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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] FO33735.PSO
[TESTLAB] PHILIPS DAY-BRITE PHOTOMETRIC LABORATORY
[ISSUEDATE] 10/29/14
[MANUFAC] PHILIPS DAY-BRITE - PHILIPS CFI
[LUMCAT] APX20LL40-UNV-W
[LUMINAIRE] PHILIPS APX 4-2LP 1.0.1 4000K 2-95W DRIVERS 18K RESISTORS WIDE OPTICS DIRA LENS
[LAMP] LED. LUMINAIRE OUTPUT = 20657 LMS
[TESTDATE] 10/29/14

CHARACTERISTICS



Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	20657
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	123
Total Luminaire Watts	168.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.92
Spacing Criterion (90-270)	2.16
Spacing Criterion (Diagonal)	1.96
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	15946	14467	15356
55	12944	12940	9468
65	3806	3004	4187
75	1898	1698	1235
85	1049	1003	1304

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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	4529.98	4529.98	4529.98	4529.98	4529.98	4529.98	4529.98	4529.98	4529.98	4529.98
2.5	4535.48	4542.07	4556.69	4563.47	4575.24	4563.47	4556.69	4542.07	4535.48	4542.07
5.0	4648.92	4639.39	4630.28	4616.71	4611.54	4616.71	4630.28	4639.39	4648.92	4639.39
7.5	4806.60	4783.81	4742.16	4691.41	4672.77	4691.41	4742.16	4783.81	4806.60	4783.81
10.0	4984.30	4956.48	4885.20	4804.04	4763.84	4804.04	4885.20	4956.48	4984.30	4956.48
12.5	5174.94	5141.91	5052.34	4932.53	4876.19	4932.53	5052.34	5141.91	5174.94	5141.91
15.0	5378.51	5347.21	5235.85	5080.86	5011.14	5080.86	5235.85	5347.21	5378.51	5347.21
17.5	5603.71	5575.12	5443.15	5272.97	5187.24	5272.97	5443.15	5575.12	5603.71	5575.12
20.0	5869.47	5833.74	5692.09	5509.65	5404.84	5509.65	5692.09	5833.74	5869.47	5833.74
22.5	6179.18	6136.02	5977.94	5756.69	5650.23	5756.69	5977.94	6136.02	6179.18	6136.02
25.0	6448.53	6429.28	6261.87	6032.68	5941.64	6032.68	6261.87	6429.28	6448.53	6429.28
27.5	6593.36	6607.03	6485.34	6315.00	6258.00	6315.00	6485.34	6607.03	6593.36	6607.03
30.0	6584.90	6627.66	6605.51	6581.74	6531.27	6581.74	6605.51	6627.66	6584.90	6627.66
32.5	6445.78	6524.74	6622.34	6759.24	6787.05	6759.24	6622.34	6524.74	6445.78	6524.74
35.0	6280.71	6407.56	6606.13	6902.17	6999.70	6902.17	6606.13	6407.56	6280.71	6407.56
37.5	6187.02	6329.69	6590.70	7000.15	7153.40	7000.15	6590.70	6329.69	6187.02	6329.69
40.0	6134.49	6277.11	6612.30	7062.96	7318.48	7062.96	6612.30	6277.11	6134.49	6277.11
42.5	6043.27	6223.08	6640.29	7180.02	7371.68	7180.02	6640.29	6223.08	6043.27	6223.08
45.0	5876.14	6136.52	6610.84	7201.98	7233.70	7201.98	6610.84	6136.52	5876.14	6136.52
