



8165 E. Kaiser Blvd. Anaheim, CA 92808
p. 714.282.2270
f. 714.676.5558

Photometric Test Report

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L051501902.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L051501902
[TESTLAB] LIGHT LABORATORY, INC.
[ISSUEDATE] 5/22/2015
[MANUFAC] BARTCO LIGHTING
[LUMCAT] BSS110-4-35-5-F-WH
[LUMINAIRE] 3"L. X 45-1/2"W. X 2"H. LED LUMINAIRE
[MORE] DIFFUSED LENS
[BALLASTCAT] PHILIPS ADVANCE XI040C110V054BPT1
[BALLAST] INPUT: 120-277VAC, 0.4-0.17A, 50/60Hz OUTPUT: 0.1-1.1ADC, 27-54VDC
[LAMPPOSITION] 0,0
[LAMPCAT] N/A
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
[INPUT] 120VAC, 22.39W
[TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2218
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	22.39
Ballast Factor	1.00
CIE Type	Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.08 ft
Luminous Width (90-270)	3.75 ft
Luminous Height	0.02 ft

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1490	873	284
55	2741	1664	349
65	5252	3459	482
75	10171	7488	815
85	21948	18991	2442

CANDELA TABULATION

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	6.64	6.64	6.59	6.56	6.53	6.51	6.47	6.41	6.36	6.32
20	8.38	8.30	8.17	7.99	7.81	7.51	7.17	6.88	6.67	6.46
25	11.40	11.24	11.02	10.80	10.36	9.87	9.30	8.67	8.01	7.37
30	15.67	15.43	15.19	14.73	14.13	13.37	12.42	11.36	10.29	9.21
35	21.42	21.03	20.83	20.12	19.23	18.01	16.58	15.07	13.53	11.89
40	28.23	27.97	27.53	27.10	25.33	23.82	22.06	19.14	17.85	15.56
45	36.75	36.48	35.82	34.65	33.06	31.09	28.74	27.35	23.33	20.34
50	47.09	46.89	46.03	44.43	42.50	39.93	37.03	33.68	31.70	26.16
55	59.52	59.34	58.26	56.35	53.76	50.85	47.17	42.93	38.35	33.50
60	74.49	74.05	72.60	70.25	67.46	63.77	59.40	54.26	48.79	42.98
65	95.11	94.38	92.95	90.31	86.93	81.37	74.80	69.01	63.14	56.57
70	116.52	115.91	113.81	111.24	107.44	102.45	96.21	88.97	80.85	71.66
75	141.96	141.39	139.54	135.69	131.72	126.42	119.13	110.66	101.31	90.49
80	171.76	171.14	169.42	165.92	160.61	153.90	146.64	137.47	126.22	113.60
85	205.85	205.16	203.06	199.69	194.73	187.75	178.78	167.81	155.29	141.46
90	247.07	246.41	244.21	240.30	234.63	227.07	217.37	199.45	191.64	175.70
95	296.18	295.48	293.09	289.02	283.38	275.37	265.51	251.21	235.25	217.17
100	352.78	352.07	350.02	345.93	338.42	328.81	317.62	303.63	286.61	267.27
105	417.62	417.11	414.89	408.31	401.22	392.21	379.10	362.59	344.14	321.77
110	490.04	490.00	485.56	479.42	472.35	460.28	446.55	428.72	408.09	384.02
115	567.48	567.52	560.65	555.96	545.90	533.63	518.07	499.15	475.76	448.49
120	644.20	643.57	636.90	630.72	619.30	606.06	589.57	567.95	542.62	514.55
125	707.66	705.86	700.23	691.82	680.60	667.03	648.35	625.61	599.50	570.45
130	773.32	769.34	763.99	755.33	743.75	729.53	709.87	686.64	660.60	630.27
135	827.59	823.59	816.74	807.97	797.71	782.17	762.63	740.04	714.00	684.50
140	867.53	864.59	858.34	849.61	839.10	823.97	805.27	783.80	758.90	731.12
145	892.30	890.92	885.20	877.64	867.49	853.38	836.13	816.32	793.15	767.78
150	904.71	903.93	898.26	891.45	882.15	869.76	854.28	837.16	815.78	793.31
155	904.40	902.79	897.30	891.63	883.06	872.53	859.32	844.50	825.62	806.54
160	889.80	887.53	882.55	877.77	870.52	861.44	850.84	838.86	822.57	806.94
165	858.87	855.66	853.12	848.01	842.76	836.07	828.28	818.71	805.67	793.40
170	811.25	809.24	808.19	804.36	800.38	796.28	791.44	784.63	775.59	766.91
175	750.51	750.71	750.24	747.36	744.89	743.64	741.38	737.97	733.08	728.28
180	674.71	674.71	674.71	674.71	674.71	674.71	674.71	674.71	674.71	674.71

