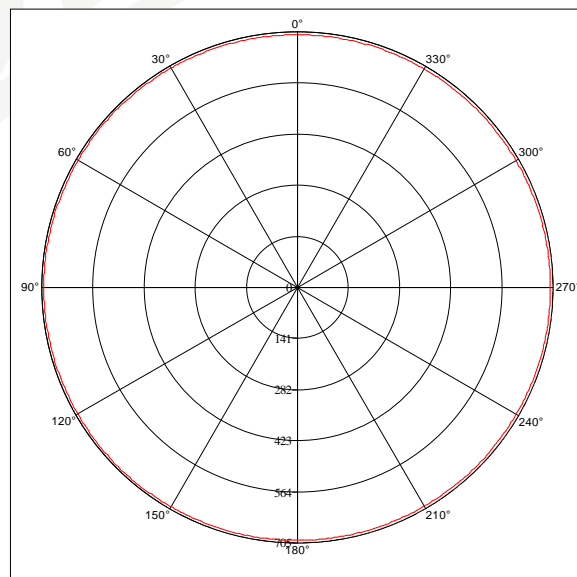
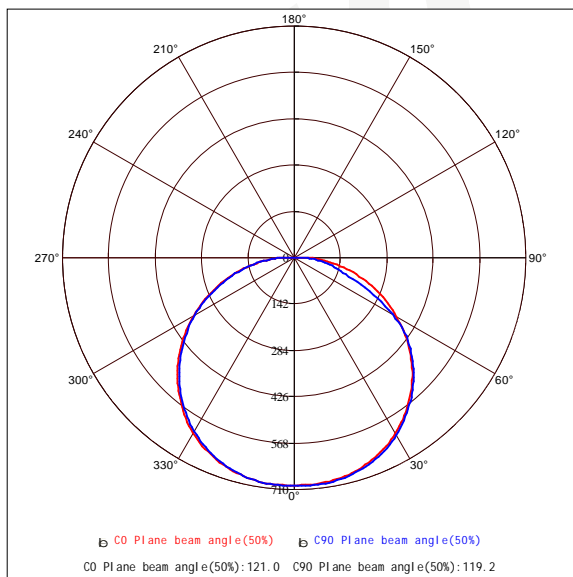


## Goniophotometer Test Report

Measured Para U: 216.8V I: 163.7mA P: 21.37W PF: 0.602 Test LM: 2015.19lm						
Lamp Name: LED DOWN LIGHT		Lamp Type:		Weight(kg):		
Lamp ID: LP-DL20MF01-T		Lamp Spec:		Shape Size:		
Manufactory: LIPER		Sur(m <sup>2</sup> ):		Protect Angle(Deg):		
Light Source Data			Photometric Data			
Model	LP-DL20MF01-T		Peak Value(cd)	699.6	Efficiency(lm/w)	94.3
Nominal P(w)	1.0		Position	90.0, 4.0	UP(C0-C180)	0.0
Rated Volt(v)	1.0		Total Flux(lm)	2015.19	Down(C0-C180)	51.3
Rated Flux(lm)	1.0		Up Flux Rate(%)	0.0	UP(C180-C360)	0.0
Illuminant QTY	1		Dw Flux Rate(%)	100.0	Down(C180-C360)	48.7

