Indoor Photometric Report
H:\1A-STUFF\GP\GP6-L550-840-N-UPM-DIM-UNV.ray
Created: Fri, 4 Nov 2022 09:13:08

PRODUCT INFORMATION

Test number:	1
Test date:	Fri, 4 Nov 2022 09:13:08
Manufacturer:	
Catalog number:	
Description:	GP6-L550-840-N-UPM-DIM-UNV
Lamp catalog number:	AM700C840D72N2S00C
Lamp description:	LED 25.5W 22" 72 LED linear module (700mA)

ANALYSIS SUMMARY
Traced 2000000 of 2000000 rays.
Rays limited to 12 reactions.
Rays traced to a minimum of 1% of their initial magnitude.
Report type: Indoor
Lamp flux energy units: Lumens
far field sphere Test Distance: 20.00ft
Photometric Type: C
Symmetry: Bilateral

LUMENS EXITING FAR FIELD SPHERE

Lumens	(%)	Reaction
37822	(71.2%)	0
7939	(15.0%)	1
368	(0.7%)	2
148	(0.3%)	3
44	(0.1%)	4
25	(0.0%)	5
11	(0.0%)	6
9	(0.0%)	7
6	(0.0%)	8
5	(0.0%)	9
4	(0.0%)	10
3	(0.0%)	11
3	(0.0%)	12
46388	(87.4%)	Total

LUMEN INTERACTION WITH SYSTEM

Attenuated	(%)	Absorbed	(%)	Incident	(%)	Layer Name
0.000	(0.0%)	0.402	(0.0%)	1.650	(0.0%)	LAMP-AM700C840D72N2S0
0.000	(0.0%)	2.723	(0.0%)	18.138	(0.0%)	LAMP-AM700C840D72N2S0
0.000	(0.0%)	412.749	(0.8%)	1788.438	(3.4%)	LAMP-AM700C840D72N2S0
0.000	(0.0%)	101.049	(0.2%)	111.894	(0.2%)	LAMP-AM700C840D72N2S0
0.000	(0.0%)	23.356	(0.0%)	34.299	(0.1%)	swa105048 - swa10645-
0.000	(0.0%)	1.323	(0.0%)	2.117	(0.0%)	swa105048 - swa10645-
0.000	(0.0%)	0.029	(0.0%)	0.045	(0.0%)	swa105048 - swa10645-
0.000	(0.0%)	707.618	(1.3%)	1044.517	(2.0%)	swa105048 - swp22213-
0.000	(0.0%)	747.154	(1.4%)	1103.121	(2.1%)	swa105048 - swp22213-
0.000	(0.0%)	10.261	(0.0%)	14.904	(0.0%)	swa105048 - swp22221-
0.000	(0.0%)	11.021	(0.0%)	16.006	(0.0%)	swa105048 - swp22221-
0.000	(0.0%)	1714.404	(3.2%)	2536.624	(4.8%)	swa105048 - swp22231-
0.000	(0.0%)	1265.057	(2.4%)	1865.421	(3.5%)	swa105048 - swp22231-
0.000	(0.0%)	26.119	(0.0%)	38.461	(0.1%)	swa105048 - swp22407-
0.000	(0.0%)	24.164	(0.0%)	35.714	(0.1%)	swa105048 - swp22407-
0.000	(0.0%)	16.577	(0.0%)	24.189	(0.0%)	swa105048 - swp22407-
0.000	(0.0%)	31.567	(0.1%)	50.402	(0.1%)	swa105048 - swp22407-
0.000	(0.0%)	43.109	(0.1%)	68.750	(0.1%)	swa105048 - swp22407-

