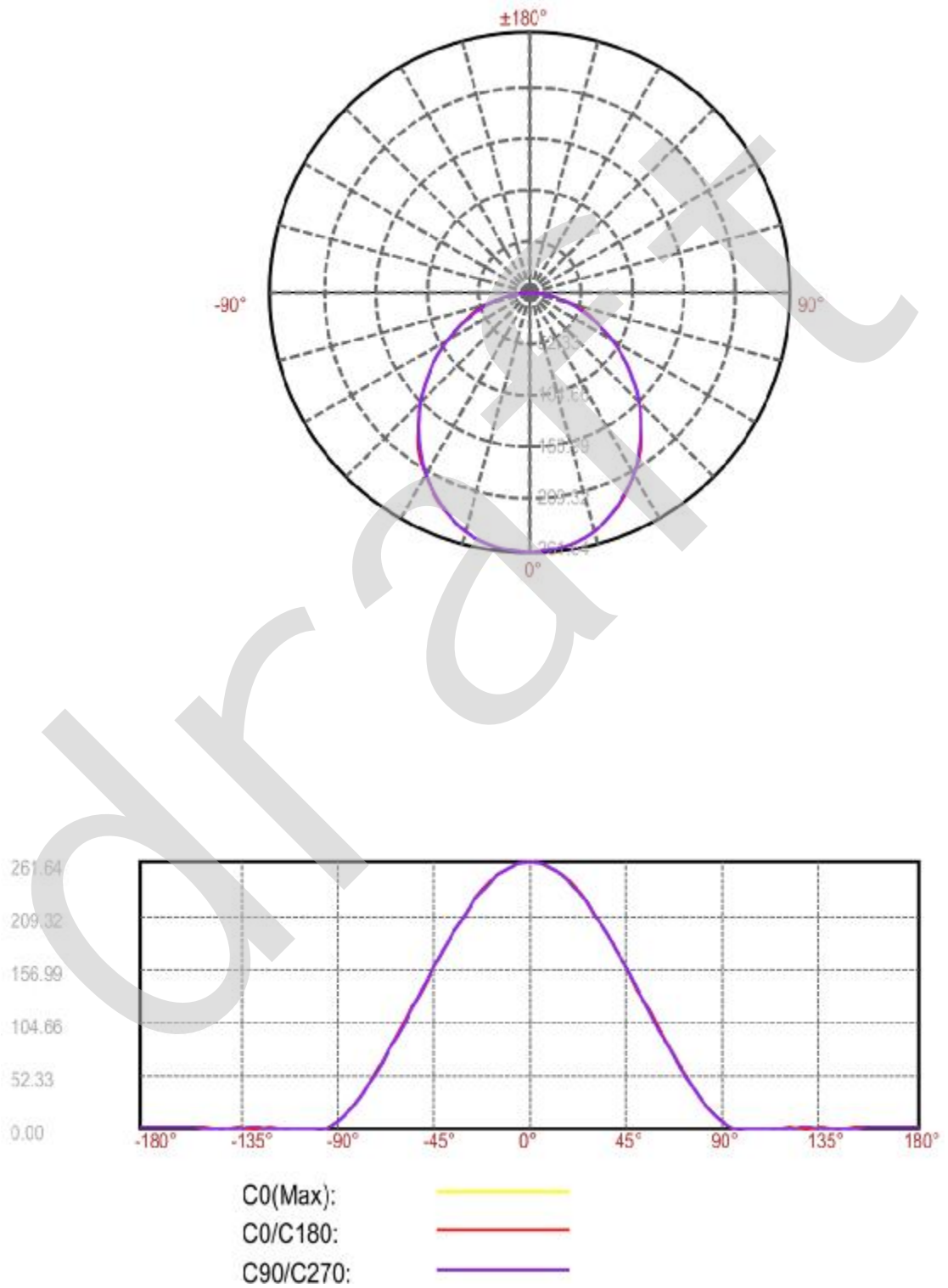


Test Report Number:	LCZP14110317	Total Page(s):	10
Applicant Name:	L-TECH CORPORATION		
Applicant Address:	SHAOGANGTOU DISTRICT, QIAOTOU TOWN, DONGGUAN CITY. GUANGDONG PROVINCE, CHINA		
Test item:	LED Downlight		
Model / Type Reference:	LRKT411-4090		
Date of Issue:	2014-12-01		
Testing Laboratory:	LCTECH (Zhongshan) Testing Service Co., Ltd. 2/F., Technology and Enterprise Development Center, Guangyuan Road, Xiaolan, Zhongshan, Guangdong, China		
Test Specification:	Photometric test (According to IES LM-79-08)		
Test Result:	See following pages		
Compiled by:	Reviewed by:		
2014-11-28	Fish Tan	2014-12-01	Richard Li
_____	_____	_____	_____
Date	Name	Signature	Date
		Signature	Name
Remark:			
N/A			
<p>The duplication of this report or parts of it and its use for advertising purposes is only allowed with permission of the testing laboratory. This report contains the result of the examination of the product sample submitted by the applicant. A general statement concerning the quality of the products from the series manufacture cannot be derived therefore.</p>			

Sample Description									
Luminaire Type	LED Downlight			Model/Type	LRKT411-4090				
