



Report No.: GZE150818-D2

NVLAP LAB CODE 201011-0

LM-79-08 Test Report

For

Premium Quality Lighting, Inc.

(Brand Name: Superior Life®)

2285 Ward Avenue
Simi Valley, CA 93065

Retrofit Kits for Outdoor Pole/Arm-mounted Area and Roadway Luminaires

Model name(s): 83454

Representative (Tested) Model: 83454

Model Different: N/A

Test & Report By:

Peeta Cao

Engineer: Peeta Cao

Date: Aug.18,2015

Review By:

Tommy Liang

Manager: Tommy Liang

Note: This report does not imply product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Laboratory: Standard-Tech Co. Ltd Testing Center

NVLAP CODE: 201011-0

Report Format Number STD/QR4909-A/2

Address: 8th floor, Block B, No. 11 Caipin Road, Guangzhou Science City, Tianhe, Guangzhou 510663, China

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<http://www.standard-tech.com>

U.S. Department of Energy

Lighting Facts™ Uniform LM-79 Reporting Template
Laboratory Information:

Name of Test Laboratory	Standard-Tech Co., Ltd.
Date of Test Report	Aug.18,2015
Test Report No.	GZE150818-D2
Laboratory Contact Name	Tommy Liang

Product Information:

Organization Name	Premium Quality Lighting	
Brand Name	Superior Life®	
Model Number	83454	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Retrofit Kits for Outdoor Pole/Arm-mounted Area and Roadway Luminaires	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Integrating Sphere
Goniophotometer
Electrical Measurements:
Output
Output

Input Wattage	--	72.85	W
Input Current	--	0.6156	A
Input Voltage (ac)	--	120.0	V
Power Factor	--	0.9862	
Off-State Power	--	0	W

Photometric Characteristics

Total Initial Lumen Output	--	9998.2	lm
Initial Lumen Efficacy	--	137.25	lm/w
Correlated color temperature / CCT	4902	--	K
Color rendering index / CRI	74.6	--	
R9 Value	0	--	
Duv	0.0046	--	
Luminous Intensity Distribution			
Center beam candlepower (if applicable)		3518	cd
Beam angle (if applicable)		114.3	°
Zonal lumens in the 0°-60° zone		81.5	%
Zonal lumens in the 60°-90° zone	----	18.3	%
Zonal lumens in the 90°-120° zone		0	%
Zonal lumens in the 120°-180° zone		0.2	%

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Test Specifications:	
Date of Receipt	: Aug.08,2015
Date of Test	: Aug.22,2015
Test item	: Total Luminous Flux, Luminous Distribution Intensity, Luminous Efficacy, Correlated Color Temperature, Color Rendering Index, Chromaticity Coordinate, Electrical parameters
Reference Standard	IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources CIE 15-2004 Technical Report Colorimetry IESNA LM-16-93 Practical Guide to Colorimetry of Light Source IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems
Reference Work Instruction	QD25

Test Methods

1. Photometric and Electrical measurements – Light Distribution Method:

Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample. The sample was operated at 120 Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1 ° vertical intervals and 22.5 ° horizontal intervals.

2. Photometric and Electrical Measurements – Integrating Sphere Method:

Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at 120 Volts AC, 60Hz. It was stabilized before measurement was made. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at least 5 nm intervals over the range of 380 to 780 nm.

