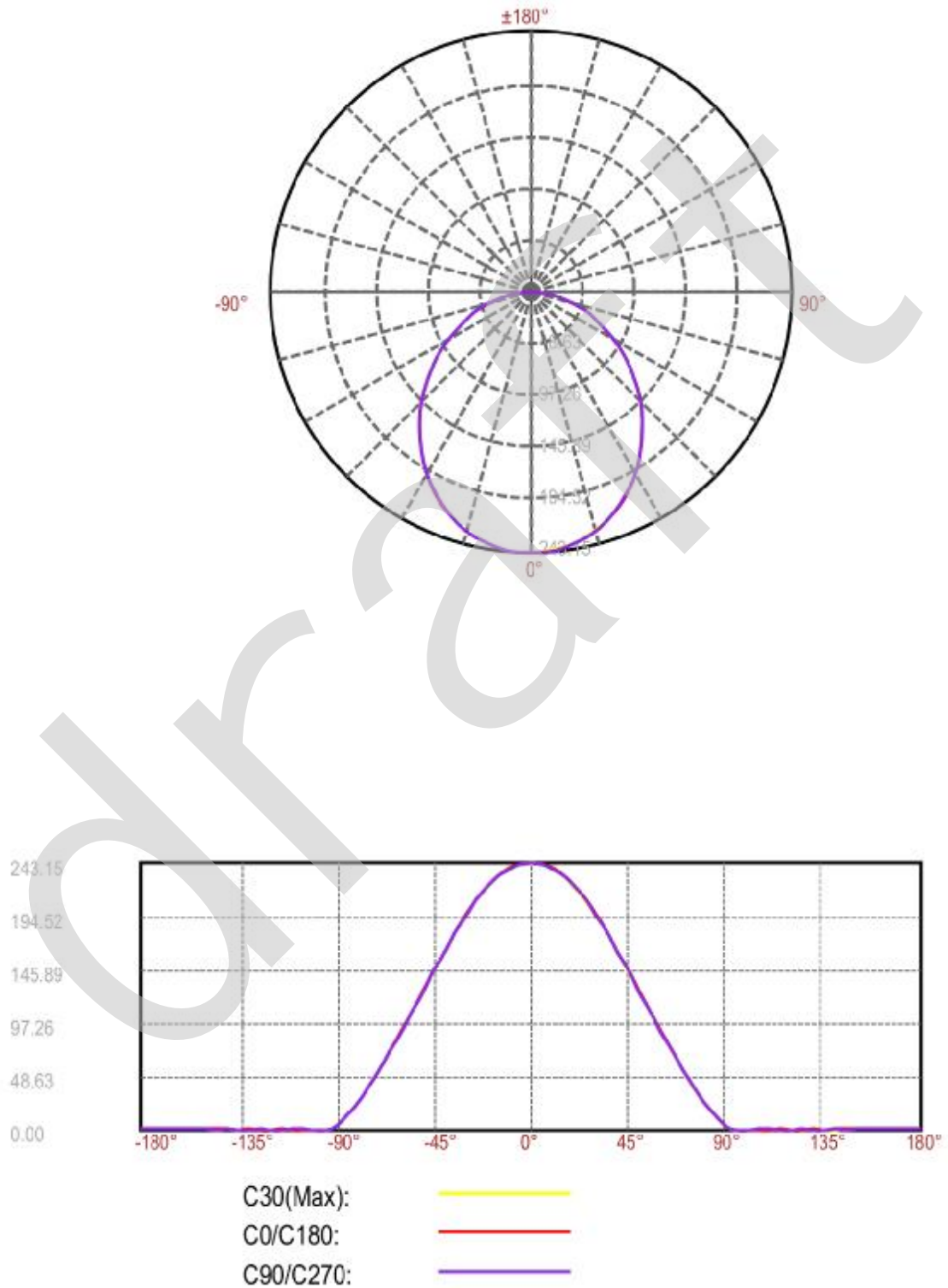


Test Report Number:	LCZP14110318	Total Page(s):	10
Applicant Name:	L-TECH CORPORATION		
Applicant Address:	SHAOGANGTOU DISTRICT, QIAOTOU TOWN, DONGGUAN CITY. GUANGDONG PROVINCE, CHINA		
Test item:	LED Downlight		
Model / Type Reference:	LRKT411-5090		
Date of Issue:	2014-12-01		
Testing Laboratory:	LCTECH (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
			Name
			Signature
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	LRKT411-5090				
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	120.04 V			Input Current	0.071 A				
