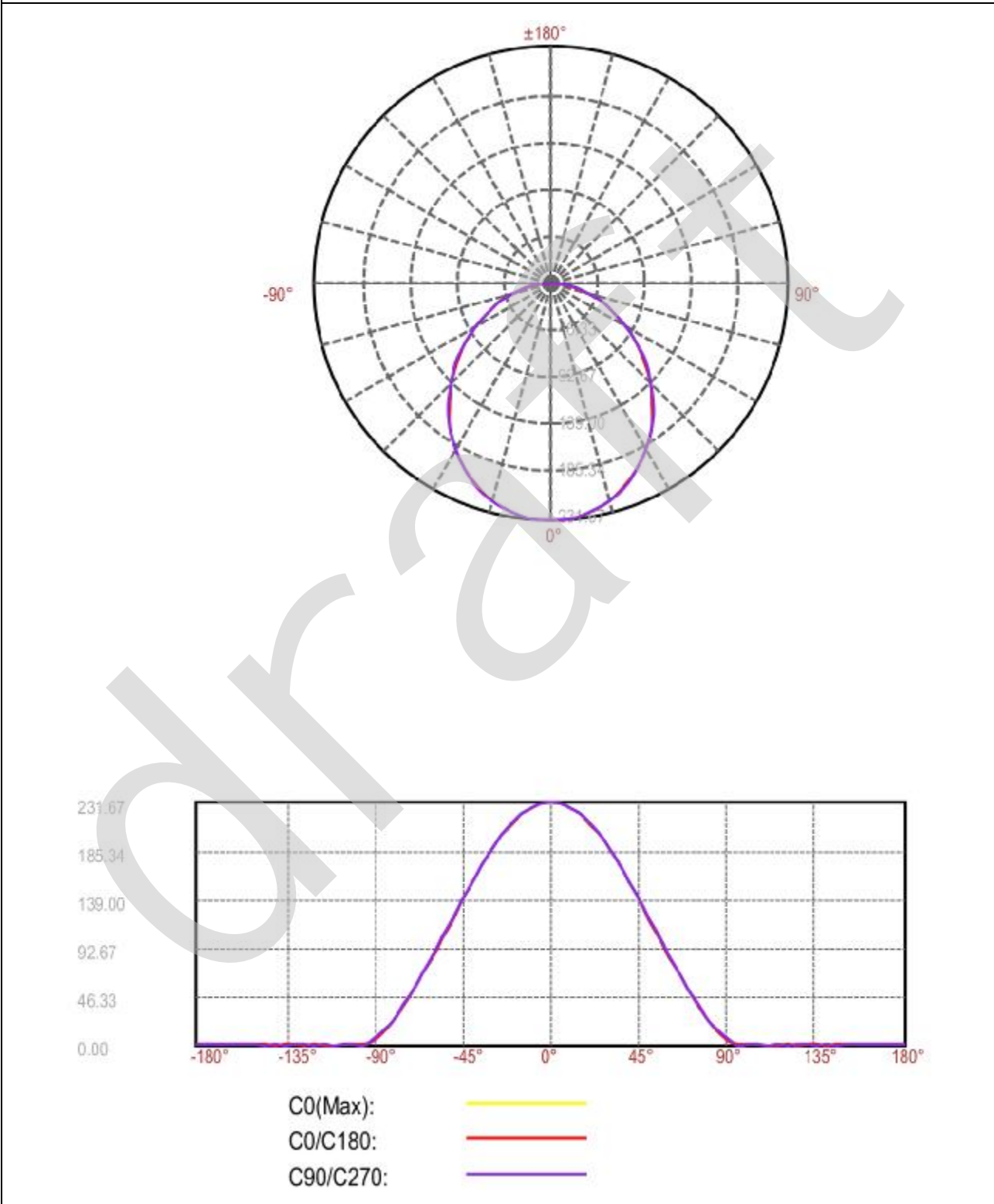


Test Report Number:	LCZP14110316	Total Page(s):	10
Applicant Name:	L-TECH CORPORATION		
Applicant Address:	SHAOGANGTOU DISTRICT, QIAOTOU TOWN, DONGGUAN CITY. GUANGDONG PROVINCE, CHINA		
Test item:	LED Downlight		
Model / Type Reference:	LRKT411-3090		
Date of Issue:	2014-12-01		
Testing Laboratory:	LCTECH (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	LRKT411-3090				
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	2014-11-27			Test Method	Absolutely photometric				
Azimuth (C)	30			Elevation (Gamma)	5				
