

PHILIPS**PHILIPS****Day-Brite****CFI****IES INDOOR REPORT****PHOTOMETRIC FILENAME : APX20LL40-UNV-LFA.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002

[TEST] FO33650.PSO

[TESTLAB] PHILIPS DAY-BRITE PHOTOMETRIC LABORATORY

[ISSUEDATE] 10/13/14

[MANUFAC] PHILIPS DAY-BRITE - PHILIPS CFI

[LUMCAT] APX20LL40-UNV-LFA

[LUMINAIRE] PHILIPS APX 4-2LP 1.0.1 4000K BOARDS 2-95W DRIVERS 18K RESISTORS DIRA-FR50 LENS

[LAMP] LED. LUMINAIRE OUTPUT = 18262 LMS

[TESTDATE] 10/13/14

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	18262
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	167.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.29 ft
Luminous Width (90-270)	1.17 ft
Luminous Height	0.50 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10077	8370	8151
55	8817	7015	7005
65	7418	5714	6032
75	5633	4378	4914
85	2937	2886	3628

IES INDOOR REPORT
PHOTOMETRIC FILENAME : APX20LL40-UNV-LFA.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	6271.56	6271.56	6271.56	6271.56	6271.56	6271.56	6271.56	6271.56	6271.56	6271.56
2.5	6245.22	6256.84	6272.16	6270.16	6258.90	6270.16	6272.16	6256.84	6245.22	6256.84
5.0	6221.26	6228.40	6249.26	6254.74	6236.91	6254.74	6249.26	6228.40	6221.26	6228.40
7.5	6178.07	6190.35	6209.80	6218.90	6203.07	6218.90	6209.80	6190.35	6178.07	6190.35
10.0	6118.24	6133.01	6152.05	6169.59	6149.36	6169.59	6152.05	6133.01	6118.24	6133.01
12.5	6040.28	6059.86	6083.50	6092.01	6073.76	6092.01	6083.50	6059.86	6040.28	6059.86
15.0	5946.30	5973.74	5993.28	5997.75	5981.04	5997.75	5993.28	5973.74	5946.30	5973.74
17.5	5836.64	5866.76	5880.72	5885.45	5869.52	5885.45	5880.72	5866.76	5836.64	5866.76
20.0	5708.03	5738.09	5756.44	5758.62	5741.07	5758.62	5756.44	5738.09	5708.03	5738.09
22.5	5561.16	5593.59	5611.83	5618.21	5600.44	5618.21	5611.83	5593.59	5561.16	5593.59
25.0	5403.02	5436.80	5453.57	5460.50	5438.41	5460.50	5453.57	5436.80	5403.02	5436.80
27.5	5230.26	5266.06	5285.81	5290.22	5267.16	5290.22	5285.81	5266.06	5230.26	5266.06
30.0	5044.05	5082.52	5106.20	5105.87	5080.39	5105.87	5106.20	5082.52	5044.05	5082.52
32.5	4842.37	4886.03	4911.50	4906.09	4890.51	4906.09	4911.50	4886.03	4842.37	4886.03
35.0	4631.55	4677.06	4703.12	4700.41	4691.81	4700.41	4703.12	4677.06	4631.55	4677.06
37.5	4413.75	4458.67	4484.29	4496.55	4484.46	4496.55	4484.29	4458.67	4413.75	4458.67
40.0	4188.30	4232.53	4266.87	4285.89	4272.95	4285.89	4266.87	4232.53	4188.30	4232.53
42.5	3953.74	4002.56	4048.51	4066.48	4056.07	4066.48	4048.51	4002.56	3953.74	4002.56
45.0	3713.44	3771.67	3824.92	3840.34	3839.64	3840.34	3824.92	3771.67	3713.44	3771.67
47.5	3473.11	3534.53	3595.39	3619.59	3626.85	3619.59	3595.39	3534.53	3473.11	3534.53
