

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00698\_1 ~ TT1610GV-15L35K-EX-FJ1-MB.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002

[TEST] SP-00698\_1\_M-15L

[TESTLAB] Spectrum Lighting Photometric Lab, VLS-245-981

[MANUFAC] Spectrum Lighting

[ISSUEDATE] 7/9/2018

[UPDATE] 7/25/2018

[LUMCAT] TT1610GV-15L-35K-EX-FJ1-MB

[LUMINAIRE] Nom. 16.5" diam shade x 10" H decorative Tech Tier luminaire

[OTHER] 3" x 6.5" Frosted Glass Jar

[OTHER] Remote driver in canopy

[LAMP] N/A, Gen3

[LAMPCAT] N/A

[OTHER] Total Luminaire Watts is approximate

[OTHER] This report generated by Spectrum Lighting, scaled from 27L

[\_CCTMULT]27K x 0.971, 30K x 0.985, 40K x 1.03

[\_LAMPMULT]27L x 1.75

[\_CRI]85+

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	343
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	34
Total Luminaire Watts	10
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	0.78
Spacing Criterion (90-270)	0.78
Spacing Criterion (Diagonal)	0.80
Basic Luminous Shape	Circular w/ Sides
Luminous Length (0-180)	1.38 ft (Diameter)
Luminous Width (90-270)	1.38 ft (Diameter)
Luminous Height	0.33 ft

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00698\_1 ~ TT1610GV-15L35K-EX-FJ1-MB.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	294	294	294
55	237	237	237
65	197	197	197
75	245	245	245
85	657	657	657