Vert. Horizontal Angles
 Angles

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>	<u>95</u>
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	6.28	6.26	6.21	6.17	6.14	6.09	6.04	5.97	5.92	5.88
20	6.30	6.22	6.17	6.13	6.08	6.03	5.99	5.92	5.87	5.83
25	6.87	6.50	6.20	6.07	6.01	5.95	5.91	5.86	5.81	5.76
30	8.16	7.19	6.57	6.11	5.92	5.86	5.81	5.78	5.73	5.68
35	10.30	8.74	7.47	6.61	6.05	5.86	5.80	5.75	5.69	5.65
40	13.23	11.01	9.11	7.45	6.48	5.89	5.78	5.72	5.66	5.62
45	15.80	14.25	11.38	9.04	7.21	6.27	5.86	5.73	5.64	5.58
50	22.21	16.54	14.62	11.22	8.57	6.79	5.92	5.73	5.61	5.54
55	30.67	23.50	16.65	14.35	10.50	7.64	6.21	5.77	5.62	5.55
60	37.04	33.84	24.70	16.18	13.42	9.18	6.68	5.84	5.69	5.61

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CANDELA TABULATION - (Cont.)

65	48.33	39.97	35.33	23.97	14.26	11.40	7.41	5.93	5.75	5.68
70	61.76	51.43	41.13	35.38	22.11	11.50	9.00	6.31	5.82	5.76
75	78.81	66.30	53.58	40.99	34.33	19.26	8.63	7.04	6.00	5.90
80	99.93	85.28	70.01	54.57	46.25	26.43	11.44	8.22	6.14	6.04
85	125.85	108.85	90.89	72.72	54.88	45.45	22.82	7.81	6.30	6.19
90	157.80	138.45	117.97	96.85	75.99	56.07	45.57	20.35	6.44	6.40
95	187.92	175.53	152.60	128.95	105.56	83.37	62.96	44.74	36.00	19.62
100	243.28	219.51	182.63	168.47	143.03	118.96	96.42	76.17	58.62	45.45
105	297.22	272.64	242.84	214.73	175.04	160.44	135.45	112.90	92.85	76.51
110	356.38	327.29	297.24	268.60	236.07	194.36	179.59	154.70	132.11	112.88
115	419.44	387.92	355.33	322.28	289.92	260.36	228.41	189.61	176.00	153.92
120	483.10	449.68	415.45	380.68	346.25	312.45	282.78	250.82	223.55	188.68
125	537.35	503.48	468.44	432.91	396.74	361.75	327.99	296.78	269.75	240.49
130	597.49	563.86	528.25	492.48	455.14	419.33	384.19	351.61	320.95	291.36
135	653.19	619.50	585.53	548.89	512.05	475.79	440.23	406.72	374.88	343.68
140	701.39	669.35	636.81	601.31	564.96	529.03	494.22	460.88	428.58	396.39
145	739.91	710.99	679.93	646.39	612.29	577.70	544.20	512.16	480.23	448.38
150	767.92	741.74	713.38	682.67	651.23	619.32	588.21	558.06	527.87	497.54
155	784.09	761.09	736.00	708.69	680.95	652.21	624.81	597.45	570.00	542.20
160	787.80	768.70	747.63	724.24	700.97	676.20	653.21	629.87	606.53	582.27
165	778.31	763.39	746.83	728.31	710.03	690.28	672.41	653.93	635.32	616.10
170	756.33	746.02	734.46	721.21	708.36	694.54	682.38	669.44	656.45	642.95
175	722.79	717.33	711.15	703.58	696.60	689.21	683.01	676.18	669.37	662.27
180	674.71	674.71	674.71	674.71	674.71	674.71	674.71	674.71	674.71	674.71