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Report Format Number STD/QR4909-A/2

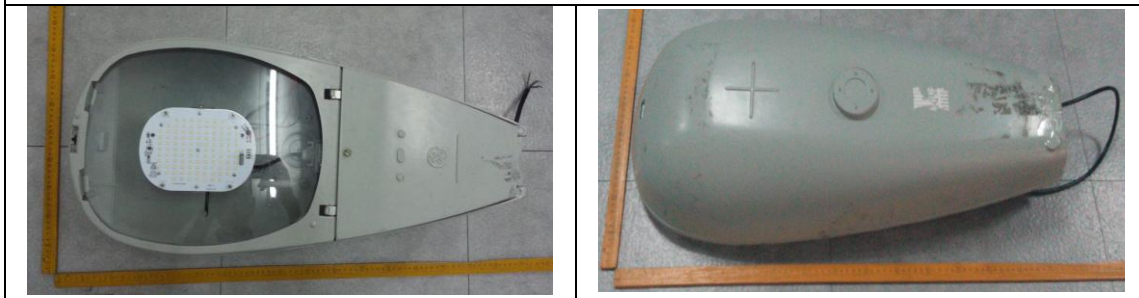
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1. Product Information:

Brand Name	Superior Life®
Model Number	83454
Luminaire Type	Retrofit Kits for Outdoor Pole/Arm-mounted Area and Roadway Luminaires
Rated Voltage / Frequency	100~ 277V, 50/60 Hz
Nominal Power	75W
Rated Initial Lamp Lumen	--
Declared CCT	5000K
LED Manufacturer	Nichia Corporation
LED Model	NF2L757DR (Nominal CCT: 2700 K)
Sample Receipt Date	Aug.08,2015
Sample Number	GZE150818-D21(5000K)

Photo



2.1 Electrical, Photometric and Chromaticity Measurements (Refer to Work Instruction QD25)	IES LM-79 2008
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Test date	2015-08-22	Test Ambient:	25.2 °C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	83454		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE150818	120.0	60	0.6156	72.85	0.9862	7.15
-D21	277.0	60	0.2906	73.48	0.9127	10.26

Sphere-Spectroradiometer Method in GE M250R2 Roadway Lamp:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	72	R9	0
Frequency (Hz)	60	R2	80	R10	51
Color Rendering Index (CRI)	74.6	R3	85	R11	69
R9	0	R4	73	R12	38
CCT (K)	4902	R5	71	R13	73
Chromaticity (x, y)	x=0.3490 y=0.3641	R6	71	R14	92
Chromaticity (u', v')	u'=0.2093 v'=0.4912	R7	85	R15	66
Duv	0.0046	R8	59	--	--

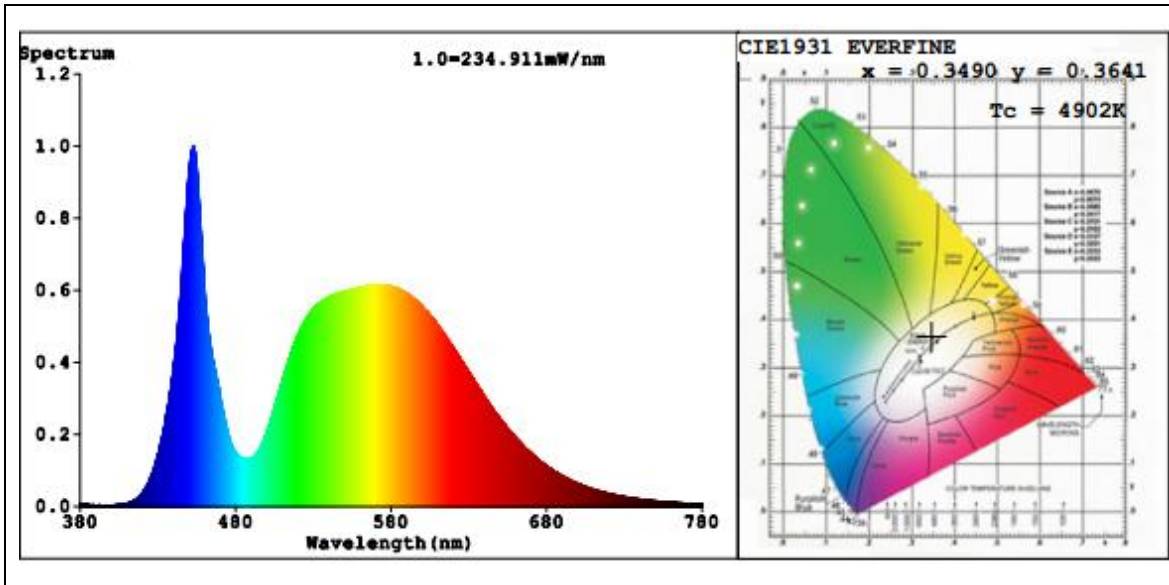
Goniophotometer Method in GE M250R2 Roadway Lamp:

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Total Luminous (lm)	9998.2
Luminous Efficacy (lm/W)	137.25
Beam Angle °	114.3
Center Beam Candle Power (cd)	3518

Goniophotometer Method in GE M250R2 Roadway Lamp:

Parameter	Result
Test Voltage (V)	277.0
Frequency (Hz)	60
Total Luminous (lm)	10026
Luminous Efficacy (lm/W)	136.44

Spectral Power Distribution & Chromaticity Diagram



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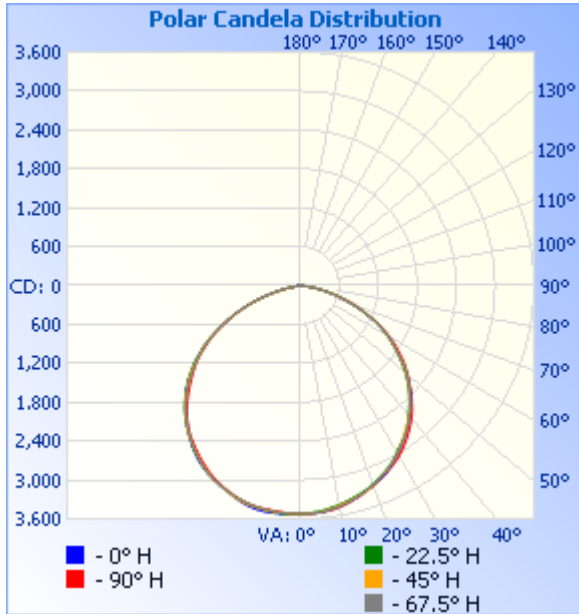
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Zonal Lumen Tabulation

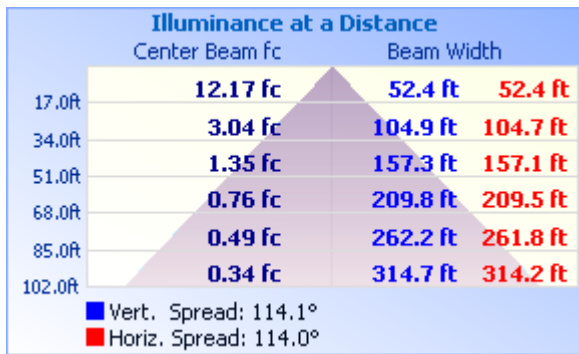
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	2,770.4	27.7%
0-40	4,570.6	45.7%
0-60	8,145.6	81.5%
60-90	1,832.5	18.3%
70-100	619.2	6.2%
90-120	4.5	0%
0-90	9,978.1	99.8%
90-180	19.0	0.2%
0-180	9,997.1	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	333.8	3.3%	90-100	0.5	0%
10-20	961.7	9.6%	100-110	1.9	0%
20-30	1,475.0	14.8%	110-120	2.1	0%
30-40	1,800.2	18.0%	120-130	2.9	0%
40-50	1,884.9	18.9%	130-140	3.3	0%
50-60	1,690.0	16.9%	140-150	3.2	0%
60-70	1,213.8	12.1%	150-160	2.7	0%
70-80	552.8	5.5%	160-170	1.8	0%
80-90	65.9	0.7%	170-180	0.7	0%

