

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: P159600

Luminaire Tested: **VST-E10-LED-E-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159600
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E10-LED-E-U-T3
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (210) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30583.6 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 247.7
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



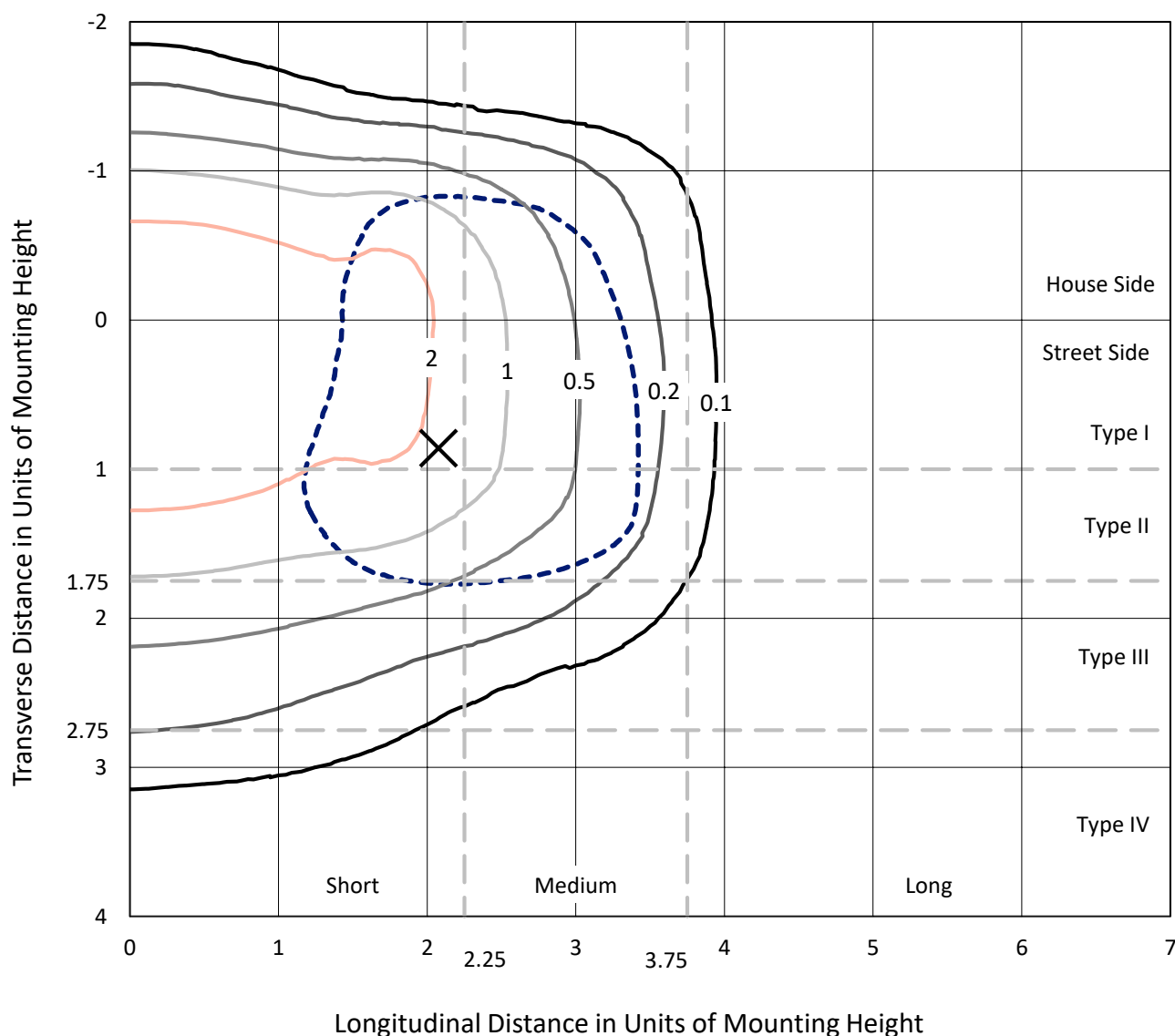
REPORT NUMBER: P159600

CATALOG NUMBER: VST-E10-LED-E-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