50.0	3233.16	3293.87	3364.39	3406.82	3420.65	3406.82	3364.39	3293.87	3233.16	3293.87
52.5	2991.99	3056.86	3136.05	3196.80	3218.57	3196.80	3136.05	3056.86	2991.99	3056.86
55.0	2753.48	2824.07	2909.64	2987.34	3019.70	2987.34	2909.64	2824.07	2753.48	2824.07
57.5	2517.34	2593.86	2689.03	2788.43	2828.00	2788.43	2689.03	2593.86	2517.34	2593.86
60.0	2283.78	2364.19	2473.30	2599.95	2645.24	2599.95	2473.30	2364.19	2283.78	2364.19
62.5	2053.32	2135.32	2263.74	2415.14	2463.31	2415.14	2263.74	2135.32	2053.32	2135.32
65.0	1828.90	1913.12	2056.86	2226.53	2280.43	2226.53	2056.86	1913.12	1828.90	1913.12
67.5	1608.21	1696.64	1855.37	2035.54	2094.75	2035.54	1855.37	1696.64	1608.21	1696.64
70.0	1392.66	1484.97	1660.66	1849.41	1908.53	1849.41	1660.66	1484.97	1392.66	1484.97
72.5	1181.93	1279.87	1472.63	1664.53	1723.66	1664.53	1472.63	1279.87	1181.93	1279.87
75.0	976.44	1080.27	1288.09	1479.34	1540.50	1479.34	1288.09	1080.27	976.44	1080.27
77.5	777.49	888.48	1104.66	1297.84	1359.93	1297.84	1104.66	888.48	777.49	888.48
80.0	589.71	707.34	930.43	1125.83	1183.45	1125.83	930.43	707.34	589.71	707.34
82.5	420.31	543.50	772.10	964.55	1019.77	964.55	772.10	543.50	420.31	543.50
85.0	278.61	407.08	633.39	815.21	868.39	815.21	633.39	407.08	278.61	407.08
87.5	177.91	312.95	529.31	698.63	746.19	698.63	529.31	312.95	177.91	312.95
90.0	134.37	249.14	441.86	595.81	640.12	595.81	441.86	249.14	134.37	249.14
92.5	125.37	214.30	376.75	510.19	549.72	510.19	376.75	214.30	125.37	214.30
95.0	119.57	196.82	331.45	444.43	478.47	444.43	331.45	196.82	119.57	196.82
97.5	113.68	182.78	300.33	395.58	424.55	395.58	300.33	182.78	113.68	182.78
100.0	107.43	168.15	276.26	358.03	382.67	358.03	276.26	168.15	107.43	168.15
102.5	100.37	154.13	255.70	328.95	350.07	328.95	255.70	154.13	100.37	154.13
105.0	93.16	141.50	237.81	306.12	325.47	306.12	237.81	141.50	93.16	141.50
107.5	86.50	129.24	220.37	284.88	304.01	284.88	220.37	129.24	86.50	129.24
110.0	79.74	116.77	203.78	264.48	283.45	264.48	203.78	116.77	79.74	116.77
112.5	72.92	104.52	187.84	245.42	264.31	245.42	187.84	104.52	72.92	104.52
115.0	66.05	92.39	172.02	227.03	245.36	227.03	172.02	92.39	66.05	92.39
117.5	59.54	80.80	156.82	209.47	227.53	209.47	156.82	80.80	59.54	80.80
120.0	53.86	69.45	141.98	193.66	210.85	193.66	141.98	69.45	53.86	69.45
122.5	47.91	58.96	127.91	177.56	193.12	177.56	127.91	58.96	47.91	58.96
125.0	42.27	48.94	113.85	161.55	177.25	161.55	113.85	48.94	42.27	48.94
127.5	37.23	39.37	99.95	147.22	163.12	147.22	99.95	39.37	37.23	39.37
130.0	32.53	31.41	85.96	133.52	148.15	133.52	85.96	31.41	32.53	31.41
132.5	28.10	25.32	72.71	119.27	132.64	119.27	72.71	25.32	28.10	25.32

IES INDOOR REPORT
PHOTOMETRIC FILENAME : APX20LL40-UNV-LFA.IES

CANDELA TABULATION - (Cont.)