Test distance	18.35 m			Uncertainty	Considered				
Characteristics									
Input Voltage	120.06 V			Input Current	0.073 A				
Wattage	8.75 W			Power Factor	0.993				
Total lumens	611.99 lm			Luminous Efficacy	69.94 lm/W				
Central Intensity	231.671 cd			Max intensity	231.671 cd				
Beam Angle(50%Imax)	102.8°			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	50545	48390	46468	44315	42280	40087	37809	36457	40046
C45	0	0	0	0	0	0	0	0	0
C90	50777	48717	46851	44591	42453	40391	38343	37537	43288

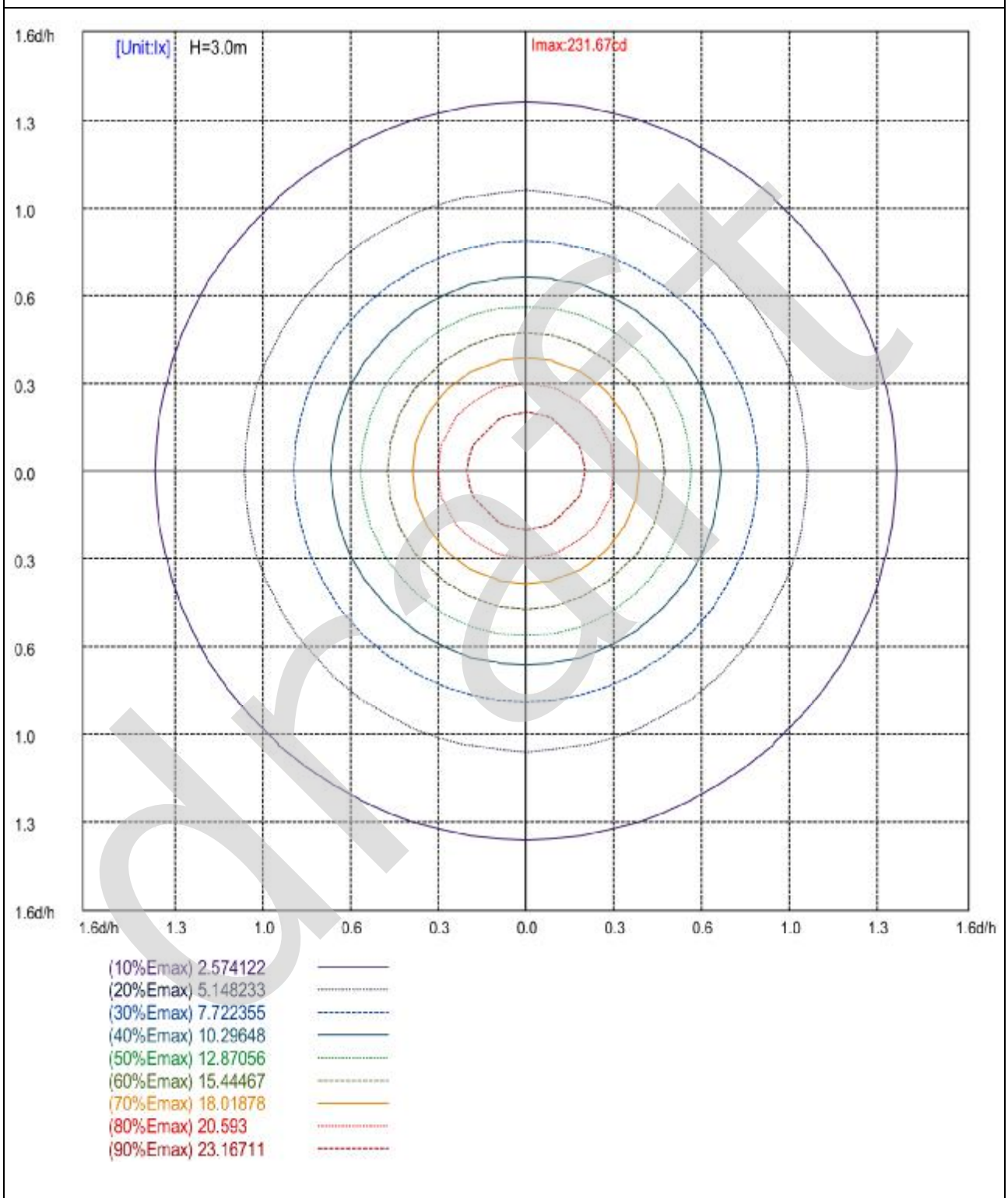
Light Distribution Curve(cd)