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**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>
<b>0.0</b>	215.392	215.392	215.392	215.392	215.392	215.392	215.392	215.392	215.392	215.392
<b>2.5</b>	215.190	215.190	215.190	215.190	215.190	215.190	215.190	215.190	215.190	215.190
<b>5.0</b>	209.131	209.131	209.131	209.131	209.131	209.131	209.131	209.131	209.131	209.131
<b>7.5</b>	202.738	202.738	202.738	202.738	202.738	202.738	202.738	202.738	202.738	202.738
<b>10.0</b>	193.237	193.237	193.237	193.237	193.237	193.237	193.237	193.237	193.237	193.237
<b>12.5</b>	182.980	182.980	182.980	182.980	182.980	182.980	182.980	182.980	182.980	182.980
<b>15.0</b>	168.790	168.790	168.790	168.790	168.790	168.790	168.790	168.790	168.790	168.790
<b>17.5</b>	154.221	154.221	154.221	154.221	154.221	154.221	154.221	154.221	154.221	154.221
<b>20.0</b>	138.360	138.360	138.360	138.360	138.360	138.360	138.360	138.360	138.360	138.360
<b>22.5</b>	122.552	122.552	122.552	122.552	122.552	122.552	122.552	122.552	122.552	122.552
<b>25.0</b>	106.869	106.869	106.869	106.869	106.869	106.869	106.869	106.869	106.869	106.869
<b>27.5</b>	91.627	91.627	91.627	91.627	91.627	91.627	91.627	91.627	91.627	91.627
<b>30.0</b>	77.176	77.176	77.176	77.176	77.176	77.176	77.176	77.176	77.176	77.176
<b>32.5</b>	64.611	64.611	64.611	64.611	64.611	64.611	64.611	64.611	64.611	64.611
<b>35.0</b>	54.622	54.622	54.622	54.622	54.622	54.622	54.622	54.622	54.622	54.622
<b>37.5</b>	47.133	47.133	47.133	47.133	47.133	47.133	47.133	47.133	47.133	47.133
<b>40.0</b>	42.270	42.270	42.270	42.270	42.270	42.270	42.270	42.270	42.270	42.270
<b>42.5</b>	39.284	39.284	39.284	39.284	39.284	39.284	39.284	39.284	39.284	39.284
<b>45.0</b>	37.820	37.820	37.820	37.820	37.820	37.820	37.820	37.820	37.820	37.820
<b>47.5</b>	35.595	35.595	35.595	35.595	35.595	35.595	35.595	35.595	35.595	35.595
<b>50.0</b>	32.900	32.900	32.900	32.900	32.900	32.900	32.900	32.900	32.900	32.900
<b>52.5</b>	30.089	30.089	30.089	30.089	30.089	30.089	30.089	30.089	30.089	30.089
<b>55.0</b>	27.225	27.225	27.225	27.225	27.225	27.225	27.225	27.225	27.225	27.225
<b>57.5</b>	24.788	24.788	24.788	24.788	24.788	24.788	24.788	24.788	24.788	24.788
<b>60.0</b>	22.496	22.496	22.496	22.496	22.496	22.496	22.496	22.496	22.496	22.496
<b>62.5</b>	20.789	20.789	20.789	20.789	20.789	20.789	20.789	20.789	20.789	20.789
<b>65.0</b>	19.216	19.216	19.216	19.216	19.216	19.216	19.216	19.216	19.216	19.216
<b>67.5</b>	17.704	17.704	17.704	17.704	17.704	17.704	17.704	17.704	17.704	17.704
<b>70.0</b>	16.200	16.200	16.200	16.200	16.200	16.200	16.200	16.200	16.200	16.200
<b>72.5</b>	17.451	17.451	17.451	17.451	17.451	17.451	17.451	17.451	17.451	17.451
<b>75.0</b>	18.897	18.897	18.897	18.897	18.897	18.897	18.897	18.897	18.897	18.897
<b>77.5</b>	24.299	24.299	24.299	24.299	24.299	24.299	24.299	24.299	24.299	24.299
<b>80.0</b>	29.567	29.567	29.567	29.567	29.567	29.567	29.567	29.567	29.567	29.567
<b>82.5</b>	33.086	33.086	33.086	33.086	33.086	33.086	33.086	33.086	33.086	33.086
<b>85.0</b>	35.913	35.913	35.913	35.913	35.913	35.913	35.913	35.913	35.913	35.913
<b>87.5</b>	34.396	34.396	34.396	34.396	34.396	34.396	34.396	34.396	34.396	34.396
<b>90.0</b>	32.760	32.760	32.760	32.760	32.760	32.760	32.760	32.760	32.760	32.760
<b>92.5</b>	30.647	30.647	30.647	30.647	30.647	30.647	30.647	30.647	30.647	30.647
<b>95.0</b>	28.582	28.582	28.582	28.582	28.582	28.582	28.582	28.582	28.582	28.582
<b>97.5</b>	26.649	26.649	26.649	26.649	26.649	26.649	26.649	26.649	26.649	26.649
<b>100.0</b>	24.475	24.475	24.475	24.475	24.475	24.475	24.475	24.475	24.475	24.475
<b>102.5</b>	21.818	21.818	21.818	21.818	21.818	21.818	21.818	21.818	21.818	21.818
<b>105.0</b>	19.091	19.091	19.091	19.091	19.091	19.091	19.091	19.091	19.091	19.091
<b>107.5</b>	16.257	16.257	16.257	16.257	16.257	16.257	16.257	16.257	16.257	16.257
<b>110.0</b>	12.882	12.882	12.882	12.882	12.882	12.882	12.882	12.882	12.882	12.882
<b>112.5</b>	8.875	8.875	8.875	8.875	8.875	8.875	8.875	8.875	8.875	8.875
<b>115.0</b>	5.980	5.980	5.980	5.980	5.980	5.980	5.980	5.980	5.980	5.980
<b>117.5</b>	4.082	4.082	4.082	4.082	4.082	4.082	4.082	4.082	4.082	4.082
<b>120.0</b>	2.849	2.849	2.849	2.849	2.849	2.849	2.849	2.849	2.849	2.849
<b>122.5</b>	2.075	2.075	2.075	2.075	2.075	2.075	2.075	2.075	2.075	2.075
<b>125.0</b>	1.547	1.547	1.547	1.547	1.547	1.547	1.547	1.547	1.547	1.547

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**CANDELA TABULATION - (Cont.)**