Wattage	8.43 W			Power Factor	0.993				
Total lumens	639.12 lm			Luminous Efficacy	75.81 lm/W				
Central Intensity	243.147 cd			Max intensity	243.147 cd				
Beam Angle(50%Imax)	102.4°			Angle of max intensity	C=0,Gamma=0				
Maximum S/H	C0=1.20,C90=1.20			CIE Type	Direct lighting				
Luminance Data (cd/m²)									
Gamma	45	50	55	60	65	70	75	80	85
C0	53110	51011	48858	46736	44514	41953	39733	38708	42426
C45	0	0	0	0	0	0	0	0	0
C90	53010	50862	48763	46534	44425	42105	39670	37922	42350

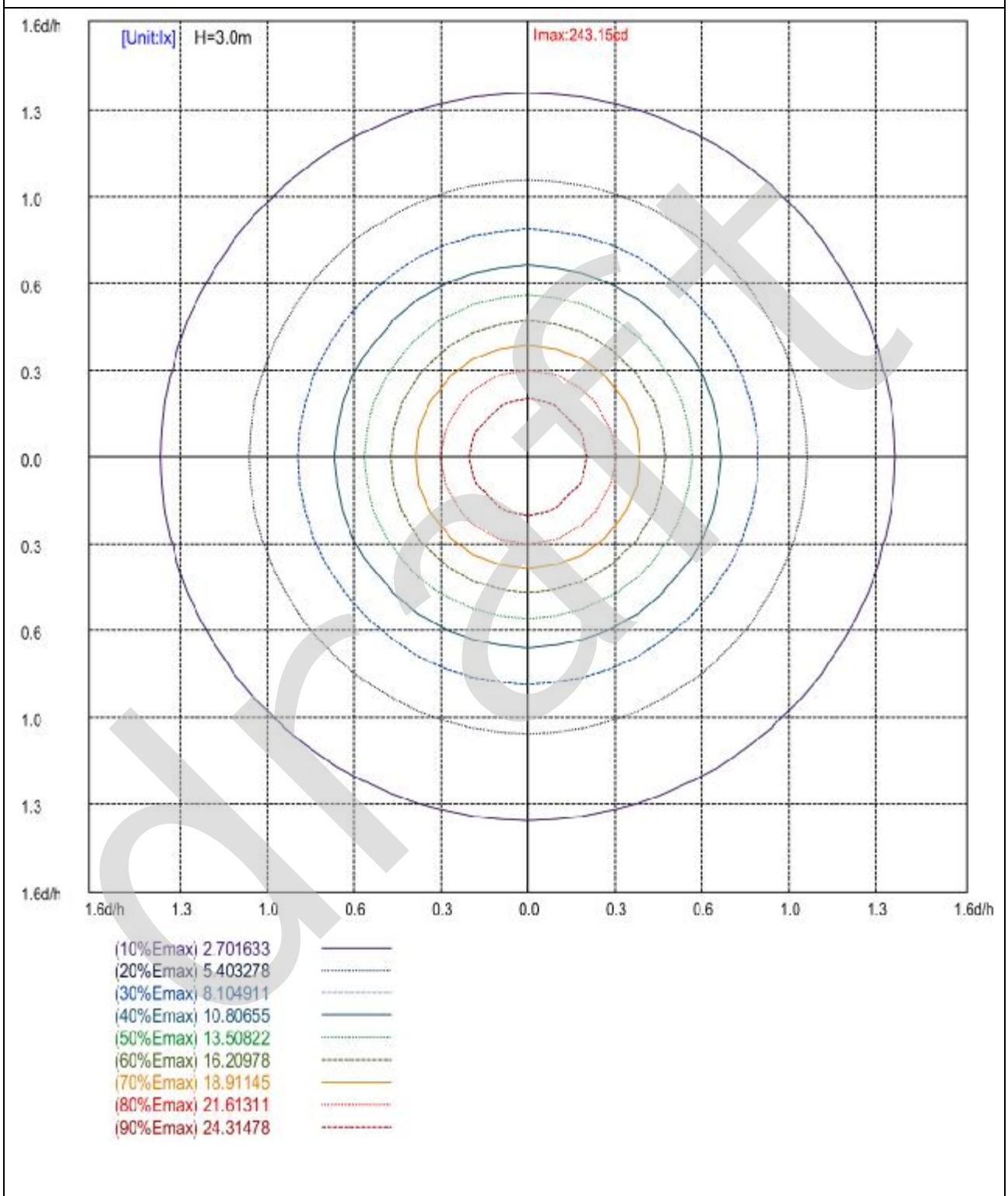
Light Distribution Curve(cd)



