Indoor Photometric Report
H:\1A-STUFF\GP\GP6-L550-840-W-UPM-DIM-UNV.ray
Created: Thu, 3 Nov 2022 16:21:26

PRODUCT INFORMATION

Test number:	1
Test date:	Thu, 3 Nov 2022 16:21:26
Manufacturer:	
Catalog number:	
Description:	GP6-L550-840-W-UPM-DIM-UNV
Lamp catalog number:	AM700C840D72N2S00C
Lamp description:	LED 25.5W 22" 72 LED linear module (700mA)

ANALYSIS SUMMARY
Traced 5000000 of 5000000 rays.
Rays limited to 6 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
47546	(89.5%)	0
534	(1.0%)	1
93	(0.2%)	2
77	(0.1%)	3
9	(0.0%)	4
1	(0.0%)	5
0	(0.0%)	6
48260	(90.9%)	Total

LUMEN INTERACTION WITH SYSTEM

Attenuated	(%)	Absorbed	(%)	Incident	(%)	Layer Name
0.000	(0.0%)	0.047	(0.0%)	0.308	(0.0%)	LAMP-AM700C840D72N2S0
0.000	(0.0%)	0.547	(0.0%)	3.645	(0.0%)	LAMP-AM700C840D72N2S0
0.000	(0.0%)	42.636	(0.1%)	197.082	(0.4%)	LAMP-AM700C840D72N2S0
0.000	(0.0%)	4.157	(0.0%)	4.517	(0.0%)	LAMP-AM700C840D72N2S0
0.000	(0.0%)	22.990	(0.0%)	33.753	(0.1%)	swa105046 - swa10645-
0.000	(0.0%)	1.225	(0.0%)	1.928	(0.0%)	swa105046 - swa10645-
0.000	(0.0%)	0.018	(0.0%)	0.026	(0.0%)	swa105046 - swa10645-
0.000	(0.0%)	661.308	(1.2%)	976.602	(1.8%)	swa105046 - swp22213-
0.000	(0.0%)	653.986	(1.2%)	965.708	(1.8%)	swa105046 - swp22213-
0.000	(0.0%)	0.614	(0.0%)	0.863	(0.0%)	swa105046 - swp22221-
0.000	(0.0%)	0.647	(0.0%)	0.912	(0.0%)	swa105046 - swp22221-
0.000	(0.0%)	1531.900	(2.9%)	2255.591	(4.2%)	swa105046 - swp22231-
0.000	(0.0%)	1526.503	(2.9%)	2247.257	(4.2%)	swa105046 - swp22231-
0.000	(0.0%)	31.795	(0.1%)	46.911	(0.1%)	swa105046 - swp22407-
0.000	(0.0%)	31.789	(0.1%)	46.890	(0.1%)	swa105046 - swp22407-
0.000	(0.0%)	15.770	(0.0%)	23.195	(0.0%)	swa105046 - swp22407-
0.000	(0.0%)	35.182	(0.1%)	54.330	(0.1%)	swa105046 - swp22407-
0.000	(0.0%)	35.754	(0.1%)	55.080	(0.1%)	swa105046 - swp22407-
0.000	(0.0%)	15.905	(0.0%)	23.410	(0.0%)	swa105046 - swp22407-
0.000	(0.0%)	120.538	(0.2%)	180.084	(0.3%)	swa105046 - swp22416-
0.000	(0.0%)	17.790	(0.0%)	27.523	(0.1%)	swa105046 - swp22420-
0.000	(0.0%)	0.140	(0.0%)	0.202	(0.0%)	swa105046 - swp22630-
0.000	(0.0%)	19.835	(0.0%)	28.969	(0.1%)	swa105046 - swp22630-
0.000	(0.0%)	0.151	(0.0%)	0.218	(0.0%)	swa105046 - swp22630-

0.000 (0.0%)	20.011 (0.0%)	29.211 (0.1%)	swa105046 - swp22630-
0.000 (0.0%)	19.396 (0.0%)	28.323 (0.1%)	swa105046 - swp22630-
0.000 (0.0%)	18.871 (0.0%)	27.581 (0.1%)	swa105046 - swp22630-
0.000 (0.0%)	0.047 (0.0%)	0.080 (0.0%)	swa105046 - swp24152-
0.000 (0.0%)	4829.552 (9.1%)	7260.198 (13.7%)	Total

