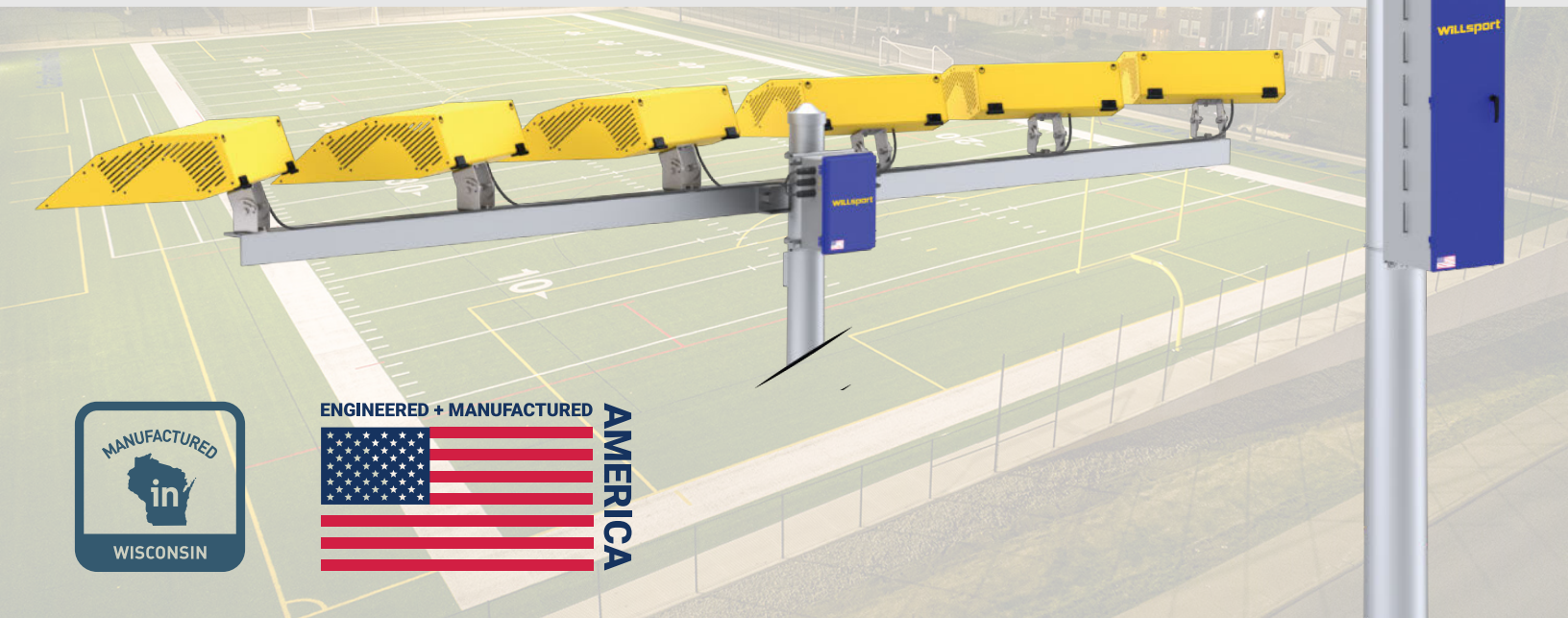


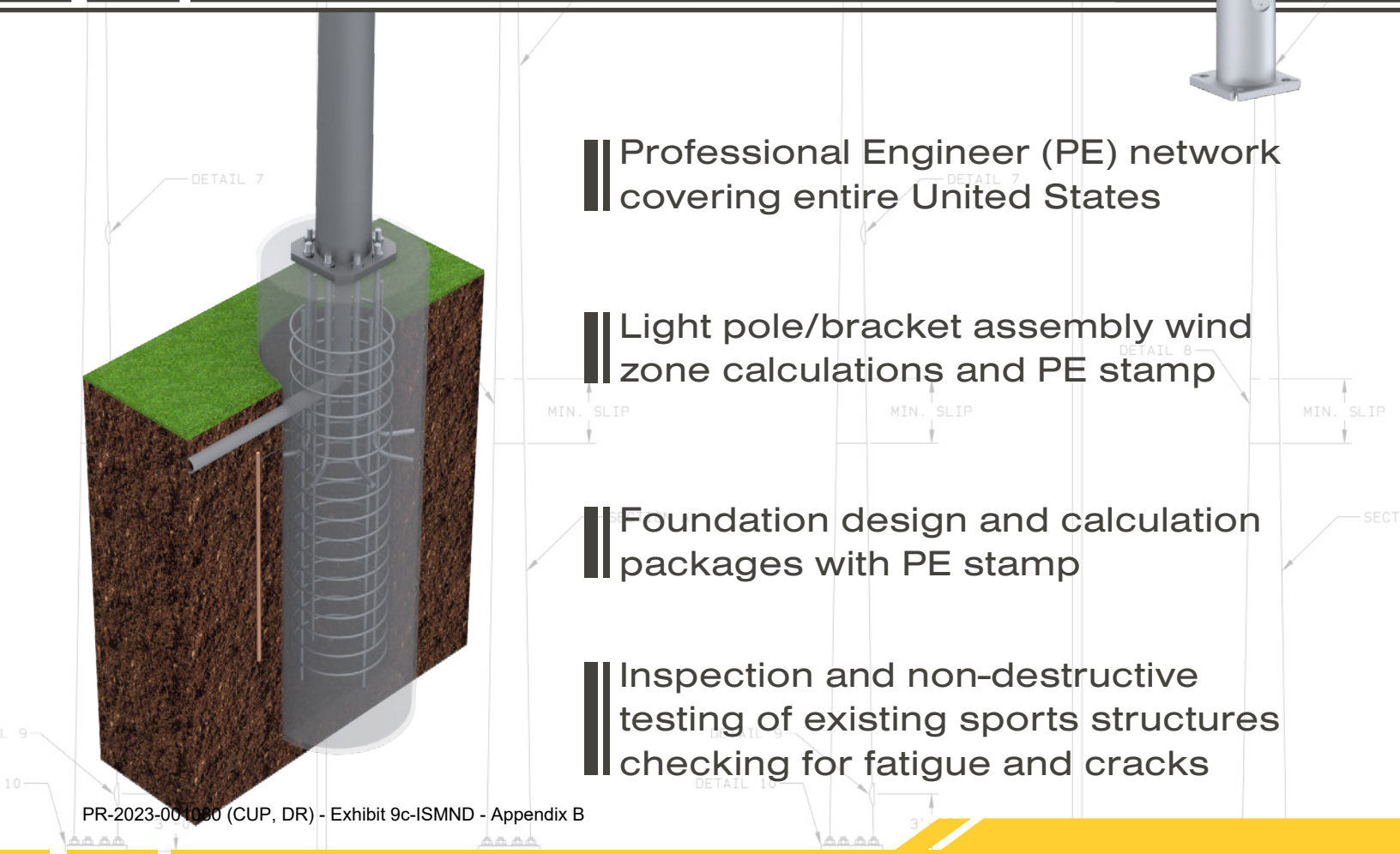
■ WiLLsport® 2 Color Combo

Showcase your team **colors**, **brand**, or **logo** with WiLL's color combo upgrade



Custom colors for fixture **body**, **PDH cover**, **bottom cabinet cover**

■ WiLLsport® Design & Engineering Support



■ Professional Engineer (PE) network covering entire United States

■ Light pole/bracket assembly wind zone calculations and PE stamp

■ Foundation design and calculation packages with PE stamp

■ Inspection and non-destructive testing of existing sports structures checking for fatigue and cracks

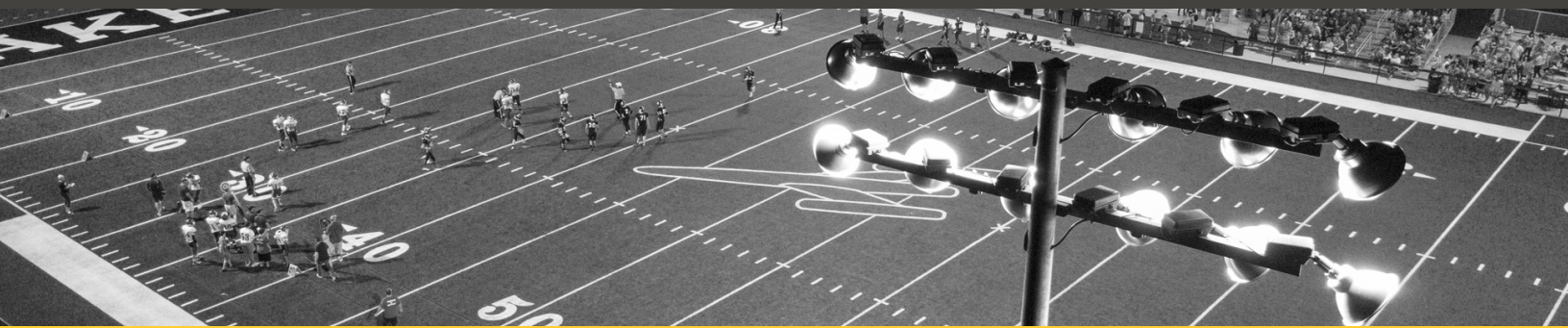
WiLLsport® RTSA ROUND TAPERED STEEL ANCHOR BASE SPORT LIGHT POLES



Catalog # _____

Project _____

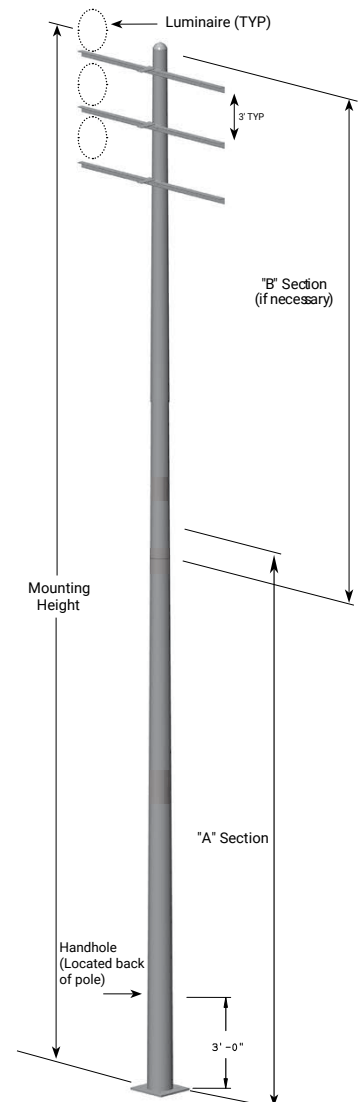
Comments _____



Proudly engineered and manufactured in the American Midwest – our WiLLsport® family of professional-grade light pole products combines 50+ years of manufacturing expertise and top-notch Midwestern workmanship. Like all WiLL products, WiLLsport® poles come supported by our unmatched design, engineering, and project support capabilities.

Specifications

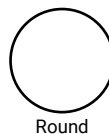
- **Pole Shaft** - The pole shaft conforms to ASTM A595 Grade A or A572 Grade 55 with a constant linear taper of 0.14 in/ft. Pole 50' and below are provided as a one-piece unit. Poles greater than 50' are provided as a two-piece field assembled unit.
- **Pole Top** - Pole is provided with a removable pole cap.
- **Hand Hole** - A reinforced handhole with grounding provision is provided at 3' from the base end of the pole assembly. Each handhole includes a cover and the cover attachment hardware. All pole assemblies are provided with a 4" X 6.5" ovalized handhole. Handhole dimensions are nominal.
- **Anchor Bolts** - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an "L" bend on one end and are galvanized a minimum of 12" on the threaded end.
- **Hardware** - All structural fasteners are galvanized high strength carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.
- **Finish** - Finishes include galvanized or painted. Please consult factory for special finishing colors and fixture matching options. When storing light poles outside, remove all protective wrapping immediately upon delivery to prevent finish damage.
- **Crossarms** - Angle iron and tubular crossarms available in 2,3,4,5 and 6 fixture mounting points. Crossarms bolt directly to light pole.
- **Design Criteria** - Please reference Design Criteria Specification for appropriate design conditions.



