

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

IESNA:LM-63-2002

[TEST] FO33722.PSO

[TESTLAB] PHILIPS DAY-BRITE PHOTOMETRIC LABORATORY

[ISSUE DATE] 10/28/14

[MANUFAC] PHILIPS DAY-BRITE - PHILIPS CFI

[LUMCAT] APX20LL40-UNV-M-LCP

[LUMINAIRE] PHILIPS APX 4-2LP 1.0.1 4000K 2-95W DRIVERS 18K RESISTORS MEDIUM OPTICS DP LENS

[LAMP] LED. LUMINAIRE OUTPUT = 20106 LMS

[TEST DATE] 10/28/14

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	20106
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	168.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.36
Spacing Criterion (Diagonal)	1.26
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	8711	10863	8197
55	2716	1871	1081
65	1941	732	849
75	1071	582	654
85	463	526	965

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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	11271.15	11271.15	11271.15	11271.15	11271.15	11271.15	11271.15	11271.15	11271.15	11271.15
2.5	11245.75	11260.55	11294.35	11309.80	11311.10	11309.80	11294.35	11260.55	11245.75	11260.55
5.0	11281.40	11301.90	11343.35	11374.45	11370.95	11374.45	11343.35	11301.90	11281.40	11301.90
7.5	11334.80	11361.90	11406.90	11449.85	11462.25	11449.85	11406.90	11361.90	11334.80	11361.90
10.0	11409.55	11442.85	11506.05	11566.70	11553.95	11566.70	11506.05	11442.85	11409.55	11442.85
12.5	11497.00	11556.25	11628.90	11673.15	11654.35	11673.15	11628.90	11556.25	11497.00	11556.25
15.0	11569.40	11675.10	11778.00	11801.55	11767.50	11801.55	11778.00	11675.10	11569.40	11675.10
17.5	11564.10	11744.55	11924.00	11922.30	11877.95	11922.30	11924.00	11744.55	11564.10	11744.55
20.0	11386.40	11682.10	12034.90	12069.55	12007.50	12069.55	12034.90	11682.10	11386.40	11682.10
22.5	11015.80	11445.15	12009.50	12186.20	12129.35	12186.20	12009.50	11445.15	11015.80	11445.15
25.0	10470.70	11012.35	11814.80	12155.30	12060.25	12155.30	11814.80	11012.35	10470.70	11012.35
27.5	9848.97	10452.00	11429.90	11921.25	11859.20	11921.25	11429.90	10452.00	9848.97	10452.00
30.0	9198.79	9831.49	10887.40	11461.30	11368.15	11461.30	10887.40	9831.49	9198.79	9831.49
32.5	8548.22	9195.95	10242.70	10704.40	10627.22	10704.40	10242.70	9195.95	8548.22	9195.95
35.0	7835.42	8563.99	9455.06	9710.01	9628.31	9710.01	9455.06	8563.99	7835.42	8563.99
37.5	7012.97	7847.44	8532.86	8552.43	8311.41	8552.43	8532.86	7847.44	7012.97	7847.44
40.0	5954.89	7004.32	7479.36	7194.78	6884.34	7194.78	7479.36	7004.32	5954.89	7004.32
42.5	4628.51	5944.41	6271.13	5723.46	5364.96	5723.46	6271.13	5944.41	4628.51	5944.41
45.0	3209.95	4647.48	4963.89	4181.58	3861.58	4181.58	4963.89	4647.48	3209.95	4647.48
47.5	1948.44	3284.74	3618.46	2830.14	2552.33	2830.14	3618.46	3284.74	1948.44	3284.74
50.0	1146.01	2052.10	2389.77	1719.94	1589.15	1719.94	2389.77	2052.10	1146.01	2052.10
52.5	868.98	1177.70	1393.63	983.83	918.35	983.83	1393.63	1177.70	868.98	1177.70
55.0	848.09	688.75	775.83	541.68	465.91	541.68	775.83	688.75	848.09	688.75
57.5	771.26	493.68	471.66	399.21	406.10	399.21	471.66	493.68	771.26	493.68
60.0	644.41	420.87	357.22	361.93	372.40	361.93	357.22	420.87	644.41	420.87
62.5	550.41	362.16	304.65	328.65	351.25	328.65	304.65	362.16	550.41	362.16
65.0	478.68	307.02	263.61	308.51	320.93	308.51	263.61	307.02	478.68	307.02
67.5	395.52	255.50	233.74	282.00	291.44	282.00	233.74	255.50	395.52	255.50
70.0	324.23	209.92	212.41	256.04	268.82	256.04	212.41	209.92	324.23	209.92
72.5	242.01	166.93	192.42	230.14	238.79	230.14	192.42	166.93	242.01	166.93
75.0	185.59	129.15	171.25	194.04	204.90	194.04	171.25	129.15	185.59	129.15
77.5	152.31	100.83	146.32	175.02	203.53	175.02	146.32	100.83	152.31	100.83
80.0	103.68	81.32	126.62	158.74	187.26	158.74	126.62	81.32	103.68	81.32
82.5	67.22	69.68	109.34	160.76	200.17	160.76	109.34	69.68	67.22	69.68
85.0	43.89	60.22	115.42	160.14	230.89	160.14	115.42	60.22	43.89	60.22
87.5	27.95	52.88	110.44	150.49	201.88	150.49	110.44	52.88	27.95	52.88
90.0	17.09	42.96	93.59	116.13	161.39	116.13	93.59	42.96	17.09	42.96
92.5	13.64	36.42	61.51	71.37	122.05	71.37	61.51	36.42	13.64	36.42
95.0	15.80	26.29	30.69	37.40	64.94	37.40	30.69	26.29	15.80	26.29
97.5	19.39	12.47	11.75	15.93	23.47	15.93	11.75	12.47	19.39	12.47
100.0	21.00	8.01	8.33	12.52	15.73	12.52	8.33	8.01	21.00	8.01
102.5	19.88	7.49	7.73	10.67	12.61	10.67	7.73	7.49	19.88	7.49
105.0	17.89	7.82	6.95	9.81	11.73	9.81	6.95	7.82	17.89	7.82
107.5	15.72	7.81	6.37	9.04	10.71	9.04	6.37	7.81	15.72	7.81
110.0	13.55	7.12	5.81	7.98	9.84	7.98	5.81	7.12	13.55	7.12
112.5	11.74	7.00	5.05	6.81	8.70	6.81	5.05	7.00	11.74	7.00
115.0	10.02	6.45	4.67	5.99	7.53	5.99	4.67	6.45	10.02	6.45
117.5	8.55	6.63	4.76	5.60	6.91	5.60	4.76	6.63	8.55	6.63
120.0	7.62	7.21	5.17	5.18	6.62	5.18	5.17	7.21	7.62	7.21
122.5	7.13	7.72	6.20	5.63	6.51	5.63	6.20	7.72	7.13	7.72
125.0	6.54	6.95	8.99	6.21	7.07	6.21	8.99	6.95	6.54	6.95
127.5	6.44	6.12	12.11	7.77	8.63	7.77	12.11	6.12	6.44	6.12
130.0	6.38	5.63	12.00	11.86	12.37	11.86	12.00	5.63	6.38	5.63
132.5	5.91	5.23	10.12	13.99	16.04	13.99	10.12	5.23	5.91	5.23

