

22-FPL-BL-LED-2000L-3000L-4000L-DIM10-MVOLT-35K-40K-50K-85(2000L)

TEST NO.: **EL05212049**

INPUT WATTS: **19.4949**

LUMENS: **2597**

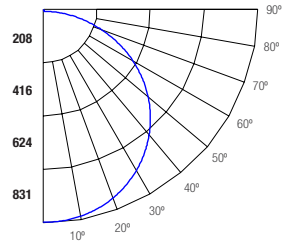
CRI: **N/A**

EFFICACY: **133**

CCT: **3500K**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	305.14	11.70	11.70
0-30	652.69	25.10	25.10
0-40	1079.38	41.60	41.60
0-60	1954.11	75.20	75.20
0-80	2497.12	96.20	96.20
0-90	2571.01	99.00	99.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	2226	2269	2283
55	2200	2262	2282
65	2136	2227	2256
75	2018	2162	2200
85	1945	2331	2444

Lumens Per Zone

Zone	Lumens
0-10	78.62
10-20	226.53
20-30	347.55
30-40	426.69
40-50	453.11
50-60	421.62
60-70	334.88
70-80	208.13
80-90	73.89

Candela Tabulation

0	
0.0	829.942
5.0	827.490
15.0	802.200
25.0	753.010
35.0	680.450
45.0	585.350
55.0	469.270
65.0	335.710
75.0	194.290
85.0	63.040
90.0	10.750

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC	RW	80%				70%				50%			30%			10%			0%
			70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
0	119	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99	
1	108	103	98	94	94	105	100	96	92	96	92	89	92	89	86	88	86	84	81	
2	98	89	82	76	76	95	87	80	75	83	78	73	80	75	71	77	73	69	67	
3	89	78	69	62	62	86	76	68	62	73	66	61	70	64	59	67	62	58	56	
4	81	69	60	53	53	79	67	59	52	65	57	51	62	56	50	60	54	50	47	
5	74	61	52	45	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41	
6	69	55	46	39	39	67	54	45	39	52	44	38	50	43	38	48	42	38	35	
7	64	50	41	34	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31	
8	59	45	37	31	31	57	45	36	30	43	36	30	42	35	30	40	34	30	28	
9	55	41	33	27	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25	
10	52	38	30	25	25	50	38	30	25	37	29	25	36	29	24	35	29	24	22	

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

22-FPL-BL-LED-2000L-3000L-4000L-DIM10-MVOLT-35K-40K-50K-85(3000L)

TEST NO.: **EL05212050**

INPUT WATTS: **28.8**

LUMENS: **3638**

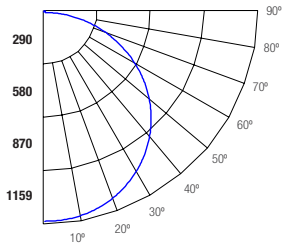
CRI: **N/A**

EFFICACY: **126**

CCT: **3500K**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	424.85	11.70	11.70
0-30	908.79	25.00	25.00
0-40	1503.04	41.30	41.30
0-60	2730.86	75.10	75.10
0-80	3496.32	96.10	96.10
0-90	3600.78	99.00	99.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	3096	3153	3181
55	3061	3143	3184
65	2971	3094	3150
75	2838	3033	3117
85	2711	3244	3469

Lumens Per Zone

Zone	Lumens
0-10	109.45
10-20	315.39
20-30	483.94
30-40	594.25
40-50	635.45
50-60	592.37
60-70	470.92
70-80	294.54
80-90	104.46

Candela Tabulation

0	
0.0	1155.504
5.0	1152.370
15.0	1116.480
25.0	1048.560
35.0	947.260
45.0	814.280
55.0	653.000
65.0	467.050
75.0	273.200
85.0	87.900
90.0	14.460