Handhole



Cross Section



Pole Cap



EPA Loading Guide (Commercial Design Criteria)

Base Model	90mph		100mph		110mph		120mph		130mph		140mph		150mph	
	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)
VS-RTSA-40-0001-SP-AB-GV	27	675	21.5	538	17.5	438	14.5	363	12	300	10	250	8.5	213
VS-RTSA-40-0002-SP-AB-GV	43	1075	35	875	29	725	24.5	613	20.5	513	17.5	438	15	375
VS-RTSA-50-0001-SP-AB-GV	18.5	463	14.5	363	11	275	9	225	7	175	5.5	138	4.5	113
VS-RTSA-50-0002-SP-AB-GV	24	600	19.5	488	16	400	13.5	338	11.5	288	9.5	238	8.5	213
VS-RTSA-50-0003-SP-AB-GV	33	825	27	675	22.5	563	18.5	463	15.5	388	13	325	11	275
VS-RTSA-50-0004-SP-AB-GV	53	1325	43.5	1088	35.5	888	29.5	738	24.5	613	20.5	513	17	425
VS-RTSA-50-0005-SP-AB-GV	73	1825	60	1500	50	1250	42	1050	35.5	888	30	750	25.5	638
VS-RTSA-55-0001-SP-AB-GV	15.5	388	11.5	288	9	225	7	175	5	125	4	100	3	75
VS-RTSA-55-0002-SP-AB-GV	25.5	638	20.5	513	17	425	14.5	363	12	300	10	250	8.5	213
VS-RTSA-55-0003-SP-AB-GV	44	1100	36	900	30	750	24.5	613	20	500	17	425	14	350
VS-RTSA-55-0004-SP-AB-GV	60	1500	50	1250	42	1050	35.5	888	30	750	25.5	638	21.5	538
VS-RTSA-60-0001-SP-AB-GV	18.5	463	18.5	463	18.5	463	15.5	388	13	325	11	275	9.5	238
VS-RTSA-60-0002-SP-AB-GV	30	750	30	750	27	675	23	575	19.5	488	16.5	413	14	350
VS-RTSA-60-0003-SP-AB-GV	44	1100	44	1100	40.5	1013	34	850	28.5	713	24	600	20	500
VS-RTSA-60-0004-SP-AB-GV	64	1600	64	1600	53	1325	44.5	1113	37.5	938	32	800	27.5	688
VS-RTSA-60-0005-SP-AB-GV	64	1600	64	1600	64	1600	53	1325	44	1100	36.5	913	31	775
VS-RTSA-70-0001-SP-AB-GV	17	425	17	425	15.5	388	12.5	313	11	275	9	225	7.5	188
VS-RTSA-70-0002-SP-AB-GV	22.5	563	21	525	17.5	438	14.5	363	12.5	313	10.5	263	9	225
VS-RTSA-70-0003-SP-AB-GV	33	825	33	825	29	725	24	600	20.5	513	17	425	14.5	363
VS-RTSA-70-0004-SP-AB-GV	49	1225	43.5	1088	36	900	30	750	25	625	21	525	18	450
VS-RTSA-70-0005-SP-AB-GV	58	1450	58	1450	48	1200	40.5	1013	34	850	29	725	24.5	613
VS-RTSA-70-0006-SP-AB-GV	78.5	1963	78.5	1963	67	1675	55.5	1388	47	1175	39.5	988	33.5	838
VS-RTSA-80-0001-SP-AB-GV	25	625	23	575	19.5	488	16	400	13.5	338	11.5	288	9.5	238
VS-RTSA-80-0002-SP-AB-GV	37.5	938	31	775	25.5	638	21.5	538	18	450	15	375	12.5	313
VS-RTSA-80-0003-SP-AB-GV	44.5	1113	40	1000	33	825	27.5	688	23	575	19.5	488	16	400
VS-RTSA-80-0004-SP-AB-GV	61	1525	58.5	1463	48	1200	39.5	988	32.5	813	27	675	22.5	563
VS-RTSA-80-0005-SP-AB-GV	87	2175	80	2000	66.5	1663	55.5	1388	47	1175	40	1000	34	850
VS-RTSA-90-0001-SP-AB-GV	22.5	563	20.5	513	17	425	14	350	12	300	10	250	8.5	213
VS-RTSA-90-0002-SP-AB-GV	34.5	863	28.5	713	23.5	588	20	500	16.5	413	14	350	12	300
VS-RTSA-90-0003-SP-AB-GV	47	1175	47	1175	46.5	1163	38	950	30.5	763	24.5	613	19	475
VS-RTSA-90-0004-SP-AB-GV	69.5	1738	58.5	1463	49	1225	41	1025	34.5	863	29.5	738	25	625
VS-RTSA-90-0005-SP-AB-GV	93	2325	83	2075	68.5	1713	56	1400	47.5	1188	40	1000	34	850
VS-RTSA-100-0001-SP-AB-GV	19.5	488	18.5	463	15	375	12.5	313	10.5	263	9	225	6.5	163
VS-RTSA-100-0002-SP-AB-GV	29.5	738	24.5	613	20	500	17	425	14	350	12	300	10	250
VS-RTSA-100-0003-SP-AB-GV	37	925	34	850	28	750	23.5	588	19.5	488	16	400	13.5	338
VS-RTSA-100-0004-SP-AB-GV	49.5	1238	49.5	1238	43	1075	35.5	888	29	725	23.5	588	18	450
VS-RTSA-100-0005-SP-AB-GV	56	1400	47.5	1188	39.5	988	33.5	838	28	700	24	600	20	500
VS-RTSA-100-0006-SP-AB-GV	76	1900	67.5	1688	55.5	1388	46	1150	38.5	963	32.5	813	27.5	688

Cross Arm Model	EPA
VS-S-ACR-BTP-2-180-GV	1.74
VS-S-ACR-BTP-3-180-GV	2.73
VS-S-ACR-BTP-4-180-GV	3.97
VS-S-ACR-BTP-5-180-GV	5.95
VS-S-ACR-BTP-6-180-GV	7.37

Cross Arm Model	EPA
VS-S-TUB-BTP-2-180-GV	1.28
VS-S-TUB-BTP-3-180-GV	2.45
VS-S-TUB-BTP-4-180-GV	3.21
VS-S-TUB-BTP-5-180-GV	4.17
VS-S-TUB-BTP-6-180-GV	5.13

AASHTO 210 SPECIFICATIONS

The sports lighting structures shown on this drawing have been designed in accordance with the loading and the allowable stress requirements of the 2013 AASHTO standard specifications for structural supports for highway signs, luminaires and traffic signals, sixth edition, LTS-6. The wind loads were calculated from a basic wind velocity of 90 MPH with a recurrence interval of 50 years and a fatigue category of 1. The fatigue loads were calculated on the requirements of section 11 of the code and the following conditions.