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CANDELA TABULATION - (Cont.)

135.0	5.27	4.70	7.63	13.65	13.69	13.65	7.63	4.70	5.27	4.70
137.5	4.69	4.33	6.39	12.92	16.33	12.92	6.39	4.33	4.69	4.33
140.0	4.35	3.92	5.44	9.77	13.30	9.77	5.44	3.92	4.35	3.92
142.5	3.87	3.89	4.74	8.00	9.86	8.00	4.74	3.89	3.87	3.89
145.0	4.01	3.61	4.54	7.09	8.25	7.09	4.54	3.61	4.01	3.61
147.5	3.78	3.51	4.25	6.31	7.03	6.31	4.25	3.51	3.78	3.51
150.0	4.11	3.87	4.18	5.97	6.89	5.97	4.18	3.87	4.11	3.87
152.5	4.06	3.99	4.22	5.55	6.06	5.55	4.22	3.99	4.06	3.99
155.0	4.37	4.46	4.45	5.52	5.96	5.52	4.45	4.46	4.37	4.46
157.5	4.43	4.75	4.80	5.39	6.20	5.39	4.80	4.75	4.43	4.75
160.0	4.73	4.83	5.06	5.76	6.14	5.76	5.06	4.83	4.73	4.83
162.5	4.86	4.84	5.23	5.64	6.13	5.64	5.23	4.84	4.86	4.84
165.0	5.33	5.14	5.29	5.62	5.93	5.62	5.29	5.14	5.33	5.14
167.5	5.31	5.10	5.17	5.64	5.59	5.64	5.17	5.10	5.31	5.10
170.0	5.19	5.20	5.51	5.58	5.75	5.58	5.51	5.20	5.19	5.20
172.5	5.33	5.54	5.47	5.91	5.90	5.91	5.47	5.54	5.33	5.54
175.0	5.69	5.91	5.39	5.89	5.93	5.89	5.39	5.91	5.69	5.91
177.5	5.82	5.99	5.65	5.76	5.97	5.76	5.65	5.99	5.82	5.99
180.0	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00

