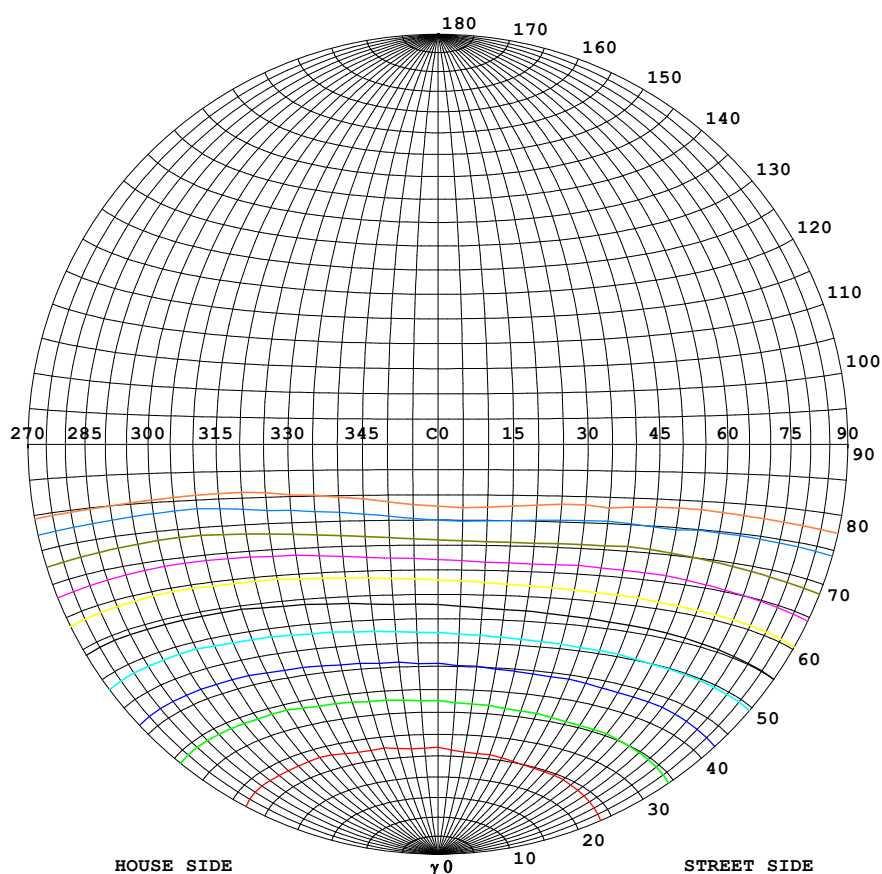


H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:04 September 2018

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

# STREETLIGHT ISOCANDELA DIAGRAM

Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



## Classification:

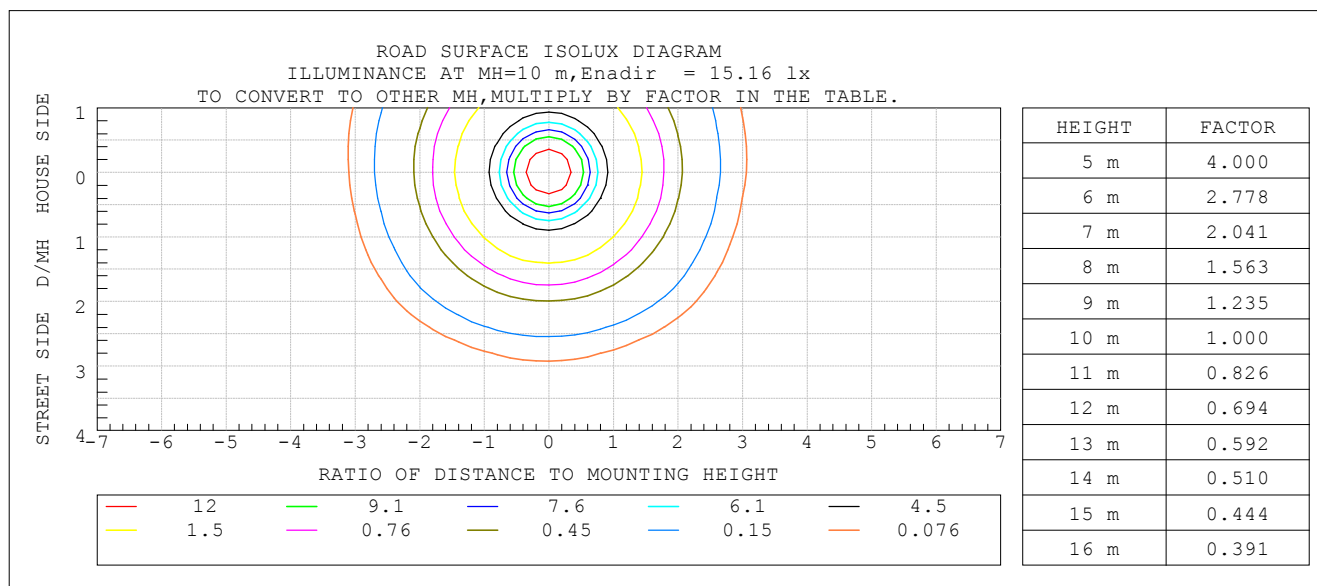
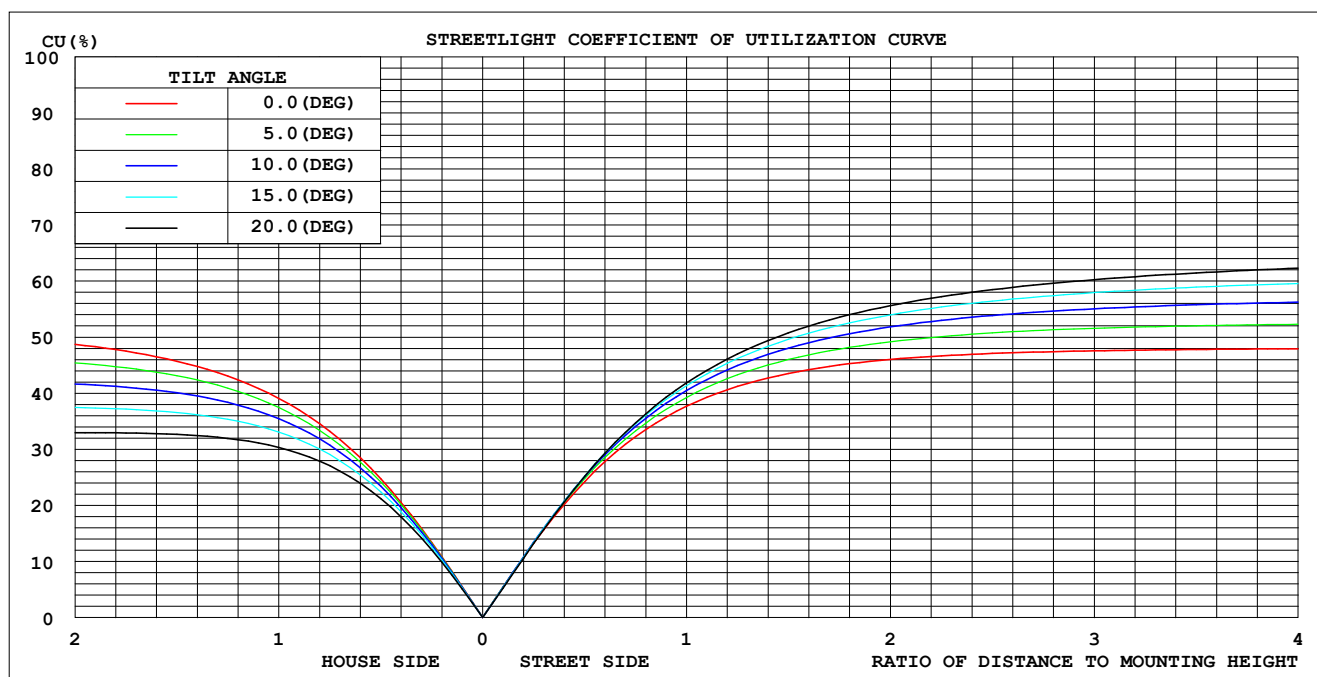
IES:Type V - Very Short  
CIE:Narrow - Short  
IES:Cut-off  
CIE:Full cut-off  
Max.At80:24.25cd/klm  
Max.At90:0.2251cd/klm  
Max.80-90:24.25cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
I <sub>max</sub> =100%	1516
90%	1364
80%	1213
70%	1061
60%	910
50%	758
40%	606
30%	455
20%	303
10%	152
5%	76

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:04 September 2018

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

# **COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM**



H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CL  
 Test Date:04 September 2018

