IES INDOOR REPORT
PHOTOMETRIC FILENAME : APX16LL40-UNV-M.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] FO33727.PSO
[TESTLAB] PHILIPS DAY-BRITE PHOTOMETRIC LABORATORY
[ISSUEDATE] 10/28/14
[MANUFAC] PHILIPS DAY-BRITE - PHILIPS CFI
[LUMCAT] APX16LL40-UNV-M
[LUMINAIRE] PHILIPS APX 4-2LP 1.0.1 4000K 2-95W DRIVERS 4.7K RESISTORS MEDIUM OPTICS DIRA LENS
[LAMP] LED. LUMINAIRE OUTPUT = 15869 LMS
[TESTDATE] 10/28/14

CHARACTERISTICS



Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	15869
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	129
Total Luminaire Watts	123.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.38
Spacing Criterion (Diagonal)	1.28
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	6886	8745	6548
55	2215	1534	912
65	1629	660	741
75	989	552	591
85	489	474	819

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0	202.5
0.0	8774.64	8774.64	8774.64	8774.64	8774.64	8774.64	8774.64	8774.64	8774.64	8774.64
2.5	8756.24	8765.79	8790.25	8797.95	8809.58	8797.95	8790.25	8765.79	8756.24	8765.79
5.0	8788.89	8796.01	8824.18	8845.10	8848.35	8845.10	8824.18	8796.01	8788.89	8796.01
7.5	8830.01	8839.70	8877.41	8904.93	8908.09	8904.93	8877.41	8839.70	8830.01	8839.70
10.0	8884.48	8906.18	8954.89	8990.40	8982.27	8990.40	8954.89	8906.18	8884.48	8906.18
12.5	8944.61	8984.25	9049.35	9066.27	9062.81	9066.27	9049.35	8984.25	8944.61	8984.25
15.0	8996.05	9069.22	9153.92	9165.55	9145.99	9165.55	9153.92	9069.22	8996.05	9069.22
17.5	8991.16	9119.12	9262.12	9270.69	9244.26	9270.69	9262.12	9119.12	8991.16	9119.12
20.0	8872.11	9061.52	9341.69	9382.70	9334.94	9382.70	9341.69	9061.52	8872.11	9061.52
22.5	8589.43	8864.51	9326.05	9479.16	9432.86	9479.16	9326.05	8864.51	8589.43	8864.51
25.0	8171.63	8528.51	9176.14	9474.39	9431.49	9474.39	9176.14	8528.51	8171.63	8528.51
27.5	7688.69	8091.25	8881.86	9309.56	9286.40	9309.56	8881.86	8091.25	7688.69	8091.25
30.0	7174.80	7611.65	8481.94	8962.03	8938.62	8962.03	8481.94	7611.65	7174.80	7611.65
32.5	6678.51	7128.92	7997.68	8392.98	8363.98	8392.98	7997.68	7128.92	6678.51	7128.92
35.0	6149.59	6642.90	7411.43	7646.36	7559.16	7646.36	7411.43	6642.90	6149.59	6642.90
37.5	5510.49	6096.81	6711.32	6758.07	6563.76	6758.07	6711.32	6096.81	5510.49	6096.81
40.0	4699.69	5436.47	5911.54	5710.91	5462.68	5710.91	5911.54	5436.47	4699.69	5436.47
42.5	3673.59	4621.75	4998.99	4560.48	4246.64	4560.48	4998.99	4621.75	3673.59	4621.75
45.0	2537.56	3604.87	3995.99	3377.25	3084.62	3377.25	3995.99	3604.87	2537.56	3604.87
47.5	1549.59	2535.91	2933.36	2291.68	2010.77	2291.68	2933.36	2535.91	1549.59	2535.91
50.0	925.44	1584.30	1928.18	1380.44	1223.35	1380.44	1928.18	1584.30	925.44	1584.30
52.5	711.32	927.34	1150.62	777.37	671.32	777.37	1150.62	927.34	711.32	927.34
55.0	691.83	566.49	636.23	423.91	393.11	423.91	636.23	566.49	691.83	566.49
57.5	628.34	426.91	400.96	341.40	345.78	341.40	400.96	426.91	628.34	426.91
60.0	530.87	370.86	313.35	311.26	322.78	311.26	313.35	370.86	530.87	370.86
62.5	456.90	325.70	269.61	298.83	319.45	298.83	269.61	325.70	456.90	325.70
65.0	401.58	281.91	237.48	274.37	280.10	274.37	237.48	281.91	401.58	281.91
67.5	337.75	240.07	213.70	248.71	256.98	248.71	213.70	240.07	337.75	240.07
70.0	282.91	202.09	195.60	229.64	240.99	229.64	195.60	202.09	282.91	202.09
72.5	218.52	164.02	180.90	209.47	211.46	209.47	180.90	164.02	218.52	164.02
75.0	171.46	130.28	162.53	179.84	185.27	179.84	162.53	130.28	171.46	130.28
77.5	147.45	104.79	140.56	164.01	184.10	164.01	140.56	104.79	147.45	104.79
80.0	106.79	84.95	120.07	148.16	169.08	148.16	120.07	84.95	106.79	84.95
82.5	70.72	71.86	104.36	144.52	175.99	144.52	104.36	71.86	70.72	71.86
85.0	46.42	60.64	104.09	148.77	196.10	148.77	104.09	60.64	46.42	60.64
87.5	26.64	51.24	100.70	128.68	154.85	128.68	100.70	51.24	26.64	51.24
90.0	13.11	40.52	81.62	97.56	144.95	97.56	81.62	40.52	13.11	40.52
92.5	12.69	32.63	53.78	65.28	98.62	65.28	53.78	32.63	12.69	32.63
95.0	16.71	23.70	29.71	37.58	53.34	37.58	29.71	23.70	16.71	23.70
97.5	22.12	16.46	21.15	27.71	31.86	27.71	21.15	16.46	22.12	16.46
100.0	23.14	15.77	20.54	26.10	29.39	26.10	20.54	15.77	23.14	15.77
102.5	22.62	15.15	21.65	25.78	27.86	25.78	21.65	15.15	22.62	15.15
105.0	19.50	15.14	21.46	26.07	27.81	26.07	21.46	15.14	19.50	15.14
107.5	16.18	14.47	20.36	25.57	27.17	25.57	20.36	14.47	16.18	14.47
110.0	13.98	13.23	18.85	24.29	26.24	24.29	18.85	13.23	13.98	13.23
112.5	11.85	11.61	17.74	22.68	24.95	22.68	17.74	11.61	11.85	11.61
115.0	9.93	10.28	16.51	20.71	23.23	20.71	16.51	10.28	9.93	10.28
117.5	8.37	9.71	15.29	19.34	21.42	19.34	15.29	9.71	8.37	9.71
120.0	7.03	8.99	14.33	18.14	20.03	18.14	14.33	8.99	7.03	8.99
122.5	6.06	7.83	13.87	16.94	18.72	16.94	13.87	7.83	6.06	7.83
125.0	5.62	7.23	13.88	15.78	17.80	15.78	13.88	7.23	5.62	7.23
127.5	5.13	6.13	14.70	15.57	17.15	15.57	14.70	6.13	5.13	6.13
130.0	5.00	5.72	13.71	15.93	17.60	15.93	13.71	5.72	5.00	5.72
132.5	5.11	5.16	12.99	16.73	18.54	16.73	12.99	5.16	5.11	5.16

