

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P158670

Luminaire Tested: **VST-E05-LED-E-U-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158670
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33714)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E05-LED-E-U-SL4
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (105) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14504.7 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

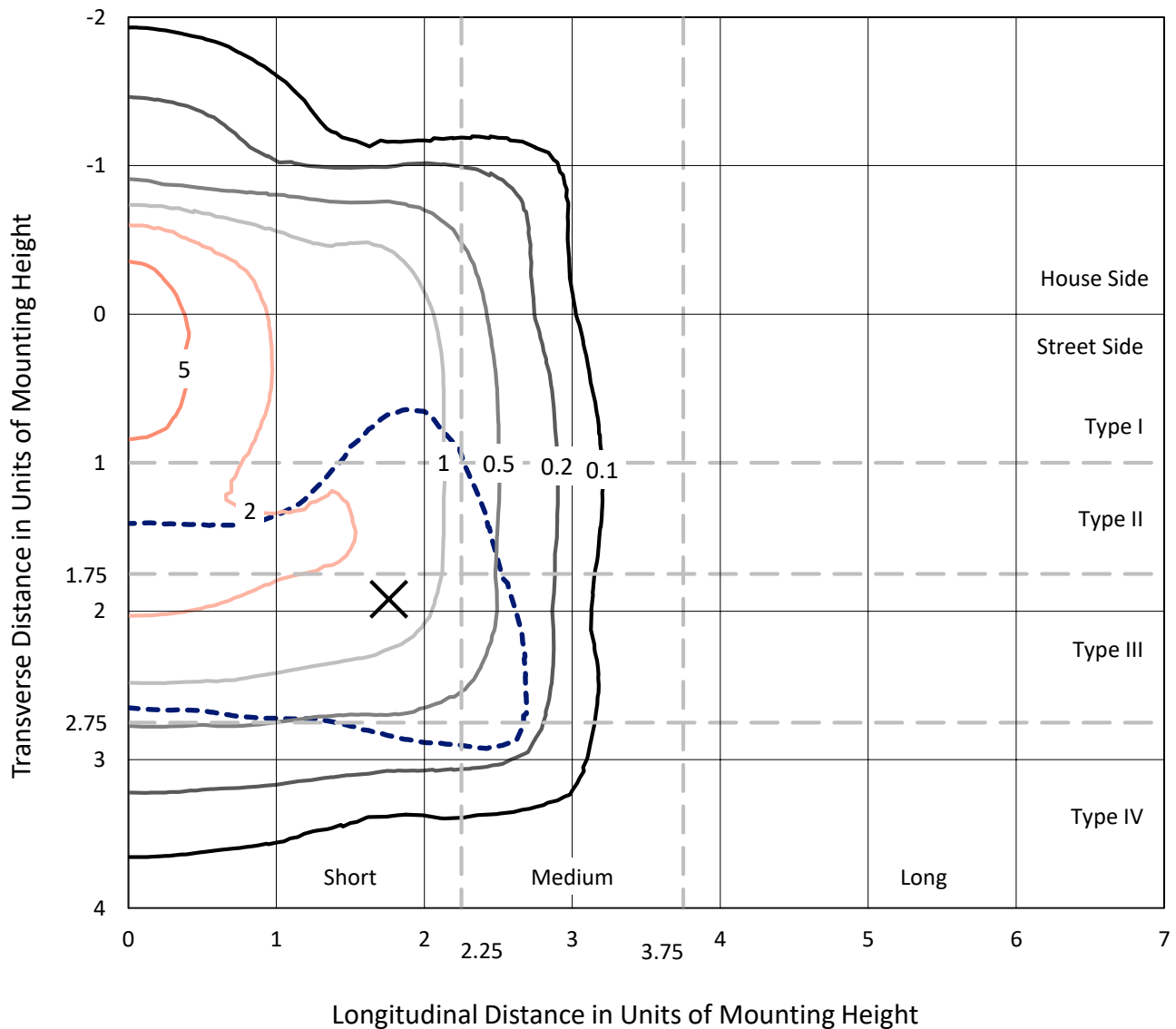


REPORT NUMBER: P158670

CATALOG NUMBER: VST-E05-LED-E-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