V(B) Range:-80 - 80DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.010m [K=1.0000]  
 Remarks:

### ZONAL FLUX DIAGRAM

Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

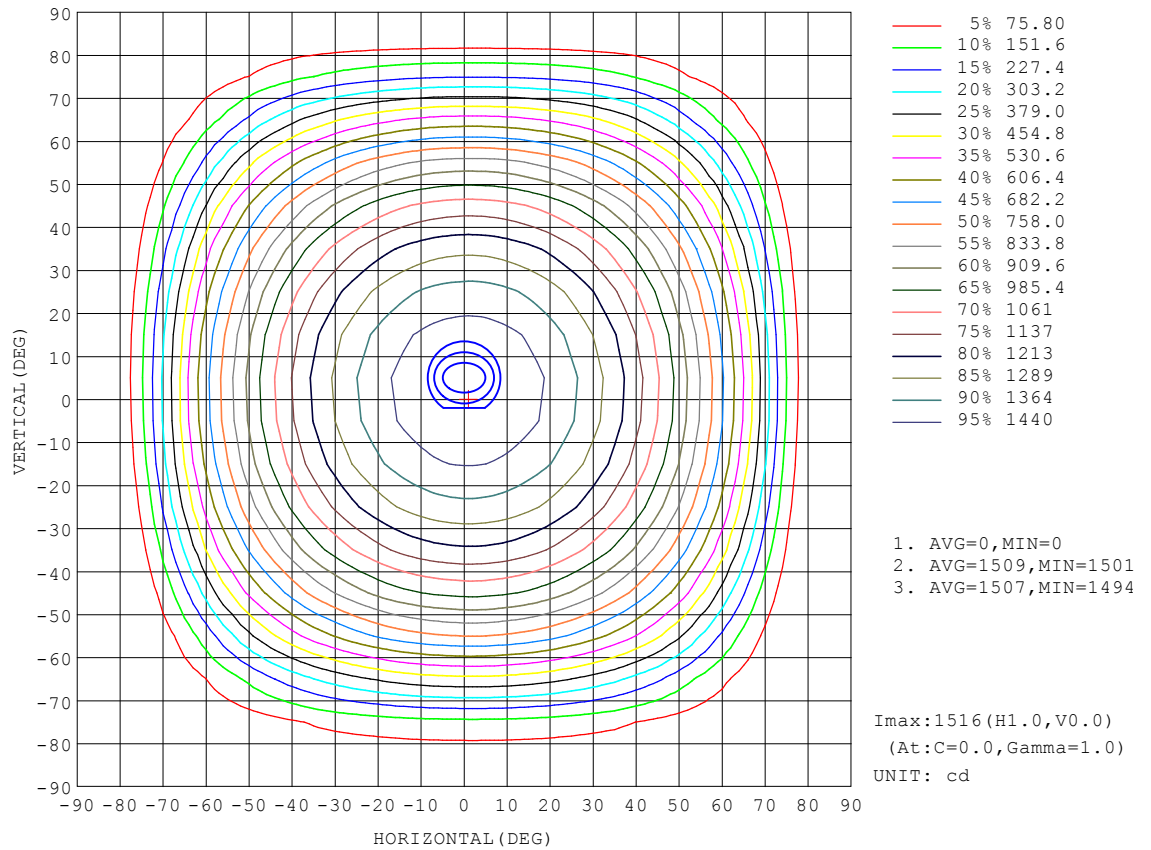
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	1498	1484	1483	1479	1490	1495	1505	1498	0- 10	143.3	143.3	3.4,3.4
20	1436	1411	1405	1401	1420	1430	1446	1440	10- 20	412.9	556.2	13.2,13.2
30	1327	1296	1285	1282	1304	1324	1343	1339	20- 30	632.8	1189	28.2,28.2
40	1171	1136	1116	1116	1144	1172	1196	1192	30- 40	774.1	1963	46.5,46.5
50	960.3	922.7	897.3	902.8	930.9	973.3	995.2	993.6	40- 50	812.5	2776	65.8,65.8
60	695.3	653.0	620.6	627.7	664.4	713.2	731.9	737.3	50- 60	728.7	3504	83,83
70	345.2	326.2	248.5	305.9	316.1	394.8	385.4	418.7	60- 70	508.9	4013	95.1,95.1
80	21.57	51.45	16.71	43.97	26.17	89.54	60.16	102.1	70- 80	194.1	4207	99.7,99.7
90	0.9498	0	0	0	0.8261	0	0	0	80- 90	12.86	4220	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		

