



Report No.: GZE150818-C2

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): 83494

Representative (Tested) Model: 83494

Model Different: N/A

Test & Report By:

*Peeta Cao*

Engineer: Peeta Cao

Date: Sep.08,2015

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

Tel: 8620-3229 0320

Fax: 8620-32290422

<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	Sep.08,2015
Test Report No.	GZE150818-C2
Laboratory Contact Name	Tommy Liang

**Product Information:**

Organization Name	Premium Quality Lighting	
Brand Name	Superior Life®	
Model Number	83494	
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	--	59.37	W
Input Current	--	0.1741	A
Input Voltage (ac)	--	347.0	V
Power Factor	--	0.9826	
Off-State Power	--	0	W

**Photometric Characteristics**

Total Initial Lumen Output	--	8106.1	lm
Initial Lumen Efficacy	--	136.54	lm/w
Correlated color temperature / CCT	5013	--	K
Color rendering index / CRI	75.2	--	
R9 Value	0	--	
Duv	0.0035	--	
<b>Luminous Intensity Distribution</b>			
Center beam candlepower (if applicable)		2870	cd
Beam angle (if applicable)		114.0	°
Zonal lumens in the 0°-60° zone		81.6	%
Zonal lumens in the 60°-90° zone	-----	18.2	%
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.15,2015
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 347 Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at  $1\text{ }^{\circ}$  vertical intervals and  $22.5\text{ }^{\circ}$  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 347 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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**1. Product Information:**

Brand Name	Superior Life®
Model Number	83494
Luminaire Type	Retrofit Kits for Outdoor Pole/Arm-mounted Area and Roadway Luminaires
Rated Voltage / Frequency	347~ 480V, 50/60 Hz
Nominal Power	60W
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-C21(5000K)

**Photo**



<b>2.1 Electrical, Photometric and Chromaticity Measurements</b> (Refer to Work Instruction QD25)	<b>IES LM-79 2008</b>
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<b>Test date</b>	2015-08-15	<b>Test Ambient:</b>	25.2 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	83494		

**Electrical Measurement:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE150818	347.0	60	0.1741	59.37	0.9826	6.48
-C21	480.0	60	0.1327	59.15	0.9285	8.64

**Sphere-Spectroradiometer Method in GE M250R2 Roadway Lamp:**

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	347.0	R1	73	R9	0
Frequency (Hz)	60	R2	81	R10	52
Color Rendering Index (CRI)	75.2	R3	85	R11	71
R9	0	R4	75	R12	44
CCT (K)	5013	R5	73	R13	74
Chromaticity (x, y)	x=0.3454 y=0.3590	R6	72	R14	91
Chromaticity (u', v')	u'=0.2088 v'=0.4883	R7	84	R15	68
Duv	0.0035	R8	60	--	--

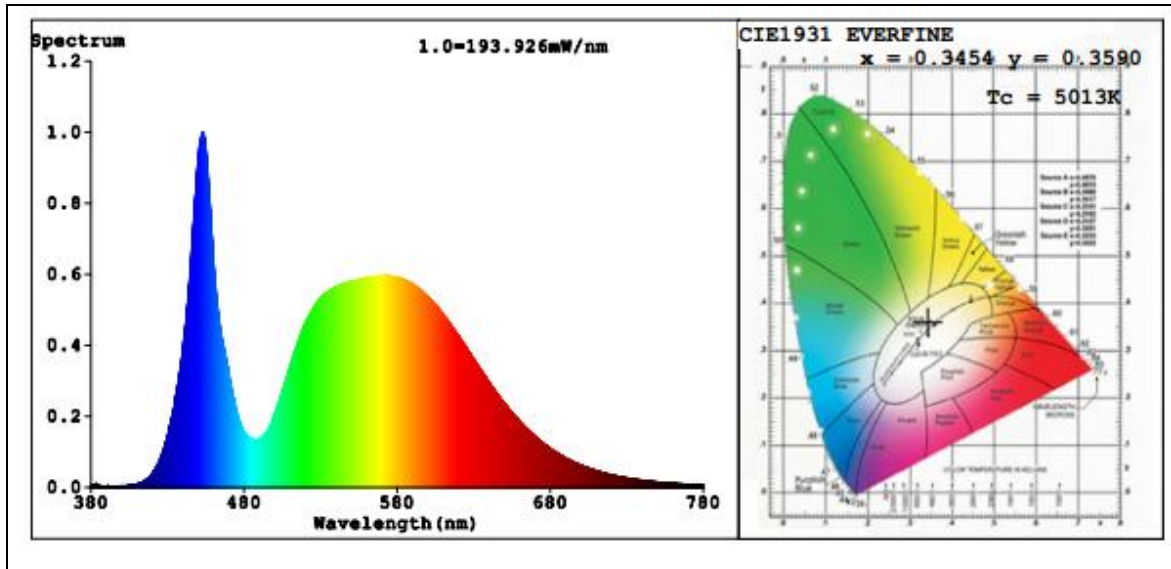
**Goniophotometer Method in GE M250R2 Roadway Lamp:**