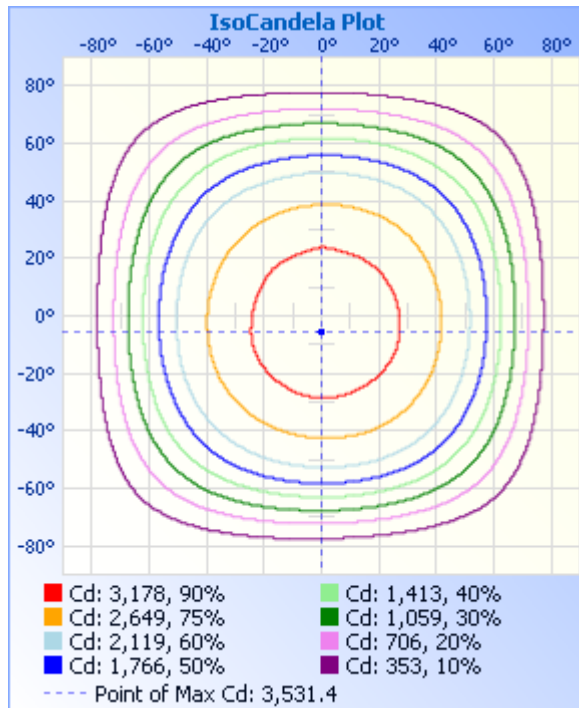
Photometric Data



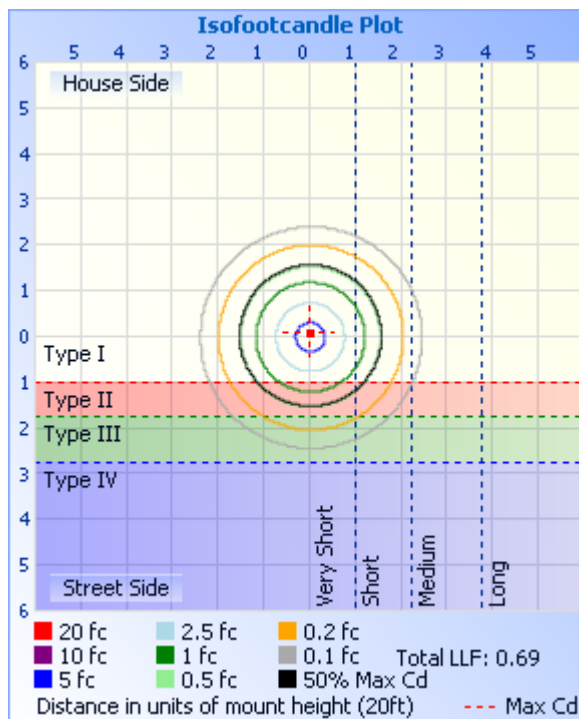
Illuminance Plots



ISOCANDELA DIAGRAM



ISOLUX DIAGRAM



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Candela Table - Type C

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	3518	3518	3518	3518	3518	3518	3518	3518	3518	3518	3518	3518	3518	3518	3518	3518	3518
1	3518	3513	3520	3518	3520	3518	3520	3520	3520	3525	3520	3518	3518	3519	3518	3517	3518
2	3518	3510	3520	3516	3520	3518	3521	3519	3524	3528	3520	3519	3517	3517	3517	3514	3518
3	3518	3504	3518	3515	3518	3517	3521	3517	3526	3529	3519	3518	3513	3514	3513	3510	3518
4	3517	3498	3513	3514	3515	3514	3519	3514	3528	3529	3518	3515	3509	3510	3507	3505	3517
5	3512	3490	3507	3508	3512	3510	3515	3514	3531	3527	3515	3512	3503	3503	3500	3498	3512
6	3502	3480	3495	3503	3506	3505	3508	3513	3530	3520	3514	3508	3498	3497	3491	3487	3502
7	3493	3467	3484	3495	3500	3498	3502	3507	3531	3514	3514	3503	3493	3491	3479	3476	3493
8	3480	3454	3474	3485	3492	3490	3495	3500	3529	3509	3510	3499	3489	3486	3469	3465	3480
9	3466	3442	3458	3474	3483	3482	3490	3494	3528	3502	3504	3494	3488	3481	3458	3453	3466
10	3451	3430	3443	3462	3468	3473	3484	3485	3523	3494	3496	3489	3483	3475	3449	3440	3451
11	3437	3415	3428	3447	3454	3462	3475	3479	3516	3487	3487	3482	3478	3466	3440	3425	3437
12	3423	3400	3414	3432	3437	3450	3464	3469	3507	3479	3481	3473	3471	3456	3429	3410	3423
