



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : IHB2-LED-09L-LL-50.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] 3566

[TESTLAB] TUV SUD America

[TESTDATE] 10/25/2018 11:12:33 AM

[ISSUEDATE] 04/19/21

[MANUFAC] LSI INDUSTRIES, INC

[LUMCAT] IHB2-LED-09L-LL-50

[OTHER] TEST PROCEDURE: IESNA LM-79-08

[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED

[OTHER] SCALED FROM ORIGINAL TEST DATA

[SEARCH\_SOURCETYPE] LED

[SEARCH\_APPLICATION] Indoor

[SEARCH\_COLORTEMP] 5000

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	10300
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	139
Total Luminaire Watts	74
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.30
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	2.00 ft
Luminous Width (90-270)	0.60 ft
Luminous Height	0.00 ft



### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	32266	32668	32335
55	31985	32420	31253
65	14847	31017	28258
75	12743	12715	21606
85	6513	10410	6521

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : IHB2-LED-09L-LL-50.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	3591.124	3591.124	3591.124	3591.124	3591.124	3591.124	3591.124	3591.124	3591.124	3591.124
2.5	3575.336	3587.562	3594.889	3590.821	3592.835	3592.895	3591.559	3585.436	3576.125	3585.436
5.0	3565.903	3579.222	3586.064	3581.459	3584.880	3583.200	3580.882	3574.546	3567.755	3574.546
7.5	3551.248	3565.033	3571.135	3567.785	3570.720	3567.512	3564.607	3560.792	3554.092	3560.792
10.0	3531.168	3544.649	3549.993	3546.562	3549.295	3541.694	3544.639	3559.982	3559.345	3559.982
12.5	3548.181	3529.782	3520.410	3518.821	3518.628	3511.240	3537.018	3528.395	3527.312	3528.395
15.0	3495.948	3528.375	3489.339	3483.630	3482.588	3473.793	3504.287	3478.864	3482.689	3478.864
17.5	3427.055	3467.984	3475.271	3442.580	3439.473	3433.856	3450.019	3428.269	3431.619	3428.269
20.0	3378.040	3398.534	3444.240	3395.458	3393.342	3394.020	3390.154	3372.362	3381.288	3372.362
22.5	3328.022	3341.989	3366.077	3340.471	3335.522	3360.176	3328.690	3321.049	3336.767	3321.049
25.0	3271.902	3289.765	3287.144	3281.345	3274.675	3306.303	3261.387	3262.682	3271.558	3262.682
27.5	3190.419	3230.336	3217.695	3222.897	3204.993	3229.000	3190.844	3186.877	3198.840	3186.877
30.0	3116.699	3147.213	3143.691	3166.989	3132.346	3145.503	3131.718	3109.128	3123.793	3109.128
32.5	3042.381	3065.609	3073.715	3103.592	3051.035	3058.595	3044.233	3021.451	3043.201	3021.451
35.0	2953.480	2980.006	2986.808	3017.383	2965.422	2967.689	2950.069	2932.762	2955.737	2932.762
37.5	2862.979	2889.789	2887.411	2913.118	2871.035	2867.584	2851.856	2838.203	2862.766	2838.203
40.0	2771.456	2798.590	2791.141	2796.353	2771.598	2767.519	2750.091	2741.569	2765.849	2741.569
42.5	2660.845	2694.477	2686.886	2684.599	2662.414	2661.108	2643.569	2632.881	2661.847	2632.881
45.0	2545.953	2584.240	2577.672	2572.864	2551.358	2558.169	2532.168	2520.691	2548.342	2520.691
47.5	2428.662	2468.427	2461.322	2462.780	2430.272	2442.811	2412.317	2403.158	2432.468	2403.158
50.0	2306.878	2347.989	2337.737	2338.870	2305.684	2307.870	2286.646	2279.187	2321.199	2279.187
52.5	2180.610	2217.612	2210.679	2210.345	2155.247	2169.700	2155.146	2145.754	2192.431	2145.754
55.0	2047.207	2085.626	2075.009	2044.302	2000.317	2007.847	2018.555	2010.721	2055.344	2010.721
57.5	1892.510	1947.537	1932.973	1884.413	1838.930	1852.846	1877.258	1869.930	1904.807	1869.930
60.0	1565.485	1784.227	1785.978	1715.334	1684.840	1680.609	1730.110	1717.672	1743.197	1717.672
62.5	1103.133	1485.864	1625.299	1550.151	1507.907	1519.576	1564.918	1421.202	1191.741	1421.202
65.0	700.191	1033.320	1462.738	1379.321	1332.614	1349.667	1403.925	769.034	698.390	769.034
67.5	603.072	663.230	1230.919	1206.366	1157.310	1179.009	1208.097	608.011	605.592	608.011
70.0	521.326	559.147	819.952	1035.931	976.653	1011.975	624.326	520.718	523.684	520.718
72.5	442.413	477.047	479.941	866.285	795.955	834.090	431.219	437.555	445.308	437.555
75.0	368.045	396.475	367.225	699.949	624.012	670.254	344.706	359.129	371.840	359.129
77.5	304.840	326.570	286.977	497.440	460.975	481.581	261.624	288.940	302.523	288.940
80.0	227.031	255.400	217.345	223.256	311.500	178.734	196.517	224.886	237.820	224.886
82.5	150.315	182.975	159.565	114.558	179.463	105.955	143.575	160.709	171.893	160.709
85.0	63.346	91.543	101.239	64.409	63.417	58.873	90.258	91.442	105.935	91.442
87.5	26.426	43.591	39.107	31.395	14.412	30.929	40.524	44.825	54.136	44.825
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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
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