0.000 (0.0%)	15.965 (0.0%)	23.320 (0.0%)	swa105048 - swp22407-
0.000 (0.0%)	148.580 (0.3%)	221.098 (0.4%)	swa105048 - swp22416-
0.000 (0.0%)	3.925 (0.0%)	5.988 (0.0%)	swa105048 - swp22420-
0.000 (0.0%)	0.131 (0.0%)	0.189 (0.0%)	swa105048 - swp22630-
0.000 (0.0%)	19.807 (0.0%)	28.929 (0.1%)	swa105048 - swp22630-
0.000 (0.0%)	0.092 (0.0%)	0.131 (0.0%)	swa105048 - swp22630-
0.000 (0.0%)	20.079 (0.0%)	29.382 (0.1%)	swa105048 - swp22630-
0.000 (0.0%)	20.782 (0.0%)	30.380 (0.1%)	swa105048 - swp22630-
0.000 (0.0%)	19.372 (0.0%)	28.353 (0.1%)	swa105048 - swp22630-
0.000 (0.0%)	41.676 (0.1%)	669.242 (1.3%)	swa105048 - swp23576-
0.000 (0.0%)	85.427 (0.2%)	1378.348 (2.6%)	swa105048 - swp23576-
0.000 (0.0%)	85.521 (0.2%)	1381.146 (2.6%)	swa105048 - swp23576-
0.000 (0.0%)	85.409 (0.2%)	1377.973 (2.6%)	swa105048 - swp23576-
0.000 (0.0%)	41.970 (0.1%)	673.030 (1.3%)	swa105048 - swp23576-
0.000 (0.0%)	87.051 (0.2%)	1404.718 (2.6%)	swa105048 - swp23576-
0.000 (0.0%)	85.331 (0.2%)	1378.115 (2.6%)	swa105048 - swp23576-
0.000 (0.0%)	86.013 (0.2%)	1388.887 (2.6%)	swa105048 - swp23576-
0.000 (0.0%)	333.859 (0.6%)	596.362 (1.1%)	swa105048 - swp23579-
0.000 (0.0%)	348.316 (0.7%)	620.331 (1.2%)	swa105048 - swp23579-
0.000 (0.0%)	0.049 (0.0%)	0.106 (0.0%)	swa105048 - swp24152-
0.000 (0.0%)	6668.036 (12.6%)	19990.718 (37.6%)	Total

Attenuated (%)	Absorbed (%)	Incident (%)	Material Name
0.000 (0.0%)	598.397 (1.1%)	9651.459 (18.2%)	almiro04
0.000 (0.0%)	101.049 (0.2%)	111.894 (0.2%)	ledblkbase
0.000 (0.0%)	0.402 (0.0%)	1.650 (0.0%)	ledphos
0.000 (0.0%)	2.723 (0.0%)	18.138 (0.0%)	ledwtbrd
0.000 (0.0%)	5552.716 (10.5%)	8419.139 (15.9%)	stbgdst
0.000 (0.0%)	412.749 (0.8%)	1788.438 (3.4%)	whitepcb
0.000 (0.0%)	6668.036 (12.6%)	19990.718 (37.6%)	Total

ANOMALOUS LUMENS

Reached interreflection limit:	33.38 (0.1%)
Fell below minimum ray energy:	10.49 (0.0%)
Redirected lamp distribution:	0.00 (0.0%)
Transmitted through shadow geometry:	0.00 (0.0%)
Ray exited a material prior to entering:	0.00 (0.0%)
Ray enter/exit material mismatch:	0.00 (0.0%)
TIR within an incorrect material:	0.00 (0.0%)
Ray never exited a material:	0.00 (0.0%)
Out of SPD range reflect/transmit:	0.00 (0.0%)
Out of SPD range IOR:	0.00 (0.0%)
Intersected with Overlapping Surfaces:	1.02 (0.0%)

- On layers

LAMP-AM700C840D72N2S00C1

LAMP-AM700C840D72N2S00C2

LAMP-AM700C840D72N2S00C3

LAMP-AM700C840D72N2S00C4

___internal___

swa105048 - swa10645-1 swp22965-1

swa105048 - swa10645-1 swp22967-1

swa105048 - swa10645-1 swp2328-1

swa105048 - swp22213-14

swa105048 - swp22213-16

swa105048 - swp22221-4

swa105048 - swp22221-8

swa105048 - swp22231-6

swa105048 - swp22231-9

swa105048 - swp22407-1

swa105048 - swp22407-10

swa105048 - swp22407-11

swa105048 - swp22407-7

swa105048 - swp22407-8

swa105048 - swp22407-9

swa105048 - swp22416-1

swa105048 - swp22420-1

swa105048 - swp22630-1

swa105048 - swp22630-10

swa105048 - swp22630-11

swa105048 - swp22630-12

swa105048 - swp22630-4

swa105048 - swp22630-9

swa105048 - swp23576-10

swa105048 - swp23576-2

swa105048 - swp23576-3

swa105048 - swp23576-4

swa105048 - swp23576-5

swa105048 - swp23576-7

swa105048 - swp23576-8

swa105048 - swp23576-9

swa105048 - swp23579-4

swa105048 - swp23579-5

swa105048 - swp24152-1

Exited Outside of Photometric distribution: 0.00 (0.0%)

