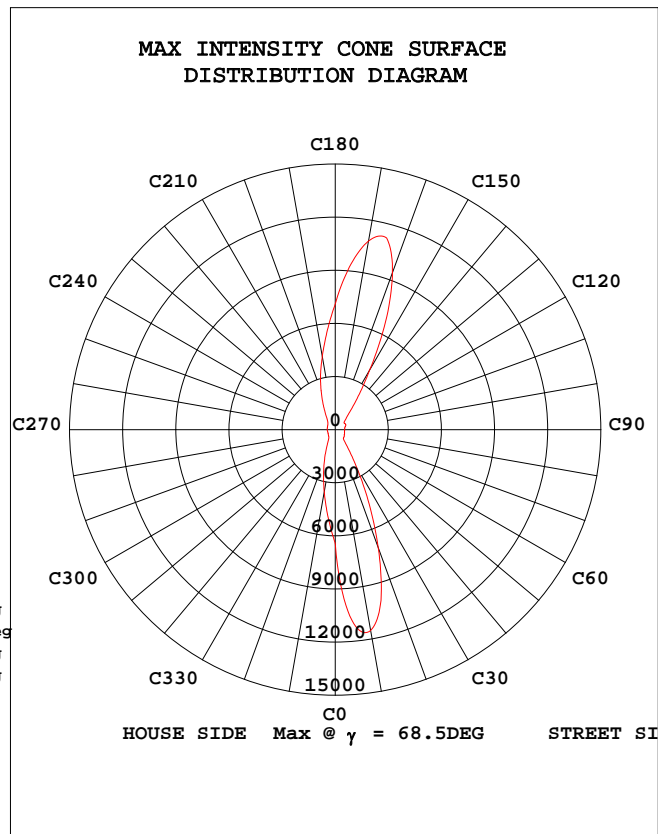
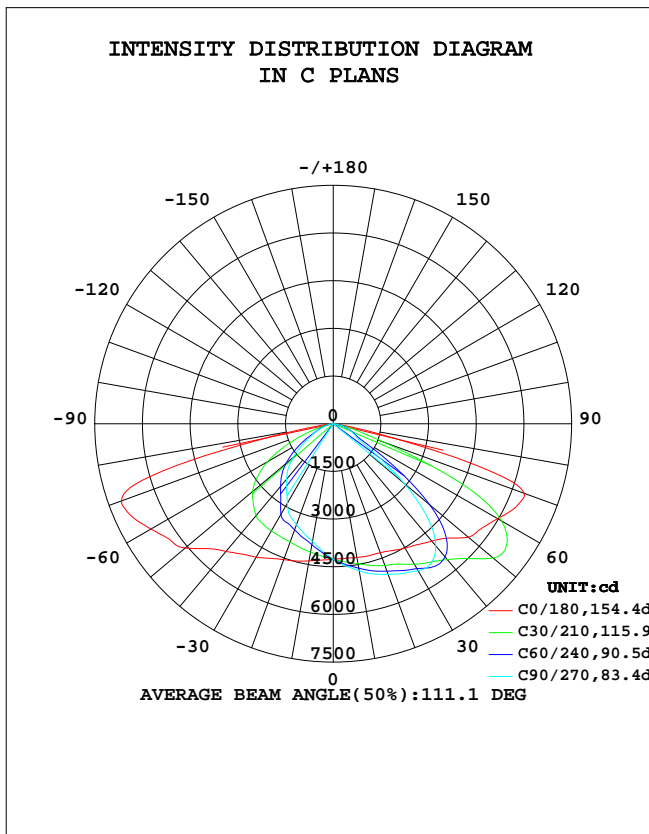


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT PHOTOMETRIC TEST REPORT

NAME: D-150MLED180-98	TYPE:Street Lighting	WEIGHT:12kg
SPEC.:14*7	DIM.: 825*360*150	SERIAL No.:60150

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	180W	Imax(cd)	11209	$\eta$ street_up(%)	0.0
NOMINAL POWER(W)	180	LOR(%)	93.0	$\eta$ street_down(%)	57.6
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	16741	$\eta$ house_up(%)	0.0
NOMINAL FLUX(lm)	18000	MAXIMUM @(C, $\gamma$ )	165,68.5	$\eta$ house_down(%)	35.4
LAMPS INSIDE	1	$\eta$ up(%)	0.0	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.0	$\eta$ down(%)	93.0	SLI	20.288