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : IHB2-LED-09L-LL-50.IES**

**CANDELA TABULATION - (Cont.)**

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	3591.124	3591.124	3591.124	3591.124	3591.124	3591.124	3591.124
2.5	3591.559	3592.895	3592.835	3590.821	3594.889	3587.562	3575.336
5.0	3580.882	3583.200	3584.880	3581.459	3586.064	3579.222	3565.903
7.5	3564.607	3567.512	3570.720	3567.785	3571.135	3565.033	3551.248
10.0	3544.639	3541.694	3549.295	3546.562	3549.993	3544.649	3531.168
12.5	3537.018	3511.240	3518.628	3518.821	3520.410	3529.782	3548.181
15.0	3504.287	3473.793	3482.588	3483.630	3489.339	3528.375	3495.948
17.5	3450.019	3433.856	3439.473	3442.580	3475.271	3467.984	3427.055
20.0	3390.154	3394.020	3393.342	3395.458	3444.240	3398.534	3378.040
22.5	3328.690	3360.176	3335.522	3340.471	3366.077	3341.989	3328.022
25.0	3261.387	3306.303	3274.675	3281.345	3287.144	3289.765	3271.902
27.5	3190.844	3229.000	3204.993	3222.897	3217.695	3230.336	3190.419
30.0	3131.718	3145.503	3132.346	3166.989	3143.691	3147.213	3116.699
32.5	3044.233	3058.595	3051.035	3103.592	3073.715	3065.609	3042.381
35.0	2950.069	2967.689	2965.422	3017.383	2986.808	2980.006	2953.480
37.5	2851.856	2867.584	2871.035	2913.118	2887.411	2889.789	2862.979
40.0	2750.091	2767.519	2771.598	2796.353	2791.141	2798.590	2771.456
42.5	2643.569	2661.108	2662.414	2684.599	2686.886	2694.477	2660.845
45.0	2532.168	2558.169	2551.358	2572.864	2577.672	2584.240	2545.953
47.5	2412.317	2442.811	2430.272	2462.780	2461.322	2468.427	2428.662
50.0	2286.646	2307.870	2305.684	2338.870	2337.737	2347.989	2306.878
52.5	2155.146	2169.700	2155.247	2210.345	2210.679	2217.612	2180.610
55.0	2018.555	2007.847	2000.317	2044.302	2075.009	2085.626	2047.207
57.5	1877.258	1852.846	1838.930	1884.413	1932.973	1947.537	1892.510
60.0	1730.110	1680.609	1684.840	1715.334	1785.978	1784.227	1565.485
62.5	1564.918	1519.576	1507.907	1550.151	1625.299	1485.864	1103.133
65.0	1403.925	1349.667	1332.614	1379.321	1462.738	1033.320	700.191
67.5	1208.097	1179.009	1157.310	1206.366	1230.919	663.230	603.072
70.0	624.326	1011.975	976.653	1035.931	819.952	559.147	521.326
72.5	431.219	834.090	795.955	866.285	479.941	477.047	442.413
75.0	344.706	670.254	624.012	699.949	367.225	396.475	368.045
77.5	261.624	481.581	460.975	497.440	286.977	326.570	304.840
80.0	196.517	178.734	311.500	223.256	217.345	255.400	227.031