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC	RW	80%				70%				50%			30%			10%			0%
			70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
0	119	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99	
1	108	103	98	94	94	105	100	96	92	96	92	89	92	89	86	88	86	84	81	
2	98	89	82	76	76	95	87	80	75	83	78	73	80	75	71	77	73	69	67	
3	89	78	69	62	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56	
4	81	69	59	52	52	79	67	59	52	64	57	51	62	56	50	60	54	50	47	
5	74	61	52	45	45	72	60	51	45	58	50	44	55	49	43	53	48	43	41	
6	68	55	46	39	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35	
7	63	50	41	34	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31	
8	59	45	36	30	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28	
9	55	41	33	27	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25	
10	52	38	30	25	25	50	38	30	25	36	29	24	35	29	24	35	28	24	22	

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

22-FPL-BL-LED-2000L-3000L-4000L-DIM10-MVOLT-35K-40K-50K-85(4000L)

TEST NO.: **EL05212051**

INPUT WATTS: **37.4**

LUMENS: **4536**

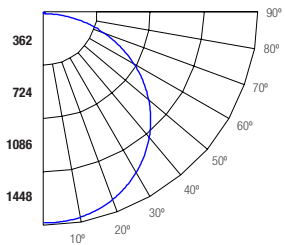
CRI: **N/A**

EFFICACY: **121**

CCT: **3500K**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	530.24	11.70	11.70
0-30	1134.29	25.00	25.00
0-40	1876.05	41.40	41.40
0-60	3402.22	75.00	75.00
0-80	4358.49	96.10	96.10
0-90	4489.77	99.00	99.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	3865	3938	3974
55	3820	3925	3981
65	3708	3862	3940
75	3544	3783	3918
85	3384	4051	4368

Lumens Per Zone

Zone	Lumens
0-10	136.60
10-20	393.64
20-30	604.05
30-40	741.77
40-50	788.05
50-60	738.12
60-70	588.50
70-80	367.77
80-90	131.28

Candela Tabulation

0	
0.0	1441.952
5.0	1437.640
15.0	1393.830
25.0	1308.550
35.0	1182.000
45.0	1016.650
55.0	814.920
65.0	582.820
75.0	341.150
85.0	109.710
90.0	18.020

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC	RW	80%				70%				50%			30%			10%			0%
			70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
0	119	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99	
1	108	103	98	94	94	105	100	96	92	96	92	89	92	89	86	88	86	83	81	
2	98	89	82	76	76	95	87	80	75	83	78	73	80	75	71	77	73	69	67	
3	89	78	69	62	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56	
4	81	69	59	52	52	79	67	59	52	64	57	51	62	56	50	60	54	50	47	
5	74	61	52	45	45	72	60	51	45	58	50	44	55	49	43	53	48	43	41	
6	68	55	46	39	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35	
7	63	50	41	34	34	62	49	40	34	47	39	34	45	39	33	44	38	33	3	

22-FPL-BL-LED-4000L-5000L-6000L-DIM10-120-347V-35K-40K-50K-85(4000L)

TEST NO.: **EL10052029**

INPUT WATTS: **30.9**

LUMENS: **3831**

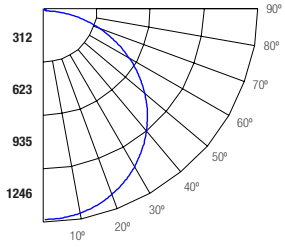
CRI: **N/A**

EFFICACY: **124**

CCT: **3500K**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	453.15	11.80	11.80
0-30	967.59	25.30	25.30
0-40	1596.68	41.70	41.70
0-60	2886.68	75.40	75.40
0-80	3686.49	96.20	96.20
0-90	3793.1	99.00	99.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	3271	3269	3269
55	3223	3217	3219
65	3134	3117	3113
75	3014	2990	2967
85	2906	2871	2850

Lumens Per Zone

Zone	Lumens
0-10	116.90
10-20	336.25
20-30	514.44
30-40	629.10
40-50	668.76
50-60	621.24
60-70	492.13
70-80	307.68
80-90	106.61

Candela Tabulation

0			
0.0	1234.645		
5.0	1232.700		
15.0	1192.190		
25.0	1116.330		
35.0	1005.990		
45.0	860.200		
55.0	687.700		
65.0	492.620		
75.0	290.170		
85.0	94.200		
90.0	12.930		