127.5	1.148	1.148	1.148	1.148	1.148	1.148	1.148	1.148	1.148	1.148
130.0	0.948	0.948	0.948	0.948	0.948	0.948	0.948	0.948	0.948	0.948
132.5	0.826	0.826	0.826	0.826	0.826	0.826	0.826	0.826	0.826	0.826
135.0	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699
137.5	0.571	0.571	0.571	0.571	0.571	0.571	0.571	0.571	0.571	0.571
140.0	0.584	0.584	0.584	0.584	0.584	0.584	0.584	0.584	0.584	0.584
142.5	0.623	0.623	0.623	0.623	0.623	0.623	0.623	0.623	0.623	0.623
145.0	0.639	0.639	0.639	0.639	0.639	0.639	0.639	0.639	0.639	0.639
147.5	0.653	0.653	0.653	0.653	0.653	0.653	0.653	0.653	0.653	0.653
150.0	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616
152.5	0.583	0.583	0.583	0.583	0.583	0.583	0.583	0.583	0.583	0.583
155.0	0.640	0.640	0.640	0.640	0.640	0.640	0.640	0.640	0.640	0.640
157.5	0.678	0.678	0.678	0.678	0.678	0.678	0.678	0.678	0.678	0.678
160.0	0.614	0.614	0.614	0.614	0.614	0.614	0.614	0.614	0.614	0.614
162.5	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606
165.0	0.674	0.674	0.674	0.674	0.674	0.674	0.674	0.674	0.674	0.674
167.5	0.636	0.636	0.636	0.636	0.636	0.636	0.636	0.636	0.636	0.636
170.0	0.609	0.609	0.609	0.609	0.609	0.609	0.609	0.609	0.609	0.609
172.5	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616
175.0	0.615	0.615	0.615	0.615	0.615	0.615	0.615	0.615	0.615	0.615
177.5	0.626	0.626	0.626	0.626	0.626	0.626	0.626	0.626	0.626	0.626
180.0	0.554	0.554	0.554	0.554	0.554	0.554	0.554	0.554	0.554	0.554

**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	215.392	215.392	215.392	215.392	215.392	215.392	215.392
2.5	215.190	215.190	215.190	215.190	215.190	215.190	215.190
5.0	209.131	209.131	209.131	209.131	209.131	209.131	209.131
7.5	202.738	202.738	202.738	202.738	202.738	202.738	202.738
10.0	193.237	193.237	193.237	193.237	193.237	193.237	193.237
12.5	182.980	182.980	182.980	182.980	182.980	182.980	182.980
15.0	168.790	168.790	168.790	168.790	168.790	168.790	168.790
17.5	154.221	154.221	154.221	154.221	154.221	154.221	154.221
20.0	138.360	138.360	138.360	138.360	138.360	138.360	138.360
22.5	122.552	122.552	122.552	122.552	122.552	122.552	122.552
25.0	106.869	106.869	106.869	106.869	106.869	106.869	106.869
27.5	91.627	91.627	91.627	91.627	91.627	91.627	91.627
30.0	77.176	77.176	77.176	77.176	77.176	77.176	77.176
32.5	64.611	64.611	64.611	64.611	64.611	64.611	64.611
35.0	54.622	54.622	54.622	54.622	54.622	54.622	54.622
37.5	47.133	47.133	47.133	47.133	47.133	47.133	47.133
40.0	42.270	42.270	42.270	42.270	42.270	42.270	42.270
42.5	39.284	39.284	39.284	39.284	39.284	39.284	39.284
45.0	37.820	37.820	37.820	37.820	37.820	37.820	37.820
47.5	35.595	35.595	35.595	35.595	35.595	35.595	35.595
50.0	32.900	32.900	32.900	32.900	32.900	32.900	32.900
52.5	30.089	30.089	30.089	30.089	30.089	30.089	30.089
55.0	27.225	27.225	27.225	27.225	27.225	27.225	27.225
57.5	24.788	24.788	24.788	24.788	24.788	24.788	24.788
60.0	22.496	22.496	22.496	22.496	22.496	22.496	22.496
62.5	20.789	20.789	20.789	20.789	20.789	20.789	20.789
65.0	19.216	19.216	19.216	19.216	19.216	19.216	19.216

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**CANDELA TABULATION - (Cont.)**