Parameter	Result
Test Voltage (V)	347.0
Frequency (Hz)	60
Total Luminous (lm)	8106.1
Luminous Efficacy (lm/W)	136.54
Beam Angle °	114.0
Center Beam Candle Power (cd)	2870

**Goniophotometer Method in GE M250R2 Roadway Lamp:**

Parameter	Result
Test Voltage (V)	480.0
Frequency (Hz)	60
Total Luminous (lm)	8119.9
Luminous Efficacy (lm/W)	137.27

**Spectral Power Distribution & Chromaticity Diagram**



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**Zonal Lumen Tabulation**

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	2,250.3	27.8%
0-40	3,713.1	45.8%
0-60	6,614.9	81.6%
60-90	1,475.5	18.2%
70-100	497.5	6.1%
90-120	4.0	0%
0-90	8,090.4	99.8%
90-180	14.9	0.2%
0-180	8,105.3	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	271.9	3.4%	90-100	0.6	0%
10-20	781.8	9.6%	100-110	1.8	0%
20-30	1,196.6	14.8%	110-120	1.5	0%
30-40	1,462.8	18.0%	120-130	2.1	0%
40-50	1,531.7	18.9%	130-140	2.4	0%
50-60	1,370.1	16.9%	140-150	2.4	0%
60-70	978.6	12.1%	150-160	2.1	0%
70-80	443.5	5.5%	160-170	1.4	0%
80-90	53.4	0.7%	170-180	0.5	0%

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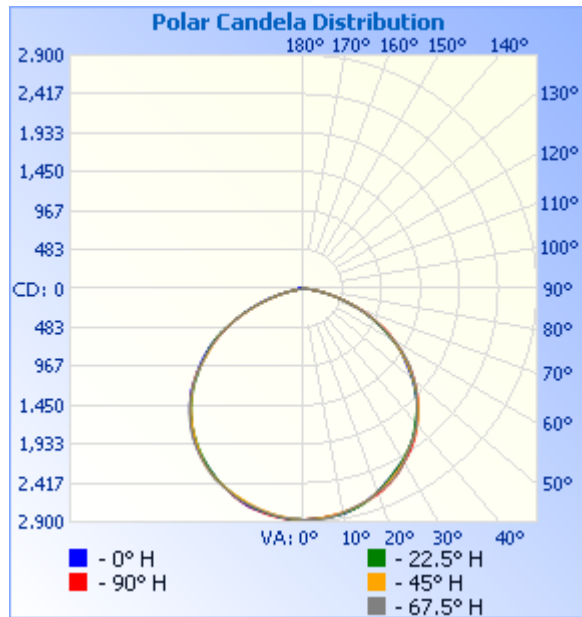
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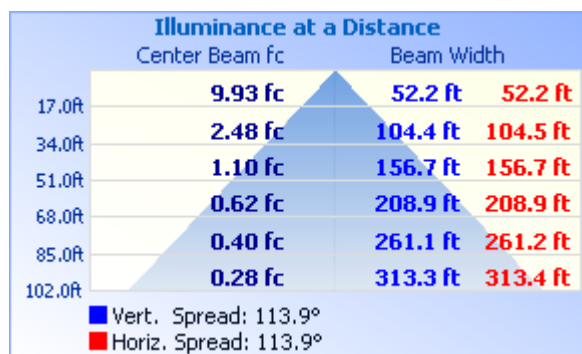
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### Photometric Data