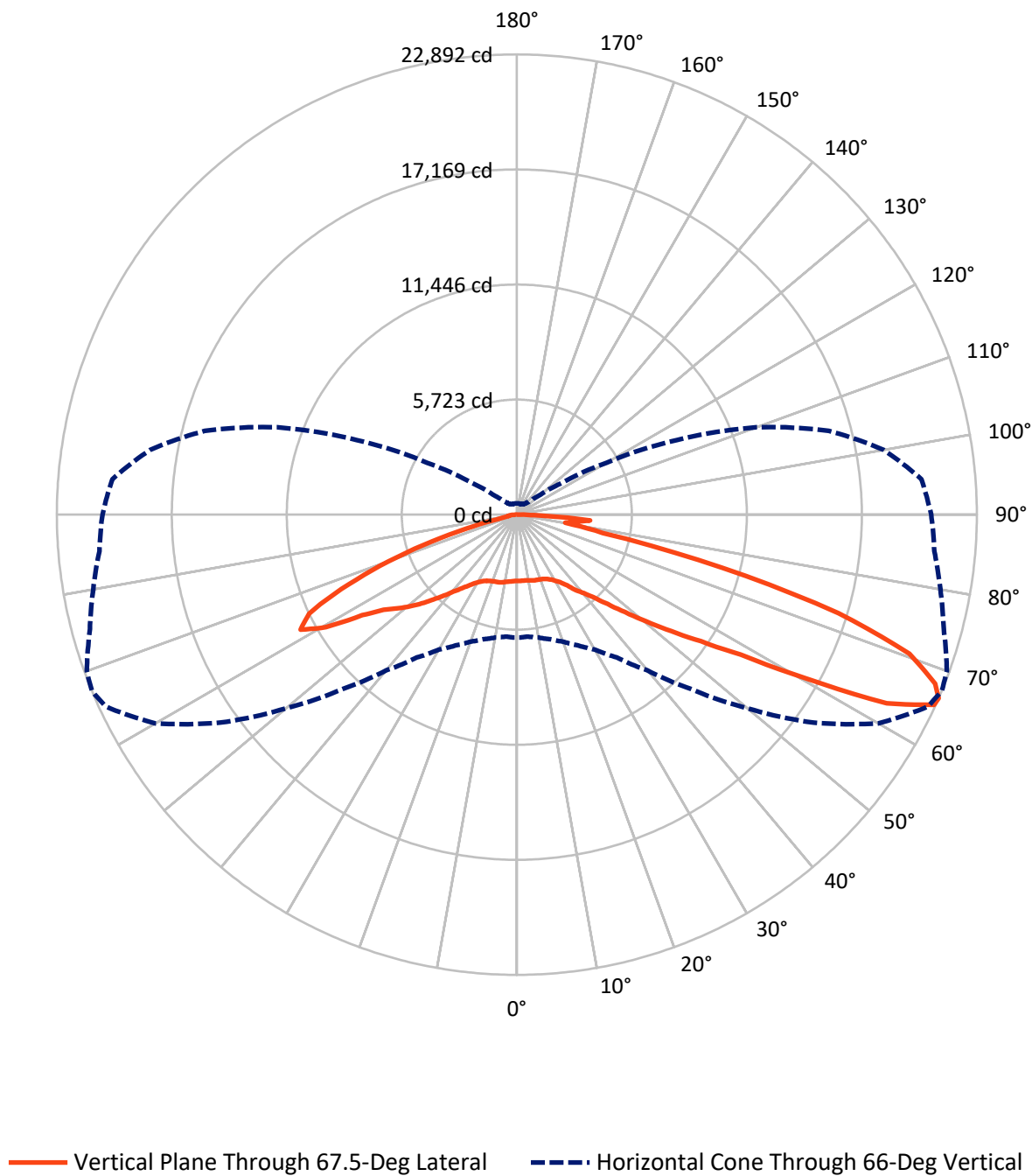


Based on 30 foot mounting height. Maximum calculated value = 3.7 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159600

CATALOG NUMBER: VST-E10-LED-E-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P159600