13	3408	3384	3401	3416	3419	3436	3453	3458	3496	3468	3476	3460	3460	3443	3413	3393	3408
14	3394	3368	3386	3397	3400	3418	3438	3445	3484	3455	3467	3448	3450	3428	3394	3374	3394
15	3378	3353	3370	3380	3383	3401	3420	3432	3468	3439	3455	3434	3436	3412	3377	3354	3378
16	3359	3339	3356	3359	3365	3386	3403	3415	3449	3424	3439	3420	3421	3395	3360	3336	3359
17	3338	3320	3340	3336	3344	3372	3384	3399	3427	3412	3421	3403	3403	3374	3344	3317	3338
18	3318	3302	3322	3313	3323	3356	3367	3381	3403	3398	3404	3388	3384	3353	3327	3297	3318
19	3297	3280	3304	3290	3303	3338	3351	3363	3381	3380	3384	3372	3365	3331	3310	3275	3297
20	3278	3257	3281	3269	3285	3318	3336	3345	3357	3362	3364	3355	3345	3309	3292	3255	3278
21	3258	3233	3256	3245	3263	3301	3318	3327	3336	3344	3340	3337	3323	3290	3269	3235	3258
22	3238	3206	3227	3221	3240	3281	3298	3309	3317	3323	3318	3319	3303	3270	3244	3214	3238
23	3215	3182	3199	3198	3218	3259	3276	3292	3300	3300	3297	3300	3283	3244	3219	3194	3215
24	3190	3157	3175	3172	3193	3237	3251	3275	3281	3281	3284	3282	3258	3220	3195	3171	3190
25	3162	3132	3148	3145	3167	3215	3226	3250	3258	3256	3255	3256	3230	3195	3172	3146	3162
26	3131	3103	3117	3116	3142	3189	3201	3224	3235	3231	3227	3231	3200	3170	3152	3120	3131
27	3098	3073	3087	3086	3116	3157	3173	3199	3212	3206	3199	3206	3171	3145	3124	3093	3098
28	3065	3041	3054	3056	3090	3123	3141	3172	3185	3177	3170	3177	3140	3119	3097	3063	3065
29	3031	3006	3022	3024	3064	3091	3107	3142	3160	3147	3142	3145	3110	3091	3067	3033	3031

