



LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and
Electrical Characteristics of Customer Submitted Luminaire

CURTIS-STRAUS

Report No.: PHM-RPT-180223-04
Date: February 23, 2018

LM-79 Distribution Testing: Total Luminous Flux, Luminous Intensity Distribution, Electrical Characteristics and Efficacy.

Report Prepared for:

**Vantage Lighting
181 Narragansett Park Drive
East Providence, RI 02916
USA
Telephone: (860) 564-4512**

**Description : 6" SQ ENC
Model Tested: SQ66VEFLEDU-3035K
WO/CS#: S0461**

**Report Issue Date: February 23, 2018
Date of Test(s): February 19-22, 2018
Total Number of Pages : 9 (including this page)**

Report Reviewed by:

**Mark Razvi
Photometric Lab Supervisor
Curtis-Straus**



LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and Electrical Characteristics of Customer Submitted Luminaire

CURTIS-STRAUS

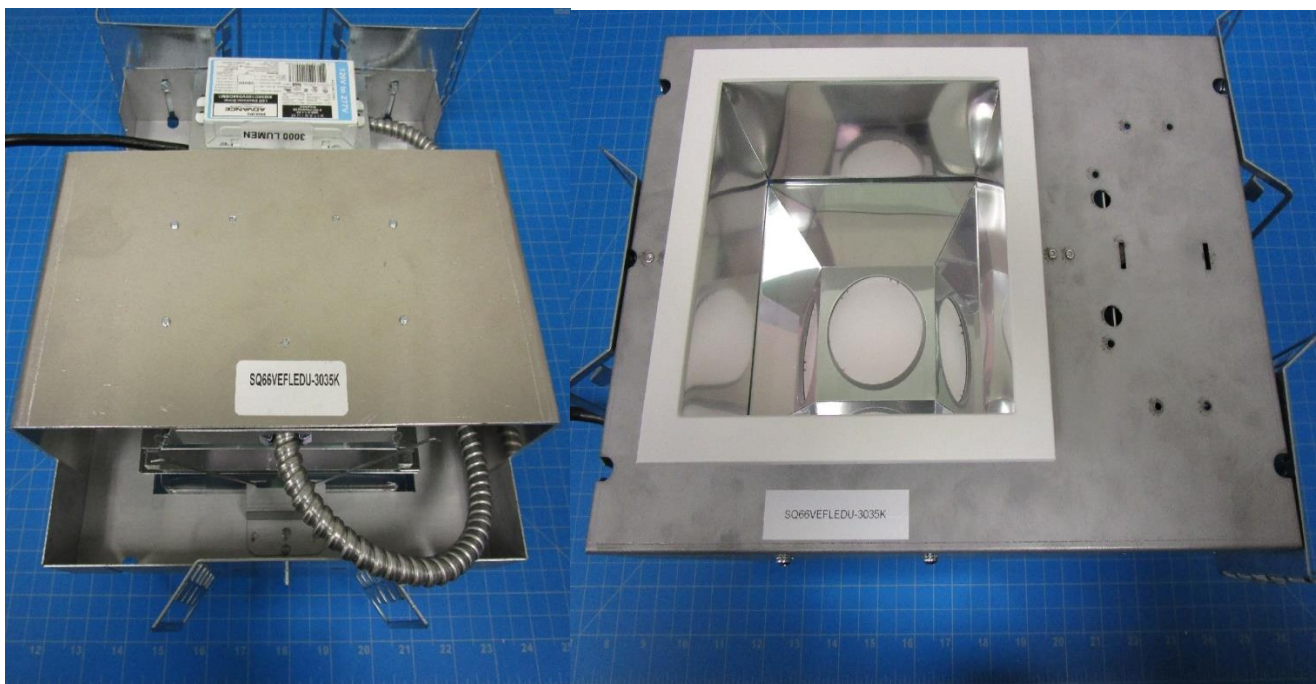
Report No.: PHM-RPT-180223-04

Date: February 23, 2018

DETAILED PRODUCT DESCRIPTION

Model #	SQ66VEFLEDU-3035K
CS/WO#	S0461
Description	6" SQ ENC
Supply Voltage	120VAC

Pictures:





LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and Electrical Characteristics of Customer Submitted Luminaire

Report No.: PHM-RPT-180223-04

Date: February 23, 2018

CURTIS-STRAUS

Curtis-Straus Photometric Testing Information

Photometric Testing is performed in accordance with the procedures outlined in LM-79-2008 . The test sample is evaluated for photometric and electrical characteristics using the equipment listed below.