Vert. Angles **Horizontal Angles**

	<u>100</u>	<u>105</u>	<u>110</u>	<u>115</u>	<u>120</u>	<u>125</u>	<u>130</u>	<u>135</u>	<u>140</u>	<u>145</u>
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	5.83	5.76	5.70	5.65	5.59	5.54	5.50	5.46	5.42	5.40
20	5.78	5.73	5.67	5.62	5.58	5.54	5.50	5.46	5.43	5.41
25	5.71	5.66	5.62	5.56	5.53	5.50	5.48	5.46	5.44	5.42
30	5.63	5.59	5.55	5.51	5.48	5.45	5.42	5.41	5.40	5.40
35	5.62	5.58	5.55	5.52	5.49	5.46	5.44	5.42	5.41	5.42
40	5.58	5.55	5.52	5.49	5.46	5.44	5.42	5.41	5.41	5.40
45	5.55	5.52	5.49	5.46	5.43	5.40	5.39	5.38	5.38	5.39
50	5.51	5.47	5.44	5.41	5.38	5.38	5.37	5.36	5.36	5.36
55	5.51	5.48	5.46	5.45	5.43	5.41	5.40	5.40	5.40	5.40
60	5.57	5.55	5.54	5.53	5.51	5.50	5.50	5.50	5.50	5.51
65	5.65	5.64	5.64	5.64	5.63	5.63	5.63	5.63	5.64	5.65
70	5.74	5.74	5.75	5.76	5.77	5.77	5.77	5.78	5.79	5.80
75	5.89	5.90	5.92	5.95	5.98	6.00	6.01	6.02	6.04	6.06
80	6.03	6.06	6.10	6.15	6.19	6.23	6.26	6.29	6.32	6.34
85	6.19	6.21	6.25	6.30	6.34	6.38	6.41	6.44	6.47	6.49
90	6.37	6.39	6.41	6.45	6.48	6.53	6.55	6.58	6.59	6.60
95	18.94	18.95	19.37	19.25	18.35	17.30	16.30	15.33	14.53	13.80
100	38.59	35.40	33.81	33.03	32.45	32.09	31.74	31.47	31.26	30.94
105	65.29	58.37	53.90	50.77	48.50	46.78	45.38	44.19	43.22	42.24
110	97.73	87.06	79.34	73.48	68.91	65.27	62.29	59.96	57.82	56.02
115	135.29	120.90	109.82	100.88	93.65	87.82	82.97	78.81	75.47	72.70
120	176.85	159.05	144.49	132.53	122.35	113.98	107.08	101.22	96.27	92.24
125	216.14	187.54	177.97	163.30	150.63	139.92	130.97	123.58	117.15	111.86
130	266.53	240.56	220.14	195.25	186.84	173.44	162.16	152.50	144.57	137.73
135	314.95	288.92	267.41	245.11	227.35	205.19	197.89	186.30	176.51	168.34

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CANDELA TABULATION - (Cont.)

140	366.71	338.93	314.06	291.48	273.18	253.81	238.21	225.03	209.16	204.08
145	418.37	389.94	364.46	340.77	319.55	300.63	283.43	268.84	256.72	245.06
150	468.40	440.59	415.57	391.91	370.17	350.87	332.70	317.23	303.41	291.79
155	515.46	489.69	466.10	443.69	422.73	403.82	385.91	370.10	356.36	344.31
160	558.89	535.99	515.46	495.45	476.57	459.29	442.91	427.96	414.97	403.20
165	597.11	578.46	561.88	545.70	530.12	515.93	501.98	489.26	477.99	467.73
170	629.54	616.04	604.54	593.39	582.07	571.99	561.48	552.22	543.51	536.01
175	655.07	647.23	641.79	635.99	630.16	624.81	618.94	613.87	609.03	604.81
180	674.71	674.71	674.71	674.71	674.71	674.71	674.71	674.71	674.71	674.71