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : IHB2-LED-09L-LL-50.IES**

**CANDELA TABULATION - (Cont.)**

82.5	143.575	105.955	179.463	114.558	159.565	182.975	150.315
85.0	90.258	58.873	63.417	64.409	101.239	91.543	63.346
87.5	40.524	30.929	14.412	31.395	39.107	43.591	26.426
90.0	0.000	0.000	0.000	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 : IHB2-LED-09L-LL-50.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1325.9	N.A.	12.90
0-30	2837.84	N.A.	27.60
0-40	4695.16	N.A.	45.60
0-60	8482.82	N.A.	82.40
0-80	10196.28	N.A.	99.00
0-90	10300.27	N.A.	100.00
10-90	9959.61	N.A.	96.70
20-40	3369.26	N.A.	32.70
20-50	5340.12	N.A.	51.80
40-70	4991.93	N.A.	48.50
60-80	1713.46	N.A.	16.60
70-80	509.19	N.A.	4.90
80-90	103.98	N.A.	1.00
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	10300.27	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	340.66
10-20	985.24
20-30	1511.94
30-40	1857.32
40-50	1970.86
50-60	1816.8
60-70	1204.27
70-80	509.19
80-90	103.98
90-100	0.00
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

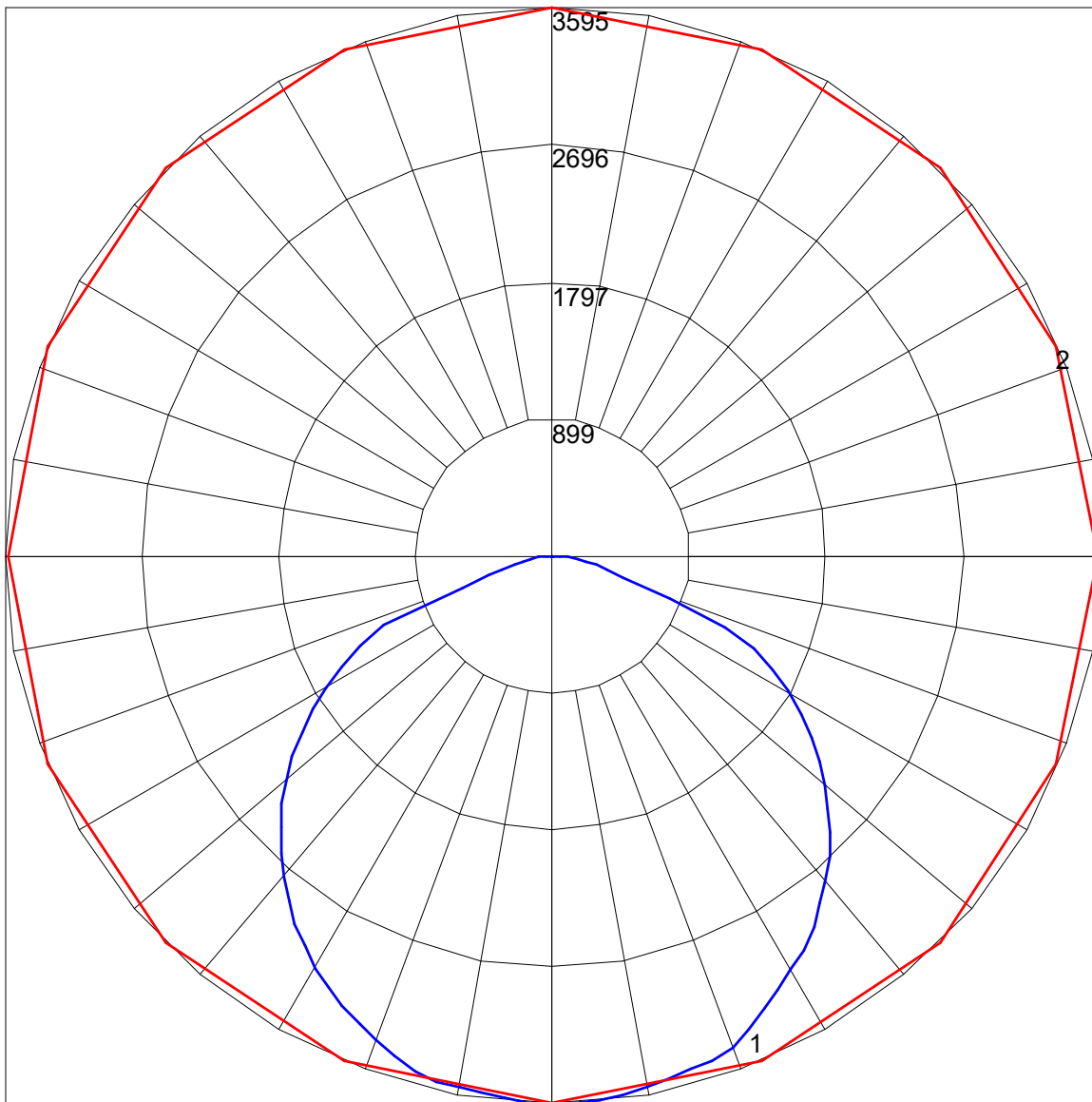
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : IHB2-LED-09L-LL-50.IES**

**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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	76	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

POLAR GRAPH



Maximum Candela = 3594.889 Located At Horizontal Angle = 45, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)