LUMINAIRE PROPERTIES
- Number of lamps: 12
- Lumens per lamp: 4425.0
- Input watts: 355.7
- Distribution: Semi-Direct
- Symmetry: Bilateral
- Photometric Type: C
- Luminous shape: Rectangle with luminous sides
- Luminous dimensions (feet)
  - 0 - 180 Axis: 2.0
  - 90 - 270 Axis: 2.3
  - Height: 0.5

CANDELA DISTRIBUTION

Lumen basis: 53,100 Internal multiplier: 1.00

Ballast factor: 1.00 Tilt factor geometry: No tilt factor.

Candela Distribution

	0.00	22.50	45.00	67.50	90.00	112.50	135.00	15
0.00	12055.91	12055.91	12055.91	12055.91	12055.91	12055.91	12055.91	1205
5.00	11352.59	12293.87	11954.53	12636.11	12760.63	12607.72	12175.75	1148
10.00	12182.99	12202.80	13239.79	14249.01	14118.29	14188.61	13937.51	1281
15.00	12357.48	12785.84	13838.13	14549.75	14636.49	14802.07	13870.53	1292
20.00	11526.62	12944.22	14272.52	15134.36	15810.39	15363.08	14505.29	1319
25.00	11367.26	13067.93	13700.05	14971.20	15710.51	15190.47	14443.20	1318
30.00	10799.66	12670.92	14261.31	15220.02	15890.97	15397.01	13943.33	1292
35.00	10307.93	12499.96	14537.26	13580.65	11480.63	13712.36	13834.12	1266
40.00	10139.48	11806.86	13122.14	9802.37	8974.63	9379.98	12694.31	1207
45.00	9256.32	11621.75	9801.66	7826.40	6194.10	7584.05	10308.81	1178
50.00	8369.10	10799.45	7514.29	3104.81	617.02	2789.70	7674.64	1049
55.00	7903.00	8838.22	4073.86	111.55	35.24	121.40	4317.25	892
60.00	6994.47	6997.00	1281.24	33.62	21.92	33.06	1197.97	690
65.00	5844.69	4756.07	100.53	18.72	12.88	19.74	90.05	454
70.00	4779.03	2456.31	28.00	11.74	6.64	12.08	25.39	220
75.00	3436.43	789.50	19.43	6.58	4.17	6.34	16.54	74
80.00	1859.89	131.46	12.43	3.80	2.41	4.11	12.09	10
85.00	383.84	30.25	6.01	3.66	3.30	3.91	8.33	3
90.00	15.16	17.31	6.45	4.64	5.89	5.57	6.00	1
95.00	164.76	88.16	27.81	20.48	18.03	19.88	29.58	9
100.00	623.45	398.52	229.46	94.99	79.38	94.34	212.21	39
105.00	1101.89	736.93	698.96	502.95	415.40	490.65	642.43	73
110.00	1517.87	1134.21	941.02	965.33	990.43	1006.32	913.26	117
115.00	2058.98	1618.81	1051.00	1213.06	1211.00	1070.09	1103.03	160
120.00	2574.43	1994.60	1604.35	1288.35	1468.11	1454.96	1552.20	208
125.00	2822.65	2544.71	2013.53	1466.06	1624.75	1570.54	2053.22	274
130.00	3265.95	3090.57	2519.28	2339.07	1636.41	2071.03	2540.61	294
135.00	4027.91	3543.94	2981.17	2816.78	2976.29	2690.81	3140.10	347
140.00	4014.50	3689.44	3416.72	3233.30	3190.60	3077.74	3580.71	404
145.00	4231.05	4266.11	3643.09	3657.80	3840.83	3645.60	4067.32	458
150.00	4608.65	4835.32	4453.30	4248.56	4283.97	4026.55	4474.47	504
155.00	4796.30	5356.29	4783.77	4455.41	4413.64	4561.24	4911.60	538
160.00	4728.02	5224.22	5458.67	4858.32	4980.73	5111.40	5212.23	503
165.00	5504.82	5582.31	5671.40	5360.26	5653.42	5174.32	5503.97	527
170.00	6541.71	5879.57	5633.48	5566.98	5727.53	5555.24	5510.41	544
175.00	5729.86	6017.99	5278.91	5664.17	5840.24	5670.48	5546.03	569