**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	11271.15	11271.15	11271.15	11271.15	11271.15	11271.15	11271.15
2.5	11294.35	11309.80	11311.10	11309.80	11294.35	11260.55	11245.75
5.0	11343.35	11374.45	11370.95	11374.45	11343.35	11301.90	11281.40
7.5	11406.90	11449.85	11462.25	11449.85	11406.90	11361.90	11334.80
10.0	11506.05	11566.70	11553.95	11566.70	11506.05	11442.85	11409.55
12.5	11628.90	11673.15	11654.35	11673.15	11628.90	11556.25	11497.00
15.0	11778.00	11801.55	11767.50	11801.55	11778.00	11675.10	11569.40
17.5	11924.00	11922.30	11877.95	11922.30	11924.00	11744.55	11564.10
20.0	12034.90	12069.55	12007.50	12069.55	12034.90	11682.10	11386.40
22.5	12009.50	12186.20	12129.35	12186.20	12009.50	11445.15	11015.80
25.0	11814.80	12155.30	12060.25	12155.30	11814.80	11012.35	10470.70
27.5	11429.90	11921.25	11859.20	11921.25	11429.90	10452.00	9848.97
30.0	10887.40	11461.30	11368.15	11461.30	10887.40	9831.49	9198.79
32.5	10242.70	10704.40	10627.22	10704.40	10242.70	9195.95	8548.22
35.0	9455.06	9710.01	9628.31	9710.01	9455.06	8563.99	7835.42
37.5	8532.86	8552.43	8311.41	8552.43	8532.86	7847.44	7012.97
40.0	7479.36	7194.78	6884.34	7194.78	7479.36	7004.32	5954.89
42.5	6271.13	5723.46	5364.96	5723.46	6271.13	5944.41	4628.51
45.0	4963.89	4181.58	3861.58	4181.58	4963.89	4647.48	3209.95
47.5	3618.46	2830.14	2552.33	2830.14	3618.46	3284.74	1948.44
50.0	2389.77	1719.94	1589.15	1719.94	2389.77	2052.10	1146.01
52.5	1393.63	983.83	918.35	983.83	1393.63	1177.70	868.98
55.0	775.83	541.68	465.91	541.68	775.83	688.75	848.09
57.5	471.66	399.21	406.10	399.21	471.66	493.68	771.26
60.0	357.22	361.93	372.40	361.93	357.22	420.87	644.41
62.5	304.65	328.65	351.25	328.65	304.65	362.16	550.41
65.0	263.61	308.51	320.93	308.51	263.61	307.02	478.68
67.5	233.74	282.00	291.44	282.00	233.74	255.50	395.52
70.0	212.41	256.04	268.82	256.04	212.41	209.92	324.23
72.5	192.42	230.14	238.79	230.14	192.42	166.93	242.01
75.0	171.25	194.04	204.90	194.04	171.25	129.15	185.59
77.5	146.32	175.02	203.53	175.02	146.32	100.83	152.31
80.0	126.62	158.74	187.26	158.74	126.62	81.32	103.68

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CANDELA TABULATION - (Cont.)