47.5	5603.22	5972.72	6494.95	7124.70	7155.94	7124.70	6494.95	5972.72	5603.22	5972.72
50.0	5171.32	5726.95	6324.56	6722.80	6109.14	6722.80	6324.56	5726.95	5171.32	5726.95
52.5	4630.23	5361.31	5994.61	5642.22	5180.17	5642.22	5994.61	5361.31	4630.23	5361.31
55.0	4042.24	4835.54	5366.92	4510.25	4081.74	4510.25	5366.92	4835.54	4042.24	4835.54
57.5	3455.40	4191.56	4430.10	3035.11	3355.58	3035.11	4430.10	4191.56	3455.40	4191.56
60.0	2719.42	3408.53	3131.68	2592.16	2350.28	2592.16	3131.68	3408.53	2719.42	3408.53
62.5	1750.31	2526.55	1816.84	1739.17	1561.07	1739.17	1816.84	2526.55	1750.31	2526.55
65.0	938.43	1618.48	1081.25	1760.97	1582.94	1760.97	1081.25	1618.48	938.43	1618.48
67.5	619.19	934.43	767.80	1222.80	1664.89	1222.80	767.80	934.43	619.19	934.43
70.0	542.66	629.85	604.97	1080.29	954.25	1080.29	604.97	629.85	542.66	629.85
72.5	445.93	471.84	682.38	605.24	539.50	605.24	682.38	471.84	445.93	471.84
75.0	329.06	333.32	499.55	409.68	387.13	409.68	499.55	333.32	329.06	333.32
77.5	255.02	240.64	351.36	350.36	372.18	350.36	351.36	240.64	255.02	240.64
80.0	191.33	193.03	282.65	303.63	308.87	303.63	282.65	193.03	191.33	193.03
82.5	140.45	168.20	229.87	281.81	305.70	281.81	229.87	168.20	140.45	168.20
85.0	99.56	142.93	220.14	289.70	312.22	289.70	220.14	142.93	99.56	142.93
87.5	64.93	123.25	214.54	246.40	256.32	246.40	214.54	123.25	64.93	123.25
90.0	34.53	95.01	177.75	201.50	221.88	201.50	177.75	95.01	34.53	95.01
92.5	33.14	78.56	120.26	152.65	179.20	152.65	120.26	78.56	33.14	78.56
95.0	39.87	56.12	73.97	96.40	119.26	96.40	73.97	56.12	39.87	56.12
97.5	50.53	40.15	56.19	83.48	93.26	83.48	56.19	40.15	50.53	40.15
100.0	48.98	38.73	52.91	75.37	80.65	75.37	52.91	38.73	48.98	38.73
102.5	45.96	38.35	50.99	68.41	73.64	68.41	50.99	38.35	45.96	38.35
105.0	41.82	38.54	49.72	63.55	72.45	63.55	49.72	38.54	41.82	38.54
107.5	37.36	38.57	48.86	60.19	64.87	60.19	48.86	38.57	37.36	38.57
110.0	33.90	38.21	46.86	59.29	63.17	59.29	46.86	38.21	33.90	38.21
112.5	30.45	36.93	44.75	57.42	61.40	57.42	44.75	36.93	30.45	36.93
115.0	29.58	37.32	42.12	53.57	58.51	53.57	42.12	37.32	29.58	37.32
117.5	31.53	38.64	39.94	48.97	54.15	48.97	39.94	38.64	31.53	38.64
120.0	32.48	38.44	37.50	44.54	48.88	44.54	37.50	38.44	32.48	38.44
122.5	30.80	35.82	35.78	40.81	45.19	40.81	35.78	35.82	30.80	35.82
125.0	27.87	31.91	34.92	37.08	41.75	37.08	34.92	31.91	27.87	31.91
127.5	24.58	26.23	35.82	35.14	39.09	35.14	35.82	26.23	24.58	26.23
130.0	21.15	21.86	32.51	35.54	38.05	35.54	32.51	21.86	21.15	21.86
132.5	18.04	17.90	31.43	37.74	39.85	37.74	31.43	17.90	18.04	17.90