Input Type	<input checked="" type="checkbox"/> AC		<input type="checkbox"/> DC		Rated Voltage	120V 50/60Hz			
Rated Wattage	9 W			Lamp Rated Lumens	Not provided				
Lamp Type	LED			Lamp Model	Not provided				
Power Supply Type	LED Driver			Power Supply Model	Not provided				
Luminous Length	N.A			Luminous Width	N.A				
Luminous Diameter	70 mm			Luminous Height	0 mm				
Test Condition									
Temperature	25.0°C			Humidity	60%				
Test Equipment	LC-I-902 GMS-2000			Test Mode	C-Gamma				
Test Date	2014-11-28			Test Method	Absolutely photometric				
Azimuth (C)	30			Elevation (Gamma)	5				
Test distance	18.35 m			Uncertainty	Considered				
Characteristics									
Input Voltage	119.97 V			Input Current	0.072 A				
Wattage	8.53 W			Power Factor	0.994				
Total lumens	688.49 lm			Luminous Efficacy	80.71 lm/W				
Central Intensity	261.645 cd			Max intensity	261.645 cd				
Beam Angle(50%Imax)	102.6°			Angle of max intensity	C=0,Gamma=0				
Maximum S/H	C0=1.20,C90=1.20			CIE Type	Direct lighting				
Luminance Data (cd/m ²)									
Gamma	45	50	55	60	65	70	75	80	85
C0	57210	54725	52645	50316	47712	45282	42559	40435	43775
C45	0	0	0	0	0	0	0	0	0
C90	57063	54878	52570	50069	47675	45008	42710	40684	44469