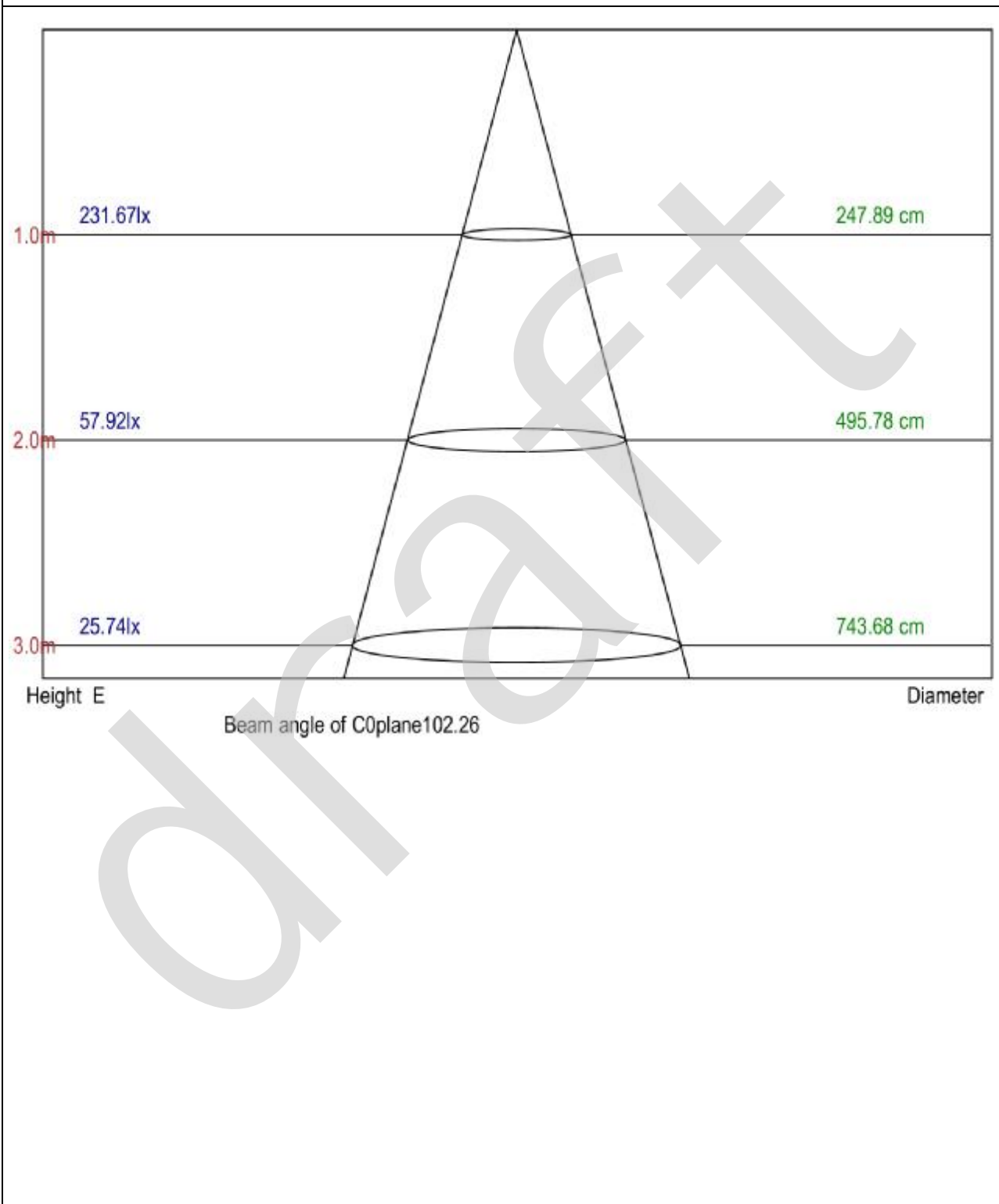
Zonal flux distribution table

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(lm)	Eff Sum(lm)
0.0	231.671	.000	.000	.000%	.000%
5.0	230.400	5.524	5.524	.903%	.903%
10.0	226.412	16.342	21.866	2.670%	3.573%
15.0	219.908	26.475	48.341	4.326%	7.899%
20.0	210.970	35.510	83.851	5.802%	13.701%
25.0	199.696	43.071	126.923	7.038%	20.739%
30.0	186.424	48.864	175.787	7.984%	28.724%
35.0	171.237	52.668	228.455	8.606%	37.330%
40.0	155.041	54.437	282.892	8.895%	46.225%
45.0	137.868	54.234	337.126	8.862%	55.087%
50.0	120.243	52.155	389.281	8.522%	63.609%
55.0	103.009	48.542	437.824	7.932%	71.541%
60.0	85.701	43.620	481.444	7.128%	78.669%
65.0	68.922	37.589	519.033	6.142%	84.811%
70.0	52.944	30.857	549.890	5.042%	89.853%
75.0	37.999	23.771	573.661	3.884%	93.737%
80.0	24.738	16.787	590.448	2.743%	96.480%
85.0	13.951	10.513	600.960	1.718%	98.198%
90.0	4.711	5.110	606.070	.835%	99.033%
95.0	.741	1.493	607.563	.244%	99.277%
100.0	.716	.396	607.958	.065%	99.341%
105.0	.774	.399	608.357	.065%	99.406%
110.0	.688	.382	608.739	.062%	99.469%
115.0	.741	.362	609.101	.059%	99.528%
120.0	.713	.353	609.454	.058%	99.586%
125.0	.727	.333	609.787	.054%	99.640%
130.0	.744	.320	610.107	.052%	99.692%
135.0	.760	.304	610.411	.050%	99.742%
140.0	.746	.279	610.690	.046%	99.788%
145.0	.783	.255	610.945	.042%	99.829%
150.0	.828	.237	611.182	.039%	99.868%
155.0	.862	.214	611.396	.035%	99.903%
160.0	.985	.194	611.589	.032%	99.935%
165.0	1.072	.170	611.759	.028%	99.962%
170.0	1.066	.127	611.886	.021%	99.983%
175.0	1.049	.076	611.961	.012%	99.995%
180.0	1.083	.025	611.987	.004%	99.999%

ISO illuminance diagram(lux)