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:04 September 2018

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

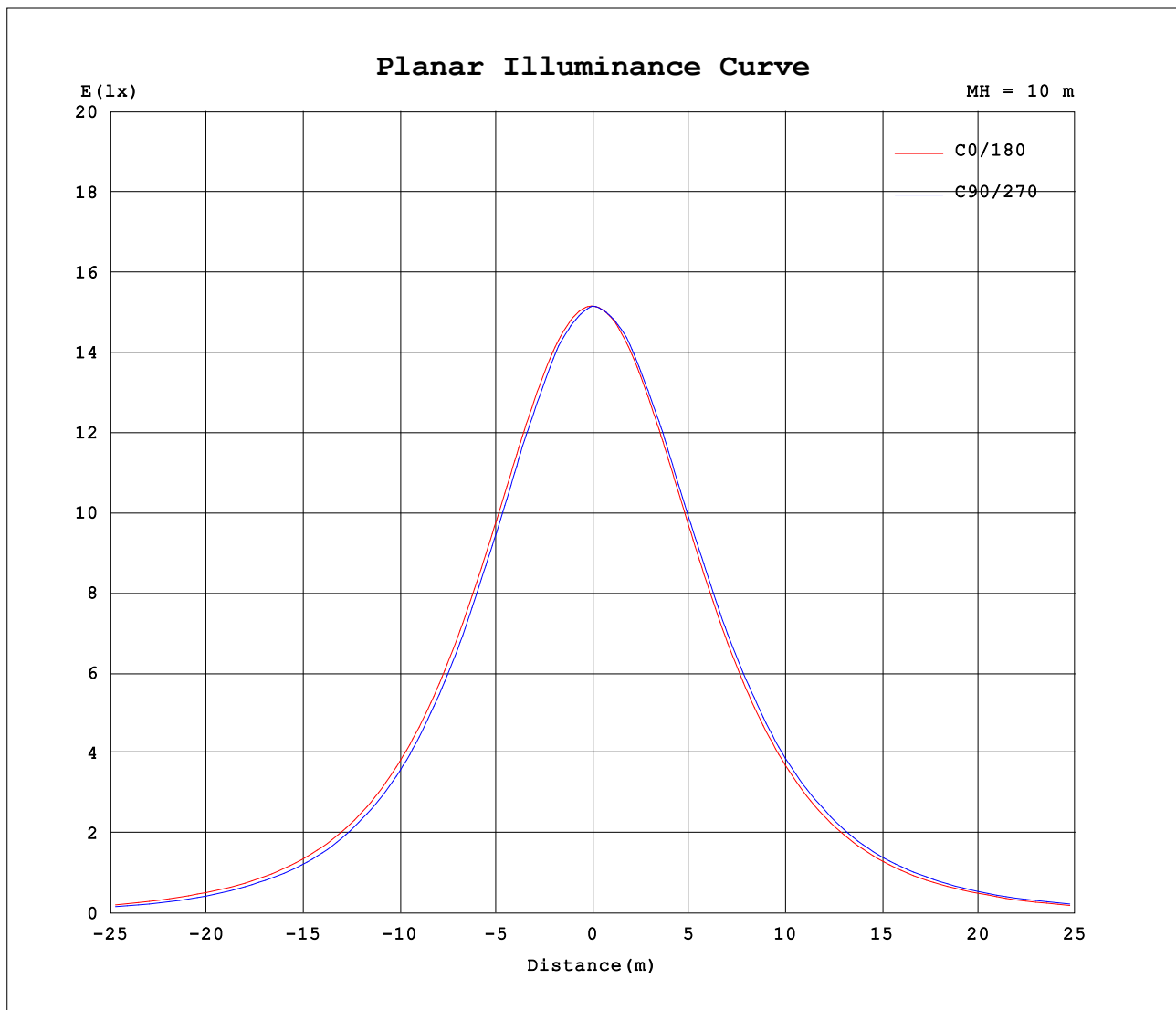
Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:04 September 2018