CATALOG NUMBER: VST-E10-LED-E-U-T3

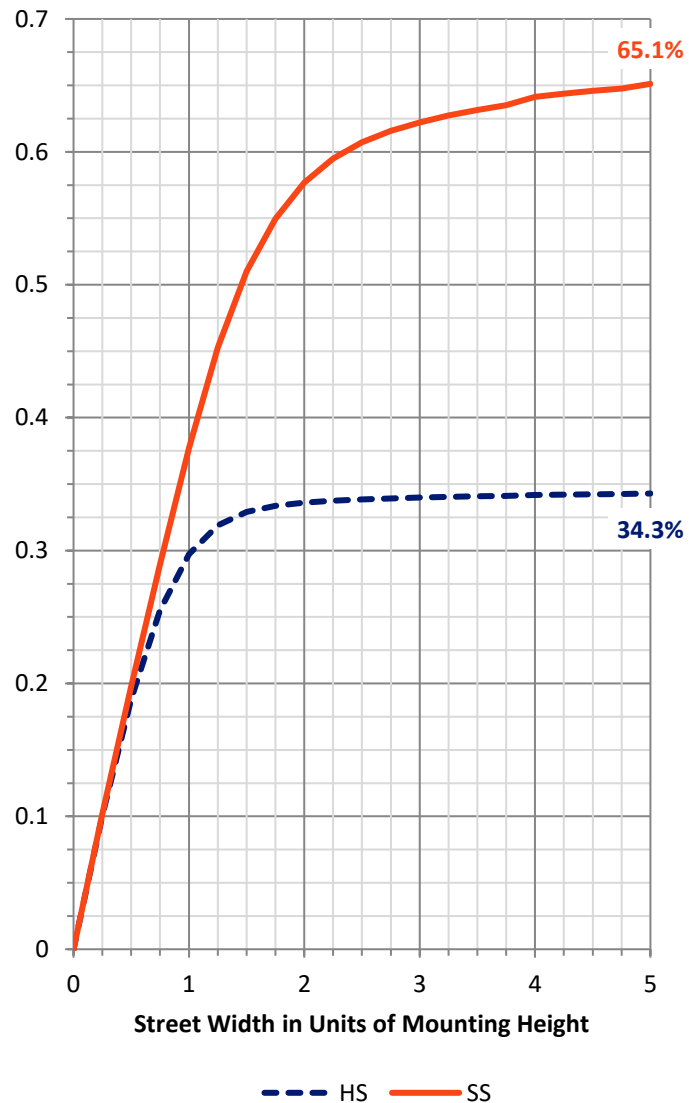
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10583.3	0.0	10583.3
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	20000.3	0.0	20000.3
	% Fixture	65.4	0.0	65.4
Total	Lumens	30583.6	0.0	30583.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.7	1.0
10°-20°	937.7	3.1
20°-30°	1611.9	5.3
30°-40°	2605.1	8.5
40°-50°	4317.3	14.1
50°-60°	6775.6	22.2
60°-70°	9263.6	30.3
70°-80°	4073.7	13.3
80°-90°	681.9	2.2
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°	30583.6	100.0
0°-180°	30583.6	100.0

Coefficient of Utilization



REPORT NUMBER: P159600

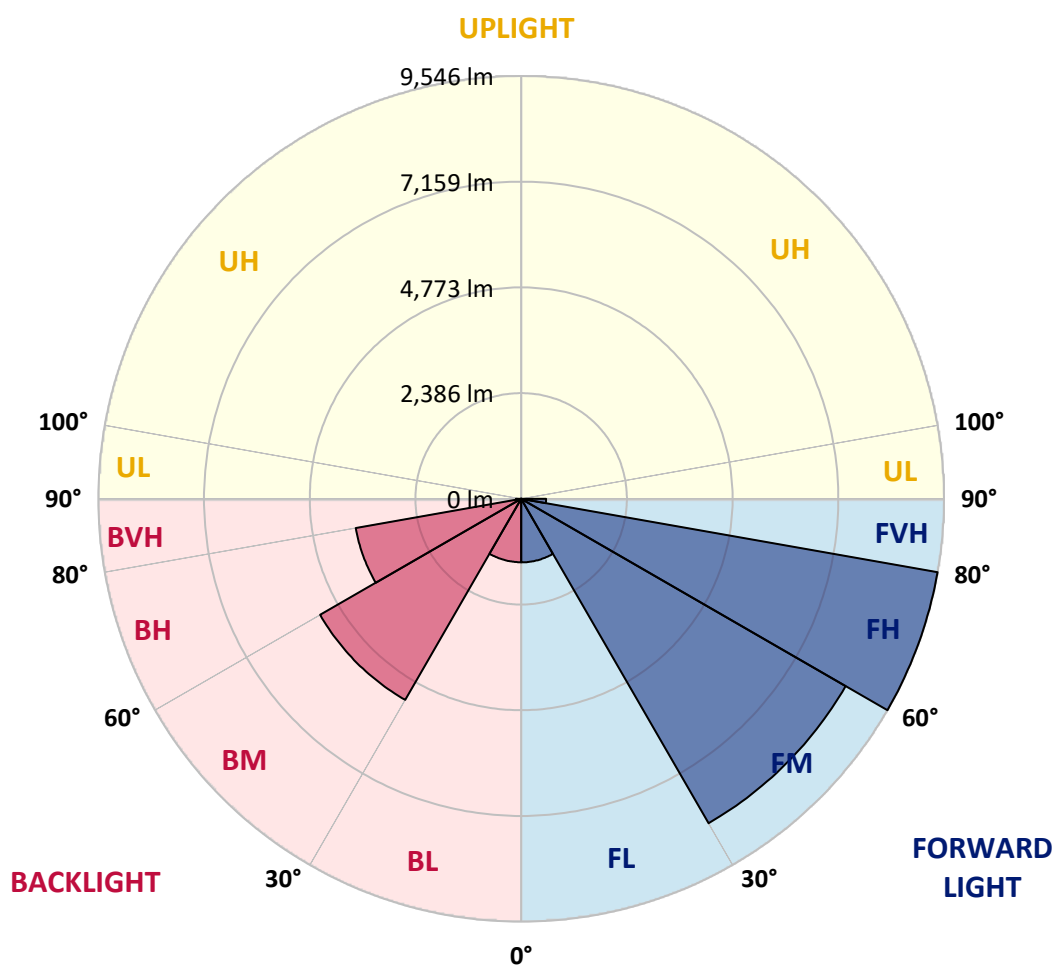
CATALOG NUMBER: VST-E10-LED-E-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1434.6	4.7			
FM	(30°-60°)	8457.3	27.7			
FH	(60°-80°)	9545.8	31.2			G4/12000
FVH	(80°-90°)	562.6	1.8			G4/750
BL	(0°-30°)	1431.7	4.7	B3/2500		
BM	(30°-60°)	5240.8	17.1	B4/8500		
BH	(60°-80°)	3791.5	12.4	B4/5000		G4/5000
BVH	(80°-90°)	119.3	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