Curtis-Straus Environmental Testing Info

Curtis-Straus testing laboratory temperature during testing: 25.7 °C .

LIST OF EQUIPMENT USED:

Description	Model No.	Serial No.	Asset No	Cal. Date	Cal. Due
Yokogawa Power Meter	WT-310E	C2SK10001V	2360	04-21-17	04-21-18
Chroma AC Power Supply	61603	616030001283	2355	04-21-17	04-21-18
LabSphere Type-C GoniometerSystem	PM-150-140	022172153	AA-30058-195	02-09-18	03-09-18
Digital Thermometer	4627	160739886	2392	09-07-16	09-07-18

This technical report may only be quoted in full. Any use for advertising purposes must be granted in writing. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production.



LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and Electrical Characteristics of Customer Submitted Luminaire

Report No.: PHM-RPT-180223-04

Date: February 23, 2018

CURTIS-STRAUS

LM-79-2008 Distribution Test Data

Model # SQ66VEFLEDU-3035K
CS/WO# S0461
Description 6" SQ ENC
Supply Voltage 120VAC

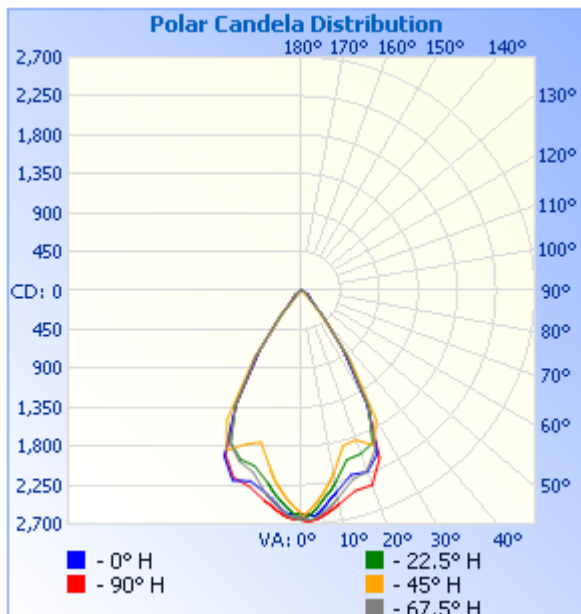
Result of Tests

Photometric and Electrical Test Data

Input Voltage: 120 VAC
 Base Orientation: Base Up

Lumens (lm)	Watts (W)	Volts (VAC)	Amps (A)	Efficacy	PF	Ithd (%)
2571.65	36.79	120.24	0.31	69.90	0.9960	0.13

Luminous Intensity Summary: Cd



Illumination Cone of Light
 Mounting Ht: 10 ft.

	Center Beam fc	Beam Width	
1.7ft	90.4 fc	2.1 ft	2.1 ft
3.3ft	24.0 fc	4.0 ft	4.0 ft
5.0ft	10.4 fc	6.1 ft	6.1 ft
6.7ft	58.2 fc	8.2 ft	8.2 ft
8.3ft	37.9 fc	10.1 ft	10.1 ft
10.0ft	26.1 fc	12.2 ft	12.2 ft

■ Vert. Spread: 62.8°
■ Horiz. Spread: 62.8°



LM-79 Distribution Test Report (Luminaire)