180.00	5531.63	5531.63	5531.63	5531.63	5531.63	5531.63	5531.63	553

	180.00
0.00	12055.91
5.00	11414.66
10.00	11492.06
15.00	11854.21
20.00	10703.75
25.00	11604.06
30.00	10905.12
35.00	10193.28
40.00	9306.68
45.00	9270.94
50.00	8243.77
55.00	7665.63
60.00	6475.34
65.00	5870.57
70.00	4885.05
75.00	3419.87
80.00	1818.69
85.00	406.54
90.00	15.97
95.00	146.31
100.00	568.70
105.00	1052.93
110.00	1499.10
115.00	2132.54
120.00	2281.33
125.00	3056.38
130.00	3482.57
135.00	3732.79
140.00	3855.97
145.00	4455.85
150.00	4901.60
155.00	5033.79
160.00	5245.46
165.00	5487.21
170.00	4966.02
175.00	5838.56
180.00	5531.63

INDOOR REPORT

ZONAL LUMENS

Cone	Between	Lumens
1.25	0.00 - 2.50	72.10
5.00	2.50 - 7.50	581.00
10.00	7.50 - 12.50	1268.18
15.00	12.50 - 17.50	1942.11
20.00	17.50 - 22.50	2632.55
25.00	22.50 - 27.50	3236.05
30.00	27.50 - 32.50	3808.25
35.00	32.50 - 37.50	4030.66
40.00	37.50 - 42.50	3857.29
45.00	42.50 - 47.50	3603.88
50.00	47.50 - 52.50	2692.89
55.00	52.50 - 57.50	1919.65
60.00	57.50 - 62.50	1376.85
65.00	62.50 - 67.50	956.08
70.00	67.50 - 72.50	616.33

75.00	72.50 - 77.50	331.95
80.00	77.50 - 82.50	142.60
85.00	82.50 - 87.50	32.97
90.00	87.50 - 92.50	5.24
95.00	92.50 - 97.50	30.87
100.00	97.50 - 102.50	141.54
105.00	102.50 - 107.50	351.02
110.00	107.50 - 112.50	555.59
115.00	112.50 - 117.50	680.80
120.00	117.50 - 122.50	823.21
125.00	122.50 - 127.50	951.59
130.00	127.50 - 132.50	1076.62
135.00	132.50 - 137.50	1235.75
140.00	137.50 - 142.50	1240.69
145.00	142.50 - 147.50	1259.40
150.00	147.50 - 152.50	1237.36
155.00	152.50 - 157.50	1122.91
160.00	157.50 - 162.50	957.78
165.00	162.50 - 167.50	775.24
170.00	167.50 - 172.50	536.28
175.00	172.50 - 177.50	271.72
178.75	177.50 - 180.00	33.08

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0.00 - 30.00	11636.11	21.91	25.08
0.00 - 40.00	19499.54	36.72	42.04
0.00 - 60.00	30333.03	57.12	65.39
0.00 - 90.00	33104.00	62.34	71.36
90.00 - 120.00	2174.04	4.09	4.69
90.00 - 150.00	8968.38	16.89	19.33
90.00 - 180.00	13284.07	25.02	28.64
0.00 - 180.00	46388.07	87.36	100.00

Total Luminaire Optical Efficiency = 87.36%

Luminaire Spacing Criterion (spacing to mounting height ratio)
Two luminaires, plane 0: 1.32
Two luminaires, plane 90: 1.43
Four luminaires: 1.49

Full Beam Angle:

0 - 180	90 - 270
107.12	83.70

Average Luminaire Luminance (cd/m^2)

	0.00	22.50	45.00	67.50	90.00	112.50	135.00	15
0.00	29265.53	29265.53	29265.53	29265.53	29265.53	29265.53	29265.53	2926
45.00	25577.74	30603.91	25515.99	20904.18	17596.97	20256.87	26836.21	3103
55.00	24846.84	26090.24	11848.06	335.44	114.93	365.06	12555.90	2633
65.00	22090.17	16544.50	342.98	66.72	51.14	70.34	307.24	1579
75.00	16923.35	3471.07	83.24	29.90	22.01	28.81	70.83	327
85.00	2835.64	188.47	36.04	23.95	27.17	25.57	49.99	20

	180.00
0.00	29265.53
45.00	25618.13
55.00	24100.54
65.00	22187.97

75.00	16841.80
85.00	3003.33