

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648_4 ~ SR2DMO-XT20L-E1-RDD2F-XXK-WDMWNL.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] SP-00648_4
[TESTLAB] VLS-245-981
[MANUFAC] Spectrum Lighting
[ISSUE DATE] 3/16/2018
[UPDATE] 4/30/2018
[LUMCAT] SR2DMO-XT20L-E1-RDD2F-xxK-WD-MW-NL
[LUMINAIRE] Nom. 2" Round Trim Downlight, Wide Beam
[OTHER] Matte White Trim, No lens
[OTHER] 39.4 Degree Beam Angle
[LAMP] N/A
[LAMPCAT] N/A, Min. 83 CRI
[OTHER] Total Luminaire Watts is approximate
[OTHER] For New Construction Non-IC Housing: SR2DMO-XT-series
[OTHER] For RDD2F Downlight Trim
[OTHER] LEDXT lumen output is the same for all available CCT's
[OTHER] This report prepared by Spectrum Lighting

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1556
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	66
Total Luminaire Watts	23.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.64
Spacing Criterion (90-270)	0.64
Spacing Criterion (Diagonal)	0.68
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.15 ft (Diameter)
Luminous Width (90-270)	0.15 ft (Diameter)
Luminous Height	0.00 ft

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648_4 ~ SR2DMO-XT20L-E1-RDD2F-XXK-WDMWNL.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	55082	56504	57477
55	57869	59604	60210
65	48424	50270	53894
75	29369	32884	36143
85	17749	22455	20165

IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00648_4 ~ SR2DMO-XT20L-E1-RDD2F-XXK-WDMWNL.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	2888.693	2888.693	2888.693	2888.693	2888.693	2888.693	2888.693	2888.693	2888.693	2888.693
2.5	2879.396	2809.765	2861.033	2820.709	2850.658	2807.149	2864.607	2809.170	2868.590	2803.995
5.0	2730.434	2725.490	2738.315	2717.381	2728.133	2710.234	2717.518	2708.805	2714.274	2711.062
7.5	2558.540	2520.275	2560.345	2526.108	2545.105	2506.224	2546.149	2508.077	2545.310	2509.209
10.0	2340.914	2314.482	2352.283	2316.770	2335.002	2298.882	2321.688	2302.096	2322.790	2305.421
12.5	2117.662	2094.735	2129.472	2097.813	2108.400	2074.567	2095.869	2075.548	2099.027	2085.204
15.0	1878.497	1873.273	1894.271	1877.398	1877.122	1848.480	1867.512	1847.371	1871.533	1862.766
17.5	1638.119	1631.296	1653.825	1639.285	1643.398	1615.428	1638.651	1614.090	1644.078	1626.734
20.0	1417.782	1392.989	1428.510	1399.278	1416.732	1386.753	1408.980	1387.993	1416.718	1396.205
22.5	1198.113	1184.804	1208.479	1183.577	1193.214	1172.378	1186.501	1180.625	1194.296	1190.890
25.0	982.066	976.645	993.751	969.472	977.074	959.494	973.847	971.558	982.366	984.969
27.5	767.168	768.643	780.550	766.618	763.661	750.582	768.390	758.745	776.604	776.822
30.0	581.386	572.374	598.085	564.615	583.302	561.666	571.583	568.429	581.870	583.007
32.5	401.850	428.707	422.766	430.860	413.285	417.666	418.075	419.728	420.199	432.365
35.0	297.658	294.212	308.152	298.823	303.324	291.574	309.140	291.377	308.687	294.875
37.5	197.094	192.722	204.250	201.464	208.346	199.766	210.258	195.400	208.138	189.914
40.0	126.481	110.296	137.124	110.435	140.961	127.726	120.239	123.587	122.194	109.634
42.5	65.943	83.246	74.773	86.823	78.871	87.697	76.398	84.999	72.746	81.947
45.0	64.004	63.751	65.656	65.765	66.786	63.550	68.414	63.559	64.879	63.346
47.5	62.331	62.648	61.159	63.916	62.141	61.625	64.597	62.274	61.961	61.036
50.0	61.857	60.980	60.578	61.894	61.278	60.419	63.541	61.046	63.872	59.040
52.5	60.250	58.147	60.166	58.931	60.792	60.085	60.382	59.878	61.759	57.517
55.0	54.544	54.264	56.179	55.738	56.750	57.354	56.040	56.306	56.182	54.585
57.5	49.216	48.556	52.126	51.566	52.512	52.135	51.783	50.600	51.025	49.769
60.0	44.984	43.581	47.032	47.005	47.899	47.637	47.567	46.377	46.176	44.929
62.5	40.104	39.721	41.810	41.111	43.254	43.799	42.685	43.279	41.441	40.061
65.0	33.629	35.326	34.911	35.629	37.428	38.512	37.530	37.961	36.777	34.700
67.5	27.728	30.296	28.232	31.160	31.632	32.095	31.779	31.168	30.723	28.854
70.0	22.691	24.134	22.568	25.621	26.038	26.081	25.846	25.098	23.982	23.806
72.5	17.511	17.317	17.765	18.863	20.593	20.269	20.427	19.338	19.566	19.263
75.0	12.491	12.800	13.986	14.937	15.372	15.125	15.375	14.942	15.298	14.273
77.5	9.151	8.541	9.327	11.104	11.656	11.181	11.142	10.881	9.977	10.426
80.0	6.687	5.321	6.633	6.662	7.967	9.113	7.493	7.268	7.275	8.882
82.5	4.814	4.446	5.253	3.959	4.574	6.158	5.051	5.451	5.293	5.116
85.0	2.542	2.767	3.216	2.805	2.888	3.182	3.129	2.739	3.325	3.159
87.5	1.783	1.226	2.134	1.623	1.734	2.288	2.178	2.328	2.344	2.311
90.0	0.000	0.000	0.000	0.000	0.000	1.418	1.853	1.386	1.725	1.364
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00648_4 ~ SR2DMO-XT20L-E1-RDD2F-XXK-WDMWNL.IES