Planar Intensity Distribution Curve

Peak Point Conical surface Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

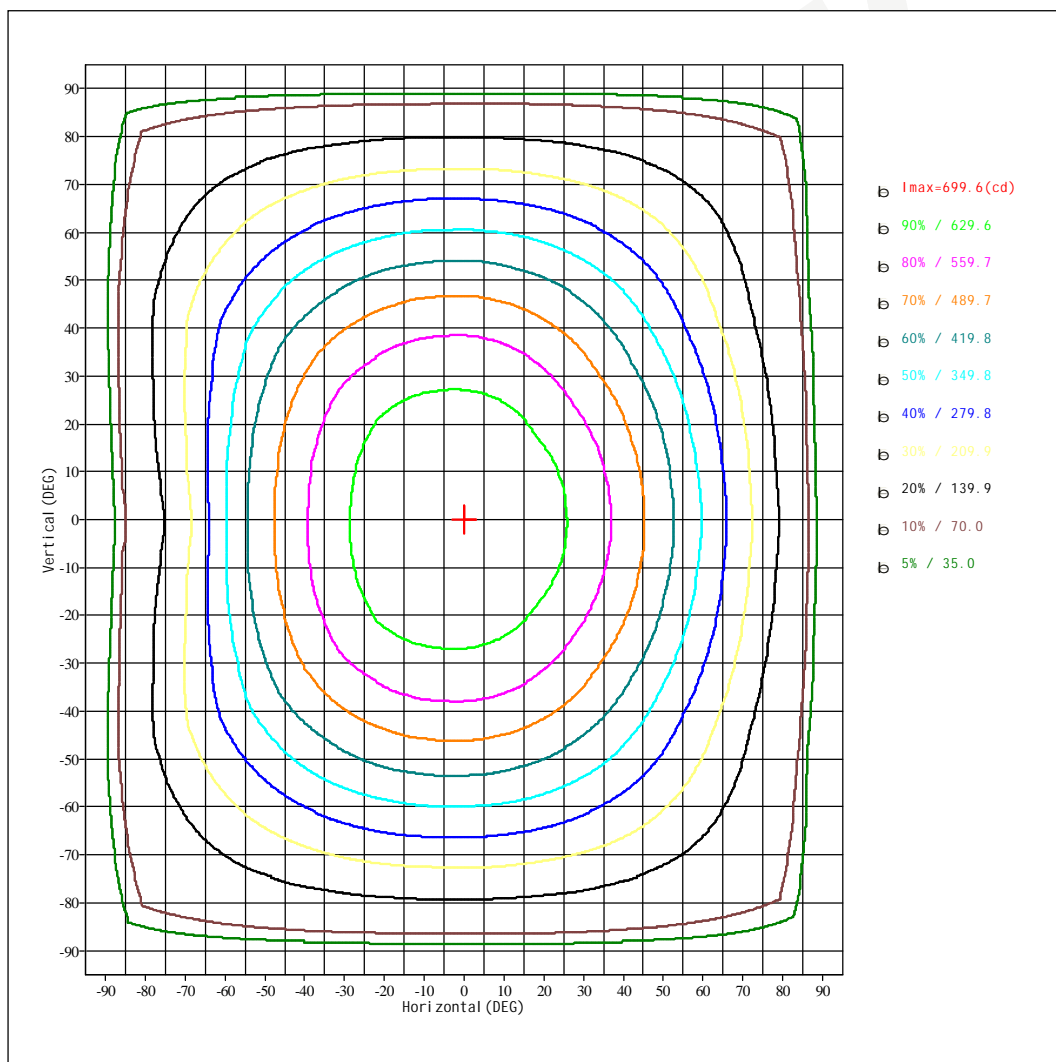
Humi dity(%): 60

Date: 2023-11-10

Remark:

Measured Para U: 216.8V I: 163.7mA P: 21.37W PF: 0.602 Test LM: 2015.191m		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-20A-Y	Lamp Spec:	Shape Si ze:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Planar IsoCandela Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 30