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30	2997	2970	2988	2989	3035	3058	3074	3110	3131	3116	3112	3112	3079	3058	3036	3004	2997
31	2961	2932	2950	2955	3004	3023	3038	3078	3098	3085	3078	3079	3047	3028	3004	2972	2961
32	2923	2898	2911	2923	2969	2987	3001	3043	3062	3053	3044	3046	3013	2999	2969	2938	2923
33	2886	2866	2875	2888	2934	2953	2965	3008	3026	3021	3009	3008	2980	2965	2935	2905	2886
34	2851	2833	2837	2853	2898	2919	2928	2973	2988	2983	2976	2970	2946	2930	2899	2871	2851
35	2813	2802	2793	2816	2860	2883	2894	2937	2950	2941	2940	2932	2912	2893	2859	2835	2813
36	2776	2763	2750	2778	2822	2848	2856	2899	2910	2904	2905	2893	2878	2856	2818	2795	2776
37	2735	2722	2712	2739	2784	2810	2815	2859	2870	2866	2868	2853	2840	2819	2777	2751	2735
38	2693	2683	2677	2699	2743	2771	2776	2814	2830	2828	2830	2812	2799	2772	2734	2709	2693
39	2652	2639	2639	2657	2702	2730	2736	2767	2790	2787	2786	2771	2757	2725	2695	2667	2652
40	2608	2592	2600	2615	2659	2687	2698	2719	2745	2748	2742	2729	2715	2678	2654	2626	2608
41	2568	2547	2559	2576	2617	2643	2656	2672	2700	2708	2700	2688	2670	2629	2612	2585	2568
42	2528	2503	2518	2533	2570	2595	2611	2626	2652	2667	2657	2642	2622	2582	2567	2543	2528
43	2488	2459	2478	2486	2520	2546	2564	2582	2602	2623	2612	2595	2571	2534	2516	2499	2488
44	2449	2416	2432	2439	2469	2495	2518	2541	2559	2576	2570	2547	2518	2483	2469	2452	2449
45	2402	2368	2382	2393	2420	2445	2470	2496	2516	2529	2521	2498	2464	2429	2419	2402	2402
46	2352	2319	2332	2346	2369	2396	2419	2445	2471	2476	2469	2447	2408	2375	2366	2351	2352
47	2301	2270	2286	2296	2316	2345	2368	2395	2424	2422	2413	2394	2355	2326	2309	2300	2301
48	2249	2221	2237	2247	2266	2296	2319	2342	2375	2365	2358	2339	2299	2279	2259	2248	2249
49	2193	2170	2187	2197	2216	2250	2265	2287	2320	2312	2302	2279	2241	2232	2213	2196	2193
50	2137	2118	2133	2147	2162	2200	2208	2235	2262	2260	2246	2215	2188	2181	2165	2145	2137
51	2081	2062	2079	2097	2113	2145	2153	2182	2198	2205	2188	2155	2135	2123	2111	2091	2081
52	2017	2004	2018	2042	2058	2085	2095	2128	2134	2147	2126	2094	2083	2063	2056	2038	2017
53	1953	1950	1960	1983	2005	2027	2035	2071	2072	2087	2059	2036	2027	2000	1993	1979	1953
54	1891	1891	1903	1917	1949	1970	1974	2005	2011	2022	1994	1976	1968	1943	1931	1916	1891
55	1836	1831	1848	1850	1890	1909	1918	1939	1949	1955	1931	1916	1905	1888	1868	1852	1836
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57	1728	1715	1732	1730	1773	1774	1808	1818	1820	1818	1812	1789	1777	1755	1744	1725	1728
58	1671	1660	1674	1674	1713	1704	1747	1753	1754	1752	1745	1718	1712	1691	1677	1673	1671
59	1615	1604	1617	1618	1652	1637	1677	1683	1684	1684	1673	1645	1647	1627	1610	1622	1615
60	1557	1547	1556	1564	1589	1577	1605	1609	1611	1612	1595	1573	1582	1563	1547	1563	1557
61	1495	1488	1493	1505	1529	1519	1535	1537	1535	1539	1519	1504	1505	1494	1485	1498	1495