Attenuated (%)	Absorbed (%)	Incident (%)	Material Name
0.000 (0.0%)	4.157 (0.0%)	4.517 (0.0%)	ledblkbase
0.000 (0.0%)	0.047 (0.0%)	0.308 (0.0%)	ledphos
0.000 (0.0%)	0.547 (0.0%)	3.645 (0.0%)	ledwtbrd
0.000 (0.0%)	4782.164 (9.0%)	7054.647 (13.3%)	stbgdst
0.000 (0.0%)	42.636 (0.1%)	197.082 (0.4%)	whitepcb
0.000 (0.0%)	4829.552 (9.1%)	7260.198 (13.7%)	Total

ANOMALOUS LUMENS

Reached interreflection limit:	0.06 (0.0%)
Fell below minimum ray energy:	10.37 (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:	0.00 (0.0%)
Exited Outside of Photometric distribution:	0.00 (0.0%)

LUMINAIRE PROPERTIES

Number of lamps: 6
Lumens per lamp: 8850.0
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
Ballast factor: 1.00
Internal multiplier: 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	11390.35	11390.35	11390.35	11390.35	11390.35	11390.35	11390.35	1139
5.00	11107.20	11152.24	11165.94	10809.28	10866.26	11169.48	10891.35	1117
10.00	10863.52	10786.56	10992.54	11122.43	10873.94	10825.81	11020.76	1103
15.00	10728.07	10705.96	10900.58	10843.70	10401.33	10918.32	10782.72	1089
20.00	10518.22	10452.01	10527.50	10464.02	10507.20	10540.56	10665.05	1068
25.00	9978.50	10261.23	10057.88	10232.58	10117.34	10107.10	10211.24	1021
30.00	9832.59	9888.02	9584.76	9662.10	9709.87	9788.68	9769.97	988
35.00	9155.04	9186.91	8832.19	9321.50	9187.82	9130.26	9031.06	918
40.00	8662.25	8570.25	8658.39	8757.80	8671.64	8665.96	8633.00	837
45.00	8030.26	7789.71	8167.03	8007.83	8009.57	7961.77	7842.37	789
50.00	7361.62	7055.05	7258.97	7239.79	7030.83	7425.96	7341.44	720
55.00	6387.15	6359.22	6307.02	6544.85	6590.49	6674.98	6573.43	630

60.00	5485.95	5635.50	5640.07	5788.23	5698.25	5731.58	5571.22	545
65.00	4630.64	4695.73	4704.66	4770.18	4663.81	4836.83	4760.10	460
70.00	3716.01	3685.95	3725.89	3811.09	3847.47	3881.30	3812.13	358
75.00	2705.22	2670.39	2846.61	2979.59	2927.55	2810.91	2800.06	272
80.00	1729.66	1685.18	1821.35	1890.43	1984.80	1954.03	1841.10	177
85.00	716.54	739.35	821.68	893.41	953.99	916.02	866.52	78
90.00	47.52	53.66	65.45	73.79	75.50	82.89	64.42	5
95.00	145.31	94.77	30.77	24.01	17.04	23.28	34.44	8
100.00	605.11	377.08	219.12	99.90	77.67	98.63	217.66	37
105.00	1170.43	677.17	612.80	497.25	430.93	505.61	662.34	67
110.00	1519.78	1045.07	860.04	983.09	1009.90	914.42	878.68	107
115.00	2049.76	1550.26	1038.65	1141.96	1159.33	1132.85	1083.22	153
120.00	2561.56	2139.34	1299.00	1353.67	1385.61	1320.28	1318.94	201
125.00	2920.26	2903.31	1409.25	1559.20	1543.04	1512.06	1492.39	286
130.00	3351.73	3415.63	1953.80	1607.94	1680.61	1632.92	1883.79	331
135.00	3724.37	3877.43	2931.06	1787.11	1847.07	1830.05	3054.02	393
140.00	4203.59	4086.46	4209.68	2358.41	1940.46	2300.43	4204.14	430
145.00	4542.04	4507.51	4389.56	4309.41	3762.81	4365.58	4612.16	433
150.00	4740.86	4629.11	4736.51	4913.93	5018.64	4936.75	4762.66	484
155.00	4898.00	5079.95	5400.83	5278.50	5195.26	5291.83	5028.39	503
160.00	5191.05	5151.30	5333.08	5300.96	5261.90	5120.12	5402.52	536
165.00	5507.44	5343.30	5317.91	5415.97	5401.10	5599.77	5420.25	559
170.00	5550.91	5434.38	5598.67	5487.14	5789.99	5741.06	5638.91	557
175.00	5826.66	5733.72	5718.83	5857.97	5761.72	5720.43	5680.64	554
180.00	5583.66	5583.66	5583.66	5583.66	5583.66	5583.66	5583.66	558