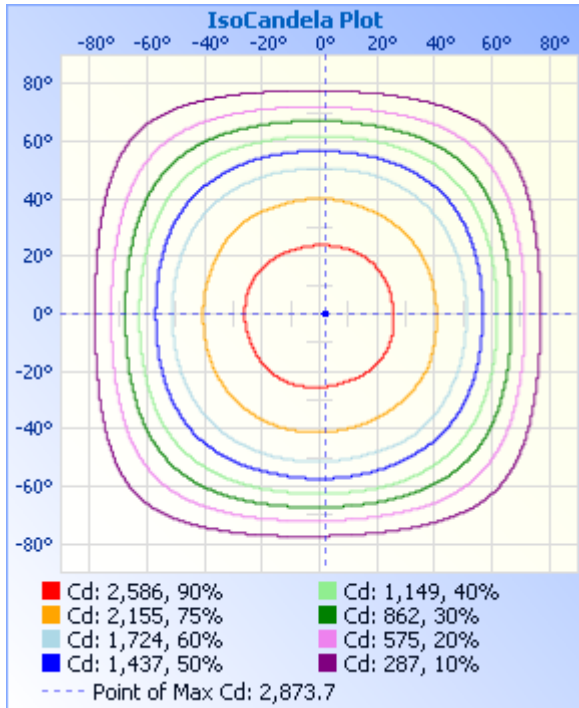


### Illuminance Plots

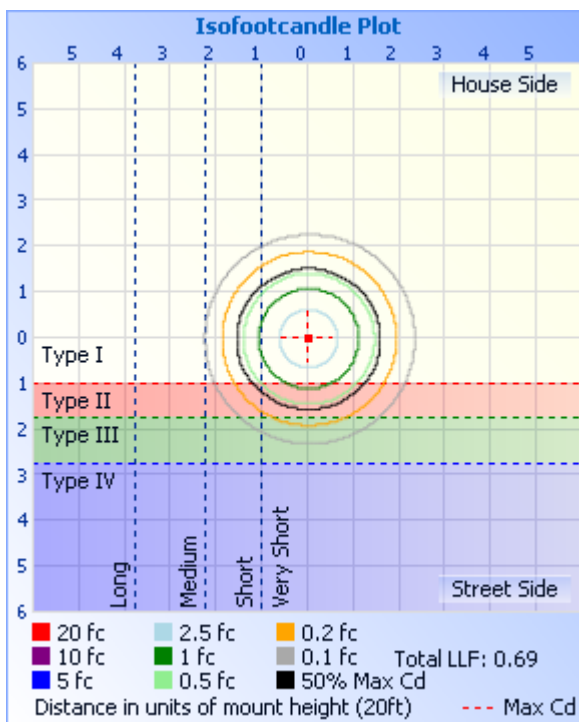




### ISOCANDELA DIAGRAM



### 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	2870	2870	2870	2870	2870	2870	2870	2870	2870	2870	2870	2870	2870	2870	2870	2870	2870
1	2870	2869	2870	2873	2867	2869	2868	2870	2868	2867	2867	2867	2872	2870	2869	2871	2870
2	2868	2868	2867	2873	2863	2867	2867	2870	2867	2866	2863	2863	2874	2869	2869	2872	2868
3	2865	2867	2866	2873	2860	2863	2864	2869	2865	2865	2859	2861	2873	2868	2869	2873	2865
4	2862	2864	2861	2873	2857	2858	2861	2868	2863	2862	2853	2857	2869	2868	2868	2872	2862
5	2859	2860	2856	2870	2854	2854	2857	2865	2859	2857	2847	2855	2865	2867	2865	2869	2859
6	2855	2856	2850	2864	2848	2848	2853	2861	2853	2850	2840	2850	2860	2865	2860	2864	2855
7	2853	2853	2843	2857	2843	2842	2848	2855	2844	2842	2833	2843	2854	2860	2854	2859	2853
8	2849	2850	2836	2848	2837	2836	2841	2847	2834	2835	2824	2835	2849	2854	2844	2850	2849
9	2845	2844	2828	2839	2832	2829	2832	2838	2826	2827	2814	2825	2841	2845	2834	2840	2845
10	2839	2837	2820	2826	2825	2820	2823	2830	2818	2817	2803	2815	2832	2834	2823	2830	2839
11	2830	2827	2811	2813	2815	2813	2811	2817	2811	2807	2793	2803	2822	2822	2813	2821	2830
12	2818	2817	2802	2801	2805	2806	2798	2806	2805	2798	2781	2793	2813	2810	2803	2812	2818
13	2805	2807	2794	2789	2793	2796	2787	2796	2796	2787	2768	2783	2803	2798	2792	2803	2805
14	2791	2796	2783	2777	2781	2785	2777	2784	2788	2773	2755	2772	2792	2785	2781	2792	2791
15	2776	2783	2771	2766	2770	2772	2766	2771	2776	2758	2742	2763	2779	2771	2769	2777	2776
16	2759	2767	2756	2755	2758	2759	2752	2756	2759	2740	2729	2753	2764	2757	2756	2762	2759
17	2740	2749	2742	2743	2747	2747	2738	2742	2742	2723	2717	2742	2749	2738	2744	2747	2740
18	2721	2729	2725	2728	2736	2734	2724	2729	2724	2708	2703	2726	2731	2720	2728	2731	2721
19	2702	2707	2709	2712	2726	2720	2709	2715	2705	2694	2689	2708	2712	2703	2713	2713	2702
20	2681	2686	2692	2696	2713	2706	2694	2699	2684	2678	2677	2691	2692	2685	2696	2693	2681
21	2659	2665	2674	2680	2697	2691	2676	2682	2664	2661	2664	2673	2671	2669	2678	2671	2659
22	2637	2643	2655	2668	2680	2674	2656	2666	2646	2643	2648	2657	2651	2651	2658	2647	2637
23	2614	2620	2636	2654	2662	2655	2641	2648	2629	2624	2631	2641	2631	2633	2638	2627	2614
24	2592	2594	2617	2638	2641	2635	2625	2628	2610	2606	2614	2625	2613	2614	2615	2604	2592
25	2572	2571	2595	2619	2621	2613	2608	2608	2588	2585	2597	2609	2592	2594	2592	2578	2572
26	2549	2548	2572	2599	2599	2589	2590	2586	2565	2562	2579	2589	2572	2575	2569	2554	2549
27	2526	2526	2552	2576	2576	2563	2569	2561	2541	2537	2558	2564	2551	2554	2548	2530	2526
28	2504	2503	2530	2550	2550	2535	2544	2538	2517	2512	2536	2536	2528	2531	2523	2508	2504