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:KB01  
 Test Date:2015-02-06

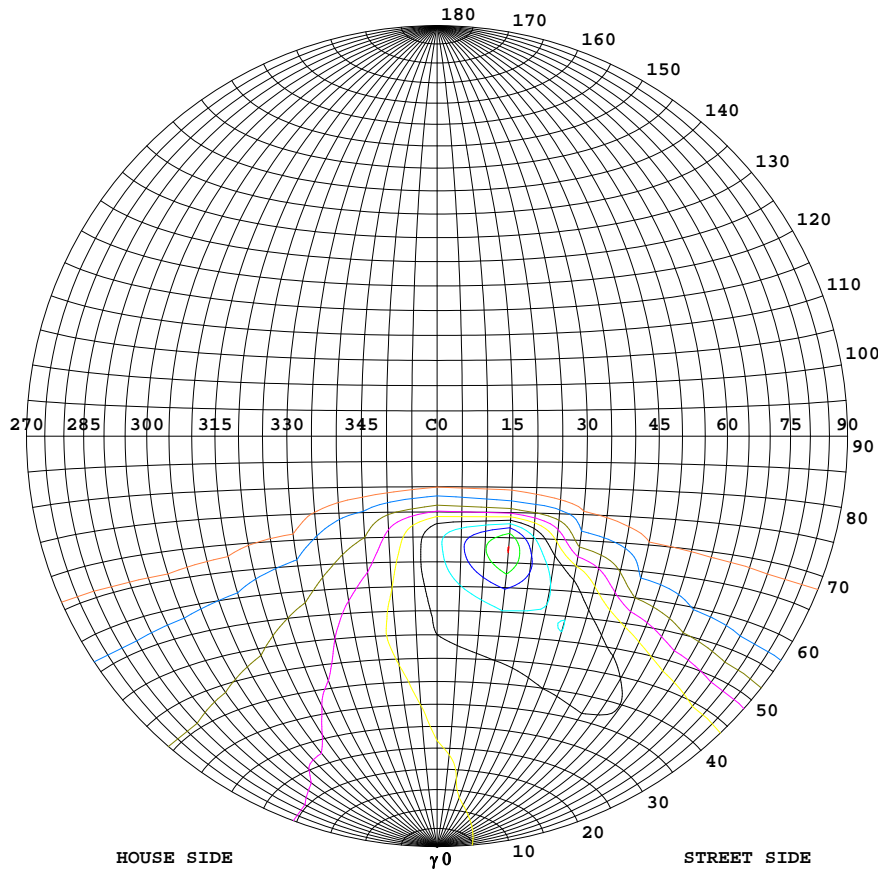
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:6.100m [K=1.0000]  
 Remarks: 4DR5 180

Note: SLI:Specific Luminaire Index

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT ISOCANDELA DIAGRAM

NAME: D-150MLED180-98	TYPE:Street Lighting	WEIGHT:12kg
SPEC.:14*7	DIM.: 825*360*150	SERIAL No.:60150



Classification:

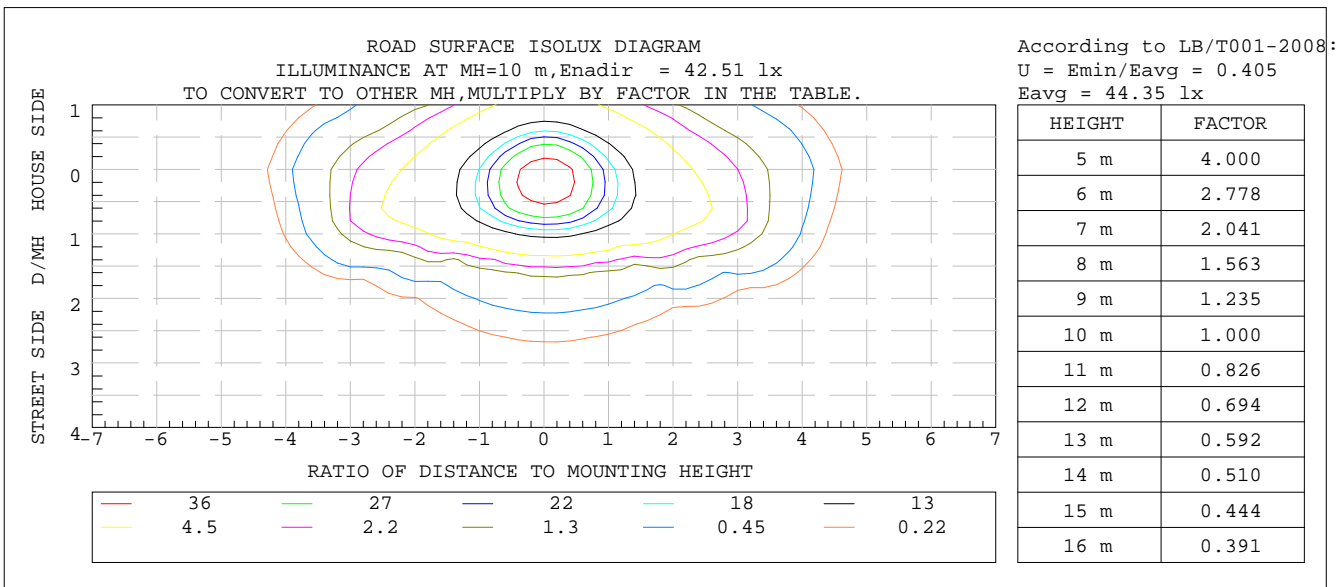
IES:Type II - Medium  
 CIE:Narrow - Intermediate  
 IES:Cut-off  
 CIE:Semi-cut-off  
 Max.At80:55.28cd/klm  
 Max.At90:1.883cd/klm  
 Max.80-90:55.28cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	11209
90%	10089
80%	8968
70%	7847
60%	6726
50%	5605
40%	4484
30%	3363
20%	2242
10%	1121
5%	560

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:KB01  
 Test Date:2015-02-06

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:6.100m [K=1.0000]  
 Remarks: 4DR5 180

COEFFICIENT OF UTILIZATION CURVE  
AND ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: KB01  
Test Date: 2015-02-06

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
Humidity: 65.0%  
Test Distance: 6.100m [K=1.0000]  
Remarks: 4DR5 180

**EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT**

**ZONAL FLUX DIAGRAM**

NAME: D-150MLED180-98	TYPE:Street Lighting	WEIGHT:12kg
SPEC.:14*7	DIM.: 825*360*150	SERIAL No.:60150

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
5	425.2	440.9	448.7	445.8	430.6	411.4	401.1	406.7	0- 5	101.9	101.9	0.61,0.57
10	427.2	454.7	469.5	465.1	438.2	396.9	376.1	388.6	5- 10	305.2	407.1	2.43,2.26
15	430.1	471.8	489.0	487.2	447.2	383.5	356.7	372.2	10- 15	508.5	915.7	5.47,5.09
20	432.0	488.0	504.2	509.3	455.3	373.8	338.1	359.9	15- 20	710.4	1626	9.71,9.03
25	440.0	503.9	519.3	529.3	467.2	361.1	320.8	345.0	20- 25	909.0	2535	15.1,14.1
30	452.0	528.3	533.8	556.2	484.6	346.0	288.8	328.5	25- 30	1109	3644	21.8,20.2
35	464.1	550.1	535.6	581.8	500.4	329.6	256.0	310.3	30- 35	1296	4940	29.5,27.4
40	482.3	579.7	501.6	615.6	524.4	303.3	228.9	282.9	35- 40	1466	6405	38.3,35.6
45	509.4	583.8	421.7	628.3	555.8	271.7	201.1	249.7	40- 45	1599	8004	47.8,44.5
50	555.2	539.2	289.9	597.5	608.2	237.9	163.7	214.8	45- 50	1674	9678	57.8,53.8
55	572.0	424.9	146.4	499.4	631.7	192.3	124.7	170.3	50- 55	1636	11314	67.6,62.9
60	596.9	223.0	83.82	294.1	662.6	142.1	86.52	121.7	55- 60	1496	12810	76.5,71.2
65	629.2	92.51	67.40	120.7	696.2	88.82	61.39	74.64	60- 65	1379	14189	84.8,78.8
70	638.9	58.68	48.60	74.55	708.5	51.41	40.01	46.18	65- 70	1242	15431	92.2,85.7
75	350.3	32.87	32.69	43.80	513.4	30.47	23.62	25.13	70- 75	897.8	16329	97.5,90.7
80	53.63	15.55	17.50	19.60	99.50	11.78	11.77	8.879	75- 80	322.8	16652	99.5,92.5
85	8.273	4.563	1.955	6.178	12.38	2.594	1.293	1.919	80- 85	73.83	16726	99.9,92.9
90	3.390	1.190	1.108	1.041	3.198	1.037	0.9606	1.348	85- 90	15.64	16741	100,93
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:KB01  
 Test Date:2015-02-06