REPORT NUMBER: P159600

CATALOG NUMBER: VST-E10-LED-E-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300
2.5°	3294	3294	3296	3294	3294	3292	3300	3300	3300	3298	3304
5°	3286	3286	3288	3288	3290	3288	3294	3296	3296	3296	3302
7.5°	3266	3272	3268	3270	3272	3278	3286	3290	3294	3300	3302
10°	3224	3234	3232	3238	3240	3258	3264	3272	3286	3294	3300
12.5°	3166	3172	3174	3182	3190	3212	3228	3242	3262	3282	3302
15°	3120	3124	3124	3132	3144	3164	3184	3208	3238	3272	3304
17.5°	3134	3144	3136	3134	3138	3150	3168	3188	3224	3262	3300
20°	3226	3228	3224	3214	3206	3208	3208	3212	3234	3264	3294
22.5°	3302	3310	3308	3310	3308	3316	3312	3304	3296	3298	3312
25°	3368	3376	3376	3382	3392	3408	3420	3418	3406	3390	3384
27.5°	3476	3476	3476	3482	3496	3516	3536	3548	3558	3542	3508
30°	3646	3648	3642	3644	3654	3680	3704	3722	3742	3740	3696
32.5°	3832	3840	3838	3846	3860	3884	3910	3938	3964	3980	3952
35°	4072	4080	4082	4094	4110	4146	4182	4218	4246	4258	4252
37.5°	4466	4468	4460	4442	4448	4476	4518	4576	4594	4606	4634
40°	5056	5050	5018	5002	4992	5004	4996	5042	5084	5086	5084
42.5°	5772	5754	5724	5720	5716	5712	5690	5692	5730	5740	5728
45°	6484	6462	6440	6460	6436	6498	6516	6564	6570	6590	6560
47.5°	7068	7070	7070	7098	7146	7264	7370	7462	7496	7544	7550
50°	7510	7522	7560	7650	7752	7950	8128	8294	8444	8500	8648
52.5°	7768	7800	7880	8030	8212	8468	8748	9030	9290	9510	9686
55°	7722	7746	7886	8120	8404	8748	9140	9548	9954	10326	10614
57.5°	7426	7442	7582	7846	8200	8662	9216	9822	10392	10992	11484
60°	7038	7062	7192	7400	7770	8262	8904	9726	10636	11580	12500
62.5°	6790	6784	6898	7084	7362	7808	8426	9400	10660	12256	14074
65°	6378	6360	6478	6690	6992	7424	8010	8946	10408	12512	15090
66°	6122	6086	6204	6418	6720	7180	7742	8666	10102	12262	14982
67.5°	5674	5656	5712	5880	6104	6536	7122	8052	9378	11510	14190
70°	4612	4572	4616	4692	4778	4884	5244	5982	7104	9170	11432
72.5°	3142	3122	3204	3320	3550	3658	3800	3920	4316	5780	7974
75°	2390	2402	2506	2698	2994	3314	3626	3740	3608	3494	4526
77.5°	1340	1410	1536	1780	2094	2546	3090	3690	3990	3916	3662
80°	552	542	604	738	846	1216	1860	2612	3456	3990	3906
82.5°	154	158	204	262	338	430	672	1080	1760	2738	3584
85°	48	48	66	98	116	134	170	280	478	954	1934
87.5°	10	10	14	28	30	30	38	52	46	42	188
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P159600