135.0	24.20	20.42	59.67	105.21	117.84	105.21	59.67	20.42	24.20	20.42
137.5	20.35	16.77	47.45	90.89	103.46	90.89	47.45	16.77	20.35	16.77
140.0	16.83	13.76	36.00	77.36	88.46	77.36	36.00	13.76	16.83	13.76
142.5	13.82	11.00	26.28	63.80	74.18	63.80	26.28	11.00	13.82	11.00
145.0	10.80	8.51	17.83	51.17	60.37	51.17	17.83	8.51	10.80	8.51
147.5	8.17	6.67	11.48	39.00	47.54	39.00	11.48	6.67	8.17	6.67
150.0	6.10	5.09	8.46	27.97	35.50	27.97	8.46	5.09	6.10	5.09
152.5	4.65	4.64	5.96	18.20	24.59	18.20	5.96	4.64	4.65	4.64
155.0	4.25	4.71	5.48	12.91	17.31	12.91	5.48	4.71	4.25	4.71
157.5	4.53	4.57	5.03	8.25	12.10	8.25	5.03	4.57	4.53	4.57
160.0	4.61	4.84	5.03	6.08	7.41	6.08	5.03	4.84	4.61	4.84
162.5	4.42	4.59	4.83	5.70	6.40	5.70	4.83	4.59	4.42	4.59
165.0	4.66	4.57	4.53	5.24	5.82	5.24	4.53	4.57	4.66	4.57
167.5	4.33	4.45	4.40	5.05	5.26	5.05	4.40	4.45	4.33	4.45
170.0	4.37	4.28	4.54	4.41	4.90	4.41	4.54	4.28	4.37	4.28
172.5	4.44	4.42	4.31	4.31	4.88	4.31	4.31	4.42	4.44	4.42
175.0	4.50	4.67	4.14	4.23	4.68	4.23	4.14	4.67	4.50	4.67
177.5	4.60	4.83	4.32	4.13	4.69	4.13	4.32	4.83	4.60	4.83
180.0	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49