- Structures are designed to resist natural wind gusts based on the code requirements in table 11.7.2-1.
- Galloping-included cyclic loads are not applicable for sports lighting structures.
- Truck-induced gust loads are not applicable for sports lighting structures.

VIBRATION DISCLAIMER

Although rare, vibration severe enough to cause damage can occasionally occur on structures of all types. Because they are influenced by many variables, vibrations are generally unpredictable. The user's maintenance program should include observation for excessive vibration and examination for any structural damage or bolt loosening. The factory warranty specifically excludes fatigue failure of similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with movement of air current around the product.

STRUCTURAL NOTICE

Outer section of slip joint connections fabricated from ASTM A572 material will have a complete joint penetration longitudinal seam weld for a minimum distance of 1.5D + 6".

Outer section of slip joint connections fabricated from ASTM A595 material will have the seam weld reinforced with 0.2391" thick x 1.25" wide bars. When measured from the large end, A 4" bar will begin at 0.19" and an 8" bar will begin at 1.5D + 6.18".

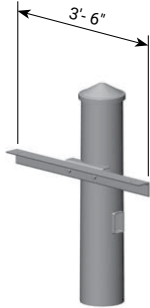
Designation & Dimensional Information

Base Model	Pole Dimensions			Base Plate			Anchor Bolts	
	Nominal Mounting Height	Style	Structural Weight (lb)	Bolt Circle Diameter (in)	Center Hole Dia (in)	Sq (in) x Thick (in)	Quantity	Dia x Length x Hook (in)
VS-RTSA-40-0001-SP-AB-GV	40'-0"	1-Piece	552	12.5	9	12.38 x 1.25	4	1.25 x 42 x 6
VS-RTSA-40-0002-SP-AB-GV	40'-0"	1-Piece	651	14	10	14.5 x 1.5	4	1.50 x 54 x 6
VS-RTSA-50-0001-SP-AB-GV	50'-0"	1-Piece	721	13.5	10	14 x 1.25	4	1.25 x 42 x 6
VS-RTSA-50-0002-SP-AB-GV	50'-0"	1-Piece	732	14	10	14.5 x 1.5	4	1.50 x 54 x 6
VS-RTSA-50-0003-SP-AB-GV	50'-0"	1-Piece	852	15	11	16.5 x 1.5	4	1.50 x 54 x 6
VS-RTSA-50-0004-SP-AB-GV	50'-0"	1-Piece	1077	17.5	13	18.5 x 1.75	4	1.75 x 84 x 6
VS-RTSA-50-0005-SP-AB-GV	50'-0"	1-Piece	1378	18	13	18.5 x 2	4	2.00 x 84 x 6
VS-RTSA-55-0001-SP-AB-GV	55'-0"	2-Piece	813	14	10.5	14 x 1.25	4	1.25 x 42 x 6
VS-RTSA-55-0002-SP-AB-GV	55'-0"	2-Piece	904	15	11	16.5 x 1.5	4	1.50 x 54 x 6
VS-RTSA-55-0003-SP-AB-GV	55'-0"	2-Piece	1159	17.5	13	18.5 x 1.75	4	1.75 x 84 x 6
VS-RTSA-55-0004-SP-AB-GV	55'-0"	2-Piece	1431	18	13	18.5 x 2	4	2.00 x 84 x 6
VS-RTSA-60-0001-SP-AB-GV	60'-0"	2-Piece	1115	15.5	10.25	18 x 2	8	1.25 x 42 x 6
VS-RTSA-60-0002-SP-AB-GV	60'-0"	2-Piece	1390	17	9	20 x 2	8	1.50 x 54 x 6
VS-RTSA-60-0003-SP-AB-GV	60'-0"	2-Piece	1696	19	9.25	22 x 2	8	1.50 x 54 x 6
VS-RTSA-60-0004-SP-AB-GV	60'-0"	2-Piece	2083	20.5	10.75	24 x 2.5	8	1.75 x 84 x 6
VS-RTSA-60-0005-SP-AB-GV	60'-0"	2-Piece	2324	20.5	10.75	24 x 2.5	8	1.75 x 84 x 6
VS-RTSA-70-0001-SP-AB-GV	70'-0"	2-Piece	1355	17	10.25	20 x 2	8	1.25 x 42 x 6
VS-RTSA-70-0002-SP-AB-GV	70'-0"	2-Piece	1488	17	9	20 x 2	8	1.50 x 54 x 6
VS-RTSA-70-0003-SP-AB-GV	70'-0"	2-Piece	1836	19	9.25	22 x 2	8	1.50 x 54 x 6
VS-RTSA-70-0004-SP-AB-GV	70'-0"	2-Piece	2224	20.5	10.75	24 x 2.5	8	1.75 x 84 x 6
VS-RTSA-70-0005-SP-AB-GV	70'-0"	2-Piece	2510	21.5	10	26 x 2.25	10	1.75 x 84 x 6
VS-RTSA-70-0006-SP-AB-GV	70'-0"	2-Piece	2951	25	9.5	29.5 x 2.25	10	1.75 x 84 x 6
VS-RTSA-80-0001-SP-AB-GV	80'-0"	2-Piece	1945	19	9.25	22 x 2	8	1.50 x 54 x 6
VS-RTSA-80-0002-SP-AB-GV	80'-0"	2-Piece	2385	20.5	10.75	24 x 2.5	8	1.75 x 84 x 6
VS-RTSA-80-0003-SP-AB-GV	80'-0"	2-Piece	2644	21.5	10	26 x 2.25	10	1.75 x 84 x 6
VS-RTSA-80-0004-SP-AB-GV	80'-0"	2-Piece	3232	25	9.5	29.5 x 2.25	10	1.75 x 84 x 6
VS-RTSA-80-0005-SP-AB-GV	80'-0"	2-Piece	3976	25	9.25	29.5 x 2.75	12	1.75 x 84 x 6
VS-RTSA-90-0001-SP-AB-GV	90'-0"	2-Piece	2320	20.5	10.75	24 x 2.25	8	1.75 x 84 x 6
VS-RTSA-90-0002-SP-AB-GV	90'-0"	2-Piece	2793	21.5	10	25 x 2.25	8	1.75 x 84 x 6
VS-RTSA-90-0003-SP-AB-GV	90'-0"	2-Piece	3618	25	9.5	29.5 x 2.25	10	1.75 x 84 x 6
VS-RTSA-90-0004-SP-AB-GV	90'-0"	2-Piece	4237	25	9.25	29.5 x 2.75	12	1.75 x 84 x 6
VS-RTSA-90-0005-SP-AB-GV	90'-0"	2-Piece	5026	28	9.75	33 x 2.75	10	2.00 x 84 x 6
VS-RTSA-100-0001-SP-AB-GV	100'-0"	2-Piece	2642	21.5	9.75	25 x 2	8	1.75 x 84 x 6
VS-RTSA-100-0002-SP-AB-GV	100'-0"	2-Piece	3179	23	9.75	26.5 x 2.25	8	1.75 x 84 x 6
VS-RTSA-100-0003-SP-AB-GV	100'-0"	2-Piece	3630	25	9.5	29.5 x 2.25	10	1.75 x 84 x 6
VS-RTSA-100-0004-SP-AB-GV	100'-0"	2-Piece	4386	28	10	32.25 x 2.25	12	1.75 x 84 x 6
VS-RTSA-100-0005-SP-AB-GV	100'-0"	2-Piece	4521	25	9.25	29.5 x 2.75	12	1.75 x 84 x 6
VS-RTSA-100-0006-SP-AB-GV	100'-0"	2-Piece	5354	28	9.75	33 x 2.75	10	2.00 x 84 x 6