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CANDELA TABULATION - (Cont.)

135.0	4.69	4.49	10.07	15.50	17.59	15.50	10.07	4.49	4.69	4.49
137.5	4.02	3.95	8.17	14.36	15.43	14.36	8.17	3.95	4.02	3.95
140.0	3.82	3.50	6.74	13.52	16.14	13.52	6.74	3.50	3.82	3.50
142.5	3.33	3.25	5.26	10.58	14.22	10.58	5.26	3.25	3.33	3.25
145.0	2.78	2.70	4.16	8.51	10.95	8.51	4.16	2.70	2.78	2.70
147.5	2.67	2.60	3.27	7.21	8.70	7.21	3.27	2.60	2.67	2.60
150.0	2.62	2.03	2.63	6.16	7.39	6.16	2.63	2.03	2.62	2.03
152.5	2.55	2.22	2.40	4.83	6.08	4.83	2.40	2.22	2.55	2.22
155.0	2.37	2.07	2.41	3.86	4.85	3.86	2.41	2.07	2.37	2.07
157.5	2.52	2.55	2.47	3.32	4.37	3.32	2.47	2.55	2.52	2.55
160.0	2.81	2.75	2.60	3.00	3.73	3.00	2.60	2.75	2.81	2.75
162.5	2.74	2.82	2.82	2.97	3.28	2.97	2.82	2.82	2.74	2.82
165.0	2.86	3.10	2.76	3.10	3.22	3.10	2.76	3.10	2.86	3.10
167.5	2.74	2.80	3.13	3.33	3.01	3.33	3.13	2.80	2.74	2.80
170.0	2.81	2.79	2.85	3.22	3.27	3.22	2.85	2.79	2.81	2.79
172.5	3.18	2.98	3.02	3.02	3.43	3.02	3.02	2.98	3.18	2.98
175.0	3.35	3.29	3.09	3.31	3.03	3.31	3.09	3.29	3.35	3.29
177.5	3.32	3.59	3.23	3.40	3.62	3.40	3.23	3.59	3.32	3.59
180.0	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52