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29	2483	2481	2505	2522	2521	2506	2517	2516	2493	2488	2510	2511	2506	2505	2496	2483	2483
30	2462	2458	2479	2490	2494	2478	2490	2492	2470	2461	2483	2487	2482	2477	2468	2458	2462
31	2441	2434	2450	2460	2468	2453	2462	2466	2448	2435	2454	2462	2456	2449	2441	2433	2441
32	2416	2408	2421	2429	2443	2429	2435	2438	2426	2409	2425	2435	2429	2421	2413	2407	2416
33	2389	2384	2393	2399	2418	2407	2410	2408	2402	2381	2393	2408	2402	2392	2383	2379	2389
34	2360	2359	2367	2370	2392	2385	2382	2379	2374	2352	2362	2382	2371	2362	2354	2351	2360
35	2332	2332	2340	2340	2362	2363	2354	2349	2345	2320	2330	2353	2338	2333	2323	2322	2332
36	2306	2301	2314	2312	2331	2337	2324	2319	2316	2291	2297	2324	2305	2302	2292	2287	2306
37	2276	2267	2287	2280	2299	2307	2292	2288	2282	2261	2265	2293	2272	2270	2258	2254	2276
38	2245	2232	2258	2249	2264	2273	2259	2259	2249	2230	2233	2261	2237	2238	2222	2217	2245
39	2211	2197	2226	2218	2228	2236	2223	2227	2213	2199	2200	2226	2201	2203	2186	2183	2211
40	2176	2161	2193	2185	2192	2195	2188	2193	2179	2165	2166	2191	2166	2168	2150	2147	2176
41	2140	2127	2162	2147	2154	2154	2154	2159	2142	2130	2131	2154	2132	2129	2116	2109	2140
42	2104	2095	2127	2107	2117	2113	2116	2122	2107	2091	2093	2116	2098	2091	2083	2070	2104
43	2066	2060	2088	2067	2080	2074	2076	2082	2070	2052	2056	2078	2063	2053	2046	2033	2066
44	2027	2024	2048	2029	2043	2034	2036	2041	2031	2012	2019	2039	2027	2016	2005	1995	2027
45	1989	1985	2007	1992	2006	1997	1998	2002	1994	1971	1981	1998	1988	1982	1962	1955	1989
46	1948	1946	1965	1956	1968	1961	1961	1958	1956	1929	1939	1954	1950	1943	1921	1916	1948
47	1904	1906	1922	1920	1928	1922	1923	1914	1915	1886	1897	1906	1909	1902	1884	1882	1904
48	1859	1866	1881	1882	1884	1883	1878	1870	1872	1842	1855	1859	1862	1854	1846	1845	1859
49	1814	1823	1835	1842	1841	1841	1829	1825	1826	1796	1814	1810	1816	1808	1808	1809	1814
50	1770	1778	1789	1799	1798	1793	1779	1782	1776	1748	1771	1759	1768	1762	1764	1774	1770
51	1721	1733	1740	1756	1755	1744	1729	1738	1723	1699	1720	1708	1718	1719	1718	1736	1721
52	1672	1689	1689	1712	1710	1697	1683	1691	1676	1653	1668	1657	1665	1676	1674	1698	1672
53	1622	1648	1643	1669	1667	1653	1633	1642	1630	1609	1611	1610	1610	1630	1628	1654	1622
54	1574	1604	1594	1625	1620	1608	1584	1586	1584	1560	1553	1559	1556	1582	1586	1600	1574
55	1530	1554	1547	1576	1568	1559	1534	1527	1537	1506	1492	1508	1504	1533	1539	1544	1530
56	1486	1502	1497	1524	1516	1507	1489	1468	1485	1458	1436	1457	1458	1480	1486	1487	1486
57	1440	1450	1445	1474	1462	1456	1445	1420	1435	1414	1388	1407	1409	1427	1432	1436	1440
58	1390	1396	1395	1420	1410	1405	1392	1383	1383	1372	1344	1357	1357	1373	1375	1384	1390
59	1338	1339	1346	1365	1356	1356	1338	1340	1333	1325	1299	1303	1299	1317	1323	1328	1338
60	1283	1282	1295	1309	1305	1309	1286	1284	1278	1274	1250	1245	1242	1259	1272	1271	1283