**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	6271.56	6271.56	6271.56	6271.56	6271.56	6271.56	6271.56
2.5	6272.16	6270.16	6258.90	6270.16	6272.16	6256.84	6245.22
5.0	6249.26	6254.74	6236.91	6254.74	6249.26	6228.40	6221.26
7.5	6209.80	6218.90	6203.07	6218.90	6209.80	6190.35	6178.07
10.0	6152.05	6169.59	6149.36	6169.59	6152.05	6133.01	6118.24
12.5	6083.50	6092.01	6073.76	6092.01	6083.50	6059.86	6040.28
15.0	5993.28	5997.75	5981.04	5997.75	5993.28	5973.74	5946.30
17.5	5880.72	5885.45	5869.52	5885.45	5880.72	5866.76	5836.64
20.0	5756.44	5758.62	5741.07	5758.62	5756.44	5738.09	5708.03
22.5	5611.83	5618.21	5600.44	5618.21	5611.83	5593.59	5561.16
25.0	5453.57	5460.50	5438.41	5460.50	5453.57	5436.80	5403.02
27.5	5285.81	5290.22	5267.16	5290.22	5285.81	5266.06	5230.26
30.0	5106.20	5105.87	5080.39	5105.87	5106.20	5082.52	5044.05
32.5	4911.50	4906.09	4890.51	4906.09	4911.50	4886.03	4842.37
35.0	4703.12	4700.41	4691.81	4700.41	4703.12	4677.06	4631.55
37.5	4484.29	4496.55	4484.46	4496.55	4484.29	4458.67	4413.75
40.0	4266.87	4285.89	4272.95	4285.89	4266.87	4232.53	4188.30
42.5	4048.51	4066.48	4056.07	4066.48	4048.51	4002.56	3953.74
45.0	3824.92	3840.34	3839.64	3840.34	3824.92	3771.67	3713.44
47.5	3595.39	3619.59	3626.85	3619.59	3595.39	3534.53	3473.11
50.0	3364.39	3406.82	3420.65	3406.82	3364.39	3293.87	3233.16
52.5	3136.05	3196.80	3218.57	3196.80	3136.05	3056.86	2991.99
55.0	2909.64	2987.34	3019.70	2987.34	2909.64	2824.07	2753.48
57.5	2689.03	2788.43	2828.00	2788.43	2689.03	2593.86	2517.34
60.0	2473.30	2599.95	2645.24	2599.95	2473.30	2364.19	2283.78
62.5	2263.74	2415.14	2463.31	2415.14	2263.74	2135.32	2053.32
65.0	2056.86	2226.53	2280.43	2226.53	2056.86	1913.12	1828.90
67.5	1855.37	2035.54	2094.75	2035.54	1855.37	1696.64	1608.21
70.0	1660.66	1849.41	1908.53	1849.41	1660.66	1484.97	1392.66
72.5	1472.63	1664.53	1723.66	1664.53	1472.63	1279.87	1181.93
75.0	1288.09	1479.34	1540.50	1479.34	1288.09	1080.27	976.44
77.5	1104.66	1297.84	1359.93	1297.84	1104.66	888.48	777.49
80.0	930.43	1125.83	1183.45	1125.83	930.43	707.34	589.71

IES INDOOR REPORT
PHOTOMETRIC FILENAME : APX20LL40-UNV-LFA.IES

CANDELA TABULATION - (Cont.)

82.5	772.10	964.55	1019.77	964.55	772.10	543.50	420.31
85.0	633.39	815.21	868.39	815.21	633.39	407.08	278.61
87.5	529.31	698.63	746.19	698.63	529.31	312.95	177.91
90.0	441.86	595.81	640.12	595.81	441.86	249.14	134.37
92.5	376.75	510.19	549.72	510.19	376.75	214.30	125.37
95.0	331.45	444.43	478.47	444.43	331.45	196.82	119.57
97.5	300.33	395.58	424.55	395.58	300.33	182.78	113.68
100.0	276.26	358.03	382.67	358.03	276.26	168.15	107.43
102.5	255.70	328.95	350.07	328.95	255.70	154.13	100.37
105.0	237.81	306.12	325.47	306.12	237.81	141.50	93.16
107.5	220.37	284.88	304.01	284.88	220.37	129.24	86.50
110.0	203.78	264.48	283.45	264.48	203.78	116.77	79.74
112.5	187.84	245.42	264.31	245.42	187.84	104.52	72.92
115.0	172.02	227.03	245.36	227.03	172.02	92.39	66.05
117.5	156.82	209.47	227.53	209.47	156.82	80.80	59.54
120.0	141.98	193.66	210.85	193.66	141.98	69.45	53.86
122.5	127.91	177.56	193.12	177.56	127.91	58.96	47.91
125.0	113.85	161.55	177.25	161.55	113.85	48.94	42.27
127.5	99.95	147.22	163.12	147.22	99.95	39.37	37.23
130.0	85.96	133.52	148.15	133.52	85.96	31.41	32.53
132.5	72.71	119.27	132.64	119.27	72.71	25.32	28.10
135.0	59.67	105.21	117.84	105.21	59.67	20.42	24.20
137.5	47.45	90.89	103.46	90.89	47.45	16.77	20.35
140.0	36.00	77.36	88.46	77.36	36.00	13.76	16.83
142.5	26.28	63.80	74.18	63.80	26.28	11.00	13.82
145.0	17.83	51.17	60.37	51.17	17.83	8.51	10.80
147.5	11.48	39.00	47.54	39.00	11.48	6.67	8.17
150.0	8.46	27.97	35.50	27.97	8.46	5.09	6.10
152.5	5.96	18.20	24.59	18.20	5.96	4.64	4.65
155.0	5.48	12.91	17.31	12.91	5.48	4.71	4.25
157.5	5.03	8.25	12.10	8.25	5.03	4.57	4.53
160.0	5.03	6.08	7.41	6.08	5.03	4.84	4.61
162.5	4.83	5.70	6.40	5.70	4.83	4.59	4.42
165.0	4.53	5.24	5.82	5.24	4.53	4.57	4.66
167.5	4.40	5.05	5.26	5.05	4.40	4.45	4.33
170.0	4.54	4.41	4.90	4.41	4.54	4.28	4.37
172.5	4.31	4.31	4.88	4.31	4.31	4.42	4.44
175.0	4.14	4.23	4.68	4.23	4.14	4.67	4.50
177.5	4.32	4.13	4.69	4.13	4.32	4.83	4.60
180.0	4.49	4.49	4.49	4.49	4.49	4.49	4.49