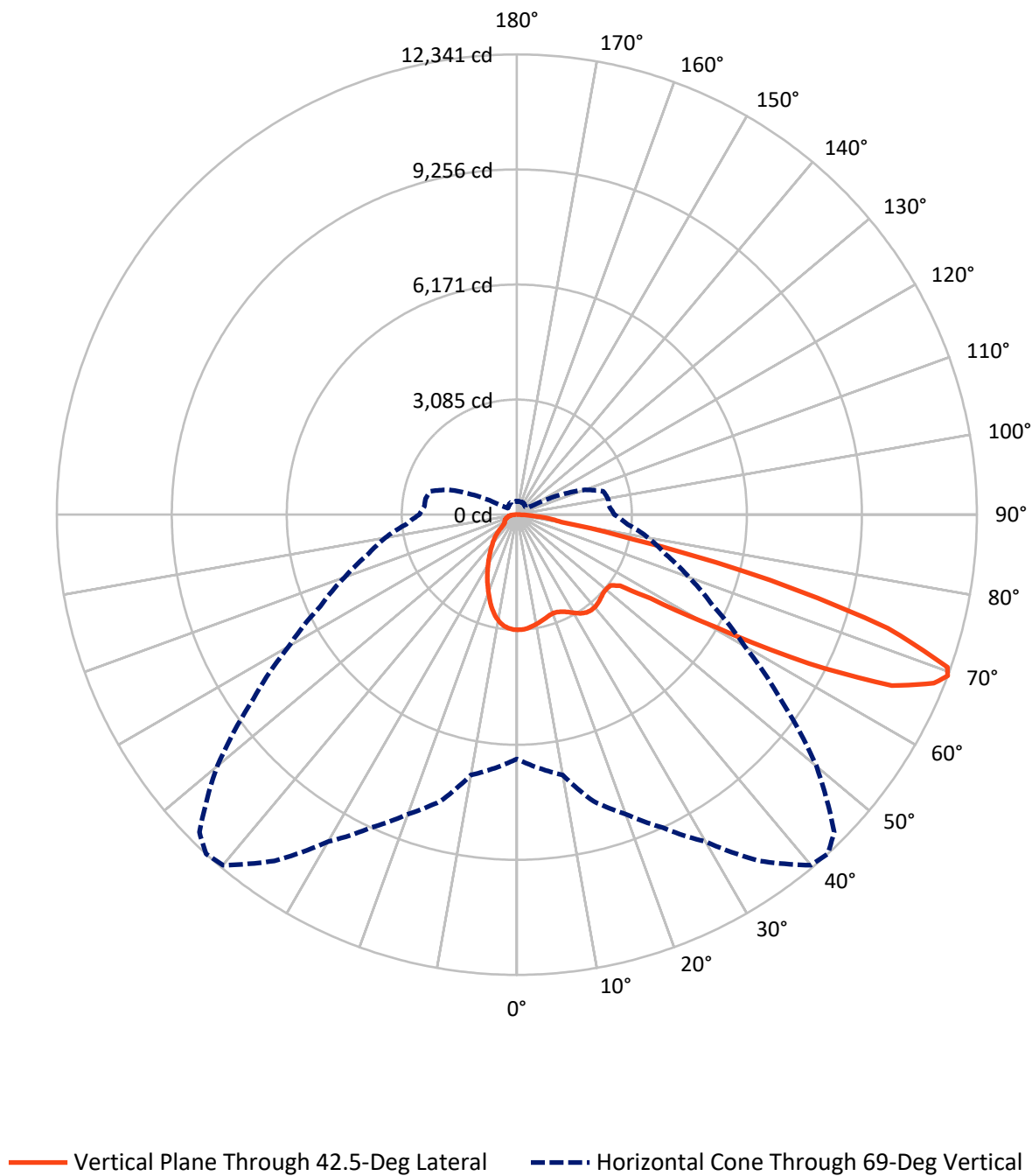


Based on 20 foot mounting height. Maximum calculated value = 7.7 fc
Type IV - Short - Full Cutoff

REPORT NUMBER: P158670

CATALOG NUMBER: VST-E05-LED-E-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P158670