67.5	17.704	17.704	17.704	17.704	17.704	17.704	17.704
70.0	16.200	16.200	16.200	16.200	16.200	16.200	16.200
72.5	17.451	17.451	17.451	17.451	17.451	17.451	17.451
75.0	18.897	18.897	18.897	18.897	18.897	18.897	18.897
77.5	24.299	24.299	24.299	24.299	24.299	24.299	24.299
80.0	29.567	29.567	29.567	29.567	29.567	29.567	29.567
82.5	33.086	33.086	33.086	33.086	33.086	33.086	33.086
85.0	35.913	35.913	35.913	35.913	35.913	35.913	35.913
87.5	34.396	34.396	34.396	34.396	34.396	34.396	34.396
90.0	32.760	32.760	32.760	32.760	32.760	32.760	32.760
92.5	30.647	30.647	30.647	30.647	30.647	30.647	30.647
95.0	28.582	28.582	28.582	28.582	28.582	28.582	28.582
97.5	26.649	26.649	26.649	26.649	26.649	26.649	26.649
100.0	24.475	24.475	24.475	24.475	24.475	24.475	24.475
102.5	21.818	21.818	21.818	21.818	21.818	21.818	21.818
105.0	19.091	19.091	19.091	19.091	19.091	19.091	19.091
107.5	16.257	16.257	16.257	16.257	16.257	16.257	16.257
110.0	12.882	12.882	12.882	12.882	12.882	12.882	12.882
112.5	8.875	8.875	8.875	8.875	8.875	8.875	8.875
115.0	5.980	5.980	5.980	5.980	5.980	5.980	5.980
117.5	4.082	4.082	4.082	4.082	4.082	4.082	4.082
120.0	2.849	2.849	2.849	2.849	2.849	2.849	2.849
122.5	2.075	2.075	2.075	2.075	2.075	2.075	2.075
125.0	1.547	1.547	1.547	1.547	1.547	1.547	1.547
127.5	1.148	1.148	1.148	1.148	1.148	1.148	1.148
130.0	0.948	0.948	0.948	0.948	0.948	0.948	0.948
132.5	0.826	0.826	0.826	0.826	0.826	0.826	0.826
135.0	0.699	0.699	0.699	0.699	0.699	0.699	0.699
137.5	0.571	0.571	0.571	0.571	0.571	0.571	0.571
140.0	0.584	0.584	0.584	0.584	0.584	0.584	0.584
142.5	0.623	0.623	0.623	0.623	0.623	0.623	0.623
145.0	0.639	0.639	0.639	0.639	0.639	0.639	0.639
147.5	0.653	0.653	0.653	0.653	0.653	0.653	0.653
150.0	0.616	0.616	0.616	0.616	0.616	0.616	0.616
152.5	0.583	0.583	0.583	0.583	0.583	0.583	0.583
155.0	0.640	0.640	0.640	0.640	0.640	0.640	0.640
157.5	0.678	0.678	0.678	0.678	0.678	0.678	0.678
160.0	0.614	0.614	0.614	0.614	0.614	0.614	0.614
162.5	0.606	0.606	0.606	0.606	0.606	0.606	0.606
165.0	0.674	0.674	0.674	0.674	0.674	0.674	0.674
167.5	0.636	0.636	0.636	0.636	0.636	0.636	0.636
170.0	0.609	0.609	0.609	0.609	0.609	0.609	0.609
172.5	0.616	0.616	0.616	0.616	0.616	0.616	0.616
175.0	0.615	0.615	0.615	0.615	0.615	0.615	0.615
177.5	0.626	0.626	0.626	0.626	0.626	0.626	0.626
180.0	0.554	0.554	0.554	0.554	0.554	0.554	0.554

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00698\_1 ~ TT1610GV-15L35K-EX-FJ1-MB.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	66.29	N.A.	19.30
0-30	115.08	N.A.	33.60
0-40	150.16	N.A.	43.80
0-60	203.71	N.A.	59.40
0-80	244.93	N.A.	71.50
0-90	281.64	N.A.	82.20
10-90	262.15	N.A.	76.50
20-40	83.87	N.A.	24.50
20-50	112.87	N.A.	32.90
40-70	72.63	N.A.	21.20
60-80	41.23	N.A.	12.00
70-80	22.14	N.A.	6.50
80-90	36.71	N.A.	10.70
90-110	51.34	N.A.	15.00
90-120	58.06	N.A.	16.90
90-130	59.57	N.A.	17.40
90-150	60.52	N.A.	17.70
90-180	61.05	N.A.	17.80
110-180	9.71	N.A.	2.80
0-180	342.69	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	19.49
10-20	46.80
20-30	48.79
30-40	35.08
40-50	29.01
50-60	24.54
60-70	19.08
70-80	22.14
80-90	36.71
90-100	31.24
100-110	20.10
110-120	6.71
120-130	1.51
130-140	0.56
140-150	0.39
150-160	0.29
160-170	0.18
170-180	0.06