CANDELA TABULATION - (Cont.)

127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert.
Angles

Horizontal Angles

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	2888.693	2888.693	2888.693	2888.693	2888.693	2888.693	2888.693
2.5	2851.958	2820.017	2848.780	2805.099	2866.086	2811.398	2879.396
5.0	2721.103	2721.243	2714.499	2704.366	2726.033	2709.983	2730.434
7.5	2551.796	2527.450	2540.997	2506.099	2548.876	2513.221	2558.540
10.0	2333.096	2326.838	2326.252	2302.114	2335.264	2306.489	2340.914
12.5	2111.295	2108.620	2104.839	2083.671	2112.250	2085.210	2117.662
15.0	1886.088	1882.177	1877.420	1864.579	1873.020	1862.951	1878.497
17.5	1658.061	1637.482	1647.383	1622.155	1630.553	1620.740	1638.119
20.0	1427.342	1407.252	1415.269	1381.971	1411.738	1378.421	1417.782
22.5	1208.150	1203.962	1196.335	1181.489	1196.610	1173.048	1198.113
25.0	998.523	997.386	986.328	979.742	979.332	967.359	982.066
27.5	794.444	785.630	780.076	764.956	761.825	755.070	767.168
30.0	594.298	594.703	575.984	559.315	580.266	549.377	581.386
32.5	437.023	432.598	422.988	418.543	400.901	415.326	401.850
35.0	305.995	294.109	295.575	283.869	290.722	285.379	297.658
37.5	198.450	183.548	192.260	180.692	182.988	185.709	197.094
40.0	103.257	111.214	99.028	93.972	121.792	98.435	126.481
42.5	70.609	78.157	70.151	75.753	63.475	79.035	65.943
45.0	65.541	61.432	63.873	61.515	62.670	63.109	64.004
47.5	62.893	59.288	62.014	60.433	61.742	61.703	62.331
50.0	61.162	57.771	61.437	58.965	59.465	59.747	61.857
52.5	57.736	56.732	57.660	56.459	56.946	55.894	60.250
55.0	53.787	53.423	53.151	53.076	52.668	51.592	54.544
57.5	49.892	48.615	48.832	47.670	48.185	46.038	49.216
60.0	46.009	44.636	44.546	42.763	42.595	40.868	44.984
62.5	40.247	41.129	39.489	38.816	37.004	36.590	40.104
65.0	34.112	35.177	34.331	34.156	31.407	31.802	33.629