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CANDELA TABULATION - (Cont.)

135.0	14.54	13.99	25.18	31.08	35.60	31.08	25.18	13.99	14.54	13.99
137.5	12.12	11.11	19.46	30.13	30.55	30.13	19.46	11.11	12.12	11.11
140.0	9.58	8.97	14.84	29.11	30.56	29.11	14.84	8.97	9.58	8.97
142.5	7.32	7.06	11.45	21.23	28.17	21.23	11.45	7.06	7.32	7.06
145.0	5.95	5.34	8.54	16.87	20.63	16.87	8.54	5.34	5.95	5.34
147.5	4.70	4.15	6.08	13.63	16.26	13.63	6.08	4.15	4.70	4.15
150.0	3.95	3.22	4.20	10.92	12.86	10.92	4.20	3.22	3.95	3.22
152.5	2.84	2.70	3.32	7.86	9.75	7.86	3.32	2.70	2.84	2.70
155.0	2.45	2.47	2.61	5.55	6.80	5.55	2.61	2.47	2.45	2.47
157.5	2.07	2.28	2.50	4.04	5.35	4.04	2.50	2.28	2.07	2.28
160.0	2.40	2.03	2.25	2.61	3.87	2.61	2.25	2.03	2.40	2.03
162.5	2.10	2.21	2.26	2.59	2.39	2.59	2.26	2.21	2.10	2.21
165.0	2.12	2.06	2.17	2.37	2.19	2.37	2.17	2.06	2.12	2.06
167.5	1.67	1.64	1.94	1.91	2.01	1.91	1.94	1.64	1.67	1.64
170.0	1.99	1.72	1.87	1.96	1.93	1.96	1.87	1.72	1.99	1.72
172.5	1.78	1.81	1.84	1.99	1.88	1.99	1.84	1.81	1.78	1.81
175.0	1.76	1.95	1.82	1.97	2.13	1.97	1.82	1.95	1.76	1.95
177.5	2.08	2.05	1.99	2.10	1.89	2.10	1.99	2.05	2.08	2.05
180.0	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Vert. Angles	**Horizontal Angles**						
	225.0	**247.5**	**270.0**	**292.5**	**315.0**	**337.5**	**360.0**
0.0	4529.98	4529.98	4529.98	4529.98	4529.98	4529.98	4529.98
2.5	4556.69	4563.47	4575.24	4563.47	4556.69	4542.07	4535.48
5.0	4630.28	4616.71	4611.54	4616.71	4630.28	4639.39	4648.92
7.5	4742.16	4691.41	4672.77	4691.41	4742.16	4783.81	4806.60
10.0	4885.20	4804.04	4763.84	4804.04	4885.20	4956.48	4984.30
12.5	5052.34	4932.53	4876.19	4932.53	5052.34	5141.91	5174.94
15.0	5235.85	5080.86	5011.14	5080.86	5235.85	5347.21	5378.51
17.5	5443.15	5272.97	5187.24	5272.97	5443.15	5575.12	5603.71
20.0	5692.09	5509.65	5404.84	5509.65	5692.09	5833.74	5869.47
22.5	5977.94	5756.69	5650.23	5756.69	5977.94	6136.02	6179.18
25.0	6261.87	6032.68	5941.64	6032.68	6261.87	6429.28	6448.53
27.5	6485.34	6315.00	6258.00	6315.00	6485.34	6607.03	6593.36
30.0	6605.51	6581.74	6531.27	6581.74	6605.51	6627.66	6584.90
32.5	6622.34	6759.24	6787.05	6759.24	6622.34	6524.74	6445.78
35.0	6606.13	6902.17	6999.70	6902.17	6606.13	6407.56	6280.71
37.5	6590.70	7000.15	7153.40	7000.15	6590.70	6329.69	6187.02
40.0	6612.30	7062.96	7318.48	7062.96	6612.30	6277.11	6134.49
42.5	6640.29	7180.02	7371.68	7180.02	6640.29	6223.08	6043.27
45.0	6610.84	7201.98	7233.70	7201.98	6610.84	6136.52	5876.14
47.5	6494.95	7124.70	7155.94	7124.70	6494.95	5972.72	5603.22
50.0	6324.56	6722.80	6109.14	6722.80	6324.56	5726.95	5171.32
52.5	5994.61	5642.22	5180.17	5642.22	5994.61	5361.31	4630.23
55.0	5366.92	4510.25	4081.74	4510.25	5366.92	4835.54	4042.24
57.5	4430.10	3035.11	3355.58	3035.11	4430.10	4191.56	3455.40
60.0	3131.68	2592.16	2350.28	2592.16	3131.68	3408.53	2719.42
62.5	1816.84	1739.17	1561.07	1739.17	1816.84	2526.55	1750.31
65.0	1081.25	1760.97	1582.94	1760.97	1081.25	1618.48	938.43
67.5	767.80	1222.80	1664.89	1222.80	767.80	934.43	619.19
70.0	604.97	1080.29	954.25	1080.29	604.97	629.85	542.66
72.5	682.38	605.24	539.50	605.24	682.38	471.84	445.93
75.0	499.55	409.68	387.13	409.68	499.55	333.32	329.06
77.5	351.36	350.36	372.18	350.36	351.36	240.64	255.02
80.0	282.65	303.63	308.87	303.63	282.65	193.03	191.33

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CANDELA TABULATION - (Cont.)