82.5	109.34	160.76	200.17	160.76	109.34	69.68	67.22
85.0	115.42	160.14	230.89	160.14	115.42	60.22	43.89
87.5	110.44	150.49	201.88	150.49	110.44	52.88	27.95
90.0	93.59	116.13	161.39	116.13	93.59	42.96	17.09
92.5	61.51	71.37	122.05	71.37	61.51	36.42	13.64
95.0	30.69	37.40	64.94	37.40	30.69	26.29	15.80
97.5	11.75	15.93	23.47	15.93	11.75	12.47	19.39
100.0	8.33	12.52	15.73	12.52	8.33	8.01	21.00
102.5	7.73	10.67	12.61	10.67	7.73	7.49	19.88
105.0	6.95	9.81	11.73	9.81	6.95	7.82	17.89
107.5	6.37	9.04	10.71	9.04	6.37	7.81	15.72
110.0	5.81	7.98	9.84	7.98	5.81	7.12	13.55
112.5	5.05	6.81	8.70	6.81	5.05	7.00	11.74
115.0	4.67	5.99	7.53	5.99	4.67	6.45	10.02
117.5	4.76	5.60	6.91	5.60	4.76	6.63	8.55
120.0	5.17	5.18	6.62	5.18	5.17	7.21	7.62
122.5	6.20	5.63	6.51	5.63	6.20	7.72	7.13
125.0	8.99	6.21	7.07	6.21	8.99	6.95	6.54
127.5	12.11	7.77	8.63	7.77	12.11	6.12	6.44
130.0	12.00	11.86	12.37	11.86	12.00	5.63	6.38
132.5	10.12	13.99	16.04	13.99	10.12	5.23	5.91
135.0	7.63	13.65	13.69	13.65	7.63	4.70	5.27
137.5	6.39	12.92	16.33	12.92	6.39	4.33	4.69
140.0	5.44	9.77	13.30	9.77	5.44	3.92	4.35
142.5	4.74	8.00	9.86	8.00	4.74	3.89	3.87
145.0	4.54	7.09	8.25	7.09	4.54	3.61	4.01
147.5	4.25	6.31	7.03	6.31	4.25	3.51	3.78
150.0	4.18	5.97	6.89	5.97	4.18	3.87	4.11
152.5	4.22	5.55	6.06	5.55	4.22	3.99	4.06
155.0	4.45	5.52	5.96	5.52	4.45	4.46	4.37
157.5	4.80	5.39	6.20	5.39	4.80	4.75	4.43
160.0	5.06	5.76	6.14	5.76	5.06	4.83	4.73
162.5	5.23	5.64	6.13	5.64	5.23	4.84	4.86
165.0	5.29	5.62	5.93	5.62	5.29	5.14	5.33
167.5	5.17	5.64	5.59	5.64	5.17	5.10	5.31
170.0	5.51	5.58	5.75	5.58	5.51	5.20	5.19
172.5	5.47	5.91	5.90	5.91	5.47	5.54	5.33
175.0	5.39	5.89	5.93	5.89	5.39	5.91	5.69
177.5	5.65	5.76	5.97	5.76	5.65	5.99	5.82
180.0	6.00	6.00	6.00	6.00	6.00	6.00	6.00

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4413.18	N.A.	21.90
0-30	9692.78	N.A.	48.20
0-40	15305.42	N.A.	76.10
0-60	19394.54	N.A.	96.50
0-80	19901.95	N.A.	99.00
0-90	20024.81	N.A.	99.60
10-90	18937.66	N.A.	94.20
20-40	10892.24	N.A.	54.20
20-50	14227.67	N.A.	70.80
40-70	4407.66	N.A.	21.90
60-80	507.40	N.A.	2.50
70-80	188.86	N.A.	0.90
80-90	122.87	N.A.	0.60
90-110	53.38	N.A.	0.30
90-120	60.11	N.A.	0.30
90-130	66.85	N.A.	0.30
90-150	77.30	N.A.	0.40
90-180	81.63	N.A.	0.40
110-180	28.25	N.A.	0.10
0-180	20106.44	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1087.15
10-20	3326.03
20-30	5279.6
30-40	5612.64
40-50	3335.43
50-60	753.69
60-70	318.54
70-80	188.86
80-90	122.87
90-100	42.93
100-110	10.45
110-120	6.73
120-130	6.73
130-140	6.97
140-150	3.48
150-160	2.28
160-170	1.52
170-180	0.54