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648_4 ~ SR2DMO-XT20L-E1-RDD2F-XXK-WDMWNL.IES****CANDELA TABULATION - (Cont.)**

67.5	28.016	28.061	28.867	28.446	26.370	26.115	27.728
70.0	22.069	22.078	23.402	22.693	22.587	21.163	22.691
72.5	18.317	16.541	18.070	16.908	17.793	16.801	17.511
75.0	14.394	13.564	13.296	13.137	12.371	12.404	12.491
77.5	10.225	10.283	9.157	9.469	9.082	8.672	9.151
80.0	7.228	6.915	6.057	6.058	6.302	5.804	6.687
82.5	5.054	5.070	4.219	3.853	4.004	3.652	4.814
85.0	2.841	2.302	2.521	2.914	2.080	2.772	2.542
87.5	1.897	2.040	1.491	1.761	1.141	1.780	1.783
90.0	1.599	1.927	1.935	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SP-00648_4 ~ SR2DMO-XT20L-E1-RDD2F-XXK-WDMWNL.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	762.44	N.A.	49.00
0-30	1206.06	N.A.	77.50
0-40	1398.31	N.A.	89.90
0-60	1502.67	N.A.	96.60
0-80	1552.43	N.A.	99.80
0-90	1556.07	N.A.	100.00
10-90	1309.6	N.A.	84.20
20-40	635.86	N.A.	40.90
20-50	691.83	N.A.	44.50
40-70	138.90	N.A.	8.90
60-80	49.76	N.A.	3.20
70-80	15.23	N.A.	1.00
80-90	3.63	N.A.	0.20
90-110	0.11	N.A.	0.00
90-120	0.11	N.A.	0.00
90-130	0.11	N.A.	0.00
90-150	0.11	N.A.	0.00
90-180	0.11	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1556.18	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	246.47
10-20	515.98
20-30	443.61
30-40	192.25
40-50	55.97
50-60	48.40
60-70	34.54
70-80	15.23
80-90	3.63
90-100	0.11
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00648_4 ~ SR2DMO-XT20L-E1-RDD2F-XXK-WDMWNL.IES