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



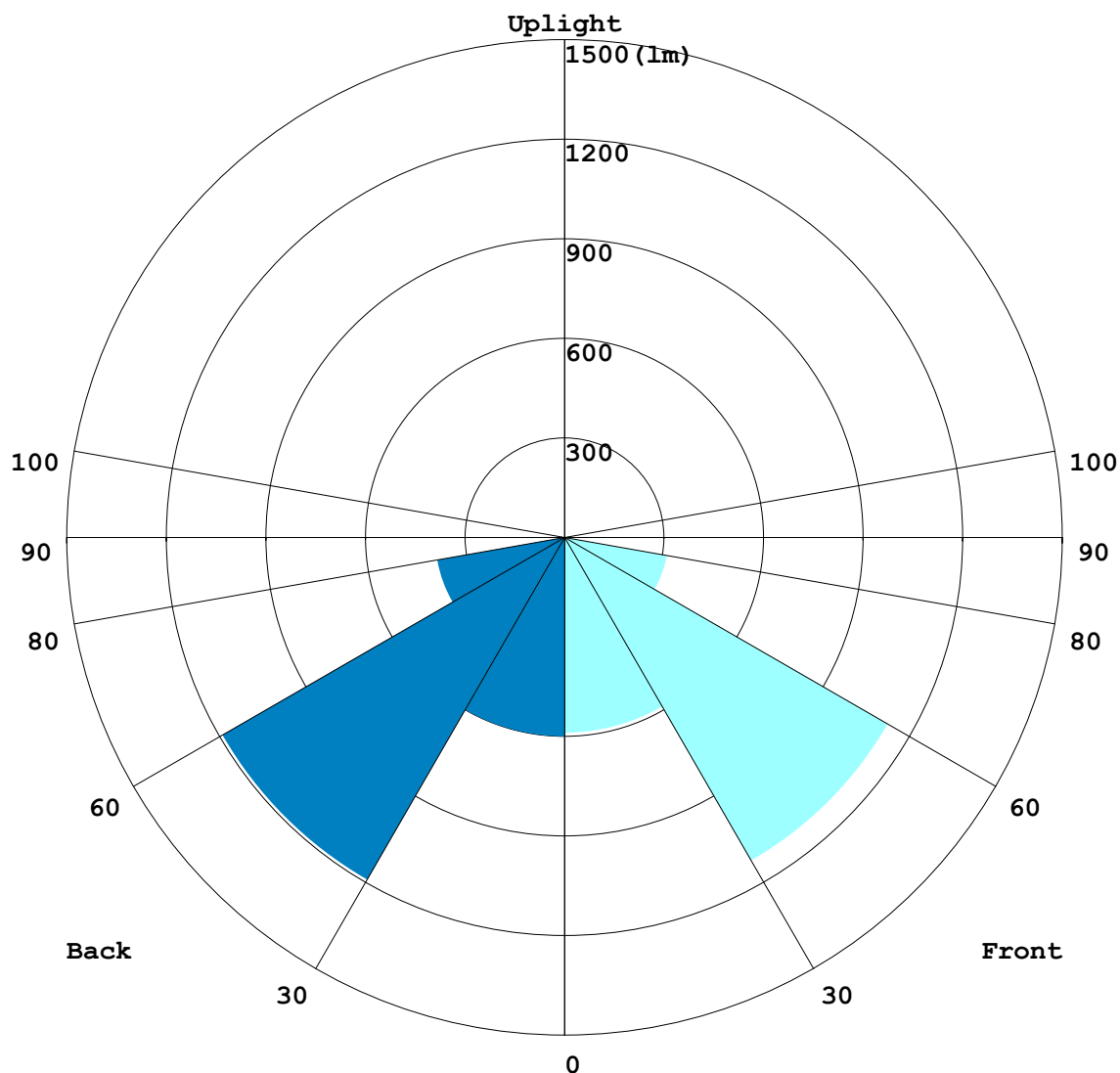
H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CL  
 Test Date:04 September 2018

V(B) Range:-80 - 80DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.010m [K=1.0000]  
 Remarks:

### LCS REPORT

Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

### LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



$H(\beta)$  Range:-90 - 90DEG  
 $H(\beta)$  Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CL  
 Test Date:04 September 2018

$V(B)$  Range:-80 - 80DEG  
 $V(B)$  Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.010m [K=1.0000]  
 Remarks:

# BUG REPORT

Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

## IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	589.13	14.0
FM - Front-Medium(30-60)	1124.4	26.6
FH - Front-High(60-80)	313.02	7.4
FVH - Front-Very High(80-90)	3.8664	0.1
Total Forward Light	2030.4	48.1