Vert. Angles	**Horizontal Angles**						
	225.0	**247.5**	**270.0**	**292.5**	**315.0**	**337.5**	**360.0**
0.0	8774.64	8774.64	8774.64	8774.64	8774.64	8774.64	8774.64
2.5	8790.25	8797.95	8809.58	8797.95	8790.25	8765.79	8756.24
5.0	8824.18	8845.10	8848.35	8845.10	8824.18	8796.01	8788.89
7.5	8877.41	8904.93	8908.09	8904.93	8877.41	8839.70	8830.01
10.0	8954.89	8990.40	8982.27	8990.40	8954.89	8906.18	8884.48
12.5	9049.35	9066.27	9062.81	9066.27	9049.35	8984.25	8944.61
15.0	9153.92	9165.55	9145.99	9165.55	9153.92	9069.22	8996.05
17.5	9262.12	9270.69	9244.26	9270.69	9262.12	9119.12	8991.16
20.0	9341.69	9382.70	9334.94	9382.70	9341.69	9061.52	8872.11
22.5	9326.05	9479.16	9432.86	9479.16	9326.05	8864.51	8589.43
25.0	9176.14	9474.39	9431.49	9474.39	9176.14	8528.51	8171.63
27.5	8881.86	9309.56	9286.40	9309.56	8881.86	8091.25	7688.69
30.0	8481.94	8962.03	8938.62	8962.03	8481.94	7611.65	7174.80
32.5	7997.68	8392.98	8363.98	8392.98	7997.68	7128.92	6678.51
35.0	7411.43	7646.36	7559.16	7646.36	7411.43	6642.90	6149.59
37.5	6711.32	6758.07	6563.76	6758.07	6711.32	6096.81	5510.49
40.0	5911.54	5710.91	5462.68	5710.91	5911.54	5436.47	4699.69
42.5	4998.99	4560.48	4246.64	4560.48	4998.99	4621.75	3673.59
45.0	3995.99	3377.25	3084.62	3377.25	3995.99	3604.87	2537.56
47.5	2933.36	2291.68	2010.77	2291.68	2933.36	2535.91	1549.59
50.0	1928.18	1380.44	1223.35	1380.44	1928.18	1584.30	925.44
52.5	1150.62	777.37	671.32	777.37	1150.62	927.34	711.32
55.0	636.23	423.91	393.11	423.91	636.23	566.49	691.83
57.5	400.96	341.40	345.78	341.40	400.96	426.91	628.34
60.0	313.35	311.26	322.78	311.26	313.35	370.86	530.87
62.5	269.61	298.83	319.45	298.83	269.61	325.70	456.90
65.0	237.48	274.37	280.10	274.37	237.48	281.91	401.58
67.5	213.70	248.71	256.98	248.71	213.70	240.07	337.75
70.0	195.60	229.64	240.99	229.64	195.60	202.09	282.91
72.5	180.90	209.47	211.46	209.47	180.90	164.02	218.52
75.0	162.53	179.84	185.27	179.84	162.53	130.28	171.46
77.5	140.56	164.01	184.10	164.01	140.56	104.79	147.45
80.0	120.07	148.16	169.08	148.16	120.07	84.95	106.79

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CANDELA TABULATION - (Cont.)