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC	RW	80%				70%				50%			30%			10%			0%
			70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
0	119	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99	
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	81	81	
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	69	67	67	
3	89	78	69	63	86	76	68	62	73	66	61	70	64	59	67	62	58	56	56	
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	54	50	47	47	
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41	41	
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	42	38	36	36	
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	44	38	33	31	31	
8	59	45	37	31	57	45	36	31	43	36	30	42	35	30	41	34	30	28	28	
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	37	31	27	25	25	
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23	23	

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

22-FPL-BL-LED-4000L-5000L-6000L-DIM10-120-347V-35K-40K-50K-85(5000L)

TEST NO.: **EL10052029**

INPUT WATTS: **41.5**

LUMENS: **4910**

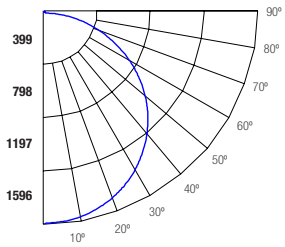
CRI: **N/A**

EFFICACY: **118**

CCT: **3500K**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	582.38	11.90	11.90
0-30	1243.39	25.30	25.30
0-40	2051.59	41.80	41.80
0-60	3700.14	75.40	75.40
0-80	4725.16	96.20	96.20
0-90	4861.42	99.00	99.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	4184	4194	4208
55	4121	4122	4143
65	3994	3992	4015
75	3826	3817	3814
85	3600	3657	3723

Lumens Per Zone

Zone	Lumens
0-10	150.20
10-20	432.18
20-30	661.02
30-40	808.19
40-50	854.13
50-60	794.42
60-70	631.59
70-80	393.44
80-90	136.26

Candela Tabulation

0			
0.0	1586.679		
5.0	1582.040		
15.0	1531.540		
25.0	1431.370		
35.0	1288.010		
45.0	1100.460		
55.0	879.260		
65.0	627.780		
75.0	368.320		
85.0	116.720		
90.0	14.070		

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC	RW	80%				70%				50%			30%			10%			0%
			70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
0	119	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99	
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	81	81	
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	69	67	67	
3	89	78	69	63	86	76	68	62	73	66	61	70	64	60	67	62	58	56	56	
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	54	50	48	48	
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41	41	
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	42	38	36	36	
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	44	38	33	31	31	
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	34	30	28	28	
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	37	31	27	25	25	
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23	23	

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

22-FPL-BL-LED-4000L-5000L-6000L-DIM10-120-347V-35K-40K-50K-85(6000L)

TEST NO.: **EL10052034**

INPUT WATTS: **50.1**

LUMENS: **5694**

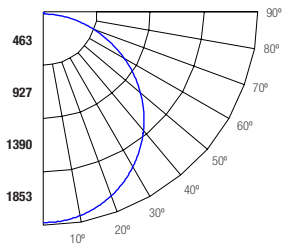
CRI: **N/A**

EFFICACY: **114**

CCT: **3500K**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	675.71	11.90	11.90
0-30	1442.7	25.30	25.30
0-40	2380.54	41.80	41.80
0-60	4289.98	75.30	75.30
0-80	5479.56	96.20	96.20
0-90	5637.82	99.00	99.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	4860	4872	4880
55	4777	4796	4816
65	4638	4637	4657
75	4426	4388	4405
85	4206	4201	4335

Lumens Per Zone

Zone	Lumens
0-10	174.29
10-20	501.42
20-30	766.99
30-40	937.84
40-50	991.15
50-60	918.29
60-70	733.04
70-80	456.54
80-90	158.26

Candela Tabulation

0			
0.0	1841.245		
5.0	1836.170		
15.0	1776.490		
25.0	1662.800		
35.0	1496.350		
45.0	1278.260		
55.0	1019.080		
65.0	729.050		
75.0	426.080		
85.0	136.350		
90.0	19.200		

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC	RW	80%				70%				50%			30%			10%			0%
			70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
0	119	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99	
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	81	81	
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	69	67	67	
3	89	78	69	63	86	76	68	62	73	66	61	70	64	59	67	62	58	56	56	
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	54	50	48	48	
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41	41	