IES INDOOR REPORT

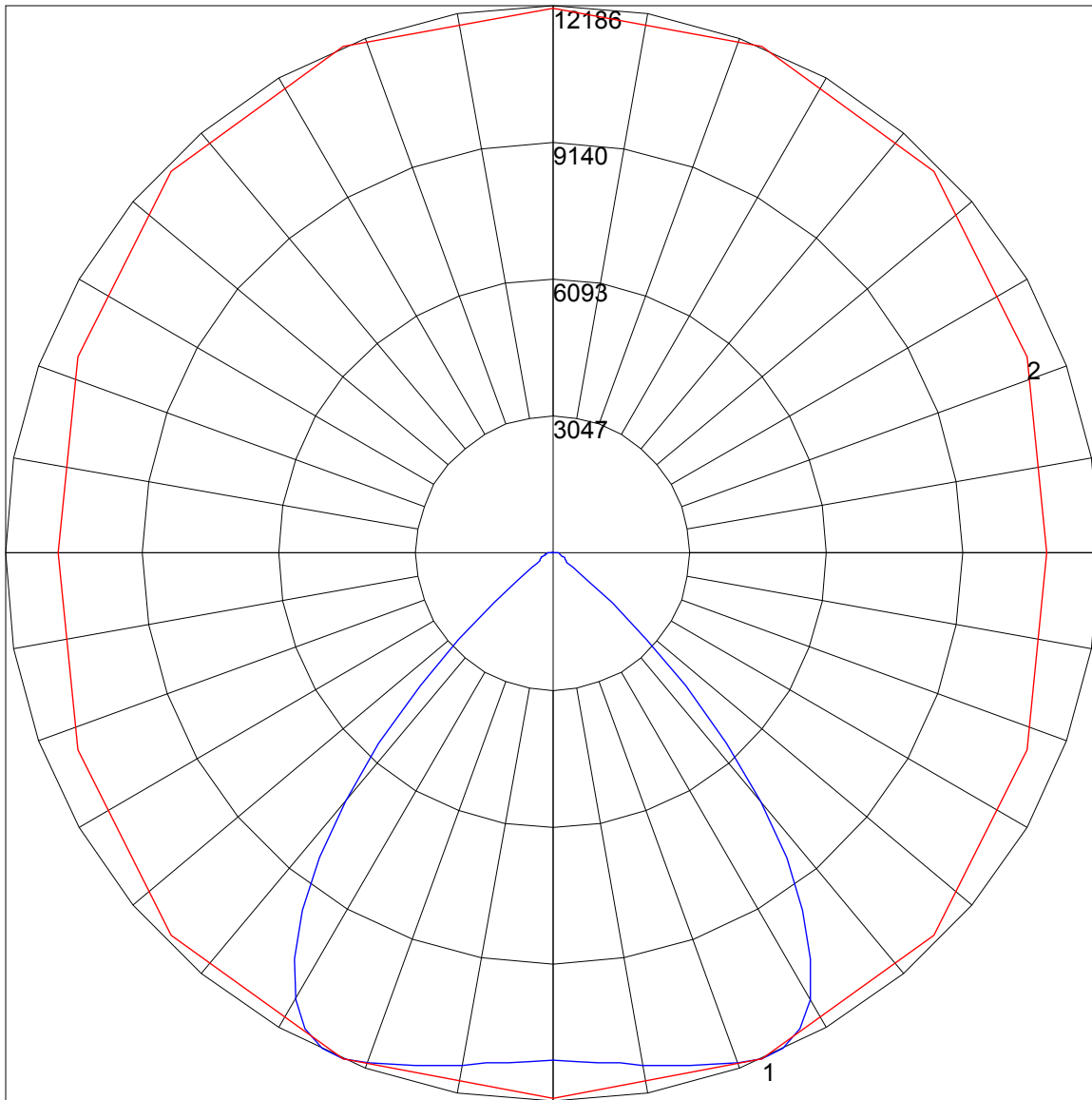
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	102	102	102	100
1	112	109	106	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	48	44	54	48	44	53	48	44	52	47	43	42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	38

POLAR GRAPH



Maximum Candela = 12186.2 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.)