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62	1425	1427	1427	1440	1462	1465	1471	1462	1456	1461	1443	1430	1431	1428	1415	1427	1425
63	1360	1364	1360	1375	1389	1405	1404	1381	1384	1378	1371	1363	1353	1367	1342	1356	1360
64	1296	1300	1293	1311	1312	1336	1336	1308	1309	1299	1307	1296	1274	1303	1277	1288	1296
65	1222	1228	1225	1240	1244	1258	1271	1241	1234	1223	1235	1222	1198	1229	1219	1222	1222
66	1147	1154	1163	1165	1174	1181	1200	1163	1164	1149	1157	1143	1133	1145	1152	1153	1147
67	1081	1083	1098	1096	1103	1114	1122	1090	1091	1069	1074	1069	1063	1068	1083	1072	1081
68	1007	1015	1034	1028	1040	1044	1040	1024	1008	991	985	995	981	996	1009	995	1007
69	938	946	966	963	977	969	963	953	923	913	903	916	904	921	930	923	938
70	871	878	893	898	911	895	890	869	857	832	829	839	833	843	860	855	871
71	808	810	821	834	842	832	821	798	773	754	747	763	756	773	789	792	808
72	740	745	754	761	763	770	748	721	692	683	672	686	685	697	709	726	740
73	675	684	686	693	690	693	679	648	630	601	600	605	612	627	636	662	675
74	609	621	621	623	625	621	604	577	562	530	526	532	540	559	568	595	609
75	535	553	561	556	565	555	533	513	488	465	455	464	473	490	505	527	535
76	472	490	497	495	503	492	473	448	416	400	390	398	408	431	453	459	472
77	418	427	441	442	433	429	402	386	354	331	324	338	345	368	390	399	418
78	362	368	382	378	379	364	342	324	294	272	268	272	285	310	329	349	362
79	305	319	325	325	322	307	286	265	232	215	207	211	231	256	272	289	305
80	254	264	271	272	269	248	227	202	172	157	151	154	175	205	222	238	254
81	207	217	227	227	218	194	172	147	115	107	102	106	125	160	178	193	207
82	162	175	184	184	169	139	119	94	74	66	62	66	82	117	137	150	162
83	119	135	144	145	120	91	73	56	40	37	34	36	48	78	103	111	119
84	80	95	111	104	78	53	38	27	19	17	18	20	25	47	74	75	80
85	47	59	80	69	46	28	17	12	8	7	9	12	16	26	45	45	47
86	25	32	49	41	25	14	8	4	3	2	3	5	10	15	24	23	25
87	12	14	24	22	14	7	3	2	2	1	2	1	3	9	12	11	12
88	5	7	10	11	6	2	1	2	2	1	2	0	1	3	5	5	5
89	2	2	3	2	2	2	1	2	1	1	1	0	0	1	1	1	2
90	1	1	1	0	0	2	1	1	1	1	1	0	0	0	0	0	1
91	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0
92	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0
93	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0

Laboratory: Standard-Tech Co. Ltd Testing Center
 NVLAP CODE: 201011-0

Report Format Number STD/QR4909-A/2

Address: 8th floor, Block B, No. 11 Caipin Road, Guangzhou Science City, Tianhe, Guangzhou 510663, China

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94	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0
95	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0
96	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0
97	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0
98	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0
99	0	0	0	0	1	1	1	1	4	1	1	1	0	0	0	0	0
100	0	0	0	0	1	1	1	1	12	1	1	1	0	0	0	0	0
101	0	0	0	0	1	1	1	1	26	1	1	1	1	0	0	0	0
102	0	0	0	0	1	1	1	1	34	1	1	1	1	0	1	0	0
103	0	0	0	0	1	1	1	1	30	1	1	1	1	1	1	0	0
104	1	0	0	0	1	1	1	1	9	1	1	1	1	1	1	1	1
105	1	1	0	1	1	1	1	1	2	1	1	2	1	1	1	1	1
106	1	1	0	1	2	2	2	1	2	1	2	2	1	1	1	1	1
107	1	1	1	1	2	2	2	2	2	1	2	2	1	1	1	1	1
108	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1
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114	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2
115	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2
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117	2	2	2	2	3	3	2	2	2	2	3	3	2	2	2	2	2
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119	2	2	2	2	3	3	3	2	2	2	3	3	3	3	2	2	2
120	3	3	2	3	3	3	3	2	2	2	3	3	3	3	2	3	3
121	3	3	3	3	3	3	3	3	2	3	3	3	3	3	2	3	3
122	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
123	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4
124	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4
125	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4

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Report Format Number STD/QR4909-A/2