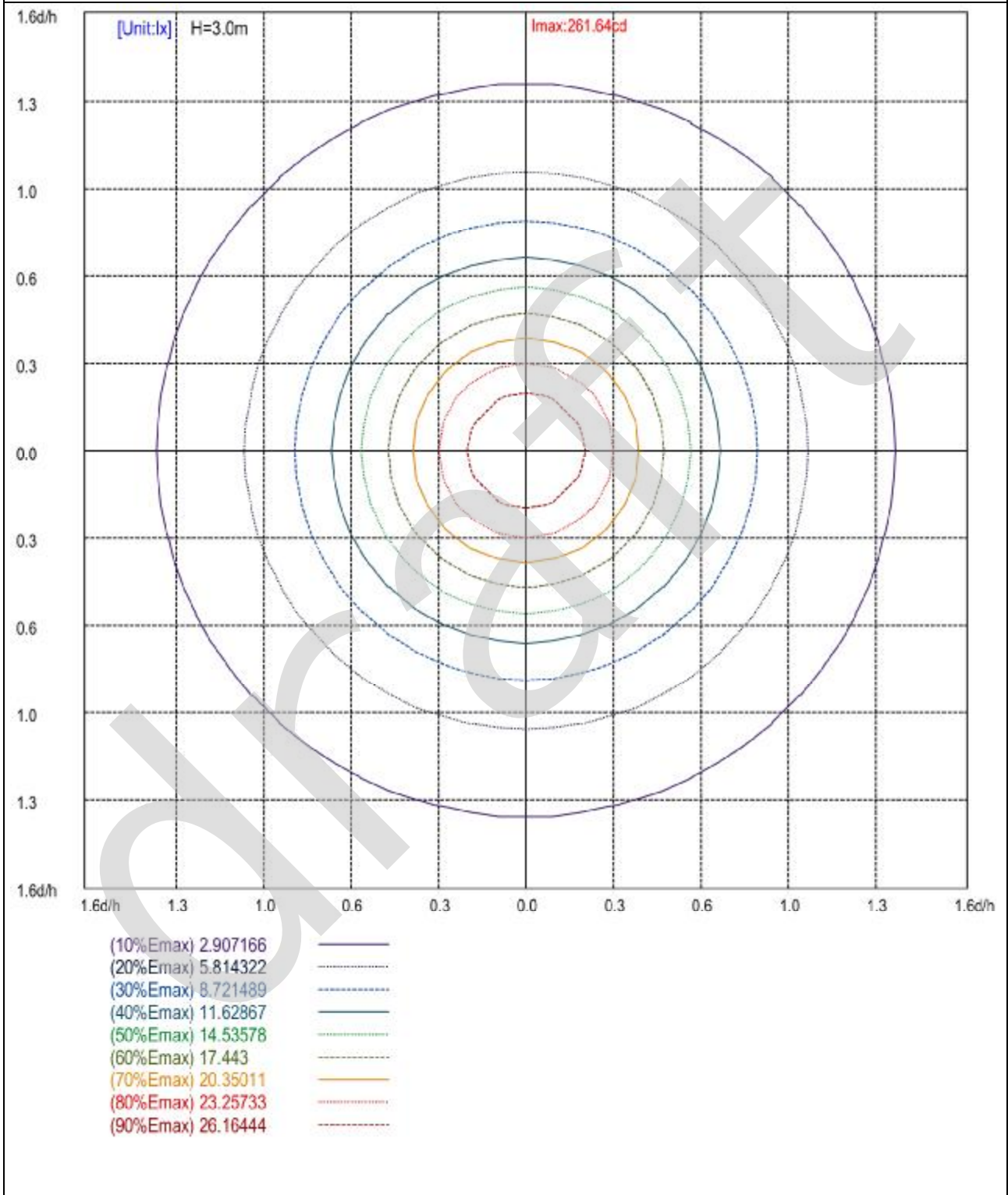
Light Distribution Curve(cd)