	180.00
0.00	11390.35
5.00	11263.98
10.00	10951.69
15.00	10922.58
20.00	10367.69
25.00	10179.33
30.00	9790.02
35.00	9354.42
40.00	8828.98
45.00	8157.71
50.00	7087.63
55.00	6370.55
60.00	5542.00
65.00	4537.48
70.00	3601.22
75.00	2676.02
80.00	1803.93
85.00	751.60
90.00	38.21
95.00	144.82
100.00	617.22
105.00	1132.03
110.00	1591.06
115.00	2083.25
120.00	2640.45
125.00	2958.65
130.00	3491.40
135.00	3970.19
140.00	4128.90
145.00	4338.48
150.00	4990.21
155.00	4893.98
160.00	4879.32

165.00	5389.21
170.00	5813.09
175.00	5814.52
180.00	5583.66

INDOOR REPORT

ZONAL LUMENS

Cone	Between	Lumens
1.25	0.00 - 2.50	68.12
5.00	2.50 - 7.50	527.99
10.00	7.50 - 12.50	1041.83
15.00	12.50 - 17.50	1529.96
20.00	17.50 - 22.50	1975.23
25.00	22.50 - 27.50	2353.77
30.00	27.50 - 32.50	2675.42
35.00	32.50 - 37.50	2874.13
40.00	37.50 - 42.50	3042.43
45.00	42.50 - 47.50	3089.60
50.00	47.50 - 52.50	3033.00
55.00	52.50 - 57.50	2903.85
60.00	57.50 - 62.50	2672.04
65.00	62.50 - 67.50	2336.28
70.00	67.50 - 72.50	1931.73
75.00	72.50 - 77.50	1485.60
80.00	77.50 - 82.50	993.08
85.00	82.50 - 87.50	458.30
90.00	87.50 - 92.50	35.26
95.00	92.50 - 97.50	31.24
100.00	97.50 - 102.50	140.28
105.00	102.50 - 107.50	345.03
110.00	107.50 - 112.50	535.78
115.00	112.50 - 117.50	664.80
120.00	117.50 - 122.50	796.96
125.00	122.50 - 127.50	910.32
130.00	127.50 - 132.50	992.54
135.00	132.50 - 137.50	1119.78
140.00	137.50 - 142.50	1214.18
145.00	142.50 - 147.50	1364.60
150.00	147.50 - 152.50	1326.20
155.00	152.50 - 157.50	1193.06
160.00	157.50 - 162.50	983.53
165.00	162.50 - 167.50	772.10
170.00	167.50 - 172.50	534.81
175.00	172.50 - 177.50	273.76
178.75	177.50 - 180.00	33.39

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0.00 - 30.00	8834.61	16.64	18.31
0.00 - 40.00	14567.66	27.43	30.19
0.00 - 60.00	26451.33	49.81	54.81
0.00 - 90.00	35009.98	65.93	72.54
90.00 - 120.00	2133.24	4.02	4.42
90.00 - 150.00	8796.24	16.57	18.23
90.00 - 180.00	13249.99	24.95	27.46
0.00 - 180.00	48259.98	90.89	100.00

Total Luminaire Optical Efficiency = 90.89%

Luminaire Spacing Criterion (spacing to mounting height ratio)
Two luminaires, plane 0: 1.27
Two luminaires, plane 90: 1.26
Four luminaires: 1.40

Full Beam Angle:

0 - 180	90 - 270
117.91	120.03

Average Luminaire Luminance (cd/m^2)

	0.00	22.50	45.00	67.50	90.00	112.50	135.00	15
0.00	27649.90	27649.90	27649.90	27649.90	27649.90	27649.90	27649.90	2764
45.00	22189.78	20512.88	21260.66	21388.79	22754.56	21265.74	20415.49	2079
55.00	20081.03	18772.30	18342.75	19680.55	21494.71	20071.85	19117.56	1862
65.00	17501.61	16334.59	16051.41	16999.32	18514.16	17236.86	16240.59	1602
75.00	13322.34	11740.42	12193.65	13534.98	15444.99	12768.76	11994.24	1196
85.00	5293.39	4605.91	4928.88	5840.00	7856.40	5987.82	5197.84	491

	180.00
0.00	27649.90
45.00	22541.97
55.00	20028.83
65.00	17149.54
75.00	13178.57
85.00	5552.45