Tester: zxg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

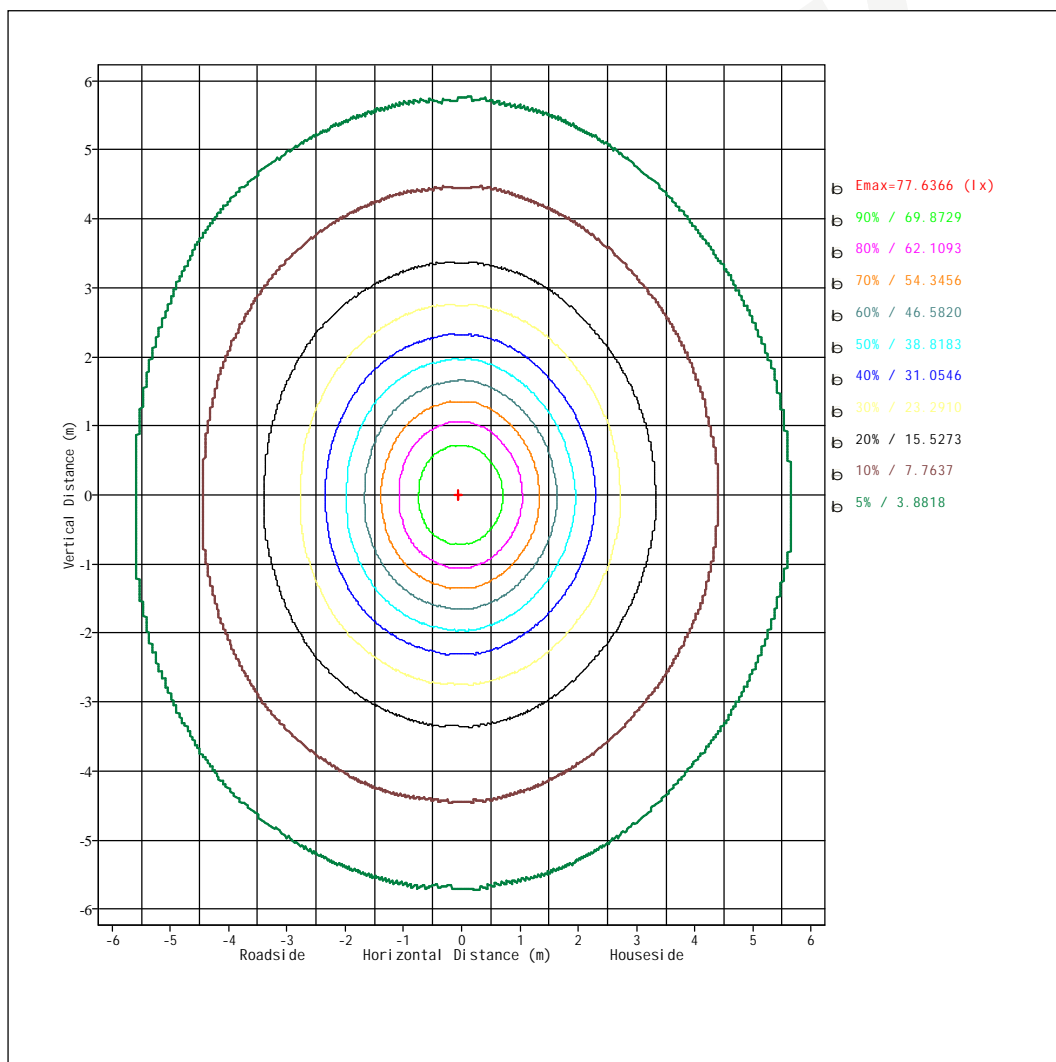
Humi di ty(%): 60

Date: 2023-11-10

Remark:

Measured Para U: 216.8V I: 163.7mA P: 21.37W PF: 0.602 Test LM: 2015.191m		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-20A-Y	Lamp Spec:	Shape Si ze:
Manufactory: LIPER	Sur(m <sup>2</sup> ):	Protect Angle(Deg):