82.5	229.87	281.81	305.70	281.81	229.87	168.20	140.45
85.0	220.14	289.70	312.22	289.70	220.14	142.93	99.56
87.5	214.54	246.40	256.32	246.40	214.54	123.25	64.93
90.0	177.75	201.50	221.88	201.50	177.75	95.01	34.53
92.5	120.26	152.65	179.20	152.65	120.26	78.56	33.14
95.0	73.97	96.40	119.26	96.40	73.97	56.12	39.87
97.5	56.19	83.48	93.26	83.48	56.19	40.15	50.53
100.0	52.91	75.37	80.65	75.37	52.91	38.73	48.98
102.5	50.99	68.41	73.64	68.41	50.99	38.35	45.96
105.0	49.72	63.55	72.45	63.55	49.72	38.54	41.82
107.5	48.86	60.19	64.87	60.19	48.86	38.57	37.36
110.0	46.86	59.29	63.17	59.29	46.86	38.21	33.90
112.5	44.75	57.42	61.40	57.42	44.75	36.93	30.45
115.0	42.12	53.57	58.51	53.57	42.12	37.32	29.58
117.5	39.94	48.97	54.15	48.97	39.94	38.64	31.53
120.0	37.50	44.54	48.88	44.54	37.50	38.44	32.48
122.5	35.78	40.81	45.19	40.81	35.78	35.82	30.80
125.0	34.92	37.08	41.75	37.08	34.92	31.91	27.87
127.5	35.82	35.14	39.09	35.14	35.82	26.23	24.58
130.0	32.51	35.54	38.05	35.54	32.51	21.86	21.15
132.5	31.43	37.74	39.85	37.74	31.43	17.90	18.04
135.0	25.18	31.08	35.60	31.08	25.18	13.99	14.54
137.5	19.46	30.13	30.55	30.13	19.46	11.11	12.12
140.0	14.84	29.11	30.56	29.11	14.84	8.97	9.58
142.5	11.45	21.23	28.17	21.23	11.45	7.06	7.32
145.0	8.54	16.87	20.63	16.87	8.54	5.34	5.95
147.5	6.08	13.63	16.26	13.63	6.08	4.15	4.70
150.0	4.20	10.92	12.86	10.92	4.20	3.22	3.95
152.5	3.32	7.86	9.75	7.86	3.32	2.70	2.84
155.0	2.61	5.55	6.80	5.55	2.61	2.47	2.45
157.5	2.50	4.04	5.35	4.04	2.50	2.28	2.07
160.0	2.25	2.61	3.87	2.61	2.25	2.03	2.40
162.5	2.26	2.59	2.39	2.59	2.26	2.21	2.10
165.0	2.17	2.37	2.19	2.37	2.17	2.06	2.12
167.5	1.94	1.91	2.01	1.91	1.94	1.64	1.67
170.0	1.87	1.96	1.93	1.96	1.87	1.72	1.99
172.5	1.84	1.99	1.88	1.99	1.84	1.81	1.78
175.0	1.82	1.97	2.13	1.97	1.82	1.95	1.76
177.5	1.99	2.10	1.89	2.10	1.99	2.05	2.08
180.0	2.00	2.00	2.00	2.00	2.00	2.00	2.00

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1945.66	N.A.	9.40
0-30	4824.45	N.A.	23.40
0-40	8994.67	N.A.	43.50
0-60	18169.85	N.A.	88.00
0-80	20172.36	N.A.	97.70
0-90	20398.8	N.A.	98.80
10-90	19948.93	N.A.	96.60
20-40	7049.01	N.A.	34.10
20-50	12115.17	N.A.	58.70
40-70	10706.57	N.A.	51.80
60-80	2002.51	N.A.	9.70
70-80	471.12	N.A.	2.30
80-90	226.44	N.A.	1.10
90-110	153.22	N.A.	0.70
90-120	197.29	N.A.	1.00
90-130	228.70	N.A.	1.10
90-150	255.13	N.A.	1.20
90-180	257.91	N.A.	1.20
110-180	104.68	N.A.	0.50
0-180	20656.7	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	449.86
10-20	1495.8
20-30	2878.79
30-40	4170.22
40-50	5066.16
50-60	4109.03
60-70	1531.39
70-80	471.12
80-90	226.44
90-100	97.81
100-110	55.42
110-120	44.06
120-130	31.41
130-140	19.00
140-150	7.43
150-160	1.97
160-170	0.62
170-180	0.18