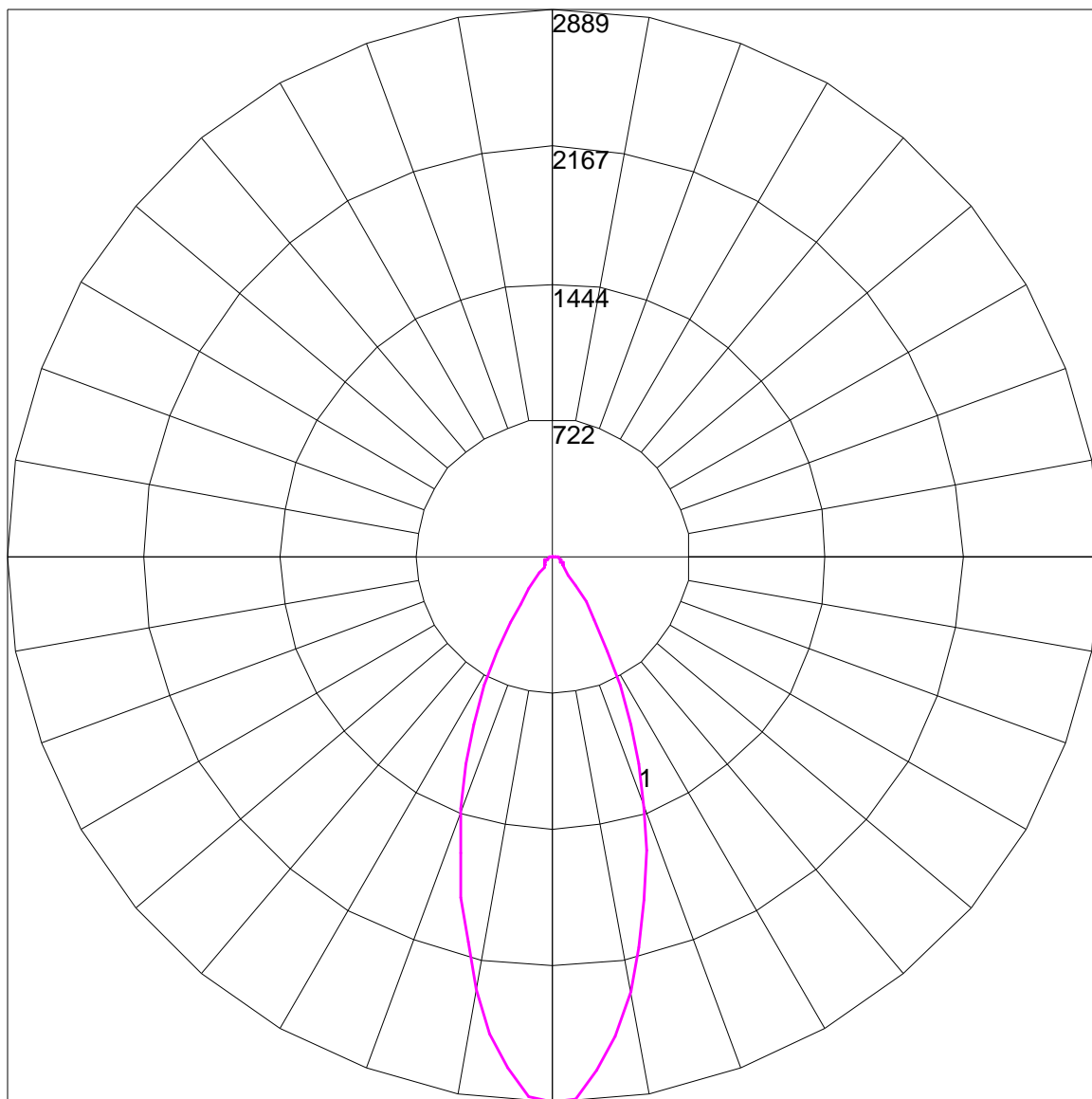
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93
2	108	103	99	96	106	101	98	95	98	95	92	95	93	90	92	90	89	87
3	103	96	91	88	101	95	90	87	92	89	85	90	87	84	88	85	83	81
4	98	90	85	81	96	89	84	80	87	83	80	85	82	79	83	80	78	76
5	93	85	80	75	92	84	79	75	83	78	74	81	77	74	79	76	73	72
6	89	81	75	71	88	80	74	71	78	74	70	77	73	70	76	72	69	68
7	85	76	71	67	84	76	70	67	75	70	66	73	69	66	72	68	65	64
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61
9	78	69	64	60	77	69	63	60	68	63	60	67	62	59	66	62	59	58
10	75	66	61	57	74	66	60	57	65	60	57	64	60	57	63	59	56	55

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SP-00648_4 ~ SR2DMO-XT20L-E1-RDD2F-XXK-WDMWNL.IES

POLAR GRAPH



Maximum Candela = 2888.693 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180)