Planar Isolux curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 30

Tester: zxg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

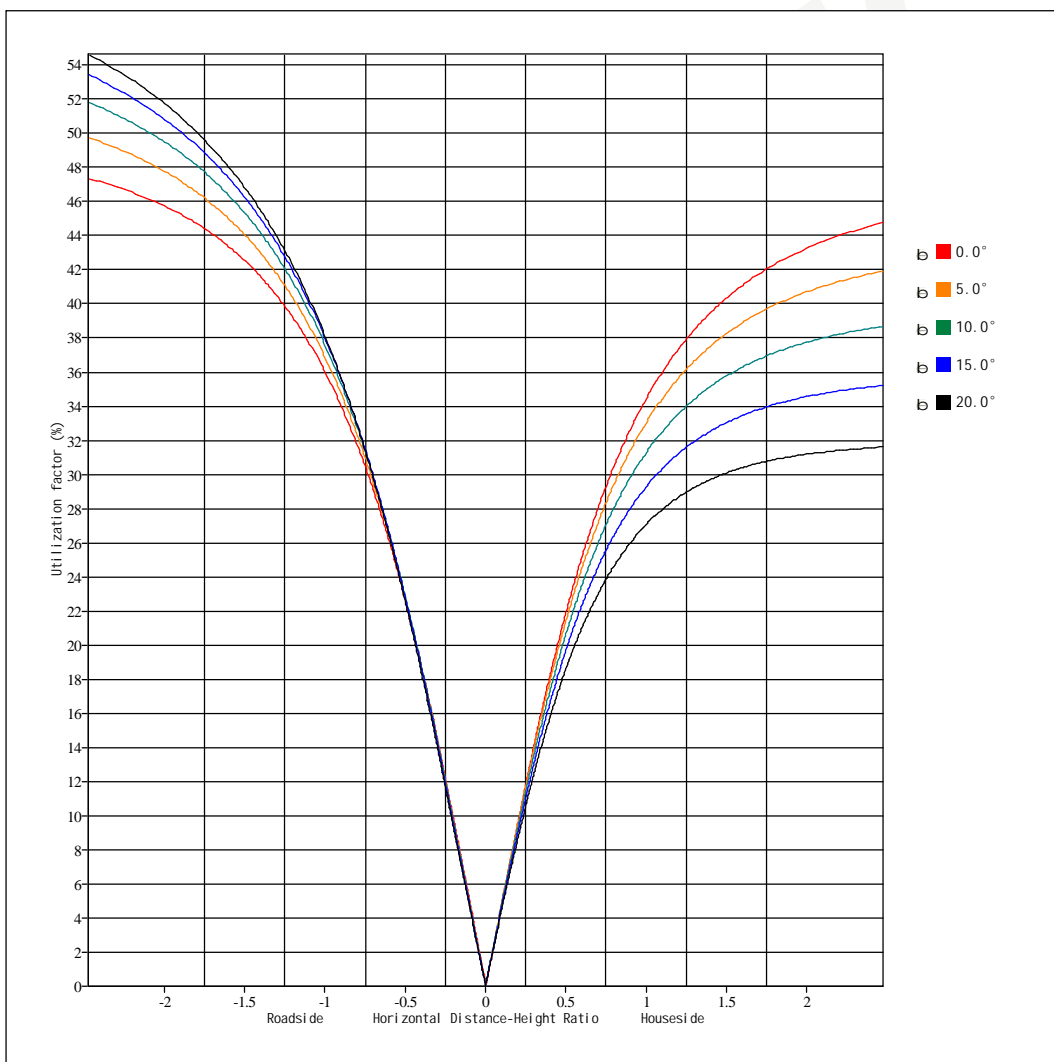
Humi di ty(%): 60

Date: 2023-11-10

Remark:

Measured Para U: 216.8V I: 163.7mA P: 21.37W PF: 0.602 Test LM: 2015.191m		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-20A-Y	Lamp Spec:	Shape Si ze:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Utilization Coefficient