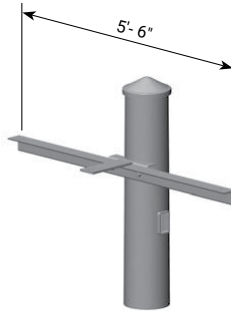
Cross Arm Model	Length	Weight (lb)
VS-S-ACR-BTP-2-180-GV	3'-6"	30
VS-S-ACR-BTP-3-180-GV	5'-6"	47
VS-S-ACR-BTP-4-180-GV	8'-0"	68
VS-S-ACR-BTP-5-180-GV	10'-6"	103
VS-S-ACR-BTP-6-180-GV	13'-0"	127

Cross Arm Model	Length	Weight (lb)
VS-S-TUB-BTP-2-180-GV	4'-0"	44
VS-S-TUB-BTP-3-180-GV	7'-0"	65
VS-S-TUB-BTP-4-180-GV	10'-0"	98
VS-S-TUB-BTP-5-180-GV	13'-0"	116
VS-S-TUB-BTP-6-180-GV	16'-0"	150

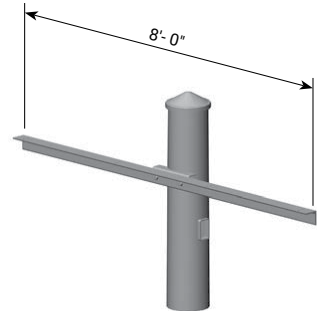
Angle Iron Cross Arms



VS-S-ACR-BTP-2-180
(2 Fixtures)

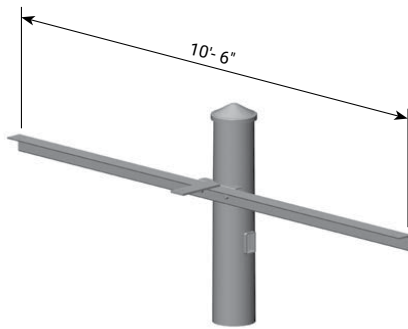


VS-S-ACR-BTP-3-180
(3 Fixtures)

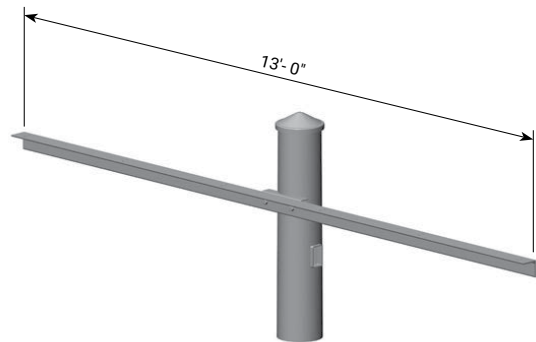


VS-S-ACR-BTP-4-180
(4 Fixtures)

Note: VS-S-ACR-BT-2-180 Fixture Drillings Spaced 36" on Center
All Others: Fixture Drillings Spaced 30" on Center

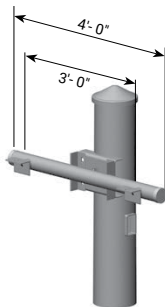


VS-S-ACR-BTP-5-180
(5 Fixtures)

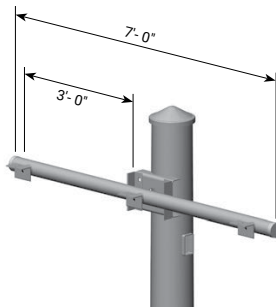


VS-S-ACR-BTP-6-180
(6 Fixtures)

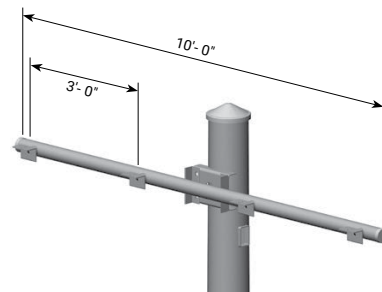
Tubular Cross Arms



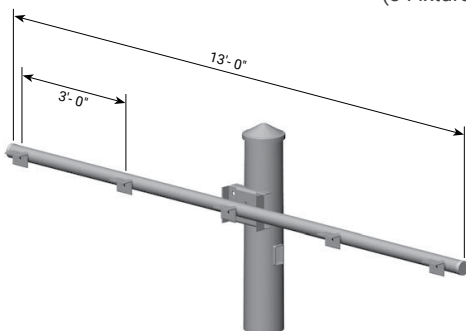
VS-S-TUB-BTP-2-180
(2 Fixtures)