BL - Back-Low(0-30)	599.78	14.2
BM - Back-Medium(30-60)	1191	28.2
BH - Back-High(60-80)	389.93	9.2
BVH - Back-Very High(80-90)	8.9925	0.2
Total Back Light	2189.7	51.9

UL - Uplight-Low(90-100)	0	0.0
UH - Uplight-High(100-180)	0	0.0
Total Up Light	0	0.0

BUG(Back,Up,Glare) Rating	B2-U0-G0
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	2189.7	0	2189.7
Street Side	2030.4	0	2030.4

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:04 September 2018

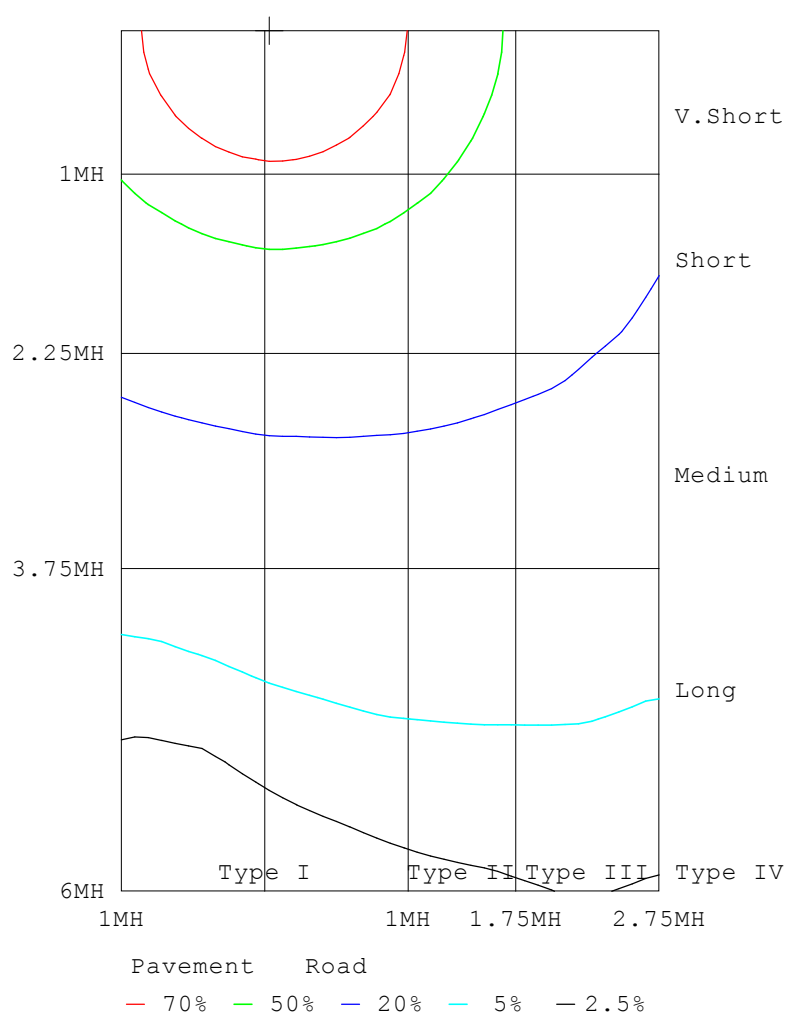
V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:



### ROAD ISOCANDELA REPORT

Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

ROAD SURFACE ISOCANDELA DIAGRAM



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:04 September 2018

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Table--1

UNIT: cd

[illegible]

```
H( $\beta$ ) Range:-90 - 90DEG
H( $\beta$ ) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:04 September 2018
```

```
V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.010m [K=1.0000]
Remarks:
```

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Table--2

UNIT: cd

[illegible]

```
H( $\beta$ ) Range:-90 - 90DEG
H( $\beta$ ) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:04 September 2018
```

```
V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.010m [K=1.0000]
Remarks:
```

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Table--3

UNIT: cd

[illegible]

```
H( $\beta$ ) Range:-90 - 90DEG
H( $\beta$ ) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:04 September 2018
```

```
V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.010m [K=1.0000]
Remarks:
```

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.03V I:0.2179A P:25.989W PF:0.9937 Freq:59.98Hz Lamp Flux:4220.09x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:20W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Table--4

UNIT: cd

[illegible]

```
H( $\beta$ ) Range:-90 - 90DEG
H( $\beta$ ) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:04 September 2018
```

```
V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.010m [K=1.0000]
Remarks:
```