CATALOG NUMBER: VST-E05-LED-E-U-SL4

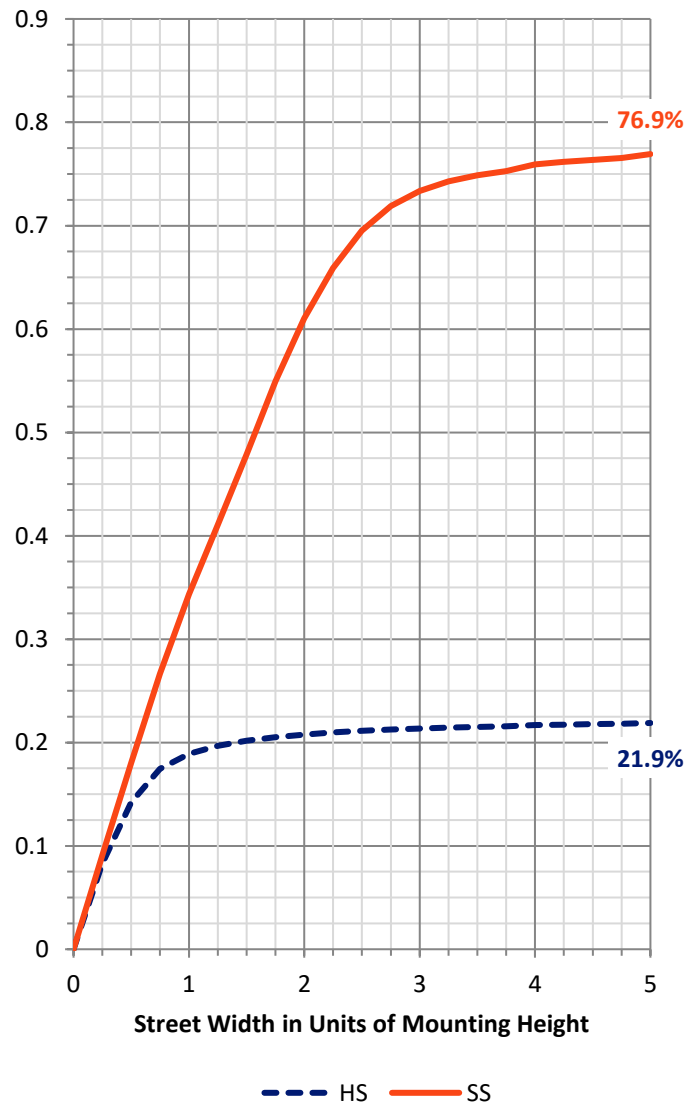
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3224.6	0.0	3224.6
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	11280.1	0.0	11280.1
	% Fixture	77.8	0.0	77.8
Total	Lumens	14504.7	0.0	14504.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.5	2.0
10°-20°	775.0	5.3
20°-30°	1130.1	7.8
30°-40°	1440.6	9.9
40°-50°	1676.2	11.6
50°-60°	2550.4	17.6
60°-70°	4505.1	31.1
70°-80°	1859.1	12.8
80°-90°	280.7	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	14504.7	100.0
0°-180°	14504.7	100.0

Coefficient of Utilization



REPORT NUMBER: P158670

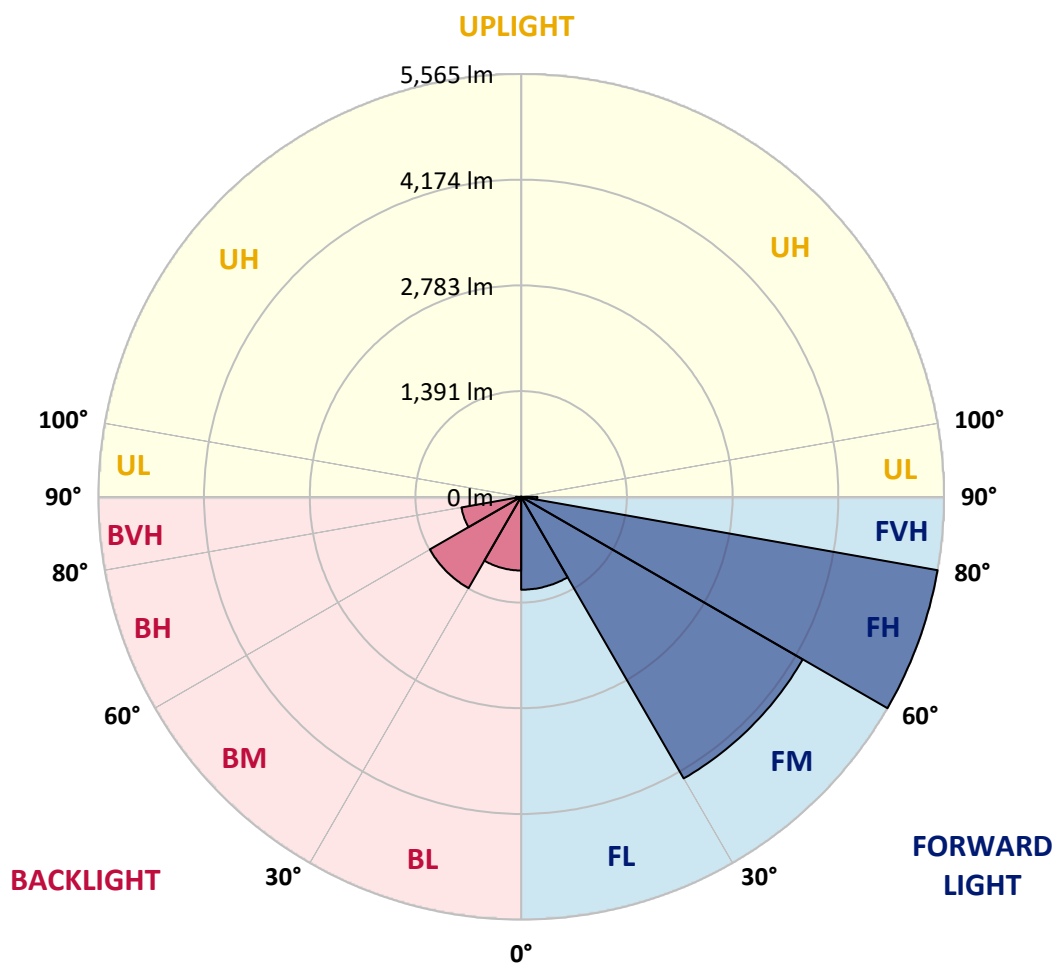
CATALOG NUMBER: VST-E05-LED-E-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1223.1	8.4			
FM	(30°-60°)	4279.3	29.5			
FH	(60°-80°)	5565.4	38.4			G3/7500
FVH	(80°-90°)	212.3	1.5			G2/225
BL	(0°-30°)	969.5	6.7	B2/1000		
BM	(30°-60°)	1387.9	9.6	B2/2500		
BH	(60°-80°)	798.7	5.5	B2/1000		G2/1000
BVH	(80°-90°)	68.4	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