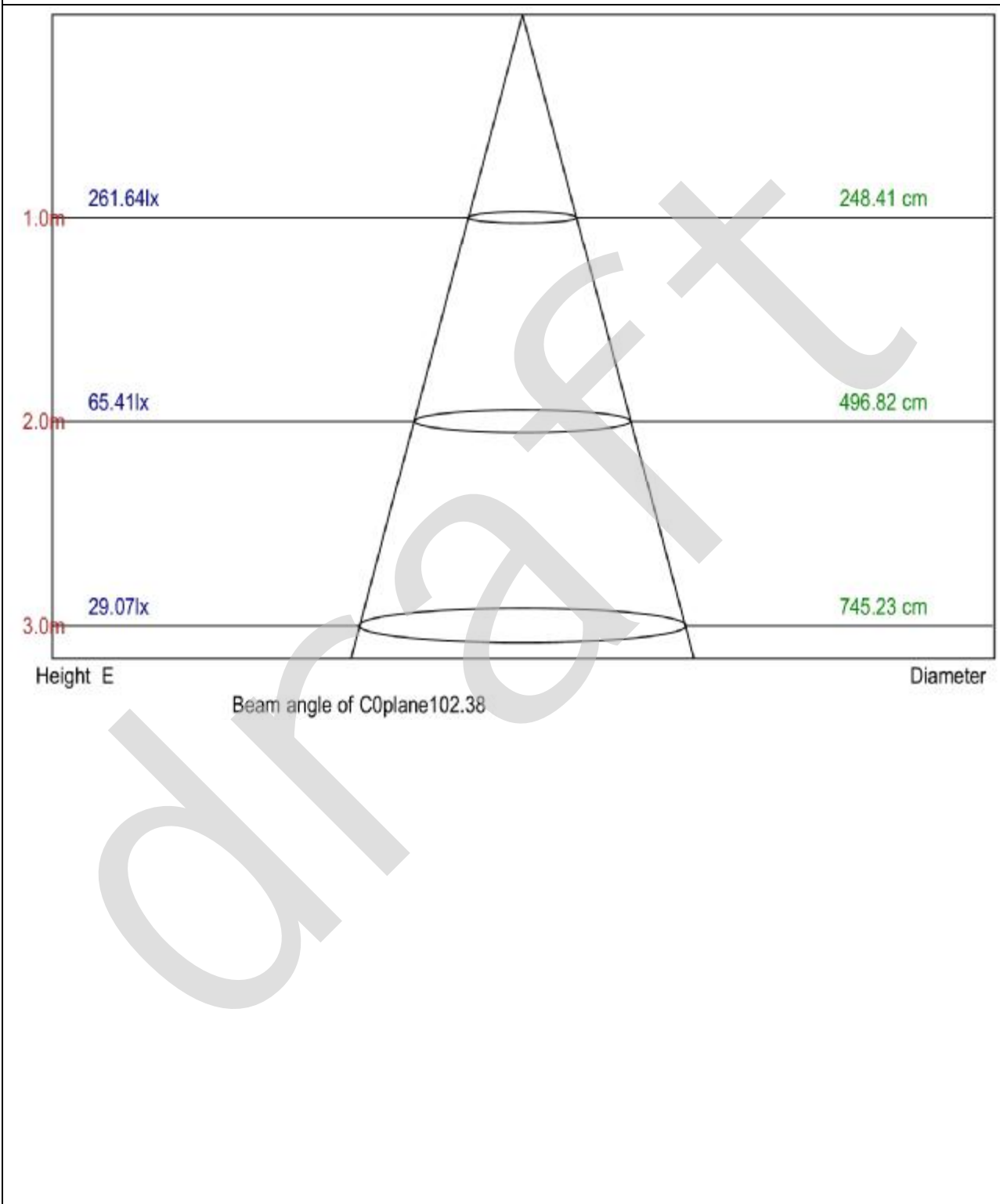
Zonal flux distribution table

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(lm)	Eff Sum(lm)
0.0	261.645	.000	.000	.000%	.000%
5.0	260.141	6.238	6.238	.906%	.906%
10.0	255.598	18.450	24.687	2.680%	3.586%
15.0	248.294	29.891	54.578	4.311%	7.927%
20.0	238.133	40.088	94.666	5.823%	13.750%
25.0	225.514	48.628	143.294	7.063%	20.813%
30.0	210.314	55.154	198.449	8.011%	28.824%
35.0	193.411	59.451	257.900	8.635%	37.459%
40.0	174.888	61.448	319.348	8.925%	46.384%
45.0	155.656	61.203	380.551	8.889%	55.273%
50.0	135.829	58.899	439.450	8.555%	63.828%
55.0	116.313	54.824	494.273	7.963%	71.791%
60.0	96.768	49.253	543.527	7.154%	78.945%
65.0	77.702	42.414	585.940	6.160%	85.105%
70.0	59.556	34.755	620.695	5.048%	90.153%
75.0	42.441	26.661	647.356	3.872%	94.026%
80.0	27.154	18.622	665.978	2.705%	96.730%
85.0	14.864	11.417	677.395	1.658%	98.389%
90.0	4.246	5.232	682.627	.760%	99.148%
95.0	.721	1.360	683.987	.198%	99.346%
100.0	.707	.388	684.375	.056%	99.402%
105.0	.741	.387	684.763	.056%	99.459%
110.0	.746	.389	685.152	.056%	99.515%
115.0	.749	.379	685.530	.055%	99.570%
120.0	.713	.355	685.886	.052%	99.622%
125.0	.766	.342	686.227	.050%	99.671%
130.0	.802	.341	686.568	.050%	99.721%
135.0	.749	.314	686.882	.046%	99.766%
140.0	.749	.277	687.159	.040%	99.807%
145.0	.786	.256	687.415	.037%	99.844%