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:6.100m [K=1.0000]  
 Remarks: 4DR5 180

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

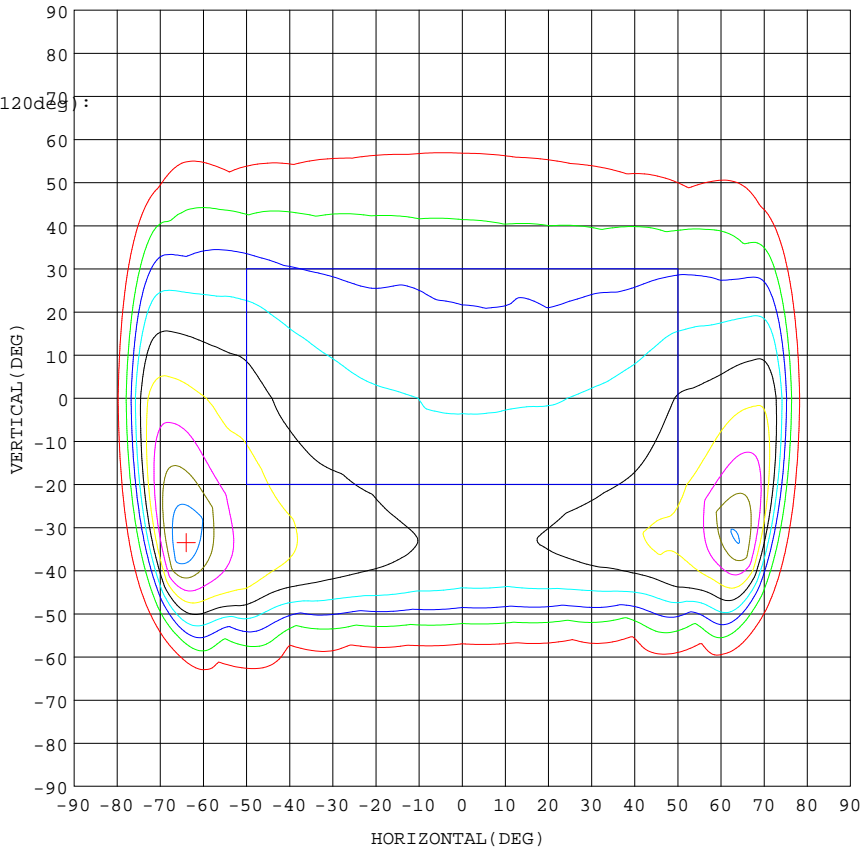
NAME: D-150MLED180-98	TYPE: Street Lighting	WEIGHT: 12kg
SPEC.: 14*7	DIM.: 825*360*150	SERIAL No.: 60150

Conical surface Flux(90deg):

8004.2 lm  
 %lum = 47.8%  
 %lamp = 44.5%

Conical surface Flux(120deg):

12810 lm  
 %lum = 76.5%  
 %lamp = 71.2%



- 10% 1107
- 20% 2214
- 30% 3321
- 40% 4428
- 50% 5536
- 60% 6643
- 70% 7750
- 80% 8857
- 90% 9964