REPORT NUMBER: P158670

CATALOG NUMBER: VST-E05-LED-E-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	42.5°	45°
0°	3089	3089	3089	3089	3089	3089	3089	3089	3089	3089	3089
2.5°	3079	3090	3086	3086	3089	3084	3084	3086	3081	3084	3083
5°	3068	3074	3072	3072	3072	3068	3066	3065	3058	3058	3055
7.5°	3044	3046	3049	3045	3044	3043	3036	3032	3024	3017	3019
10°	3012	3011	3016	3013	3009	3006	3000	2993	2984	2975	2974
12.5°	2976	2975	2979	2977	2974	2968	2963	2951	2937	2926	2925
15°	2953	2950	2954	2950	2945	2939	2930	2915	2890	2879	2870
17.5°	2975	2970	2972	2967	2960	2944	2923	2891	2855	2836	2822
20°	3052	3043	3045	3040	3024	3003	2963	2907	2846	2815	2793
22.5°	3162	3155	3158	3153	3137	3105	3045	2965	2878	2833	2798
25°	3329	3335	3337	3314	3305	3246	3163	3052	2936	2883	2835
27.5°	3517	3517	3526	3517	3499	3430	3313	3179	3030	2958	2900
30°	3700	3698	3715	3713	3684	3606	3473	3310	3140	3059	2985
32.5°	3894	3900	3911	3907	3869	3761	3601	3424	3245	3156	3073
35°	4104	4107	4111	4109	4032	3896	3695	3497	3311	3223	3137
37.5°	4314	4311	4306	4263	4175	3986	3752	3539	3344	3249	3160
40°	4502	4485	4469	4402	4267	4037	3774	3549	3341	3243	3156
42.5°	4605	4586	4553	4469	4305	4042	3759	3519	3310	3213	3127
45°	4624	4610	4578	4484	4296	4010	3713	3470	3264	3167	3086
47.5°	4579	4568	4537	4444	4257	3962	3660	3418	3219	3128	3050
50°	4510	4500	4476	4391	4213	3929	3633	3391	3204	3121	3049
52.5°	4622	4630	4560	4467	4260	3958	3663	3419	3231	3149	3074
55°	6363	6352	5931	5578	4947	4375	3948	3641	3440	3358	3288
57.5°	8268	8230	8057	7727	7049	6144	5321	4621	4345	4227	4235
60°	8890	8904	8867	8750	8507	8036	7410	6884	6366	6113	6142
62.5°	9235	9260	9292	9266	9187	9078	8999	9047	8975	8793	8648
65°	9283	9334	9440	9524	9565	9668	9910	10490	11020	11055	10800
67.5°	8333	8474	8704	9093	9426	9792	10376	11258	12040	12066	11828
69°	6552	6823	7092	7961	8546	9263	10127	11332	12269	12341	12041
70°	5250	5411	5643	6516	7390	8304	9556	11088	12112	12257	11926
72.5°	3152	3214	3294	3607	4057	4871	6531	9040	10217	10411	9990
75°	2038	2034	2041	2128	2154	2310	2833	4651	6665	7017	6513
77.5°	1535	1549	1527	1535	1528	1570	1586	1665	2631	3241	2898
80°	1355	1362	1363	1359	1310	1306	1332	1287	1196	1214	1163
82.5°	773	772	781	849	877	969	1007	1028	949	890	805
85°	501	505	515	536	515	523	514	532	488	453	405
87.5°	205	205	218	237	221	217	186	184	156	141	110
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P158670

