

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : BY120P G3 1XLED105S\_840 WB.IES

## DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] LVC2160052  
 [TESTLAB]  
 [MANUFAC] PHILIPS  
 [LUMCAT]  
 [LUMINAIRE] BY120P G3 WB LED105S/840 NO  
 [LAMP] LED105S/840  
 [BALLAST] -  
 [ISSUEDATE] 2016-01-19  
 [OTHER] B-Angle = 0.00 B-Tilt = 0.00 2019-06-21

## CHARACTERISTICS

Lumens Per Lamp	10500 (1 lamp)
Total Lamp Lumens	10500
Luminaire Lumens	10502
Total Luminaire Efficiency	100 %
Luminaire Efficacy Rating (LER)	124
Total Luminaire Watts	85
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.62
Spacing Criterion (90-270)	1.60
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.21 m (Diameter)
Luminous Width (90-270)	0.21 m (Diameter)
Luminous Height	0.00 m

## LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	122692	123360	120733
55	47161	45953	49083
65	28166	25707	28017
75	18859	18616	19102
85	7226	7588	7949

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**CANDELA TABULATION**

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
<b>0.0</b>	4092.90	4092.90	4092.90	4092.90	4092.90	4092.90	4092.90	4092.90	4092.90	4092.90
<b>2.5</b>	4080.30	4079.25	4078.20	4080.30	4075.05	4080.30	4079.25	4076.10	4083.45	4089.75
<b>5.0</b>	4064.55	4061.40	4063.50	4063.50	4060.35	4065.60	4062.45	4062.45	4064.55	4074.00
<b>7.5</b>	4036.20	4030.95	4035.15	4033.05	4029.90	4035.15	4030.95	4032.00	4030.95	4040.40
<b>10.0</b>	4012.05	4009.95	4011.00	4008.90	4006.80	4009.95	4005.75	4007.85	4003.65	4011.00
<b>12.5</b>	4018.35	4013.10	4014.15	4014.15	4011.00	4014.15	4006.80	4012.05	4011.00	4019.40
<b>15.0</b>	4090.80	4087.65	4087.65	4084.50	4085.55	4086.60	4079.25	4089.75	4086.60	4100.25
<b>17.5</b>	4263.00	4263.00	4259.85	4263.00	4259.85	4263.00	4258.80	4265.10	4267.20	4284.00
<b>20.0</b>	4505.55	4508.70	4505.55	4508.70	4512.90	4516.05	4515.00	4523.40	4532.85	4545.45
<b>22.5</b>	4759.65	4764.90	4761.75	4764.90	4767.00	4773.30	4774.35	4778.55	4781.70	4799.55
<b>25.0</b>	4979.10	4975.95	4977.00	4972.80	4968.60	4968.60	4964.40	4960.20	4962.30	4977.00
<b>27.5</b>	5112.45	5108.25	5106.15	5096.70	5090.40	5077.80	5069.40	5059.95	5063.10	5076.75
<b>30.0</b>	5134.50	5128.20	5122.95	5113.50	5106.15	5099.85	5090.40	5083.05	5083.05	5094.60
<b>32.5</b>	5046.30	5041.05	5041.05	5035.80	5031.60	5030.55	5022.15	5025.30	5025.30	5034.75
<b>35.0</b>	4863.60	4861.50	4861.50	4857.30	4854.15	4857.30	4854.15	4863.60	4865.70	4875.15
<b>37.5</b>	4571.70	4568.55	4567.50	4566.45	4563.30	4569.60	4568.55	4574.85	4580.10	4586.40
<b>40.0</b>	4138.05	4134.90	4134.90	4133.85	4132.80	4141.20	4145.40	4149.60	4155.90	4155.90
<b>42.5</b>	3564.75	3560.55	3561.60	3558.45	3559.50	3566.85	3568.95	3575.25	3576.30	3576.30
<b>45.0</b>	2892.75	2889.60	2888.55	2885.40	2886.45	2891.70	2898.00	2903.25	2904.30	2908.50
<b>47.5</b>	2216.55	2214.45	2214.45	2211.30	2213.40	2217.60	2221.80	2228.10	2231.25	2239.65
<b>50.0</b>	1640.10	1639.05	1635.90	1632.75	1633.80	1632.75	1636.95	1641.15	1646.40	1654.80
<b>52.5</b>	1201.20	1199.10	1195.95	1192.80	1190.70	1188.60	1187.55	1190.70	1194.90	1200.15
<b>55.0</b>	901.95	898.80	892.50	886.20	882.00	877.80	875.70	874.65	876.75	878.85
<b>57.5</b>	722.40	712.95	696.15	681.45	672.00	664.65	661.50	659.40	661.50	663.60
<b>60.0</b>	604.80	589.05	556.50	534.45	527.10	523.95	521.85	519.75	519.75	520.80
<b>62.5</b>	525.00	484.05	446.25	433.65	432.60	434.70	431.55	428.40	427.35	428.40
<b>65.0</b>	396.90	384.30	370.65	366.45	367.50	370.65	368.55	363.30	362.25	362.25
<b>67.5</b>	322.35	317.10	311.85	309.75	311.85	315.00	313.95	307.65	306.60	306.60
<b>70.0</b>	262.50	260.40	258.30	257.25	259.35	263.55	261.45	256.20	254.10	254.10
<b>72.5</b>	210.00	210.00	208.95	208.95	210.00	214.20	213.15	207.90	205.80	204.75
<b>75.0</b>	162.75	162.75	163.80	162.75	163.80	166.95	166.95	162.75	160.65	160.65
<b>77.5</b>	120.75	120.75	121.80	120.75	121.80	124.95	123.90	120.75	119.70	119.70
<b>80.0</b>	82.95	82.95	84.00	82.95	84.00	86.10	86.10	84.00	82.95	82.95
<b>82.5</b>	49.35	50.40	50.40	50.40	50.40	51.45	51.45	50.40	50.40	49.35
<b>85.0</b>	21.00	21.00	21.00	21.00	22.05	22.05	22.05	22.05	22.05	22.05
<b>87.5</b>	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15
<b>90.0</b>	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.00	0.00
<b>92.5</b>	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>95.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>97.5</b>	0.00	1.05	0.00	0.00	1.05	0.00	1.05	0.00	0.00	0.00
<b>100.0</b>	1.05	1.05	0.00	1.05	1.05	1.05	0.00	0.00	1.05	1.05
<b>180.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Vert. Angles**      **Horizontal Angles**