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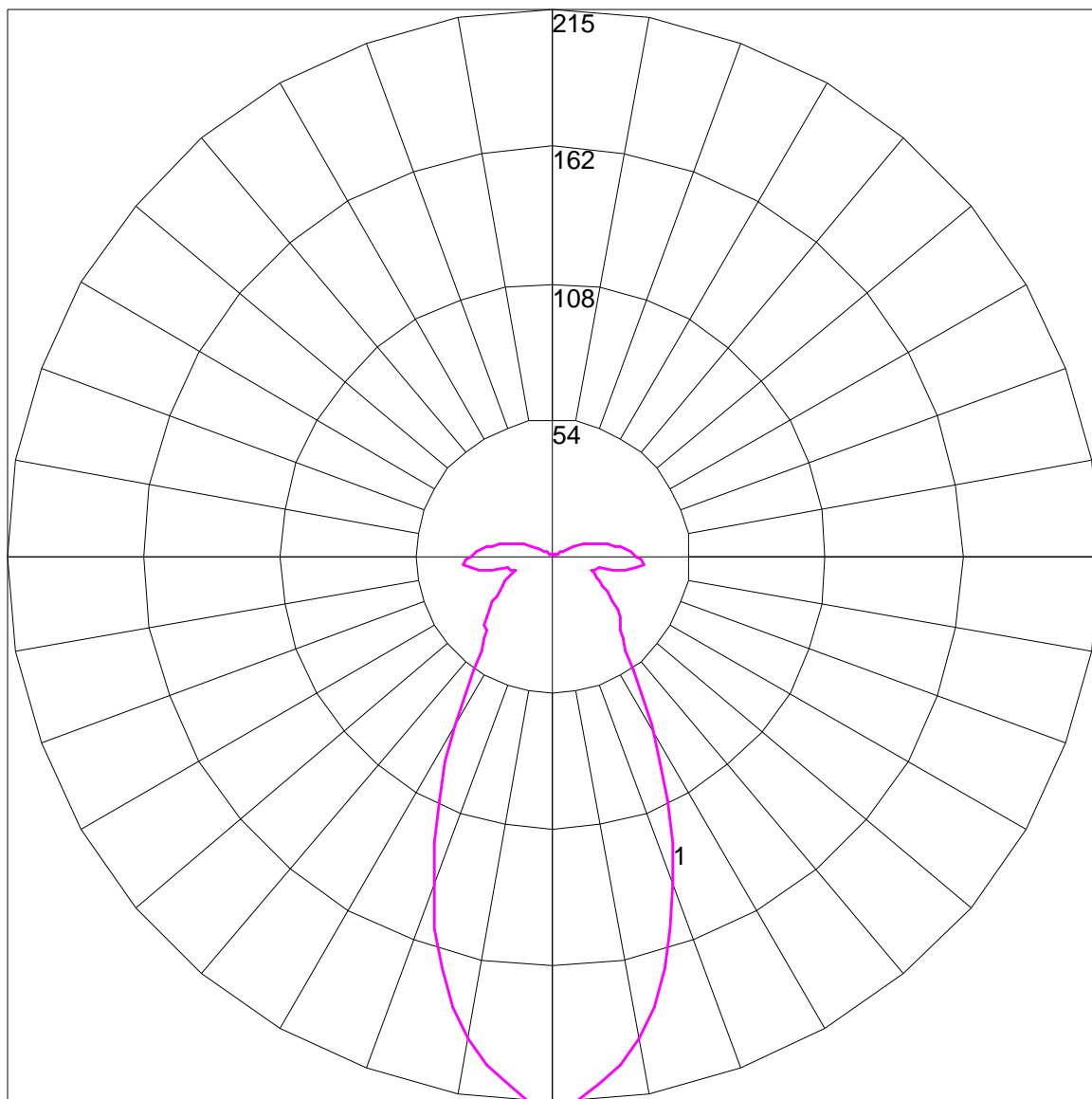
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	82
1	102	96	91	87	97	92	88	83	85	81	78	78	75	72	71	69	67	63
2	93	85	78	72	89	81	75	69	75	70	65	69	65	61	63	60	57	54
3	86	76	68	61	82	73	66	60	67	61	56	62	57	53	58	54	50	47
4	80	68	60	54	76	66	58	52	61	55	50	57	52	47	53	48	45	42
5	74	62	54	48	71	60	52	47	56	50	45	52	47	42	49	44	40	38
6	70	57	49	43	67	55	48	42	52	45	40	48	43	39	45	41	37	35
7	65	53	45	39	62	51	44	38	48	42	37	45	40	35	42	38	34	32
8	61	49	41	36	59	47	40	35	45	38	34	42	37	33	40	35	31	29
9	58	46	38	33	56	44	37	32	42	36	31	40	34	30	37	33	29	27
10	55	43	35	31	53	41	35	30	39	33	29	37	32	28	35	31	27	26

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00698\_1 ~ TT1610GV-15L35K-EX-FJ1-MB.IES

POLAR GRAPH



Maximum Candela = 215.392 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)