Lux distance Curve



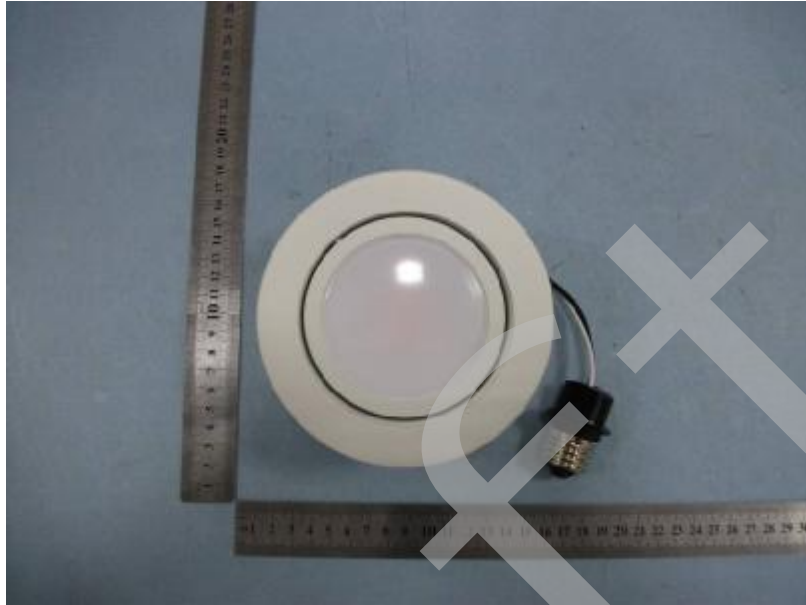
Utilization factor table

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	0.99	0.95	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	0.81	0.77	0.73	0.78	0.75	0.71	0.69
3	0.80	0.72	0.65	0.78	0.71	0.64	0.75	0.69	0.63	0.72	0.67	0.62	0.69	0.65	0.61	0.59
4	0.71	0.62	0.55	0.69	0.61	0.55	0.67	0.60	0.54	0.64	0.58	0.53	0.62	0.57	0.52	0.50
5	0.63	0.54	0.48	0.62	0.54	0.48	0.60	0.53	0.47	0.58	0.51	0.46	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	0.40	0.38
7	0.52	0.43	0.37	0.51	0.43	0.37	0.49	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	0.37	0.33	0.43	0.37	0.32	0.30
9	0.44	0.36	0.30	0.43	0.35	0.30	0.42	0.35	0.30	0.41	0.34	0.29	0.40	0.34	0.29	0.27
10	0.40	0.32	0.27	0.40	0.32	0.27	0.39	0.32	0.27	0.36	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	231.6707	231.6707	231.6707	231.6707	231.6707	231.6707	231.6707	231.6707
5	230.5218	230.458	230.2162	230.5266	230.2162	230.458	230.5218	230.458
10	226.3486	226.477	226.3492	226.472	226.3492	226.477	226.3486	226.477
15	220.0635	219.9785	219.7499	219.9273	219.7499	219.9785	220.0635	219.9785
20	210.602	211.0727	210.881	211.3133	210.881	211.0727	210.602	211.0727
25	199.6875	199.7677	199.532	199.8896	199.532	199.7677	199.6875	199.7677
30	186.6104	186.2747	186.3588	186.6657	186.3588	186.2747	186.6104	186.2747
35	171.1004	171.1478	171.2521	171.5238	171.2521	171.1478	171.1004	171.1478
40	154.7456	155.1207	154.96	155.3388	154.96	155.1207	154.7456	155.1207
45	137.546	137.7975	137.9449	138.178	137.9449	137.7975	137.546	137.7975
50	119.7044	120.247	120.3749	120.5125	120.3749	120.247	119.7044	120.247
55	102.5724	102.8644	103.1665	103.419	103.1665	102.8644	102.5724	102.8644
60	85.27143	85.70074	85.86564	85.80396	85.86564	85.70074	85.27143	85.70074
65	68.76456	68.94944	68.90941	69.04694	68.90941	68.94944	68.76456	68.94944