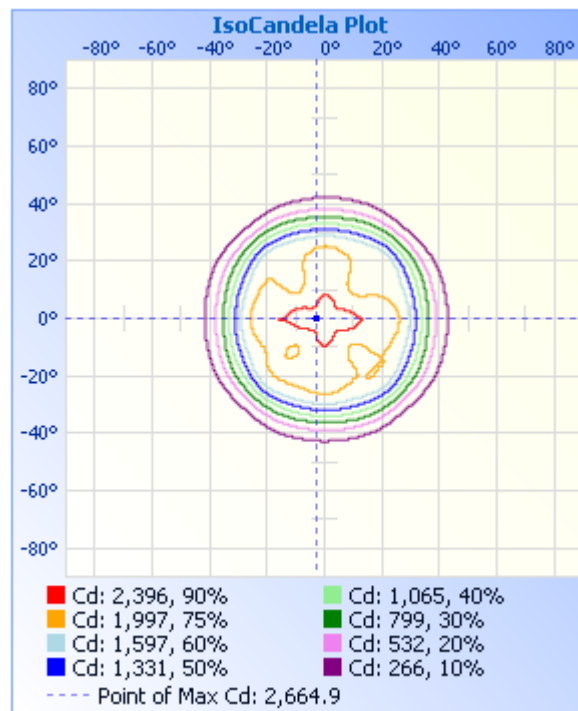
Total Luminous Flux, Luminous Intensity Distribution and Electrical Characteristics of Customer Submitted Luminaire

Report No.: PHM-RPT-180223-04

Date: February 23, 2018

CURTIS-STRAUS

IsoCandela Plot



Zonal Lumens Summary

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	1,719.7	66.9%
0-40	2,295.3	89.3%
0-60	2,480.0	96.4%
60-90	46.3	1.8%
70-100	26.4	1%
90-120	19.6	0.8%
0-90	2,526.3	98.2%
90-180	45.3	1.8%
0-180	2,571.6	100%

Lumens per Zone

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	232.3	9.0%	90-100	6.8	0.3%
10-20	606.2	23.6%	100-110	6.5	0.3%
20-30	881.2	34.3%	110-120	6.4	0.2%
30-40	575.6	22.4%	120-130	6.1	0.2%
40-50	124.3	4.8%	130-140	6.0	0.2%
50-60	60.4	2.3%	140-150	5.6	0.2%
60-70	26.8	1.0%	150-160	4.3	0.2%
70-80	10.8	0.4%	160-170	2.8	0.1%
80-90	8.7	0.3%	170-180	0.9	0%



LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and Electrical Characteristics of Customer Submitted Luminaire