CATALOG NUMBER: VST-E10-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300
2.5°	3298	3294	3296	3298	3296	3296	3294	3292	3294	3294	3300
5°	3296	3294	3296	3296	3296	3298	3298	3298	3304	3304	3314
7.5°	3300	3300	3304	3304	3304	3304	3306	3310	3320	3318	3336
10°	3308	3312	3322	3324	3324	3330	3334	3342	3352	3356	3372
12.5°	3318	3338	3356	3360	3366	3376	3382	3386	3404	3410	3430
15°	3330	3358	3380	3388	3396	3408	3416	3422	3438	3446	3470
17.5°	3332	3364	3390	3402	3412	3426	3438	3450	3468	3480	3504
20°	3330	3372	3412	3428	3438	3464	3482	3498	3520	3532	3556
22.5°	3352	3400	3454	3474	3490	3526	3550	3576	3604	3612	3630
25°	3404	3454	3522	3550	3578	3626	3660	3698	3726	3730	3736
27.5°	3492	3538	3620	3662	3708	3776	3826	3864	3904	3904	3900
30°	3670	3680	3766	3820	3888	3988	4062	4104	4134	4134	4100
32.5°	3900	3888	3966	4024	4118	4258	4358	4390	4422	4412	4354
35°	4232	4198	4242	4330	4436	4628	4732	4804	4824	4796	4704
37.5°	4650	4646	4668	4766	4884	5132	5238	5284	5268	5218	5056
40°	5092	5080	5066	5132	5264	5562	5750	5774	5752	5678	5474
42.5°	5682	5682	5616	5634	5744	6078	6300	6376	6378	6270	5998
45°	6494	6486	6370	6342	6426	6754	7040	7082	7082	6940	6642
47.5°	7470	7460	7346	7248	7264	7618	7856	7920	7864	7758	7404
50°	8570	8552	8436	8344	8304	8662	8864	8894	8812	8686	8302
52.5°	9686	9740	9672	9622	9636	9868	10076	9934	9892	9756	9370
55°	10848	11014	11164	11120	11172	11398	11438	11250	11174	11076	10646
57.5°	12018	12502	12994	13132	13260	13584	13538	13230	13288	13434	12950
60°	13652	15050	16298	16528	16926	17202	17264	17204	17474	17398	16970
62.5°	16162	18492	20228	20660	21060	21046	20836	20620	20886	20886	19768
65°	17954	20598	22456	22814	22798	22316	21820	21388	21350	21054	19420
66°	18038	20760	22580	22892	22772	21996	21402	20854	20620	20208	18534
67.5°	17282	20302	22176	22448	22132	21020	20202	19468	19128	18434	16858
70°	14176	17448	20174	20730	20372	18964	17844	16852	16202	15200	14064
72.5°	10348	12882	15834	16738	16682	15386	14484	13576	12722	11810	10980
75°	6726	8380	10026	10554	10300	9550	8904	8374	7564	6930	6776
77.5°	3840	4692	4438	4372	4054	3272	2176	1526	1378	1720	1886
80°	3654	3312	2712	2446	2248	1532	804	566	496	508	546
82.5°	4120	4294	3512	2934	2554	1864	1018	474	346	410	460
85°	3088	4348	4310	3652	2996	2148	1204	362	208	288	376
87.5°	626	1030	992	872	742	518	202	114	104	142	216
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P159600