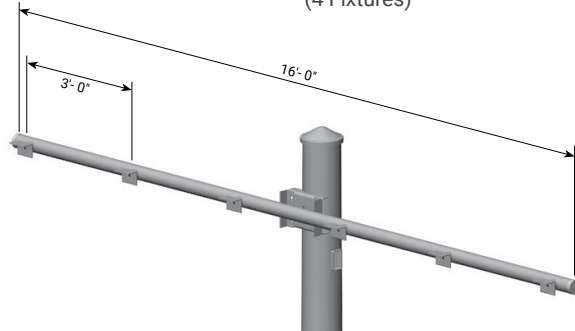
VS-S-TUB-BTP-3-180
(3 Fixtures)



VS-S-TUB-BTP-4-180
(4 Fixtures)

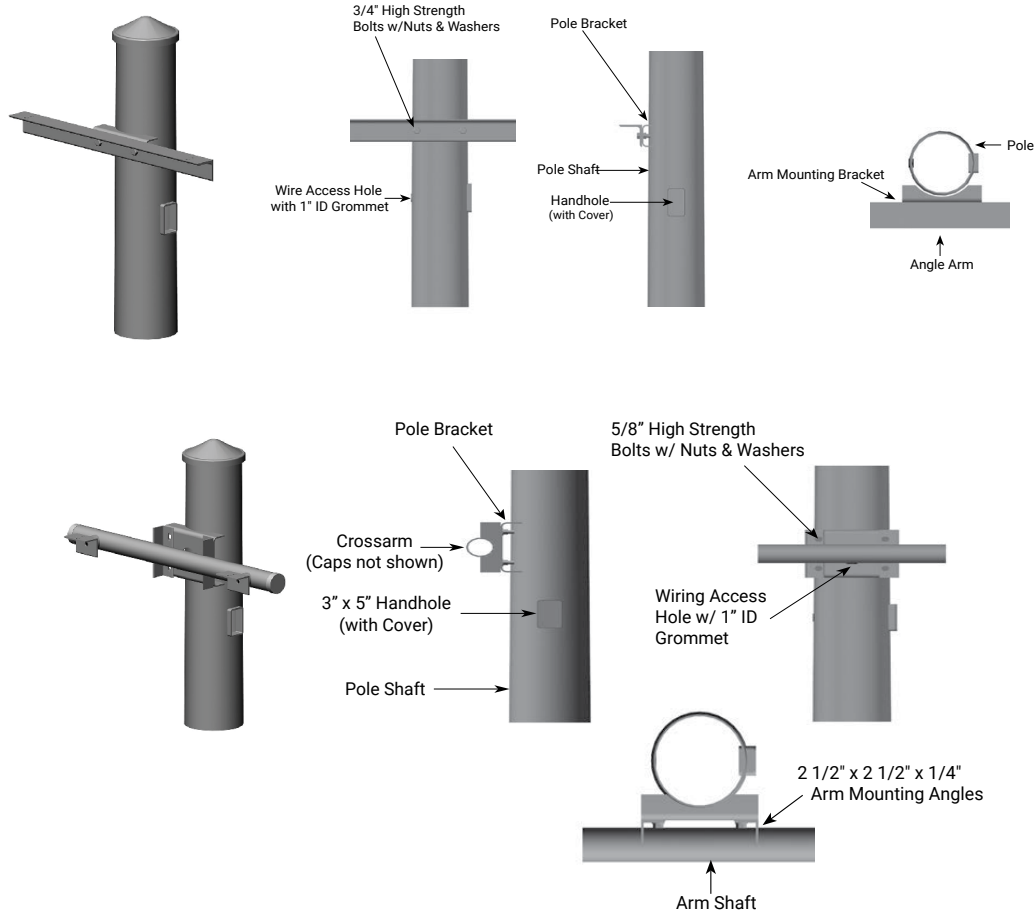


VS-S-TUB-BTP-5-180
(5 Fixtures)