Report No.: PHM-RPT-180223-04

Date: February 23, 2018

CURTIS-STRAUS

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	2612	2612	2612	2612	2612	2612	2612	2612	2612	2612	2612	2612	2612	2612	2612	2612	2612
0.1	2580	2640	2605	2628	2653	2651	2577	2595	2581	2590	2573	2643	2634	2646	2597	2595	2623
0.2	2581	2639	2605	2629	2654	2652	2573	2594	2582	2590	2570	2643	2635	2645	2593	2596	2625
0.3	2582	2637	2604	2630	2655	2654	2570	2594	2582	2590	2567	2644	2636	2644	2590	2597	2626
0.4	2583	2635	2604	2631	2656	2654	2566	2594	2582	2590	2563	2643	2637	2643	2587	2597	2628
0.5	2584	2633	2601	2632	2657	2653	2562	2594	2583	2589	2560	2643	2638	2643	2583	2598	2630
0.6	2585	2631	2598	2633	2658	2652	2558	2594	2583	2589	2557	2642	2638	2642	2580	2599	2631
0.7	2586	2629	2594	2634	2659	2651	2554	2593	2583	2589	2553	2641	2639	2641	2577	2600	2633
0.8	2587	2628	2591	2636	2659	2650	2550	2593	2584	2589	2550	2641	2640	2640	2573	2600	2635
0.9	2588	2626	2588	2637	2660	2648	2546	2593	2584	2589	2546	2640	2640	2640	2570	2601	2635
1	2589	2624	2584	2638	2661	2647	2543	2593	2584	2589	2542	2640	2641	2639	2566	2602	2635
1.1	2590	2622	2581	2639	2661	2646	2539	2592	2585	2589	2539	2639	2641	2638	2563	2603	2635
1.2	2590	2620	2578	2640	2662	2645	2535	2592	2585	2589	2535	2638	2642	2637	2560	2604	2636
1.3	2591	2618	2574	2641	2662	2643	2531	2592	2585	2589	2531	2638	2642	2636	2556	2604	2636
1.4	2592	2615	2571	2642	2663	2642	2527	2592	2586	2589	2528	2637	2643	2634	2551	2605	2636
1.5	2593	2612	2567	2643	2664	2641	2523	2592	2586	2589	2524	2636	2643	2633	2547	2606	2636
1.6	2594	2609	2564	2644	2664	2639	2519	2591	2586	2589	2520	2634	2644	2631	2543	2607	2636
1.7	2595	2606	2560	2645	2665	2636	2515	2591	2587	2589	2516	2633	2644	2630	2539	2607	2637
1.8	2596	2603	2555	2646	2665	2634	2511	2591	2587	2589	2513	2631	2643	2628	2535	2608	2637
1.9	2597	2601	2551	2648	2664	2632	2507	2591	2587	2586	2509	2630	2642	2627	2531	2609	2637
2	2598	2598	2547	2649	2664	2630	2502	2590	2588	2582	2505	2628	2642	2625	2527	2610	2636
2.1	2599	2595	2543	2650	2664	2627	2498	2590	2588	2579	2500	2627	2641	2623	2522	2610	2635
2.2	2600	2592	2539	2651	2663	2625	2494	2590	2588	2576	2496	2625	2641	2622	2518	2610	2634
2.3	2601	2589	2534	2652	2663	2623	2490	2590	2589	2572	2492	2624	2640	2620	2514	2607	2632
2.4	2602	2586	2530	2653	2663	2621	2486	2590	2589	2569	2487	2622	2639	2617	2510	2604	2631
2.5	2603	2582	2526	2651	2662	2619	2482	2589	2589	2566	2483	2621	2639	2615	2505	2602	2629
2.6	2603	2579	2522	2650	2662	2616	2478	2589	2590	2562	2479	2619	2638	2612	2500	2599	2628
2.7	2604	2575	2517	2648	2662	2614	2474	2588	2590	2559	2474	2617	2637	2610	2495	2596	2626
2.8	2605	2571	2513	2647	2661	2611	2469	2585	2590	2556	2470	2615	2636	2607	2490	2593	2625
2.9	2606	2567	2508	2645	2660	2608	2465	2581	2591	2552	2466	2613	2635	2604	2486	2590	2623
3	2607	2563	2504	2643	2659	2605	2460	2578	2591	2548	2461	2611	2634	2602	2481	2587	2622
3.1	2608	2560	2499	2642	2658	2602	2456	2575	2591	2545	2457	2609	2632	2599	2476	2584	2620



LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and Electrical Characteristics of Customer Submitted Luminaire