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126	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4
127	4	4	3	3	3	4	3	3	3	3	3	3	3	3	3	4	4
128	4	4	3	3	4	4	3	3	4	4	4	3	4	3	3	4	4
129	4	4	3	3	4	4	3	3	4	4	4	3	4	3	3	4	4
130	4	4	3	4	4	4	4	3	4	4	4	3	4	4	3	4	4
131	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4
132	5	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	5
133	5	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	5
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139	5	5	4	4	5	5	5	5	4	5	4	5	4	4	3	5	5
140	5	5	4	4	5	5	5	5	4	5	4	5	4	4	3	5	5
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145	5	6	4	4	6	5	5	6	5	5	5	6	5	4	4	6	5
146	5	6	5	5	6	5	5	6	5	5	5	6	5	4	4	6	5
147	6	6	5	5	6	6	5	6	5	5	5	6	5	4	4	6	6
148	6	6	5	5	6	6	5	6	5	6	6	6	5	4	5	6	6
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152	6	6	6	5	6	6	6	6	5	6	6	6	5	5	5	6	6
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155	6	6	6	5	6	6	7	7	5	6	6	7	5	5	6	6	6
156	7	6	6	5	6	6	7	7	6	6	6	7	5	5	6	6	7
157	7	6	6	5	6	6	7	7	6	6	6	7	5	5	6	7	7

Laboratory: Standard-Tech Co. Ltd Testing Center
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Report Format Number STD/QR4909-A/2

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158	7	6	6	5	6	6	7	7	6	6	7	7	5	5	6	7	7
159	7	6	6	5	7	6	7	7	6	6	7	7	5	5	6	7	7
160	7	6	6	6	7	6	7	7	6	6	7	7	6	5	6	7	7
161	6	6	6	6	7	7	7	7	6	6	7	7	6	5	6	7	6
162	7	6	6	6	7	7	7	7	6	6	7	7	6	5	6	7	7
163	6	6	6	6	7	7	7	7	7	6	7	7	6	5	6	7	6
164	6	6	6	6	7	7	7	7	6	6	7	7	6	5	6	7	6
165	7	6	6	6	7	7	7	7	6	6	7	7	6	5	6	7	7
166	7	6	6	6	7	7	7	7	7	6	7	7	6	6	6	7	7
167	7	7	6	6	7	7	7	7	7	6	7	7	6	6	6	7	7
168	7	7	7	6	7	7	7	7	7	6	7	8	6	6	7	7	7
169	7	7	7	6	7	7	7	7	7	7	7	8	6	6	7	7	7
170	7	7	7	6	8	7	7	7	7	7	8	8	7	6	7	7	7
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172	7	7	7	7	8	8	7	7	7	7	8	8	7	6	7	7	7
173	7	7	7	7	8	8	7	7	7	7	8	8	7	7	7	7	7
174	7	7	7	7	8	8	7	7	8	7	8	8	7	7	7	7	7
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178	7	7	8	7	8	8	7	7	7	7	7	8	7	7	7	7	7
179	7	7	8	7	8	7	7	7	7	7	7	8	7	7	7	7	7
180	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-336	2 meter Integrating Sphere	2015-07-01	2016-06-30
ST-R-331	Spectral analysis system HAAS-2000	2015-07-01	2016-06-30
D204	Standard Lamp	2015-07-01	2016-06-30
PF2010	Power Meter for Integrating Sphere	2015-07-01	2016-06-30
EE-09	Goniophotometer system	2015-07-01	2016-06-30
D908S	Standard Lamp	2015-07-01	2016-06-30
PF210	Power Meter for Goniophotometer	2015-07-01	2016-06-30
ST-R-181A	Temperature Tester	2015-07-01	2016-06-30
Uncertainty: Photometric Measurement (Sphere):1.74% Chromaticity Measurement(Sphere):14.3K Photometric Measurement(Goniophotometer):1.62%			

******* END OF DATASHEET PACKAGE *******