82.5	104.36	144.52	175.99	144.52	104.36	71.86	70.72
85.0	104.09	148.77	196.10	148.77	104.09	60.64	46.42
87.5	100.70	128.68	154.85	128.68	100.70	51.24	26.64
90.0	81.62	97.56	144.95	97.56	81.62	40.52	13.11
92.5	53.78	65.28	98.62	65.28	53.78	32.63	12.69
95.0	29.71	37.58	53.34	37.58	29.71	23.70	16.71
97.5	21.15	27.71	31.86	27.71	21.15	16.46	22.12
100.0	20.54	26.10	29.39	26.10	20.54	15.77	23.14
102.5	21.65	25.78	27.86	25.78	21.65	15.15	22.62
105.0	21.46	26.07	27.81	26.07	21.46	15.14	19.50
107.5	20.36	25.57	27.17	25.57	20.36	14.47	16.18
110.0	18.85	24.29	26.24	24.29	18.85	13.23	13.98
112.5	17.74	22.68	24.95	22.68	17.74	11.61	11.85
115.0	16.51	20.71	23.23	20.71	16.51	10.28	9.93
117.5	15.29	19.34	21.42	19.34	15.29	9.71	8.37
120.0	14.33	18.14	20.03	18.14	14.33	8.99	7.03
122.5	13.87	16.94	18.72	16.94	13.87	7.83	6.06
125.0	13.88	15.78	17.80	15.78	13.88	7.23	5.62
127.5	14.70	15.57	17.15	15.57	14.70	6.13	5.13
130.0	13.71	15.93	17.60	15.93	13.71	5.72	5.00
132.5	12.99	16.73	18.54	16.73	12.99	5.16	5.11
135.0	10.07	15.50	17.59	15.50	10.07	4.49	4.69
137.5	8.17	14.36	15.43	14.36	8.17	3.95	4.02
140.0	6.74	13.52	16.14	13.52	6.74	3.50	3.82
142.5	5.26	10.58	14.22	10.58	5.26	3.25	3.33
145.0	4.16	8.51	10.95	8.51	4.16	2.70	2.78
147.5	3.27	7.21	8.70	7.21	3.27	2.60	2.67
150.0	2.63	6.16	7.39	6.16	2.63	2.03	2.62
152.5	2.40	4.83	6.08	4.83	2.40	2.22	2.55
155.0	2.41	3.86	4.85	3.86	2.41	2.07	2.37
157.5	2.47	3.32	4.37	3.32	2.47	2.55	2.52
160.0	2.60	3.00	3.73	3.00	2.60	2.75	2.81
162.5	2.82	2.97	3.28	2.97	2.82	2.82	2.74
165.0	2.76	3.10	3.22	3.10	2.76	3.10	2.86
167.5	3.13	3.33	3.01	3.33	3.13	2.80	2.74
170.0	2.85	3.22	3.27	3.22	2.85	2.79	2.81
172.5	3.02	3.02	3.43	3.02	3.02	2.98	3.18
175.0	3.09	3.31	3.03	3.31	3.09	3.29	3.35
177.5	3.23	3.40	3.62	3.40	3.23	3.59	3.32
180.0	3.52	3.52	3.52	3.52	3.52	3.52	3.52

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3431.00	N.A.	21.60
0-30	7538.62	N.A.	47.50
0-40	11935.00	N.A.	75.20
0-60	15190.16	N.A.	95.70
0-80	15650.16	N.A.	98.60
0-90	15762.29	N.A.	99.30
10-90	14916.39	N.A.	94.00
20-40	8504.00	N.A.	53.60
20-50	11147.77	N.A.	70.30
40-70	3537.96	N.A.	22.30
60-80	460.01	N.A.	2.90
70-80	177.20	N.A.	1.10
80-90	112.13	N.A.	0.70
90-110	64.72	N.A.	0.40
90-120	80.85	N.A.	0.50
90-130	91.97	N.A.	0.60
90-150	103.69	N.A.	0.70
90-180	106.33	N.A.	0.70
110-180	41.61	N.A.	0.30
0-180	15868.62	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	845.90
10-20	2585.1
20-30	4107.62
30-40	4396.38
40-50	2643.77
50-60	611.38
60-70	282.81
70-80	177.20
80-90	112.13
90-100	42.30
100-110	22.41
110-120	16.13
120-130	11.12
130-140	8.00
140-150	3.73
150-160	1.50
160-170	0.84
170-180	0.30