CATALOG NUMBER: VST-E05-LED-E-U-SL4

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	3089	3089	3089	3089	3089	3089	3089	3089	3089	3089	3089
2.5°	3077	3083	3080	3084	3081	3081	3077	3076	3079	3075	3076
5°	3050	3051	3046	3048	3042	3040	3037	3029	3034	3029	3031
7.5°	3011	3008	3001	2991	2984	2981	2975	2964	2966	2957	2962
10°	2961	2951	2939	2924	2914	2905	2892	2879	2872	2864	2863
12.5°	2905	2893	2877	2854	2832	2817	2797	2774	2767	2754	2747
15°	2844	2825	2806	2780	2756	2733	2706	2677	2658	2638	2623
17.5°	2789	2767	2742	2717	2691	2663	2629	2593	2565	2528	2498
20°	2746	2718	2693	2667	2638	2604	2563	2517	2470	2429	2394
22.5°	2729	2685	2655	2629	2600	2560	2510	2456	2399	2342	2296
25°	2743	2678	2631	2600	2575	2534	2478	2412	2346	2278	2216
27.5°	2784	2701	2633	2584	2555	2514	2455	2385	2307	2231	2155
30°	2848	2740	2654	2585	2540	2493	2431	2350	2271	2184	2101
32.5°	2910	2781	2678	2589	2520	2459	2390	2310	2225	2134	2048
35°	2954	2808	2687	2580	2489	2413	2339	2259	2176	2083	1995
37.5°	2975	2823	2688	2556	2448	2364	2285	2206	2128	2040	1957
40°	2974	2822	2674	2525	2399	2310	2232	2155	2082	2005	1930
42.5°	2952	2806	2654	2495	2364	2265	2184	2110	2048	1980	1917
45°	2918	2779	2633	2481	2354	2255	2169	2097	2042	1980	1926
47.5°	2892	2764	2636	2506	2385	2282	2191	2112	2065	2015	1977
50°	2896	2771	2646	2521	2407	2303	2215	2143	2109	2096	2087
52.5°	2917	2782	2676	2601	2562	2484	2432	2387	2412	2363	2305
55°	3185	3141	3244	3341	3464	3510	3466	3458	3498	3332	2951
57.5°	4292	4406	4565	4649	4751	4724	4622	4537	4437	4243	3768
60°	6175	6089	6017	5814	5648	5454	5238	5053	4876	4597	4083
62.5°	8115	7518	7019	6537	6149	5827	5514	5236	4968	4579	4026
65°	9793	8536	7599	6892	6325	5836	5434	5050	4709	4253	3706
67.5°	10547	8972	7609	6596	5811	5147	4627	4047	3665	3373	3065
69°	10491	8639	7066	5819	4917	4143	3585	2980	2614	2490	2483
70°	10225	8075	6432	5188	4156	3387	2852	2309	1968	1883	2034
72.5°	8348	5706	4031	3078	2367	1871	1526	1211	967	838	866
75°	4715	2642	1708	1291	1091	902	774	660	597	485	384
77.5°	1714	1134	902	780	553	381	319	279	253	253	241
80°	1084	854	596	408	302	263	230	202	186	182	186
82.5°	677	523	334	256	215	193	168	147	134	131	137
85°	334	259	203	181	170	158	139	119	115	123	144
87.5°	100	89	73	76	80	78	62	54	51	67	105
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P158670