150.0	.836	.239	687.654	.035%	99.879%
155.0	.904	.220	687.874	.032%	99.911%
160.0	1.024	.202	688.077	.029%	99.940%
165.0	1.134	.178	688.255	.026%	99.966%
170.0	1.117	.133	688.388	.019%	99.985%
175.0	1.103	.079	688.467	.012%	99.997%
180.0	1.184	.027	688.495	.004%	100.001%

ISO illuminance diagram(lux)



Lux distance Curve



Utilization factor table

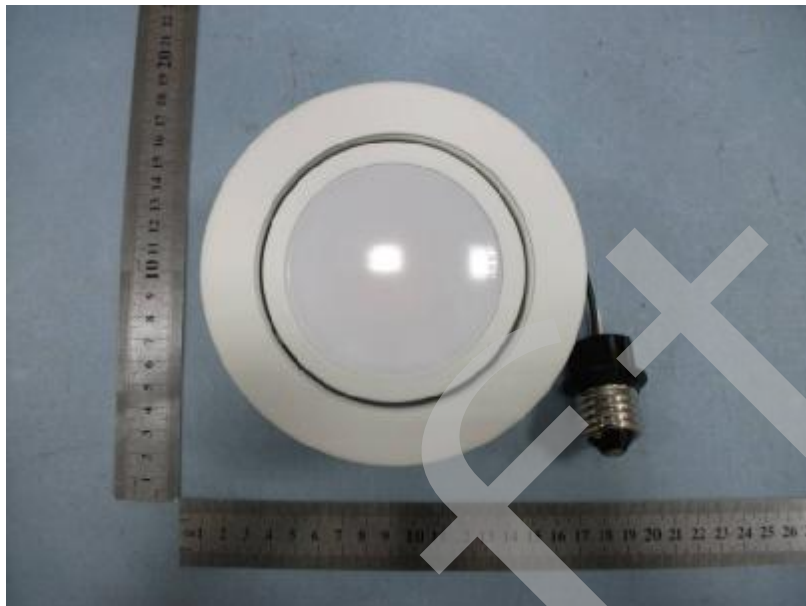
RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.19	1.19	1.19	1.16	1.18	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	0.99
1	1.04	0.99	0.96	1.01	0.97	0.94	0.97	0.94	0.91	0.93	0.90	0.68	0.89	0.87	0.85	0.83
2	0.91	0.84	0.78	0.89	0.82	0.77	0.85	0.80	0.75	0.82	0.77	0.73	0.78	0.75	0.72	0.69
3	0.80	0.72	0.65	0.78	0.71	0.65	0.75	0.69	0.63	0.72	0.67	0.62	0.70	0.65	0.61	0.59
4	0.71	0.62	0.56	0.70	0.61	0.55	0.67	0.60	0.54	0.64	0.58	0.53	0.62	0.57	0.53	0.50
5	0.64	0.55	0.48	0.62	0.54	0.48	0.60	0.53	0.47	0.58	0.52	0.47	0.56	0.50	0.46	0.44
6	0.57	0.48	0.42	0.56	0.48	0.42	0.54	0.47	0.41	0.53	0.46	0.41	0.51	0.45	0.41	0.38
7	0.52	0.43	0.37	0.51	0.43	0.37	0.50	0.42	0.37	0.48	0.41	0.36	0.47	0.41	0.36	0.34
8	0.48	0.39	0.33	0.47	0.39	0.33	0.45	0.38	0.33	0.44	0.38	0.33	0.43	0.37	0.32	0.31
9	0.44	0.36	0.30	0.43	0.35	0.30	0.42	0.35	0.30	0.41	0.34	0.30	0.40	0.34	0.29	0.28
10	0.40	0.33	0.27	0.40	0.32	0.27	0.39	0.32	0.27	0.38	0.31	0.27	0.37	0.31	0.27	0.25