MAX = 7090.1  
 MIN = 2843.8  
 AVG = 4404.6  
 AVG/MAX = 0.62  
 MIN/MAX = 0.40

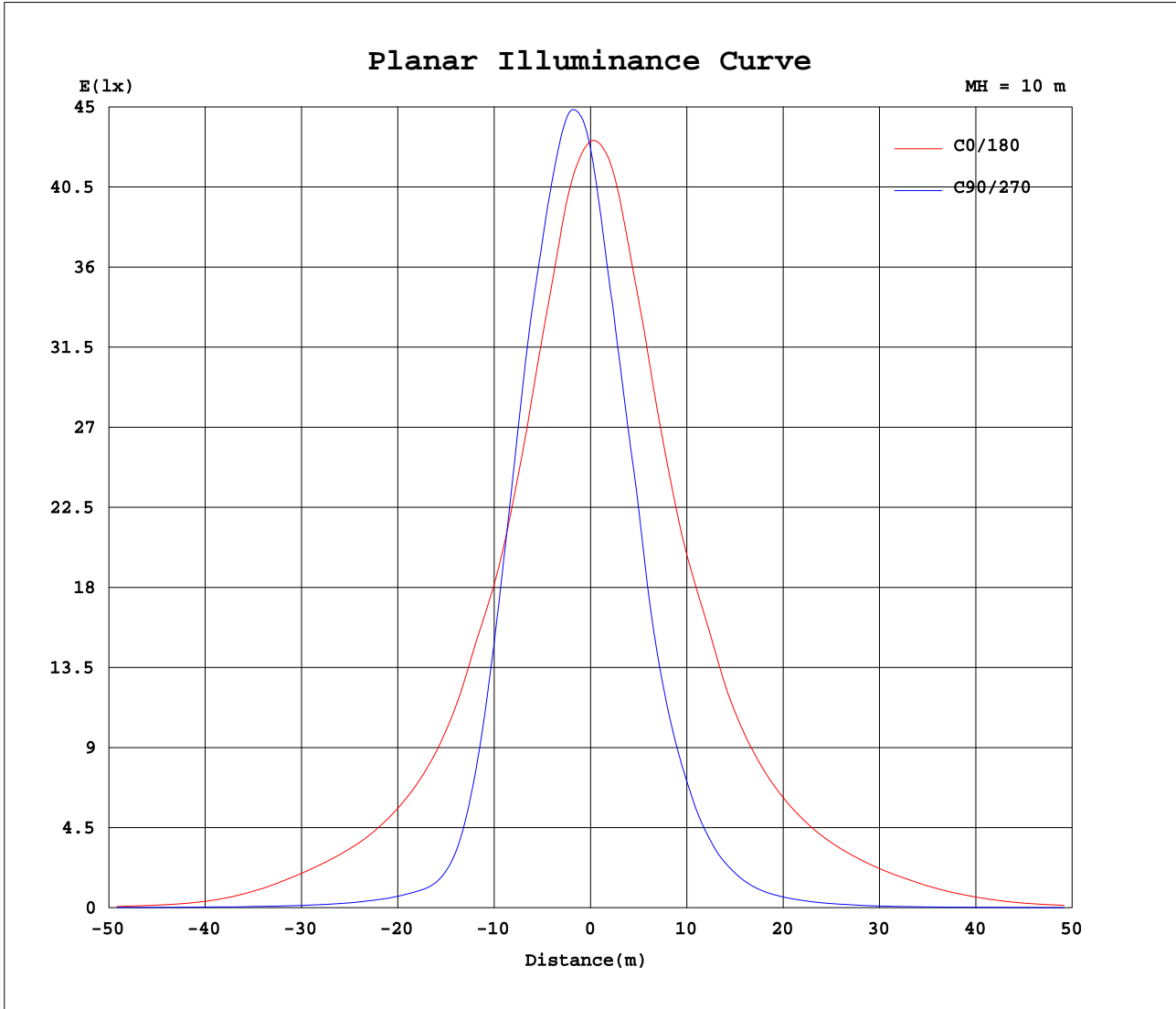
Imax: 11071 (H=-64.0, V=-33.5)  
 (At: C=165.0, Gamma=68.5)

UNIT: cd

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: KB01  
 Test Date: 2015-02-06