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

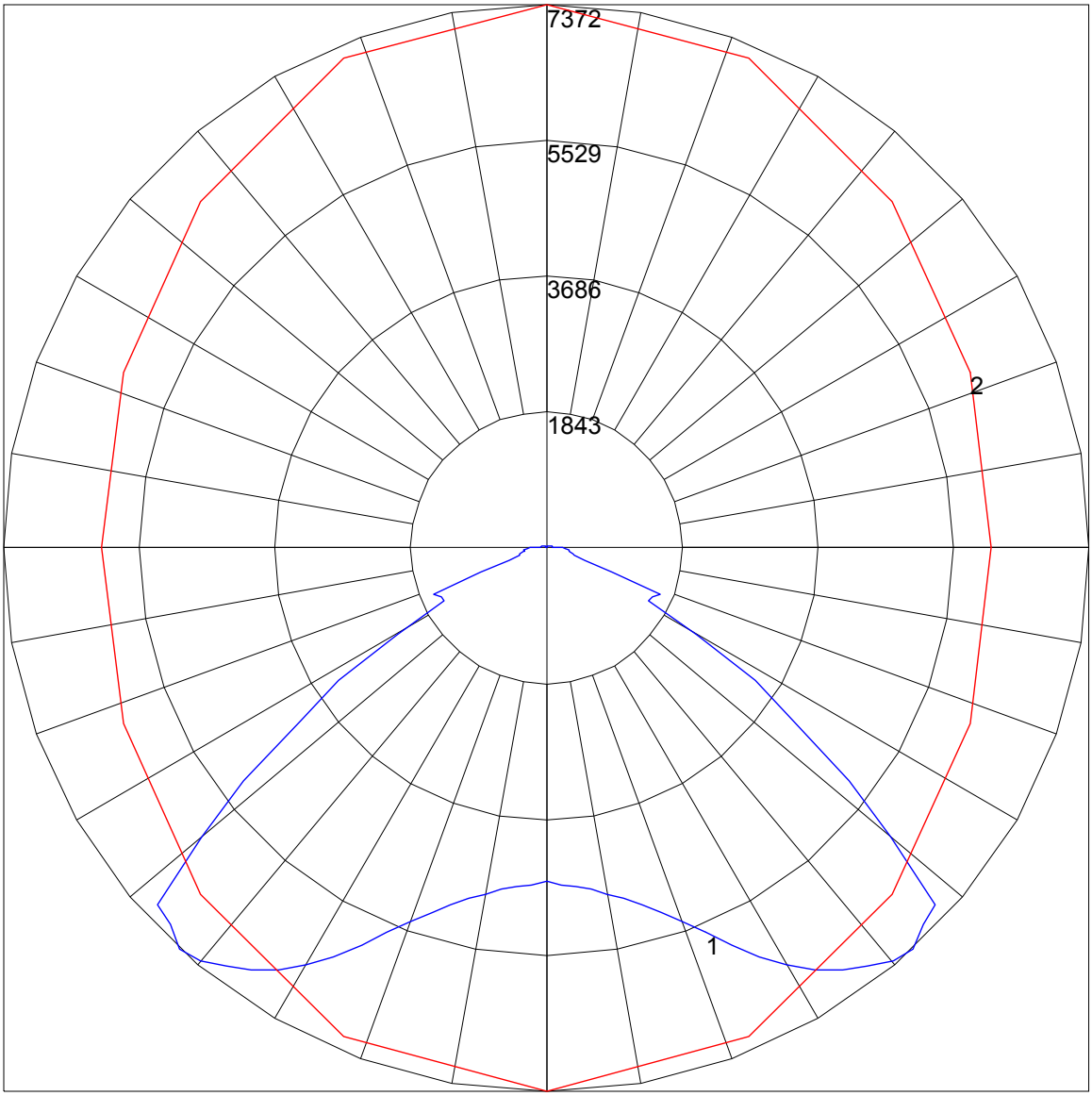
Effective Floor Cavity Reflectance 0.20

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	110	110	110	105	105	105	101	101	101	99
1	110	105	101	98	107	103	99	96	98	96	93	94	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	79	76	80	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	63	58	54	52
5	77	64	55	49	74	63	55	48	61	53	48	58	52	47	57	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	52	46	41	51	45	40	38
7	65	51	43	37	63	51	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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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.

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

POLAR GRAPH



Maximum Candela = 7371.68 Located At Horizontal Angle = 90, Vertical Angle = 42.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (42.5) (Through Max. Cd.)