Report No.: PHM-RPT-180223-04

Date: February 23, 2018

CURTIS-STRAUS

3.2	2609	2556	2494	2640	2657	2599	2451	2571	2592	2541	2452	2607	2631	2597	2471	2581	2617
3.3	2610	2552	2490	2638	2655	2596	2447	2568	2592	2537	2447	2605	2630	2594	2466	2578	2614
3.4	2611	2548	2485	2637	2654	2593	2442	2565	2592	2533	2442	2603	2628	2591	2462	2574	2611
3.5	2608	2544	2480	2635	2653	2591	2438	2561	2593	2529	2438	2601	2627	2588	2457	2570	2608
3.6	2605	2540	2476	2633	2652	2588	2433	2558	2593	2525	2433	2599	2626	2585	2452	2566	2605
3.7	2602	2535	2471	2631	2650	2585	2429	2554	2590	2521	2428	2596	2624	2581	2447	2562	2603
3.8	2599	2530	2467	2628	2649	2582	2424	2551	2586	2518	2423	2593	2623	2578	2442	2558	2600
3.9	2595	2526	2462	2626	2648	2579	2420	2547	2583	2514	2419	2591	2621	2575	2438	2554	2597
4	2592	2521	2457	2623	2646	2575	2415	2544	2580	2510	2414	2588	2619	2572	2433	2550	2594
4.1	2589	2516	2452	2621	2644	2572	2410	2540	2577	2506	2409	2585	2617	2568	2428	2546	2591
4.2	2586	2512	2447	2618	2642	2569	2405	2537	2573	2502	2404	2582	2615	2565	2423	2542	2588
4.3	2583	2507	2442	2616	2640	2566	2400	2533	2570	2498	2400	2580	2612	2562	2419	2538	2584
4.4	2579	2502	2438	2613	2638	2563	2395	2529	2567	2494	2395	2577	2610	2559	2414	2534	2580
4.5	2576	2498	2433	2611	2637	2559	2390	2526	2563	2490	2390	2574	2608	2555	2409	2530	2576
4.6	2572	2493	2428	2608	2635	2556	2385	2522	2560	2486	2385	2571	2606	2552	2404	2525	2572
4.7	2568	2489	2423	2606	2633	2553	2380	2518	2557	2482	2381	2569	2604	2548	2399	2521	2568
4.8	2564	2484	2418	2603	2631	2550	2374	2515	2553	2478	2376	2566	2601	2545	2394	2516	2564
4.9	2560	2479	2413	2600	2629	2546	2369	2511	2550	2474	2371	2562	2599	2541	2389	2511	2560
5	2556	2475	2409	2597	2627	2543	2365	2507	2546	2470	2366	2559	2597	2537	2384	2507	2556
5.1	2552	2470	2404	2594	2625	2539	2360	2503	2542	2466	2361	2555	2594	2534	2379	2502	2552
5.2	2548	2465	2399	2591	2623	2536	2356	2499	2539	2462	2357	2552	2592	2530	2374	2497	2548
5.3	2543	2461	2394	2588	2620	2532	2351	2495	2535	2458	2352	2549	2589	2526	2369	2493	2544
5.4	2539	2456	2390	2585	2618	2528	2347	2491	2532	2454	2346	2545	2586	2523	2363	2488	2540
5.5	2535	2451	2385	2582	2616	2525	2342	2487	2528	2450	2341	2542	2583	2519	2358	2484	2536
5.6	2531	2447	2380	2579	2613	2521	2338	2483	2524	2446	2336	2538	2581	2516	2353	2479	2531
5.7	2527	2442	2375	2576	2611	2518	2333	2480	2521	2442	2331	2535	2578	2512	2348	2474	2527
5.8	2522	2437	2371	2573	2609	2514	2329	2476	2517	2438	2326	2531	2575	2508	2343	2469	2523
5.9	2518	2433	2366	2570	2607	2510	2325	2472	2514	2434	2321	2528	2573	2505	2338	2464	2518
6	2514	2428	2361	2567	2604	2507	2320	2468	2510	2430	2315	2524	2570	2501	2333	2459	2514
6.1	2509	2423	2356	2564	2602	2503	2316	2464	2506	2426	2310	2521	2567	2498	2328	2455	2510
6.2	2505	2419	2351	2561	2600	2499	2310	2460	2502	2422	2305	2517	2565	2494	2323	2450	2505
6.3	2501	2414	2345	2558	2597	2495	2305	2456	2499	2418	2300	2514	2562	2490	2318	2445	2501
6.4	2496	2410	2340	2555	2595	2491	2300	2453	2495	2414	2295	2510	2559	2487	2314	2440	2496
6.5	2492	2405	2334	2553	2593	2487	2294	2449	2491	2410	2290	2507	2556	2483	2309	2435	2492
6.6	2488	2400	2329	2550	2590	2484	2289	2445	2488	2406	2285	2503	2554	2480	2304	2430	2488
6.7	2483	2396	2323	2547	2588	2480	2284	2441	2484	2403	2281	2500	2551	2476	2299	2425	2483
6.8	2479	2391	2317	2544	2586	2476	2278	2438	2480	2399	2276	2496	2548	2472	2294	2421	2479
6.9	2475	2387	2312	2541	2583	2472	2273	2434	2476	2395	2271	2493	2545	2469	2289	2416	2474
7	2470	2383	2306	2538	2581	2468	2267	2430	2473	2391	2267	2489	2542	2465	2285	2411	2470
7.1	2466	2380	2301	2535	2579	2464	2262	2427	2470	2388	2262	2486	2540	2461	2281	2406	2466



LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and Electrical Characteristics of Customer Submitted Luminaire

Report No.: PHM-RPT-180223-04

Date: February 23, 2018

CURTIS-STRAUS

7.2	2462	2377	2295	2531	2576	2460	2257	2423	2466	2384	2257	2482	2537	2457	2276	2402	2461
7.3	2457	2373	2290	2528	2574	2456	2251	2420	2463	2380	2252	2479	2534	2454	2272	2397	2457
7.4	2453	2370	2285	2525	2572	2452	2245	2417	2459	2377	2248	2475	2532	2450	2268	2392	2452
7.5	2449	2366	2281	2522	2569	2448	2239	2414	2456	2372	2243	2472	2529	2446	2263	2388	2448
7.6	2444	2363	2276	2519	2567	2444	2234	2411	2453	2368	2237	2468	2526	2442	2259	2383	2444
7.7	2440	2359	2271	2515	2564	2440	2228	2407	2449	2363	2232	2465	2523	2439	2255	2378	2441
7.8	2436	2356	2266	2512	2562	2436	2222	2404	2446	2359	2226	2461	2521	2435	2250	2374	2437
7.9	2431	2352	2261	2509	2560	2431	2216	2401	2442	2354	2220	2458	2518	2431	2246	2371	2433
8	2428	2349	2256	2506	2557	2427	2210	2398	2439	2350	2214	2454	2515	2427	2241	2367	2430
8.1	2424	2344	2251	2502	2555	2423	2205	2395	2436	2345	2209	2450	2513	2424	2237	2364	2426
8.2	2421	2340	2246	2499	2552	2419	2199	2392	2433	2341	2203	2447	2510	2420	2232	2361	2422
8.3	2418	2335	2241	2495	2550	2415	2193	2389	2430	2336	2197	2444	2507	2417	2227	2357	2419
8.4	2414	2331	2235	2492	2547	2410	2187	2385	2428	2332	2192	2441	2505	2413	2223	2354	2415
8.5	2411	2326	2230	2488	2545	2406	2181	2381	2425	2327	2186	2437	2502	2409	2218	2351	2412
8.6	2408	2321	2224	2485	2542	2401	2175	2377	2422	2322	2180	2434	2500	2406	2213	2347	2408
8.7	2404	2317	2219	2481	2540	2397	2169	2373	2420	2318	2174	2431	2497	2402	2209	2344	2404
8.8	2401	2312	2214	2477	2537	2392	2163	2369	2417	2313	2168	2427	2495	2399	2204	2341	2401
8.9	2398	2308	2208	2474	2535	2388	2156	2365	2414	2308	2161	2424	2493	2395	2199	2338	2398
9	2394	2303	2203	2470	2532	2383	2150	2361	2411	2303	2155	2421	2490	2391	2195	2333	2395
9.1	2391	2299	2197	2467	2530	2379	2144	2357	2409	2298	2148	2418	2488	2388	2190	2329	2391
9.2	2388	2294	2192	2463	2527	2374	2138	2353	2406	2293	2142	2414	2485	2384	2184	2324	2388
9.3	2384	2289	2186	2459	2525	2370	2132	2349	2402	2289	2136	2411	2483	2380	2178	2320	2385
9.4	2381	2284	2181	2456	2522	2365	2126	2345	2399	2284	2129	2407	2480	2376	2173	2316	2382
9.5	2377	2279	2175	2452	2520	2360	2120	2341	2395	2279	2123	2403	2478	2372	2167	2312	2379
9.6	2374	2274	2168	2448	2517	2355	2113	2337	2392	2274	2117	2399	2476	2368	2161	2307	2375
9.7	2371	2269	2162	2445	2514	2350	2107	2333	2388	2270	2110	2396	2474	2365	2156	2303	2372
9.8	2367	2264	2156	2441	2512	2345	2101	2329	2385	2265	2104	2392	2471	2361	2150	2299	2369
9.9	2364	2259	2150	2437	2509	2340	2095	2325	2381	2261	2097	2388	2469	2357	2144	2294	2366
10	2360	2254	2144	2434	2507	2335	2089	2321	2378	2257	2091	2384	2467	2353	2139	2290	2362
15	2206	2026	1855	2269	2397	2127	1894	2196	2282	2100	1816	2173	2343	2125	1810	2083	2207
20	2230	2008	1838	2213	2392	2070	2019	2212	2337	2075	1890	2103	2301	2015	1733	2051	2232
25	2077	1941	1973	2020	2134	1949	2101	2039	2116	1940	2039	1955	2089	1869	1938	1943	2076
30	1509	1561	1729	1530	1524	1532	1722	1548	1524	1533	1725	1528	1503	1510	1737	1546	1511
35	842	933	985	905	854	925	956	912	863	929	965	925	849	932	1005	919	841
40	369	374	324	388	352	375	312	388	365	391	308	387	373	398	321	377	369
45	173	124	63	112	149	92	63	105	149	93	61	115	168	112	58	137	172
50	118	77	38	86	118	70	32	79	117	66	34	80	119	74	36	88	118
55	101	69	31	92	101	72	27	81	96	63	27	91	95	72	30	87	100
60	85	42	22	65	79	45	19	56	75	38	19	73	79	46	21	60	85
65	41	17	13	23	37	18	12	20	38	16	13	26	41	18	13	21	41



LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and Electrical Characteristics of Customer Submitted Luminaire

Report No.: PHM-RPT-180223-04

Date: February 23, 2018

CURTIS-STRAUS

70	14	10	11	11	14	11	10	11	14	10	10	11	16	10	11	11	14
75	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	10
80	9	10	9	10	9	9	9	10	9	9	9	11	9	10	9	10	10
85	8	9	7	8	8	9	7	8	8	8	7	10	8	8	7	8	8
90	6	7	6	6	7	6	6	7	6	6	6	6	6	6	6	6	6
95	6	7	7	6	7	6	6	6	6	6	6	8	7	6	6	6	6
100	6	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6
105	6	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6
110	6	6	7	7	6	6	6	6	6	6	6	6	6	6	7	6	6
115	6	7	8	7	6	6	7	6	6	6	6	6	6	6	8	6	6
120	6	7	9	7	6	7	7	6	6	6	6	6	6	6	9	6	6
125	6	7	9	7	7	7	7	6	6	6	6	6	6	6	9	7	6
130	6	7	9	8	7	7	7	6	6	6	7	6	6	7	8	7	6
135	7	8	9	9	8	8	8	7	6	7	7	7	7	8	9	8	7
140	7	9	9	10	9	9	8	8	7	8	8	8	8	9	9	8	7
145	8	9	10	10	10	9	9	8	8	8	9	8	9	9	9	9	8
150	9	10	10	10	9	9	9	9	8	9	9	9	9	10	9	9	9
155	9	10	10	10	9	9	9	9	9	9	9	9	9	10	10	9	9
160	9	10	10	10	10	10	10	9	9	9	10	9	9	10	10	9	9
165	9	10	10	10	10	10	10	10	9	10	10	10	9	10	10	10	9
170	10	10	10	10	10	10	10	9	10	10	10	10	10	10	10	10	10
175	10	10	10	10	10	10	10	10	9	10	9	10	10	10	10	10	10
180	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10