Vert. Horizontal Angles
Angles

	<u>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	5.38	5.37	5.36	5.35	5.35	5.35	5.33
20	5.40	5.40	5.39	5.39	5.39	5.38	5.37
25	5.41	5.40	5.40	5.40	5.40	5.41	5.41
30	5.41	5.42	5.42	5.41	5.42	5.42	5.43
35	5.43	5.43	5.44	5.45	5.46	5.48	5.48
40	5.40	5.40	5.40	5.41	5.41	5.43	5.45
45	5.39	5.40	5.41	5.43	5.44	5.45	5.46
50	5.37	5.38	5.39	5.40	5.41	5.41	5.42
55	5.42	5.42	5.43	5.44	5.44	5.45	5.46
60	5.52	5.53	5.54	5.55	5.55	5.56	5.57
65	5.66	5.67	5.68	5.69	5.69	5.71	5.72
70	5.81	5.82	5.83	5.84	5.85	5.87	5.88
75	6.08	6.10	6.12	6.13	6.13	6.16	6.17
80	6.36	6.38	6.40	6.41	6.41	6.40	6.44
85	6.51	6.53	6.55	6.56	6.57	6.57	6.58
90	6.61	6.62	6.62	6.62	6.61	6.59	6.58
95	13.15	12.59	12.19	11.92	11.69	11.56	11.53
100	30.27	29.48	29.05	28.57	28.25	27.99	27.94
105	41.57	41.02	40.38	39.97	39.87	39.74	39.57
110	54.60	53.34	52.55	51.60	51.22	51.08	50.74
115	70.23	68.35	66.83	65.87	64.55	64.62	64.17
120	88.90	85.98	83.72	82.15	80.99	80.62	80.05
125	107.54	103.95	101.02	98.85	97.57	96.65	96.14
130	132.12	127.58	123.54	120.71	119.17	117.66	117.63
135	161.46	155.90	151.39	147.53	145.06	143.97	144.05
140	195.80	189.43	184.12	179.31	176.74	175.42	175.34
145	235.95	228.57	222.55	217.64	213.24	212.05	212.12
150	282.04	273.92	267.59	261.98	258.50	255.96	255.92
155	334.37	325.69	318.94	313.28	309.33	306.92	306.26
160	393.55	385.16	378.21	372.59	368.78	367.01	365.35
165	459.18	451.31	445.43	440.46	436.62	435.31	434.74
170	529.50	523.52	518.83	514.86	511.65	510.91	512.32
175	601.22	597.45	594.46	591.87	590.02	590.02	592.61
180	674.71	674.71	674.71	674.71	674.71	674.71	674.71

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1.35	N.A.	0.10
0-30	4.54	N.A.	0.20
0-40	10.30	N.A.	0.50
0-60	37.81	N.A.	1.70
0-80	114.23	N.A.	5.10
0-90	187.36	N.A.	8.40
10-90	187.36	N.A.	8.40
20-40	8.95	N.A.	0.40
20-50	19.11	N.A.	0.90
40-70	56.73	N.A.	2.60
60-80	76.42	N.A.	3.40
70-80	47.20	N.A.	2.10
80-90	73.13	N.A.	3.30
90-110	300.07	N.A.	13.50
90-120	552.80	N.A.	24.90
90-130	858.85	N.A.	38.70
90-150	1515.88	N.A.	68.30
90-180	2030.98	N.A.	91.60
110-180	1730.91	N.A.	78.00
0-180	2218.34	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	0.00
10-20	1.35
20-30	3.19
30-40	5.76
40-50	10.16
50-60	17.35
60-70	29.22
70-80	47.20
80-90	73.13
90-100	117.17
100-110	182.91
110-120	252.72
120-130	306.05
130-140	333.61
140-150	323.42
150-160	270.82
160-170	180.67
170-180	63.61