CATALOG NUMBER: VST-E10-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300
2.5°	3304	3304	3308	3314	3316	3316	3320	3316	3324	3326	3328
5°	3322	3328	3332	3342	3348	3352	3358	3354	3362	3364	3368
7.5°	3342	3352	3360	3364	3372	3372	3374	3370	3368	3362	3360
10°	3378	3384	3394	3390	3386	3372	3360	3342	3332	3314	3304
12.5°	3436	3440	3440	3422	3396	3364	3334	3304	3280	3260	3248
15°	3476	3484	3474	3448	3410	3366	3326	3286	3254	3228	3212
17.5°	3506	3504	3486	3450	3414	3376	3340	3298	3258	3220	3196
20°	3552	3532	3500	3462	3424	3392	3364	3324	3282	3230	3194
22.5°	3614	3578	3532	3492	3456	3426	3394	3360	3316	3258	3208
25°	3702	3640	3588	3548	3516	3482	3446	3402	3358	3298	3238
27.5°	3836	3744	3678	3642	3612	3566	3520	3468	3412	3350	3282
30°	3998	3888	3812	3780	3744	3692	3642	3570	3492	3418	3334
32.5°	4188	4076	4000	3976	3918	3858	3788	3692	3590	3480	3380
35°	4476	4334	4264	4208	4128	4056	3938	3812	3666	3520	3396
37.5°	4772	4628	4556	4478	4374	4242	4084	3904	3710	3530	3378
40°	5168	5012	4920	4800	4632	4426	4192	3946	3710	3486	3302
42.5°	5630	5486	5344	5146	4876	4576	4248	3932	3646	3388	3194
45°	6270	6024	5798	5480	5086	4664	4254	3866	3536	3250	3034
47.5°	6990	6672	6272	5774	5236	4698	4196	3742	3362	3052	2816
50°	7820	7332	6718	6008	5312	4652	4058	3534	3122	2766	2514
52.5°	8770	8026	7122	6174	5300	4512	3830	3260	2800	2422	2174
55°	9824	8782	7508	6280	5192	4240	3472	2874	2400	2028	1810
57.5°	11682	10108	8244	6422	4966	3828	3018	2386	1958	1642	1434
60°	15134	12426	9638	6756	4626	3312	2446	1872	1514	1284	1130
62.5°	17270	14058	10318	6708	4074	2606	1816	1388	1106	954	858
65°	16764	13418	9488	5762	3170	1848	1202	908	760	682	636
66°	16076	12702	8786	5160	2762	1544	992	762	654	596	572
67.5°	14634	11394	7578	4132	2070	1150	732	598	532	502	486
70°	12248	9180	5360	2440	1122	624	468	416	400	390	384
72.5°	9470	6646	3132	1200	566	404	356	334	328	328	330
75°	5966	3820	1402	578	384	326	304	294	296	298	296
77.5°	1982	1318	584	410	334	296	278	274	278	280	280
80°	570	498	422	362	306	276	260	258	268	270	266
82.5°	438	410	382	350	294	260	254	256	262	258	240
85°	402	398	286	284	256	248	242	244	238	216	196
87.5°	226	210	162	164	190	196	162	172	160	140	128
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P159600

CATALOG NUMBER: VST-E10-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	3300	3300	3300	3300	3300
2.5°	3332	3330	3330	3336	3328
5°	3370	3368	3368	3374	3368
7.5°	3352	3346	3342	3340	3340
10°	3292	3286	3274	3270	3266
12.5°	3230	3224	3210	3210	3206
15°	3192	3184	3174	3168	3164
17.5°	3172	3160	3148	3142	3138
20°	3164	3148	3134	3124	3124
22.5°	3166	3146	3130	3118	3114
25°	3186	3156	3136	3124	3120
27.5°	3214	3178	3152	3136	3130
30°	3252	3202	3166	3146	3138
32.5°	3278	3208	3162	3134	3124
35°	3276	3186	3130	3094	3082
37.5°	3240	3134	3060	3016	2996
40°	3160	3038	2960	2918	2894
42.5°	3044	2912	2842	2796	2770
45°	2862	2732	2646	2610	2576
47.5°	2610	2478	2404	2352	2330
50°	2314	2182	2104	2062	2042
52.5°	1990	1864	1808	1768	1740
55°	1654	1538	1514	1470	1444
57.5°	1338	1270	1248	1204	1182
60°	1046	1024	1000	972	960
62.5°	810	790	784	766	764
65°	618	620	616	612	608
66°	562	560	562	558	556
67.5°	478	486	492	490	490
70°	388	394	402	400	400
72.5°	332	342	346	344	344
75°	300	310	310	306	304
77.5°	280	284	280	276	272
80°	260	256	250	244	240
82.5°	226	216	210	200	200
85°	182	174	160	150	140
87.5°	118	114	104	78	62
90°	0	0	0	0	0

(END OF REPORT)