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity: 65.0%  
 Test Distance: 6.100m [K=1.0000]  
 Remarks: 4DR5 180

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: KB01  
Test Date: 2015-02-06

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
Humidity: 65.0%  
Test Distance: 6.100m [K=1.0000]  
Remarks: 4DR5 180

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: D-150MLED180-98	TYPE:Street Lighting	WEIGHT:12kg
SPEC.:14*7	DIM.: 825*360*150	SERIAL No.:60150

Table--1

UNIT: x10cd

C( DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427
5	425	431	436	441	444	447	449	449	448	446	442	437	431	424	418	411	407	403	401
10	427	439	448	455	461	466	470	471	469	465	459	450	438	425	410	397	387	380	376
15	430	448	461	472	479	485	489	492	491	487	479	466	447	426	403	383	371	362	357
20	432	454	474	488	494	499	504	508	510	509	499	480	455	426	396	374	356	344	338
25	440	464	487	504	510	513	519	524	528	529	517	495	467	431	392	361	344	327	321
30	452	481	510	528	527	527	534	540	549	556	543	517	485	439	389	346	329	297	289
35	464	497	532	550	549	534	536	550	574	582	571	539	500	446	386	330	288	262	256
40	482	521	558	580	547	507	502	526	577	616	601	570	524	455	378	303	258	235	229
45	509	558	600	584	501	436	422	458	541	628	646	613	556	467	356	272	230	207	201
50	555	630	657	539	396	308	290	330	441	598	712	690	608	477	330	238	194	171	164
55	572	663	665	425	234	164	146	178	273	499	744	731	632	466	291	192	150	131	125
60	597	790	611	223	105	85.2	83.8	90.5	126	294	721	846	663	434	238	142	105	89.4	86.5
65	629	964	445	92.5	73.5	68.1	67.4	71.3	81.1	121	596	1045	696	379	168	88.8	65.2	62.1	61.4
70	639	948	166	58.7	51.3	49.1	48.6	51.2	58.5	74.6	287	1098	709	296	96.3	51.4	43.4	41.7	40.0
75	350	313	62.1	32.9	33.5	33.4	32.7	34.6	37.0	43.8	104	557	513	178	39.8	30.5	25.6	26.1	23.6
80	53.6	47.8	21.4	15.5	18.1	17.4	17.5	18.4	20.9	19.6	42.7	72.3	99.5	49.2	15.9	11.8	11.0	11.4	11.8
85	8.27	8.48	4.48	4.56	5.59	6.23	1.95	6.33	6.69	6.18	8.81	16.2	12.4	9.06	4.04	2.59	1.96	1.56	1.29
90	3.39	2.62	1.56	1.19	1.23	1.27	1.11	1.12	1.04	1.04	1.75	2.83	3.20	2.75	1.78	1.04	0.76	0.88	0.96

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:KB01  
 Test Date:2015-02-06

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:6.100m [K=1.0000]  
 Remarks: 4DR5 180

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: D-150MLED180-98	TYPE: Street Lighting	WEIGHT: 12kg
SPEC.: 14*7	DIM.: 825*360*150	SERIAL No.: 60150

Table--2

UNIT: x10cd

C( DEG )	285	300	315	330	345																		
γ (DEG)																							
0	427	427	427	427	427																		
5	401	403	407	412	418																		
10	376	381	389	400	414																		
15	357	363	372	389	409																		
20	339	346	360	378	404																		
25	322	335	345	371	405																		
30	292	317	329	365	409																		
35	257	277	310	359	413																		
40	230	246	283	347	418																		
45	201	216	250	322	425																		
50	165	181	215	295	427																		
55	125	138	170	254	411																		
60	85.8	95.3	122	197	372																		
65	60.1	61.2	74.6	128	314																		
70	39.9	40.3	46.2	68.6	227																		
75	24.1	23.1	25.1	30.6	120																		
80	10.2	9.26	8.88	10.6	24.8																		
85	1.20	1.38	1.92	2.92	4.94																		
90	0.82	0.78	1.35	2.15	2.81																		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: KB01  
Test Date: 2015-02-06

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
Humidity: 65.0%  
Test Distance: 6.100m [K=1.0000]  
Remarks: 4DR5 180