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

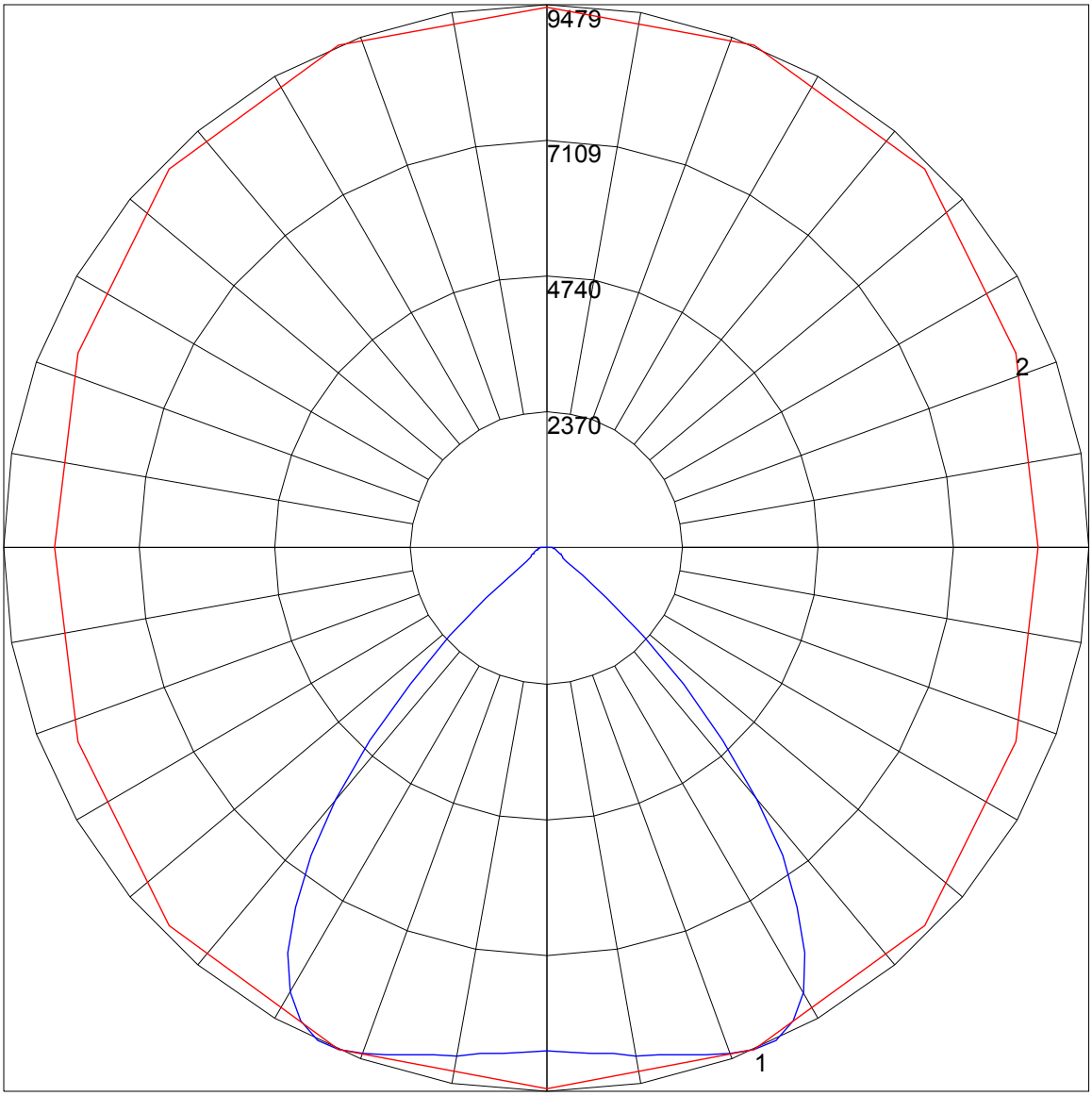
Effective Floor Cavity Reflectance 0.20

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	94	93	92	90
2	105	99	94	90	102	97	93	89	94	90	87	90	87	85	87	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	69	77	72	68	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	52	48	69	59	52	47	58	52	47	56	51	47	55	50	47	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38

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Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

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POLAR GRAPH



Maximum Candela = 9479.16 Located At Horizontal Angle = 67.5, Vertical Angle = 22.5
1 - Vertical Plane Through Horizontal Angles (67.5 - 247.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (22.5) (Through Max. Cd.)