70	52.76455	52.89695	52.97047	53.1648	52.97047	52.89695	52.76455	52.89695
75	37.66	37.90483	38.16636	38.19117	38.16636	37.90483	37.66	37.90483
80	24.36327	24.51266	24.97623	25.08504	24.97623	24.51266	24.36327	24.51266
85	13.4319	13.67067	14.20743	14.51938	14.20743	13.67067	13.4319	13.67067
90	3.902853	4.318799	5.161734	5.400601	5.161734	4.318799	3.902853	4.318799
95	0.7602961	0.7323167	0.7565776	0.7066208	0.7565776	0.7323167	0.7602961	0.7323167
100	0.7602961	0.6564256	0.7061595	0.8075666	0.7061595	0.6564256	0.7602961	0.6564256
105	0.7434007	0.7658824	0.7986493	0.7739181	0.7986493	0.7658824	0.7434007	0.7658824
110	0.6758187	0.6820734	0.7145717	0.6561479	0.7145717	0.6820734	0.6758187	0.6820734
115	0.7096097	0.7238201	0.7481984	0.7907423	0.7481984	0.7238201	0.7096097	0.7238201
120	0.7265052	0.7154287	0.7061815	0.7066208	0.7061815	0.7154287	0.7265052	0.7154287
125	0.6589234	0.7407082	0.7481764	0.7234451	0.7481764	0.7407082	0.6589234	0.7407082
130	0.7434006	0.7071425	0.7313851	0.8412152	0.7313851	0.7071425	0.7434006	0.7071425
135	0.7771916	0.7828231	0.7650116	0.6897966	0.7650116	0.7828231	0.7771916	0.7828231
140	0.6758187	0.74931	0.7650226	0.7739181	0.7650226	0.74931	0.6758187	0.74931
145	0.8109825	0.8165994	0.7734129	0.7066208	0.7734129	0.8165994	0.8109825	0.8165994
150	0.7940871	0.8248855	0.8238637	0.8748639	0.8238637	0.8248855	0.7940871	0.8248855
155	0.9630417	0.8502177	0.8406442	0.8243909	0.8406442	0.8502177	0.9630417	0.8502177
160	0.9630417	0.9764574	0.992008	1.009458	0.992008	0.9764574	0.9630417	0.9764574
165	1.131996	1.085809	1.059261	1.009458	1.059261	1.085809	1.131996	1.085809
170	1.064415	1.102697	1.042426	1.043107	1.042426	1.102697	1.064415	1.102697
175	0.9968327	1.085967	1.067662	0.992634	1.067662	1.085967	0.9968327	1.085967
180	1.08131	1.07726	1.059272	1.144053	1.059272	1.07726	1.08131	1.07726