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61	1223	1223	1243	1255	1260	1262	1236	1222	1218	1220	1196	1188	1182	1200	1213	1214	1223
62	1165	1164	1193	1199	1213	1205	1181	1169	1152	1164	1140	1132	1122	1140	1155	1161	1165
63	1106	1113	1140	1142	1164	1151	1131	1113	1089	1093	1083	1075	1068	1077	1093	1107	1106
64	1046	1062	1083	1087	1103	1099	1075	1056	1030	1020	1027	1019	1009	1020	1035	1047	1046
65	994	1008	1026	1032	1036	1042	1017	996	966	957	966	961	947	962	972	980	994
66	945	949	970	974	978	982	956	936	900	902	893	903	891	905	911	922	945
67	892	895	910	918	920	916	894	870	842	843	820	840	828	845	859	867	892
68	835	840	847	862	867	845	837	808	792	781	759	777	764	782	802	811	835
69	776	788	787	799	815	782	779	745	737	713	704	711	708	719	736	762	776
70	714	732	731	740	757	728	717	688	674	657	644	646	651	661	677	710	714
71	652	667	676	686	688	674	659	633	618	596	588	583	586	603	626	643	652
72	597	613	622	627	626	616	599	584	557	531	529	524	527	546	570	582	597
73	541	566	566	574	573	562	539	529	497	474	471	466	469	493	513	529	541
74	497	510	512	518	524	506	482	467	440	422	414	410	417	436	455	473	497
75	441	452	460	463	469	450	433	408	385	364	360	359	362	378	399	418	441
76	386	398	405	415	410	400	380	357	331	315	304	306	315	329	345	374	386
77	344	348	359	364	364	350	329	309	280	266	256	256	266	282	298	323	344
78	294	301	307	312	312	302	281	262	233	219	212	211	218	235	254	275	294
79	248	258	263	270	267	259	236	216	187	176	168	169	177	193	211	233	248
80	209	216	221	228	227	212	194	171	140	131	120	122	136	156	171	192	209
81	172	182	186	187	185	166	146	122	94	86	80	82	97	122	138	157	172
82	139	147	149	153	147	116	98	74	54	50	46	49	61	89	107	124	139
83	107	115	119	119	103	74	57	39	27	25	24	26	36	60	81	96	107
84	70	86	90	86	66	42	27	17	13	13	14	16	20	37	59	64	70
85	38	51	67	56	38	20	13	9	5	5	7	10	14	21	38	35	38
86	20	23	42	33	20	11	6	3	2	1	1	3	8	14	20	17	20
87	10	12	19	18	12	5	2	1	1	1	0	1	2	9	11	8	10
88	3	4	8	9	5	1	0	1	0	1	0	0	0	2	4	2	3
89	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	1	1
90	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0