CATALOG NUMBER: VST-E05-LED-E-U-SL4

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3089	3089	3089	3089	3089	3089	3089	3089	3089	3089	3089
2.5°	3078	3077	3079	3076	3078	3079	3077	3086	3080	3081	3085
5°	3033	3031	3039	3037	3041	3045	3043	3056	3051	3055	3063
7.5°	2958	2962	2963	2963	2971	2984	2987	2995	2995	3006	3014
10°	2858	2859	2865	2864	2874	2888	2890	2904	2909	2927	2938
12.5°	2742	2737	2736	2735	2748	2763	2765	2789	2799	2815	2833
15°	2612	2599	2595	2603	2600	2609	2618	2631	2645	2677	2693
17.5°	2485	2459	2452	2443	2434	2434	2438	2454	2483	2500	2536
20°	2355	2324	2299	2275	2254	2246	2247	2267	2288	2316	2350
22.5°	2246	2199	2156	2124	2081	2080	2074	2080	2103	2110	2129
25°	2152	2089	2031	1979	1937	1915	1909	1907	1896	1893	1879
27.5°	2079	2003	1928	1865	1813	1783	1745	1718	1679	1669	1644
30°	2019	1937	1855	1773	1714	1660	1596	1549	1489	1450	1416
32.5°	1961	1878	1795	1714	1623	1539	1455	1382	1315	1255	1205
35°	1913	1834	1750	1652	1536	1415	1314	1231	1139	1076	1013
37.5°	1882	1810	1726	1591	1442	1312	1197	1096	1002	907	836
40°	1868	1805	1700	1535	1360	1216	1089	977	857	750	674
42.5°	1867	1803	1664	1473	1292	1135	994	860	727	617	542
45°	1885	1800	1626	1421	1232	1068	900	737	588	506	466
47.5°	1933	1805	1595	1373	1175	987	792	602	479	441	441
50°	2019	1834	1587	1339	1118	893	660	486	424	424	436
52.5°	2151	1895	1601	1315	1047	769	520	419	407	418	434
55°	2455	2003	1620	1274	939	610	429	396	401	414	429
57.5°	3013	2234	1640	1184	765	470	389	387	396	408	421
60°	3380	2528	1691	1048	579	388	369	381	392	402	412
62.5°	3380	2611	1729	896	435	353	356	375	388	393	399
65°	3164	2459	1600	730	354	333	344	363	375	379	384
67.5°	2765	2172	1348	550	316	316	330	344	354	362	370
69°	2404	1949	1187	466	301	303	317	329	341	351	361
70°	2144	1782	1075	423	292	293	307	320	331	342	354
72.5°	1148	1231	817	347	269	272	285	297	307	318	329
75°	391	529	520	284	243	251	259	270	283	290	296
77.5°	229	237	277	231	219	223	232	241	252	259	264
80°	192	191	192	188	191	200	206	218	228	230	229
82.5°	156	164	165	163	172	179	184	191	190	192	196
85°	139	138	145	146	146	141	142	142	142	145	146
87.5°	139	116	90	81	85	80	76	75	83	91	89
90°	0	0	0	0	0	0	0	0	0	0	0

REPORT NUMBER: P158670

CATALOG NUMBER: VST-E05-LED-E-U-SL4

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	3089	3089	3089	3089	3089
2.5°	3087	3090	3088	3088	3090
5°	3066	3071	3069	3071	3071
7.5°	3018	3025	3030	3035	3032
10°	2949	2961	2969	2975	2972
12.5°	2846	2857	2874	2884	2876
15°	2705	2736	2746	2760	2752
17.5°	2558	2577	2589	2602	2610
20°	2362	2377	2393	2399	2390
22.5°	2126	2134	2131	2140	2122
25°	1867	1872	1869	1877	1862
27.5°	1622	1621	1622	1612	1602
30°	1386	1377	1373	1358	1355
32.5°	1175	1144	1128	1106	1101
35°	964	920	891	866	855
37.5°	775	722	688	666	663
40°	613	564	540	528	526
42.5°	500	479	473	473	473
45°	456	455	460	464	465
47.5°	447	453	460	466	468
50°	447	453	458	464	466
52.5°	445	450	452	456	458
55°	439	442	442	444	446
57.5°	429	431	428	430	435
60°	419	421	416	421	424
62.5°	408	409	407	411	411
65°	390	388	391	394	395
67.5°	372	367	370	371	373
69°	358	355	356	358	360
70°	348	346	348	351	354
72.5°	323	324	331	337	343
75°	300	307	316	329	336
77.5°	272	277	284	298	311
80°	235	238	239	244	243
82.5°	191	188	186	184	183
85°	137	136	128	122	122
87.5°	82	78	74	69	66
90°	0	0	0	0	0

(END OF REPORT)