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 30

Tester: zxg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

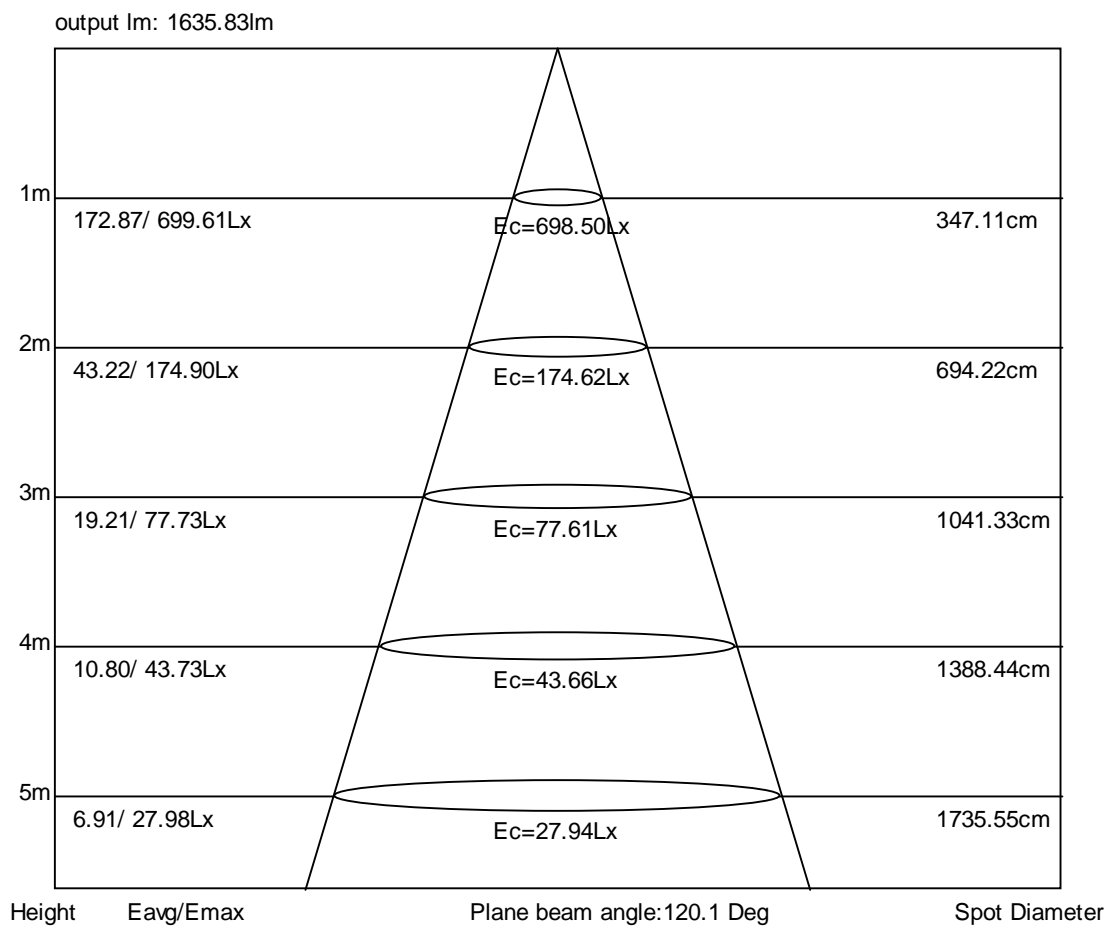
Humi di ty(%): 60

Date: 2023-11-10

Remark:

Measured Para U: 216.8V I: 163.7mA P: 21.37W PF: 0.602 Test LM: 2015.19lm		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-20A-Y	Lamp Spec:	Shape Si ze:
Manufactory: LIPER	Sur(m <sup>2</sup> ):	Protect Angle(Deg):

Average Illumination



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 30

Tester: zxg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humi di ty(%): 60

Date: 2023-11-10

Remark:

Measured Para U: 216.8V I: 163.7mA P: 21.37W PF: 0.602 Test LM: 2015.191m		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight(kg):
Lamp ID: LPDL-20A-Y	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m <sup>2</sup> ):	Protect Angle(Deg):