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93	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
97	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0
98	0	0	0	0	0	0	1	1	7	1	1	1	0	0	0	0	0
99	0	0	0	0	0	0	1	1	25	1	1	1	0	0	0	0	0
100	0	0	0	0	0	1	1	1	54	1	1	1	0	0	0	0	0
101	0	0	0	0	0	1	1	1	58	1	1	1	0	0	0	0	0
102	0	0	0	0	1	1	1	1	50	1	1	1	0	0	0	0	0
103	0	0	0	0	1	1	1	1	26	1	1	1	0	0	0	0	0
104	0	0	0	0	1	1	1	1	5	1	1	1	0	0	0	0	0
105	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0
106	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0
107	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0
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109	1	0	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1
110	1	0	1	1	2	1	1	1	1	1	1	2	1	1	1	1	1
111	1	1	1	1	2	1	2	1	2	1	2	2	1	1	1	1	1
112	1	1	1	1	2	2	2	2	2	1	2	2	1	1	1	1	1
113	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1
114	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1
115	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1
116	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1
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118	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2
119	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1
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123	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
124	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2

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125	3	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	3
126	3	2	2	2	3	2	2	3	3	3	3	3	2	2	2	3	3
127	3	2	2	2	3	3	2	3	3	3	3	3	2	2	2	3	3
128	3	3	2	3	3	3	3	3	3	3	3	3	2	2	2	3	3
129	3	3	2	3	3	3	3	3	3	3	3	3	3	2	2	3	3
130	3	3	2	3	3	3	3	3	3	3	3	3	3	3	2	3	3
131	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3
132	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3
133	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3
134	3	3	3	3	3	3	3	3	3	4	3	3	3	3	2	3	3
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136	3	3	3	3	4	3	3	4	3	4	3	4	3	3	2	3	3
137	3	3	3	3	4	4	3	4	3	4	3	4	3	3	2	3	3
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140	3	4	3	3	4	4	3	4	4	4	3	4	3	3	2	3	3
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143	3	4	3	3	4	4	4	4	4	4	4	4	3	3	3	4	3
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146	4	4	3	3	4	4	4	5	4	4	4	4	4	3	3	4	4
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148	4	4	3	3	5	4	4	5	4	4	5	4	4	3	3	4	4
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151	4	4	4	4	5	5	5	5	4	4	5	5	4	3	4	4	4
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155	5	4	4	4	5	5	5	5	4	4	5	5	4	4	4	5	5
156	5	4	4	4	4	5	5	5	4	4	5	5	4	4	4	5	5

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157	5	4	4	4	4	5	5	5	5	4	5	5	4	4	4	5	5
158	5	4	4	4	5	5	5	5	5	4	5	5	4	4	4	5	5
159	5	4	4	4	5	5	5	5	5	4	5	5	4	4	4	5	5
160	5	4	4	4	5	5	5	5	5	4	5	5	4	4	4	5	5
161	5	4	4	4	5	5	5	5	5	4	5	5	4	4	5	5	5
162	5	4	4	4	5	5	5	5	5	5	5	5	4	4	5	5	5
163	5	4	4	4	5	5	5	5	5	5	5	6	4	4	5	5	5
164	5	5	4	4	5	5	5	5	5	5	5	6	4	4	5	5	5
165	5	5	4	4	5	5	5	5	5	5	5	6	4	4	5	5	5
166	5	5	5	4	5	5	5	5	5	5	5	6	5	4	5	5	5
167	5	5	5	4	6	6	5	5	5	5	5	6	5	4	5	5	5
168	5	5	5	5	6	6	5	6	5	5	6	6	5	4	5	5	5
169	5	5	5	5	6	6	6	6	6	6	6	6	5	5	5	5	5
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171	5	5	5	5	6	6	6	6	6	6	6	6	5	5	6	5	5
172	5	5	6	5	6	6	6	6	6	6	6	6	5	5	6	5	5
173	5	5	6	5	6	6	6	6	6	6	6	6	5	5	6	6	5
174	6	6	6	5	6	6	6	6	6	6	6	6	5	5	6	6	6
175	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6
176	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
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178	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
179	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
180	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

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<b>3. Test Equipment</b>
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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 \*\*\*\*\***