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>
<b>0.0</b>	4092.90	4092.90	4092.90	4092.90	4092.90	4092.90	4092.90	4092.90	4092.90
<b>2.5</b>	4080.30	4083.45	4086.60	4085.55	4087.65	4088.70	4083.45	4085.55	4088.70
<b>5.0</b>	4066.65	4065.60	4066.65	4064.55	4067.70	4071.90	4069.80	4068.75	4070.85
<b>7.5</b>	4037.25	4038.30	4039.35	4036.20	4040.40	4040.40	4037.25	4039.35	4038.30
<b>10.0</b>	4005.75	4008.90	4013.10	4013.10	4013.10	4016.25	4014.15	4019.40	4019.40
<b>12.5</b>	4014.15	4021.50	4025.70	4021.50	4025.70	4028.85	4029.90	4032.00	4035.15
<b>15.0</b>	4092.90	4100.25	4101.30	4101.30	4107.60	4112.85	4112.85	4112.85	4117.05
<b>17.5</b>	4276.65	4285.05	4289.25	4288.20	4301.85	4308.15	4306.05	4311.30	4313.40
<b>20.0</b>	4541.25	4547.55	4557.00	4558.05	4565.40	4571.70	4568.55	4571.70	4572.75
<b>22.5</b>	4790.10	4800.60	4804.80	4804.80	4812.15	4819.50	4819.50	4821.60	4826.85
<b>25.0</b>	4970.70	4981.20	4988.55	4993.80	5003.25	5006.40	5010.60	5012.70	5016.90
<b>27.5</b>	5068.35	5079.90	5089.35	5097.75	5106.15	5116.65	5121.90	5128.20	5131.35