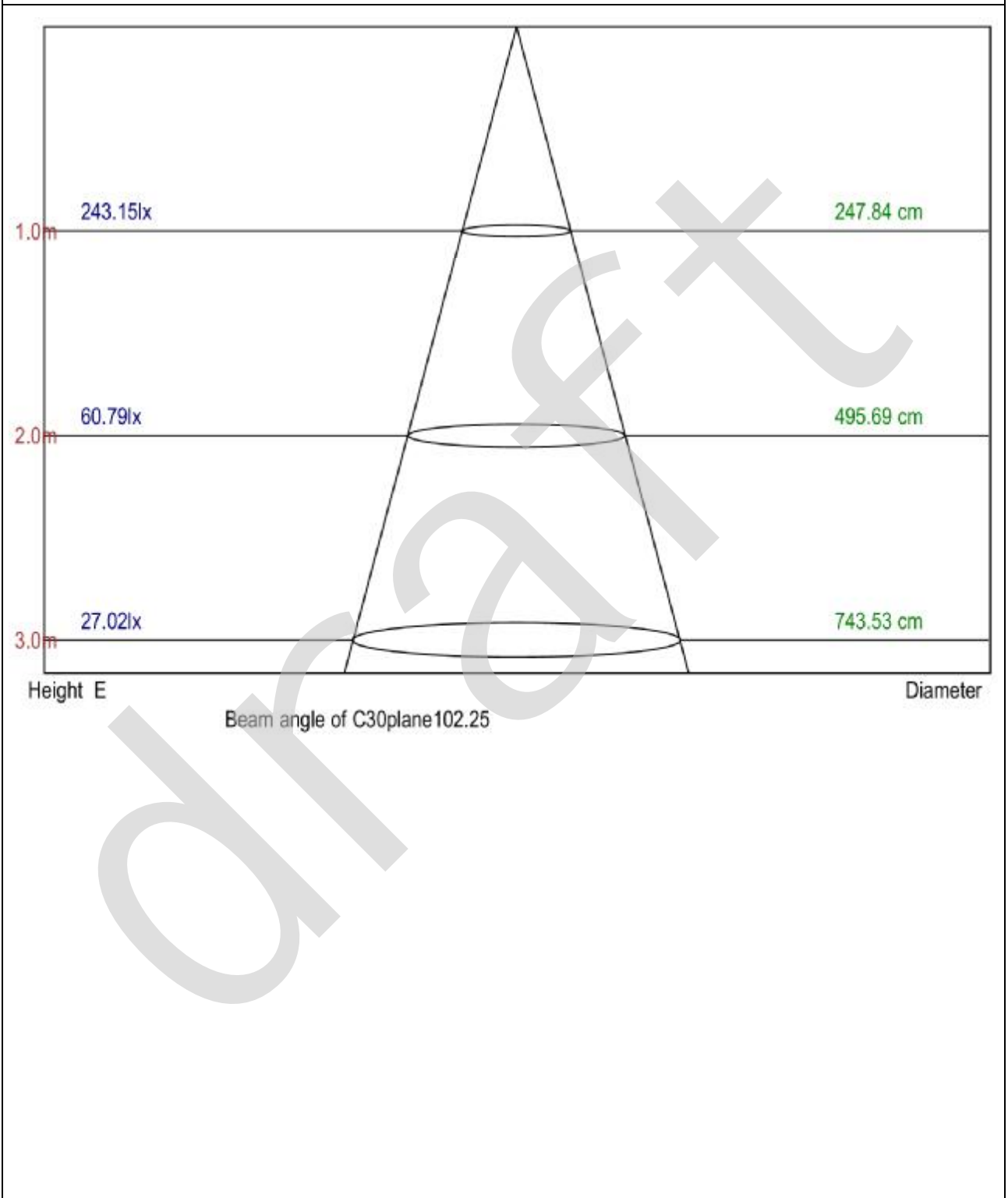
Zonal flux distribution table

$\psi(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(lm)	Eff Sum(lm)
0.0	243.147	.000	.000	.000%	.000%
5.0	241.674	5.796	5.796	.907%	.907%
10.0	237.656	17.147	22.943	2.683%	3.590%
15.0	230.621	27.778	50.721	4.346%	7.936%
20.0	221.227	37.239	87.960	5.827%	13.763%
25.0	209.183	45.142	133.102	7.063%	20.826%
30.0	195.282	51.185	184.287	8.009%	28.835%
35.0	179.215	55.147	239.435	8.629%	37.463%
40.0	162.059	56.939	296.374	8.909%	46.372%
45.0	144.131	56.694	353.067	8.871%	55.243%
50.0	125.819	54.547	407.615	8.535%	63.777%
55.0	107.530	50.738	458.352	7.939%	71.716%
60.0	89.512	45.546	503.898	7.126%	78.842%
65.0	72.238	39.322	543.220	6.152%	84.995%
70.0	55.329	32.301	575.521	5.054%	90.049%
75.0	39.551	24.800	600.321	3.880%	93.929%
80.0	25.636	17.442	617.763	2.729%	96.658%
85.0	14.280	10.846	628.609	1.697%	98.355%
90.0	3.597	4.895	633.504	.766%	99.121%
95.0	.713	1.180	634.684	.185%	99.306%
100.0	.721	.390	635.074	.061%	99.367%
105.0	.724	.387	635.460	.061%	99.427%
110.0	.735	.381	635.842	.060%	99.487%
115.0	.735	.372	636.214	.058%	99.545%
120.0	.732	.357	636.571	.056%	99.601%
125.0	.749	.342	636.913	.054%	99.655%
130.0	.744	.325	637.238	.051%	99.706%
135.0	.752	.302	637.540	.047%	99.753%
140.0	.752	.278	637.819	.044%	99.796%
145.0	.766	.253	638.072	.040%	99.836%
150.0	.856	.239	638.311	.037%	99.873%
155.0	.870	.218	638.529	.034%	99.908%
160.0	.965	.192	638.722	.030%	99.938%
165.0	1.030	.164	638.886	.026%	99.963%
170.0	1.134	.128	639.015	.020%	99.983%
175.0	1.061	.078	639.093	.012%	99.996%
180.0	1.134	.026	639.119	.004%	100.000%

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	1.16	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	0.98	0.96	1.01	0.97	0.94	0.97	0.94	0.91	0.93	0.90	0.88	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	0.69	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	0.63	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	0.36	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	0.38	0.32	0.27	0.38	0.31	0.27	0.37	0.31	0.27	0.25