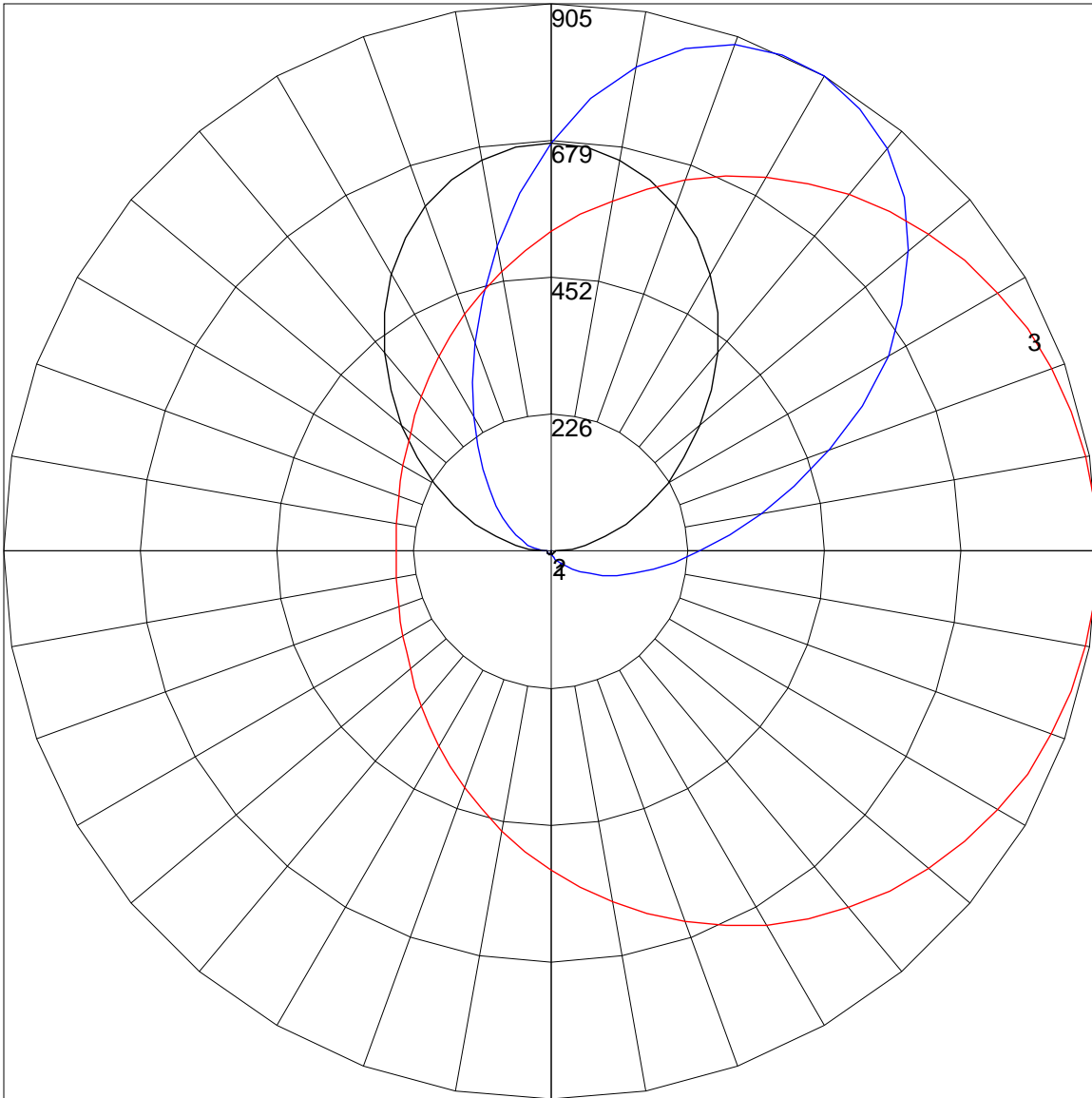
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
0	97	97	97	97	84	84	84	84	60	60	60	38	38	38	18	18	18	8
1	87	82	78	74	75	71	68	64	50	48	46	31	30	28	13	13	12	4
2	79	71	65	60	68	61	56	52	43	40	37	27	25	23	11	10	9	2
3	71	62	55	49	61	54	48	43	38	34	30	23	21	19	9	8	7	2
4	65	54	47	41	56	47	41	36	33	29	26	20	18	16	8	7	6	1
5	59	48	40	35	51	42	35	30	29	25	22	18	15	13	7	6	5	1
6	54	43	35	29	47	37	31	26	26	22	18	16	13	11	7	5	4	1
7	50	38	31	25	43	33	27	22	24	19	16	14	12	10	6	5	4	0
8	46	35	27	22	40	30	24	19	21	17	14	13	10	9	5	4	3	0
9	43	31	24	19	37	27	21	17	19	15	12	12	9	7	5	4	3	0
10	40	28	22	17	34	25	19	15	18	14	11	11	8	7	5	3	2	0

POLAR GRAPH



Maximum Candela = 904.71 Located At Horizontal Angle = 0, Vertical Angle = 150

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Vertical Plane Through Horizontal Angles (90 - 270)

3 - Horizontal Cone Through Vertical Angle (150) (Through Max. Cd.)