Ring-shaped Flux Data Table

Gm\C(Deg)	0	45	90	135	180	225	270	315	Range	Ring	T(lm)
5	697	700	699	700	697	697	698	696	0-5	16.7	16.7
10	692	697	696	697	692	690	691	689	5-10	49.8	66.5
15	682	689	686	690	681	677	680	675	10-15	81.6	148
20	666	675	672	676	665	658	662	656	15-20	111	259
25	644	655	651	657	644	633	639	631	20-25	137	397
30	619	631	624	632	617	603	611	602	25-30	160	556
35	586	600	592	602	583	567	577	567	30-35	177	733
40	550	564	556	566	545	526	538	526	35-40	189	922
45	508	523	513	525	502	482	494	482	40-45	194	1116
50	461	478	467	480	455	433	448	434	45-50	194	1310
55	411	429	415	431	404	380	398	382	50-55	188	1498
60	358	377	341	379	350	325	346	328	55-60	175	1673
65	303	322	260	323	294	269	291	271	60-65	156	1829
70	247	266	184	266	240	214	235	216	65-70	133	1962
75	192	209	137	210	186	158	182	161	70-75	108	2070
80	138	155	99.6	155	131	106	129	109	75-80	82	2152
85	88.4	103	64.2	103	81.3	60.3	81.2	64.2	80-85	56.4	2208
90	55.7	55.9	40.8	57.6	44.4	43.2	44.8	46.4	85-90	34	2242
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		

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 7.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2023-11-10

Remark:

Measured Para U: 216.8V I: 163.7mA P: 21.37W PF: 0.602 Test LM: 2015.191m		
Lamp Name: LED DOWN LIGHT	Lamp Type:	Weight (kg):
Lamp ID: LPDL-20A-Y	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

CD Table

Gm\C(Deg)	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340
5.0	697	698	699	699	699	699	699	699	698	697	697	697	697	698	697	697	696	696
10.0	692	694	696	696	696	696	697	697	694	692	691	690	690	691	691	689	689	690
15.0	682	685	688	688	687	687	688	689	685	681	679	677	678	679	679	677	676	679
20.0	666	670	674	674	672	673	675	675	670	665	662	659	659	661	661	658	657	662
25.0	644	649	654	654	652	652	655	656	650	644	640	635	635	638	638	634	633	639
30.0	619	624	629	628	626	626	630	631	624	617	611	604	605	609	609	605	604	611
35.0	586	592	599	598	594	594	599	600	591	583	576	569	570	574	574	570	569	578
40.0	550	556	563	561	557	558	562	563	554	545	537	528	530	535	535	530	529	540
45.0	508	515	522	520	515	516	521	522	512	502	493	484	486	492	492	486	485	497
50.0	461	468	476	475	470	470	476	477	466	455	445	435	438	444	445	438	437	449
55.0	411	419	427	425	418	419	426	428	416	404	394	383	386	394	394	387	386	399
60.0	358	366	375	365	349	349	366	376	363	350	339	328	332	342	342	334	331	345
65.0	303	311	320	302	274	274	303	320	307	294	283	271	276	286	287	278	275	289
70.0	247	255	264	239	202	202	239	263	252	240	229	216	221	231	231	222	219	233
75.0	192	200	207	185	153	153	186	207	196	186	174	161	166	176	177	168	164	179
80.0	138	146	153	137	112	112	137	153	142	131	120	109	114	124	125	116	113	126
85.0	88.4	94.6	101	89.9	72.6	72.6	90.1	100	90.7	81.3	72.1	62.6	67.2	76.7	77.5	69.8	66.8	77.8
90.0	55.7	55.8	55.9	51	44.1	44.5	52.1	56.1	50.2	44.4	43.9	43.3	43.7	44.5	45.2	45.9	47.4	51.6
95.0																		
100.0																		
105.0																		
110.0																		
115.0																		
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140.0																		
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160.0																		
165.0																		
170.0																		
175.0																		
180.0																		

Gama Angle Range: -90 - 90(Deg)

C Angle Range: 0 - 180(Deg)

Gama interval (Deg): 1

C interval (Deg): 45

Temperature(Deg): 30

Humidity(%): 60

Tester: zxcg

Date: 2023-11-10

Distance(m): 7.000

Remark:

Test System: ZWL Goniophotometer System V3.0