Intensity data(cd)					
$\gamma/C(^{\circ})$	240.0	270.0	300.0	330.0	360.0
0	231.6707	231.6707	231.6707	231.6707	231.6707
5	230.2162	230.5266	230.2162	230.458	230.5218
10	226.3492	226.472	226.3492	226.477	226.3486
15	219.7499	219.9273	219.7499	219.9785	220.0635
20	210.881	211.3133	210.881	211.0727	210.602
25	199.532	199.8896	199.532	199.7677	199.6875
30	186.3588	186.6657	186.3588	186.2747	186.6104
35	171.2521	171.5238	171.2521	171.1478	171.1004
40	154.96	155.3388	154.96	155.1207	154.7456
45	137.9449	138.178	137.9449	137.7975	137.546
50	120.3749	120.5125	120.3749	120.247	119.7044
55	103.1665	103.419	103.1665	102.8644	102.5724
60	85.86564	85.80396	85.86564	85.70074	85.27143
65	68.90941	69.04694	68.90941	68.94944	68.76456
70	52.97047	53.1648	52.97047	52.89695	52.76455
75	38.16636	38.19117	38.16636	37.90483	37.66
80	24.97623	25.08504	24.97623	24.51266	24.36327
85	14.20743	14.51938	14.20743	13.67067	13.4319
90	5.161734	5.400601	5.161734	4.318799	3.902853
95	0.7565776	0.7066208	0.7565776	0.7323167	0.7602961
100	0.7061595	0.8075666	0.7061595	0.6564256	0.7602961
105	0.7986493	0.7739181	0.7986493	0.7658824	0.7434007
110	0.7145717	0.6561479	0.7145717	0.6820734	0.6758187
115	0.7481984	0.7907423	0.7481984	0.7238201	0.7096097
120	0.7061815	0.7066208	0.7061815	0.7154287	0.7265052
125	0.7481764	0.7234451	0.7481764	0.7407082	0.6589234
130	0.7313851	0.8412152	0.7313851	0.7071425	0.7434006
135	0.7650116	0.6897966	0.7650116	0.7828231	0.7771916
140	0.7650226	0.7739181	0.7650226	0.74931	0.6758187
145	0.7734129	0.7066208	0.7734129	0.8165994	0.8109825
150	0.8238637	0.8748639	0.8238637	0.8248855	0.7940871
155	0.8406442	0.8243909	0.8406442	0.8502177	0.9630417
160	0.992008	1.009458	0.992008	0.9764574	0.9630417
165	1.059261	1.009458	1.059261	1.085809	1.131996
170	1.042426	1.043107	1.042426	1.102697	1.064415
175	1.067662	0.992634	1.067662	1.085967	0.9968327
180	1.059272	1.144053	1.059272	1.07726	1.08131

Photo of Test Sample



Picture 1



Picture 2

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