IES INDOOR REPORT
PHOTOMETRIC FILENAME : APX20LL40-UNV-LFA.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2278.69	N.A.	12.50
0-30	4784.73	N.A.	26.20
0-40	7714.74	N.A.	42.20
0-60	13249.47	N.A.	72.60
0-80	16645.32	N.A.	91.10
0-90	17333.01	N.A.	94.90
10-90	16740.27	N.A.	91.70
20-40	5436.05	N.A.	29.80
20-50	8371.25	N.A.	45.80
40-70	7579.12	N.A.	41.50
60-80	3395.85	N.A.	18.60
70-80	1351.46	N.A.	7.40
80-90	687.69	N.A.	3.80
90-110	594.09	N.A.	3.30
90-120	755.52	N.A.	4.10
90-130	853.79	N.A.	4.70
90-150	922.73	N.A.	5.10
90-180	928.91	N.A.	5.10
110-180	334.82	N.A.	1.80
0-180	18261.91	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	592.74
10-20	1685.95
20-30	2506.04
30-40	2930.01
40-50	2935.2
50-60	2599.52
60-70	2044.39
70-80	1351.46
80-90	687.69
90-100	356.09
100-110	238.00
110-120	161.43
120-130	98.27
130-140	50.35
140-150	18.59
150-160	4.34
160-170	1.41
170-180	0.42