Intensity data(cd)								
$\gamma/C(^{\circ})$	0.0	30.0	60.0	90.0	120.0	150.0	180.0	210.0
0	261.6446	261.6446	261.6446	261.6446	261.6446	261.6446	261.6446	261.6446
5	260.0708	260.3211	260.1353	259.8601	260.1353	260.3211	260.0708	260.3211
10	255.4835	255.7108	255.6839	255.3148	255.6839	255.7108	255.4835	255.7108
15	248.117	248.3769	248.3995	248.0927	248.3995	248.3769	248.117	248.3769
20	238.1053	238.3798	238.1477	237.6384	238.1477	238.3798	238.1053	238.3798
25	225.5153	225.6513	225.5435	225.1807	225.5435	225.6513	225.5153	225.6513
30	210.1628	210.5631	210.3931	209.8106	210.3931	210.5631	210.1628	210.5631
35	193.4543	193.5272	193.405	193.1443	193.405	193.5272	193.4543	193.5272
40	174.8706	175.0428	174.7978	174.7776	174.7978	175.0428	174.8706	175.0428
45	155.6842	155.7052	155.7777	155.2831	155.7777	155.7052	155.6842	155.7052
50	135.3761	136.0152	135.9061	135.7549	135.9061	136.0152	135.3761	136.0152
55	116.2065	116.3913	116.4222	116.0414	116.4222	116.3913	116.2065	116.3913
60	96.81922	96.87715	96.84569	96.34488	96.84569	96.87715	96.81922	96.87715
65	77.59936	77.91155	77.62319	77.54053	77.62319	77.91155	77.59936	77.91155
70	59.60167	59.61992	59.63186	59.24125	59.63186	59.61992	59.60167	59.61992
75	42.39085	42.37369	42.48328	42.54124	42.48328	42.37369	42.39085	42.37369
80	27.02165	27.14238	27.21491	27.18801	27.21491	27.14238	27.02165	27.14238
85	14.68277	14.81846	14.97325	14.91553	14.97325	14.81846	14.68277	14.81846
90	4.18551	4.366431	4.223849	4.107662	4.223849	4.366431	4.18551	4.366431
95	0.6864237	0.7335368	0.7081862	0.7575606	0.7081862	0.7335368	0.6864237	0.7335368
100	0.7533918	0.716348	0.682869	0.6902218	0.682869	0.716348	0.7533918	0.716348
105	0.7366497	0.7333717	0.7672074	0.7070565	0.7672074	0.7333717	0.7366497	0.7333717
110	0.6864237	0.7417391	0.7671977	0.7743952	0.7671977	0.7417391	0.6864237	0.7417391
115	0.803618	0.7670065	0.7166123	0.7238913	0.7166123	0.7670065	0.803618	0.7670065
120	0.8203599	0.6996544	0.7250676	0.6060485	0.7250676	0.6996544	0.8203599	0.6996544
125	0.6864237	0.7503129	0.7840888	0.8417339	0.7840888	0.7503129	0.6864237	0.7503129
130	0.7868759	0.8090086	0.7924953	0.8248993	0.7924953	0.8090086	0.7868759	0.8090086
135	0.837102	0.7079806	0.767227	0.7070565	0.767227	0.7079806	0.837102	0.7079806
140	0.7199077	0.7165131	0.7756529	0.79123	0.7756529	0.7165131	0.7199077	0.7165131
145	0.7868759	0.7838651	0.7756237	0.8080646	0.7756237	0.7838651	0.7868759	0.7838651
150	0.8203599	0.8850583	0.8599815	0.7070565	0.8599815	0.8850583	0.8203599	0.8850583
155	0.9375542	0.9356754	0.8515458	0.9090727	0.8515458	0.9356754	0.9375542	0.9356754
160	0.9710383	1.036745	1.028541	1.04375	1.028541	1.036745	0.9710383	1.036745
165	1.138459	1.120997	1.146632	1.127924	1.146632	1.120997	1.138459	1.120997
170	1.121717	1.12957	1.112899	1.094254	1.112899	1.12957	1.121717	1.12957
175	1.138459	1.112671	1.079136	1.094254	1.079136	1.112671	1.138459	1.112671
180	1.104975	1.163205	1.214011	1.245766	1.214011	1.163205	1.104975	1.163205