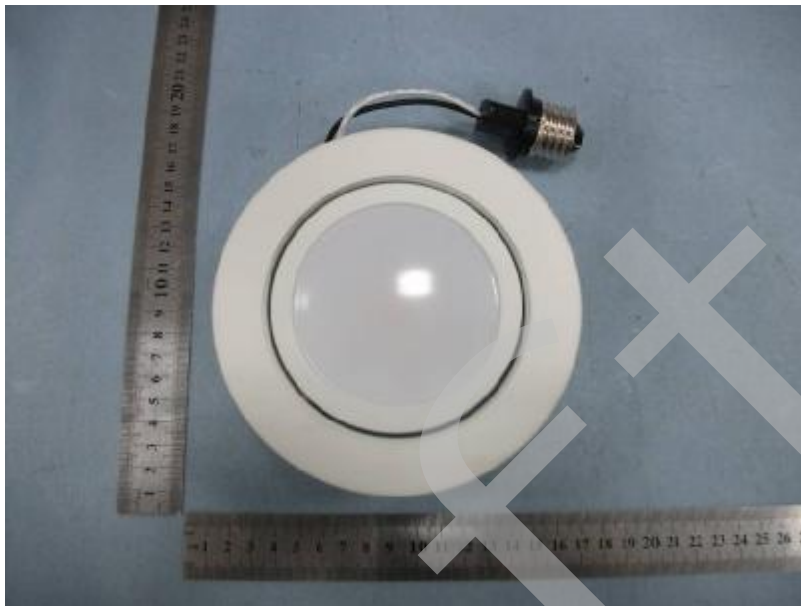
Draft

Intensity data(cd)								
$\gamma/C(^{\circ})$	0.0	30.0	60.0	90.0	120.0	150.0	180.0	210.0
0	243.1473	243.1473	243.1473	243.1473	243.1473	243.1473	243.1473	243.1473
5	242.1537	241.4147	241.6064	241.8499	241.6064	241.4147	242.1537	241.4147
10	238.1456	237.3777	237.5979	237.8395	237.5979	237.3777	238.1456	237.3777
15	231.0893	230.3634	230.6169	230.6782	230.6169	230.3634	231.0893	230.3634
20	221.3048	221.1286	221.2444	221.3096	221.2444	221.1286	221.3048	221.1286
25	209.651	209.068	209.0509	209.2112	209.0509	209.068	209.651	209.068
30	195.6058	195.1823	195.2152	195.293	195.2152	195.1823	195.6058	195.1823
35	179.4723	179.0425	179.2409	179.2516	179.2409	179.0425	179.4723	179.0425
40	162.2105	161.9945	162.0956	161.9634	162.0956	161.9945	162.2105	161.9945
45	144.5277	144.0044	143.9989	144.2539	143.9989	144.0044	144.5277	144.0044
50	126.188	125.6696	125.7843	125.8199	125.7843	125.6696	126.188	125.6696
55	107.8484	107.444	107.4012	107.6386	107.4012	107.444	107.8484	107.444
60	89.92982	89.32784	89.47298	89.54157	89.47298	89.32784	89.92982	89.32784
65	72.39855	72.06108	72.3278	72.25334	72.3278	72.06108	72.39855	72.06108
70	55.22095	55.39991	55.26697	55.42006	55.26697	55.39991	55.22095	55.39991
75	39.57586	39.48726	39.62075	39.51355	39.62075	39.48726	39.57586	39.48726
80	25.86745	25.67723	25.62514	25.34259	25.62514	25.67723	25.86745	25.67723
85	14.23047	14.28943	14.33256	14.20466	14.33256	14.28943	14.23047	14.28943
90	3.704974	3.616505	3.562154	3.521677	3.562154	3.616505	3.704974	3.616505
95	0.7409948	0.6980679	0.7326307	0.674005	0.7326307	0.6980679	0.7409948	0.6980679
100	0.7073132	0.7485344	0.690531	0.7414055	0.690531	0.7485344	0.7073132	0.7485344
105	0.7073132	0.6812481	0.7494516	0.7751058	0.7494516	0.6812481	0.7073132	0.6812481
110	0.6904724	0.7148924	0.7494621	0.7919559	0.7494621	0.7148924	0.6904724	0.7148924
115	0.7578356	0.7821752	0.7157467	0.6571549	0.7157467	0.7821752	0.7578356	0.7821752
120	0.7073132	0.7485356	0.7241834	0.7414055	0.7241834	0.7485356	0.7073132	0.7485356
125	0.7073132	0.7233023	0.7915723	0.7582557	0.7915723	0.7233023	0.7073132	0.7233023
130	0.808358	0.7737629	0.7326201	0.6403048	0.7326201	0.7737629	0.808358	0.7737629
135	0.7409948	0.7401233	0.7747303	0.7414055	0.7747303	0.7401233	0.7409948	0.7401233
140	0.7746764	0.7064801	0.7578988	0.8088061	0.7578988	0.7064801	0.7746764	0.7064801
145	0.808358	0.7905828	0.7579198	0.6908552	0.7579198	0.7905828	0.808358	0.7905828
150	0.808358	0.8494614	0.8841978	0.8593565	0.8841978	0.8494614	0.808358	0.8494614
155	0.808358	0.8242271	0.8758136	1.011008	0.8758136	0.8242271	0.808358	0.8242271
160	0.9767658	0.9756159	0.9599814	0.943607	0.9599814	0.9756159	0.9767658	0.9756159
165	0.9767658	1.084954	1.02736	0.9773074	1.02736	1.084954	0.9767658	1.084954
170	1.06097	1.118595	1.136827	1.230059	1.136827	1.118595	1.06097	1.118595
175	1.111492	1.068132	1.02736	1.061558	1.02736	1.068132	1.111492	1.068132
180	1.010447	1.143827	1.19579	1.112108	1.19579	1.143827	1.010447	1.143827