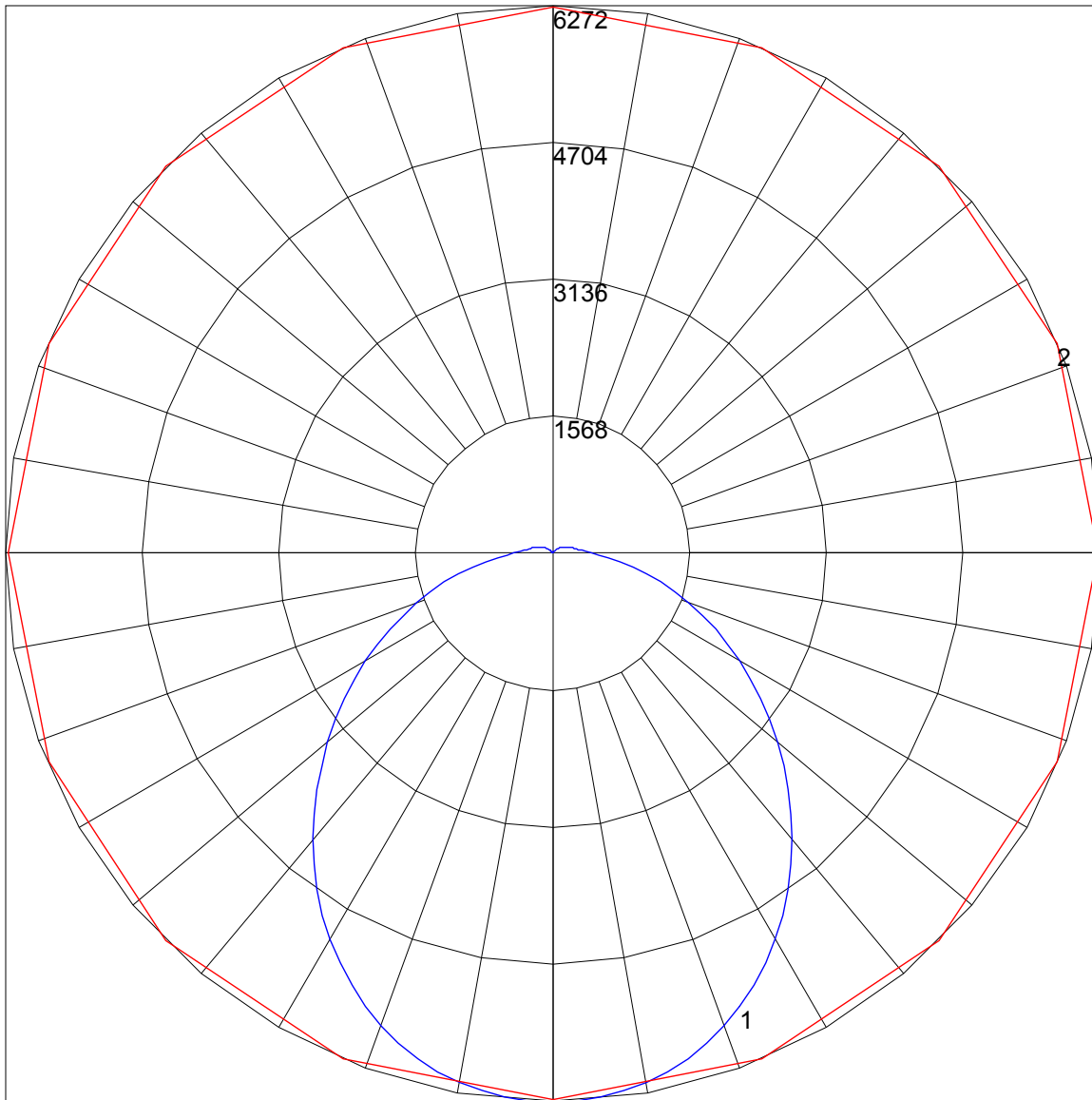
IES INDOOR REPORT
PHOTOMETRIC FILENAME : APX20LL40-UNV-LFA.IES

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	118	118	118	118	115	115	115	115	108	108	108	103	103	103	97	97	97	95
1	107	102	97	93	103	99	95	91	94	90	87	89	86	84	84	82	80	78
2	97	88	81	75	94	86	80	74	82	76	72	78	73	69	74	70	67	64
3	88	78	69	63	85	76	68	62	72	65	60	68	63	58	65	61	57	54
4	81	69	60	53	78	67	59	52	64	57	51	61	55	50	58	53	49	46
5	74	62	52	46	72	60	52	45	57	50	44	55	48	43	53	47	42	40
6	69	55	46	40	67	54	46	40	52	44	39	50	43	38	48	42	37	35
7	64	50	42	35	62	49	41	35	47	40	34	45	39	34	44	38	33	31
8	59	46	37	32	58	45	37	31	43	36	31	42	35	30	40	34	30	28
9	56	42	34	28	54	41	34	28	40	33	28	38	32	27	37	31	27	25
10	52	39	31	26	51	38	31	26	37	30	25	36	29	25	34	29	25	23

POLAR GRAPH



Maximum Candela = 6272.16 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.)