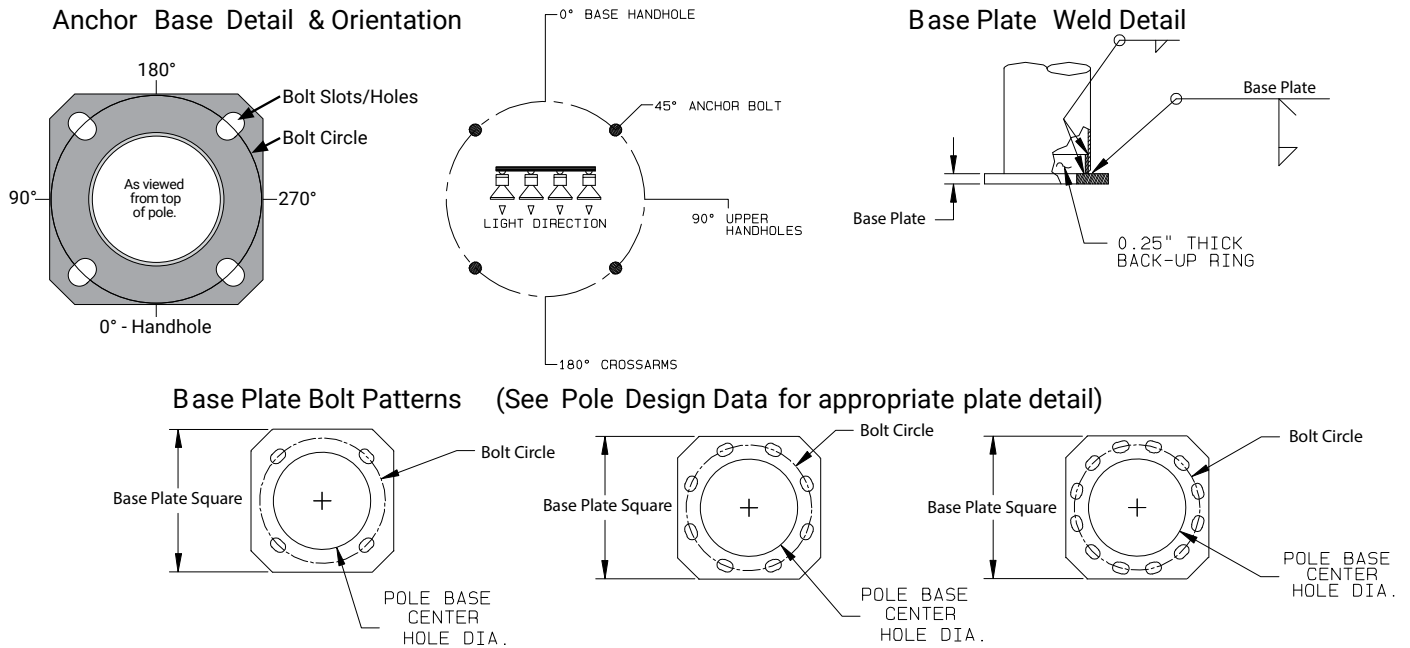


VS-S-TUB-BTP-6-180
(6 Fixtures)