Intensity data(cd)

$\gamma/C(^{\circ})$	240.0	270.0	300.0	330.0	360.0
0	261.6446	261.6446	261.6446	261.6446	261.6446
5	260.1353	259.8601	260.1353	260.3211	260.0708
10	255.6839	255.3148	255.6839	255.7108	255.4835
15	248.3995	248.0927	248.3995	248.3769	248.117
20	238.1477	237.6384	238.1477	238.3798	238.1053
25	225.5435	225.1807	225.5435	225.6513	225.5153
30	210.3931	209.8106	210.3931	210.5631	210.1628
35	193.405	193.1443	193.405	193.5272	193.4543
40	174.7978	174.7776	174.7978	175.0428	174.8706
45	155.7777	155.2831	155.7777	155.7052	155.6842
50	135.9061	135.7549	135.9061	136.0152	135.3761
55	116.4222	116.0414	116.4222	116.3913	116.2065
60	96.84569	96.34488	96.84569	96.87715	96.81922
65	77.62319	77.54053	77.62319	77.91155	77.59936
70	59.63186	59.24125	59.63186	59.61992	59.60167
75	42.48328	42.54124	42.48328	42.37369	42.39085
80	27.21491	27.18801	27.21491	27.14238	27.02165
85	14.97325	14.91553	14.97325	14.81846	14.68277
90	4.223849	4.107662	4.223849	4.366431	4.18551
95	0.7081862	0.7575606	0.7081862	0.7335368	0.6864237
100	0.682869	0.6902218	0.682869	0.716348	0.7533918
105	0.7672074	0.7070565	0.7672074	0.7333717	0.7366497
110	0.7671977	0.7743952	0.7671977	0.7417391	0.6864237
115	0.7166123	0.7238913	0.7166123	0.7670065	0.803618
120	0.7250676	0.6060485	0.7250676	0.6996544	0.8203599
125	0.7840888	0.8417339	0.7840888	0.7503129	0.6864237
130	0.7924953	0.8248993	0.7924953	0.8090086	0.7868759
135	0.767227	0.7070565	0.767227	0.7079806	0.837102
140	0.7756529	0.79123	0.7756529	0.7165131	0.7199077
145	0.7756237	0.8080646	0.7756237	0.7838651	0.7868759
150	0.8599815	0.7070565	0.8599815	0.8850583	0.8203599
155	0.8515458	0.9090727	0.8515458	0.9356754	0.9375542
160	1.028541	1.04375	1.028541	1.036745	0.9710383
165	1.146632	1.127924	1.146632	1.120997	1.138459
170	1.112899	1.094254	1.112899	1.12957	1.121717
175	1.079136	1.094254	1.079136	1.112671	1.138459
180	1.214011	1.245766	1.214011	1.163205	1.104975

Photo of Test Sample



Picture 1



Picture 2

----End of test report----