Intensity data(cd)

$\gamma/C(^{\circ})$	240.0	270.0	300.0	330.0	360.0
0	243.1473	243.1473	243.1473	243.1473	243.1473
5	241.6064	241.8499	241.6064	241.4147	242.1537
10	237.5979	237.8395	237.5979	237.3777	238.1456
15	230.6169	230.6782	230.6169	230.3634	231.0893
20	221.2444	221.3096	221.2444	221.1286	221.3048
25	209.0509	209.2112	209.0509	209.068	209.651
30	195.2152	195.293	195.2152	195.1823	195.6058
35	179.2409	179.2516	179.2409	179.0425	179.4723
40	162.0956	161.9634	162.0956	161.9945	162.2105
45	143.9989	144.2539	143.9989	144.0044	144.5277
50	125.7843	125.8199	125.7843	125.6696	126.188
55	107.4012	107.6386	107.4012	107.444	107.8484
60	89.47298	89.54157	89.47298	89.32784	89.92982
65	72.3278	72.25334	72.3278	72.06108	72.39855
70	55.26697	55.42006	55.26697	55.39991	55.22095
75	39.62075	39.51355	39.62075	39.48726	39.57586
80	25.62514	25.34259	25.62514	25.67723	25.86745
85	14.33256	14.20466	14.33256	14.28943	14.23047
90	3.562154	3.521677	3.562154	3.616505	3.704974
95	0.7326307	0.674005	0.7326307	0.6980679	0.7409948
100	0.690531	0.7414055	0.690531	0.7485344	0.7073132
105	0.7494516	0.7751058	0.7494516	0.6812481	0.7073132
110	0.7494621	0.7919559	0.7494621	0.7148924	0.6904724
115	0.7157467	0.6571549	0.7157467	0.7821752	0.7578356
120	0.7241834	0.7414055	0.7241834	0.7485356	0.7073132
125	0.7915723	0.7582557	0.7915723	0.7233023	0.7073132
130	0.7326201	0.6403048	0.7326201	0.7737629	0.808358
135	0.7747303	0.7414055	0.7747303	0.7401233	0.7409948
140	0.7578988	0.8088061	0.7578988	0.7064801	0.7746764
145	0.7579198	0.6908552	0.7579198	0.7905828	0.808358
150	0.8841978	0.8593565	0.8841978	0.8494614	0.808358
155	0.8758136	1.011008	0.8758136	0.8242271	0.808358
160	0.9599814	0.943607	0.9599814	0.9756159	0.9767658
165	1.02736	0.9773074	1.02736	1.084954	0.9767658
170	1.136827	1.230059	1.136827	1.118595	1.06097
175	1.02736	1.061558	1.02736	1.068132	1.111492
180	1.19579	1.112108	1.19579	1.143827	1.010447

Photo of Test Sample



Picture 1



Picture 2

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