Cross Arm Mounting Detail



Base Plate Detail



Light Pole Base Reactions

Base Model	90 MPH (Torsion 0-ft-lbs)			100 MPH (Torsion 0-ft-lbs)			110 MPH (Torsion 0-ft-lbs)			120 MPH (Torsion 0-ft-lbs)			130 MPH (Torsion 0-ft-lbs)			140 MPH (Torsion 0-ft-lbs)			150 MPH (Torsion 0-ft-lbs)		
	Bending Moment (ft-lbs)	Shear Force (lbs)	Axial Force (lbs)	Bending Moment (ft-lbs)	Shear Force (lbs)	Axial Force (lbs)	Bending Moment (ft-lbs)	Shear Force (lbs)	Axial Force (lbs)	Bending Moment (ft-lbs)	Shear Force (lbs)	Axial Force (lbs)	Bending Moment (ft-lbs)	Shear Force (lbs)	Axial Force (lbs)	Bending Moment (ft-lbs)	Shear Force (lbs)	Axial Force (lbs)	Bending Moment (ft-lbs)	Shear Force (lbs)	Axial Force (lbs)
VS-RTSA-40-0001-SP-AB-GV	36,268	1,021	1,680	36,105	1,051	1,477	36,105	1,080	1,330	36,180	1,113	1,220	35,874	1,138	1,127	35,534	1,166	1,053	35,577	1,206	999
VS-RTSA-40-0002-SP-AB-GV	53,835	1,418	2,384	53,708	1,458	2,087	53,641	1,498	1,865	53,972	1,549	1,699	53,466	1,583	1,551	53,573	1,633	1,441	53,630	1,684	1,348
VS-RTSA-50-0001-SP-AB-GV	39,470	941	1,596	39,659	984	1,450	38,681	1,007	1,320	39,387	1,062	1,248	38,789	1,097	1,174	38,577	1,142	1,119	38,818	1,199	1,083
VS-RTSA-50-0002-SP-AB-GV	48,356	1,083	1,807	49,074	1,144	1,643	49,583	1,200	1,515	50,701	1,269	1,425	51,735	1,340	1,354	51,658	1,393	1,281	53,607	1,486	1,247
VS-RTSA-50-0003-SP-AB-GV	62,278	1,332	2,281	62,911	1,398	2,059	63,764	1,469	1,894	63,229	1,517	1,746	63,307	1,578	1,635	63,282	1,641	1,542	63,537	1,713	1,470
VS-RTSA-50-0004-SP-AB-GV	89,794	1,850	3,301	90,498	1,937	2,949	89,854	2,001	2,651	90,030	2,081	2,429	89,783	2,157	2,243	89,866	2,241	2,095	89,257	2,316	1,967
VS-RTSA-50-0005-SP-AB-GV	119,218	2,367	4,325	119,769	2,463	3,843	120,500	2,561	3,472	121,052	2,656	3,176	121,489	2,750	2,935	121,335	2,835	2,731	121,335	2,926	2,568
VS-RTSA-55-0001-SP-AB-GV	40,865	925	1,623	40,205	958	1,476	40,687	1,012	1,384	40,945	1,065	1,312	39,615	1,094	1,237	40,185	1,159	1,201	39,967	1,215	1,164
VS-RTSA-55-0002-SP-AB-GV	58,981	1,200	2,084	59,379	1,264	1,901	60,512	1,341	1,773	62,196	1,428	1,683	62,111	1,489	1,590	62,251	1,557	1,516	63,071	1,641	1,463
VS-RTSA-55-0003-SP-AB-GV	88,979	1,700	3,091	89,490	1,784	2,793	90,597	1,880	2,571	89,703	1,947	2,366	88,590	2,012	2,198	90,031	2,125	2,088	89,513	2,208	1,979
VS-RTSA-55-0004-SP-AB-GV	115,328	2,120	3,942	117,335	2,238	3,572	118,929	2,351	3,275	120,310	2,463	3,035	121,013	2,566	2,831	121,789	2,674	2,665	121,586	2,768	2,520
VS-RTSA-60-0001-SP-AB-GV	53,499	1,091	2,038	63,177	1,285	2,046	73,363	1,500	2,054	74,373	1,587	1,944	75,205	1,676	1,851	76,315	1,773	1,778	78,318	1,891	1,727
VS-RTSA-60-0002-SP-AB-GV	73,944	1,406	2,775	87,987	1,676	2,781	95,063	1,860	2,673	97,574	1,984	2,525	99,338	2,103	2,396	100,697	2,220	2,286	102,234	2,345	2,197
VS-RTSA-60-0003-SP-AB-GV	96,970	1,800	3,667	117,384	2,186	3,673	130,498	2,480	3,547	132,992	2,626	3,305	134,796	2,766	3,101	136,881	2,915	2,936	137,613	3,048	2,792
VS-RTSA-60-0004-SP-AB-GV	131,906	2,361	4,751	161,072	2,893	4,758	163,530	3,047	4,350	166,909	3,219	4,035	169,709	3,385	3,775	173,289	3,568	3,574	177,079	3,760	3,413
VS-RTSA-60-0005-SP-AB-GV	131,765	2,362	4,996	161,064	2,895	5,002	193,631	3,493	5,008	194,323	3,631	4,600	194,153	3,757	4,265	192,980	3,870	3,989	194,726	4,032	3,790
VS-RTSA-70-0001-SP-AB-GV	65,082	1,181	2,287	76,499	1,394	2,298	83,403	1,564	2,250	84,029	1,661	2,140	88,132	1,810	2,087	88,895	1,919	2,014	90,711	2,049	1,963
VS-RTSA-70-0002-SP-AB-GV	77,330	1,331	2,637	87,045	1,529	2,590	89,520	1,646	2,463	91,414	1,763	2,354	94,753	1,904	2,282	96,621	2,031	2,209	99,622	2,180	2,159
VS-RTSA-70-0003-SP-AB-GV	99,639	1,656	3,457	118,909	1,988	3,465	126,823	2,196	3,319	128,481	2,334	3,133	132,711	2,511	3,004	134,248	2,661	2,876	138,292	2,850	2,791
VS-RTSA-70-0004-SP-AB-GV	133,811	2,120	4,411	146,192	2,387	4,211	149,156	2,549	3,931	152,287	2,718	3,708	155,091	2,889	3,522	158,665	3,078	3,377	164,295	3,302	3,274
VS-RTSA-70-0005-SP-AB-GV	151,956	2,404	5,071	185,095	2,942	5,080	188,905	3,131	4,708	194,753	3,352	4,430	198,930	3,558	4,188	204,638	3,790	4,008	208,396	4,004	3,849
VS-RTSA-70-0006-SP-AB-GV	196,386	3,096	6,424	241,839	3,821	6,432	254,404	4,146	6,007	258,326	4,367	5,580	265,177	4,633	5,264	269,218	4,870	4,992	274,204	5,127	4,777
VS-RTSA-80-0001-SP-AB-GV	102,678	1,574	3,322	114,565	1,808	3,257	119,772	1,981	3,130	121,897	2,127	2,999	125,947	2,303	2,908	130,736	2,496	2,839	133,787	2,677	2,771
VS-RTSA-80-0002-SP-AB-GV	135,318	1,958	4,206	139,539	2,127	3,964	142,582	2,290	3,760	147,659	2,484	3,612	151,895	2,677	3,481	155,794	2,876	3,375	159,924	3,085	3,290
VS-RTSA-80-0003-SP-AB-GV	151,947	2,187	4,783	168,049	2,496	4,620	172,251	2,690	4,359	177,210	2,900	4,154	182,378	3,121	3,987	189,113	3,370	3,864	192,633	3,591	3,743
VS-RTSA-80-0004-SP-AB-GV	193,645	2,770	6,063	228,914	3,318	5,978	235,139	3,566	5,587	240,603	3,812	5,271	245,182	4,057	5,010	250,927	4,325	4,813	257,032	4,608	4,656
VS-RTSA-80-0005-SP-AB-GV	260,543	3,511	7,679	296,112	4,075	7,426	304,085	4,354	6,925	310,689	4,624	6,516	319,016	4,920	6,201	327,080	5,223	5,949	333,827	5,520	5,738
VS-RTSA-90-0001-SP-AB-GV	116,213	1,661	3,661	129,269	1,914	3,598	134,570	2,103	3,469	139,007	2,292	3,359	146,036	2,518	3,287	151,394	2,736	3,219	158,309	2,982	3,176
VS-RTSA-90-0002-SP-AB-GV	153,573	2,058	4,648	159,356	2,257	4,425	164,439	2,459	4,239	172,518	2,703	4,109	177,474	2,925	3,979	185,319	3,189	3,894	194,539	3,480	3,833
VS-RTSA-90-0003-SP-AB-GV	189,804	2,514	5,985	230,225	3,071	5,997	272,579	3,674	5,990	276,435	3,921	5,670	277,100	4,144	5,391	278,405	4,381	5,176	275,394	4,582	4,979
VS-RTSA-90-0004-SP-AB-GV	257,876	3,172	7,357	270,994	3,487	6,950	281,172	3,783	6,596	289,976	4,077	6,298	299,386	4,388	6,059	311,189	4,735	5,884	320,642	5,070	5,731
VS-RTSA-90-0005-SP-AB-GV	328,970	4,048	9,121	366,734	4,636	8,756	377,375	4,976	8,217	382,702	5,271	7,751	396,850	5,667	7,438	407,548	6,042	7,170	419,938	6,448	6,962
VS-RTSA-100-0001-SP-AB-GV	127,775	1,742	4,013	145,545	2,046	3,991	151,342	2,258	3,863	159,193	2,500	3,774	167,284	2,756	3,702	173,397	3,004	3,636	177,588	3,243	3,570
VS-RTSA-100-0002-SP-AB-GV	164,264	2,092	4,938	172,913	2,330	4,755	178,944	2,557	4,586	189,016	2,834	4,476	196,351	3,098	4,365	207,776	3,416	4,303	217,201	3,728	4,243
VS-RTSA-100-0003-SP-AB-GV	190,155	2,379	5,706	214,696	2,773	5,602	224,043	3,047	5,428	234,268	3,359	5,210	244,056	3,673	5,063	253,107	3,995	4,943	266,351	4,373	4,869
VS-RTSA-100-0004-SP-AB-GV	234,628	2,920	7,087	286,690	3,589	7,100	311,515	4,049	6,860	324,364	4,420	6,580	334,574	4,782	6,340	343,627	5,148	6,148	344,633	5,452	5,955
VS-RTSA-100-0005-SP-AB-GV	258,272	2,943	7,214	272,786	3,266	6,900	281,749	3,554	6,602	293,813	3,882	6,379	302,619	4,194	6,176	316,124	4,563	6,041	324,702	4,899	5,909
VS-RTSA-100-0006-SP-AB-GV	325,871	3,715	8,906	361,382	4,258	8,597	373,032	4,613	8,149	385,174	4,984	7,794	398,635	5,381	7,519	413,474	5,807	7,311	428,510	6,251	7,144