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**CANDELA TABULATION - (Cont.)**

30.0	5083.05	5095.65	5104.05	5112.45	5119.80	5128.20	5135.55	5141.85	5145.00
32.5	5024.25	5030.55	5032.65	5030.55	5033.70	5038.95	5036.85	5035.80	5037.90
35.0	4861.50	4861.50	4857.30	4843.65	4838.40	4836.30	4828.95	4825.80	4827.90
37.5	4570.65	4565.40	4552.80	4532.85	4524.45	4517.10	4508.70	4503.45	4504.50
40.0	4134.90	4125.45	4106.55	4084.50	4071.90	4061.40	4048.80	4042.50	4045.65
42.5	3559.50	3549.00	3531.15	3507.00	3494.40	3481.80	3473.40	3466.05	3468.15
45.0	2895.90	2890.65	2878.05	2863.35	2858.10	2850.75	2847.60	2844.45	2846.55
47.5	2238.60	2241.75	2242.80	2242.80	2247.00	2248.05	2251.20	2253.30	2255.40
50.0	1660.05	1669.50	1676.85	1686.30	1697.85	1707.30	1716.75	1719.90	1723.05
52.5	1206.45	1214.85	1223.25	1232.70	1245.30	1256.85	1266.30	1270.50	1273.65
55.0	882.00	887.25	894.60	901.95	912.45	920.85	928.20	935.55	938.70
57.5	663.60	663.60	667.80	673.05	681.45	693.00	706.65	722.40	730.80
60.0	520.80	519.75	521.85	525.00	529.20	535.50	557.55	584.85	598.50
62.5	427.35	427.35	431.55	435.75	433.65	433.65	444.15	478.80	514.50
65.0	362.25	363.30	368.55	371.70	368.55	365.40	369.60	381.15	394.80
67.5	305.55	307.65	313.95	317.10	312.90	309.75	310.80	316.05	321.30
70.0	254.10	256.20	262.50	264.60	260.40	258.30	259.35	260.40	262.50
72.5	205.80	207.90	213.15	215.25	211.05	210.00	210.00	211.05	211.05
75.0	160.65	162.75	168.00	169.05	165.90	164.85	165.90	164.85	164.85
77.5	119.70	121.80	126.00	127.05	123.90	122.85	123.90	123.90	123.90
80.0	84.00	86.10	88.20	89.25	87.15	87.15	88.20	87.15	87.15
82.5	50.40	52.50	53.55	54.60	53.55	53.55	53.55	54.60	54.60
85.0	22.05	23.10	24.15	24.15	24.15	23.10	23.10	23.10	23.10
87.5	3.15	4.20	4.20	4.20	4.20	3.15	3.15	3.15	3.15
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.00
95.0	0.00	1.05	0.00	0.00	0.00	1.05	0.00	0.00	1.05
97.5	1.05	0.00	1.05	0.00	0.00	0.00	0.00	1.05	0.00
100.0	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1575.07	15.00	15.00
0-30	3861.58	36.80	36.80
0-40	6841.56	65.20	65.10
0-60	9913.89	94.40	94.40
0-80	10466.75	99.70	99.70
0-90	10499.48	100.00	100.00
10-90	10113.3	96.30	96.30
20-40	5266.5	50.20	50.10
20-50	7474.44	71.20	71.20
40-70	3448.94	32.80	32.80
60-80	552.86	5.30	5.30
70-80	176.25	1.70	1.70
80-90	32.73	0.30	0.30
90-110	0.29	0.00	0.00
90-120	0.29	0.00	0.00
90-130	0.29	0.00	0.00
90-150	0.29	0.00	0.00
90-180	2.56	0.00	0.00
110-180	2.27	0.00	0.00
0-180	10502.03	100.00	100.00

Total Luminaire Efficiency = 100.00%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	386.17
10-20	1188.9
20-30	2286.51
30-40	2979.98
40-50	2207.95
50-60	864.38
60-70	376.61
70-80	176.25
80-90	32.73
90-100	0.29
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	2.27

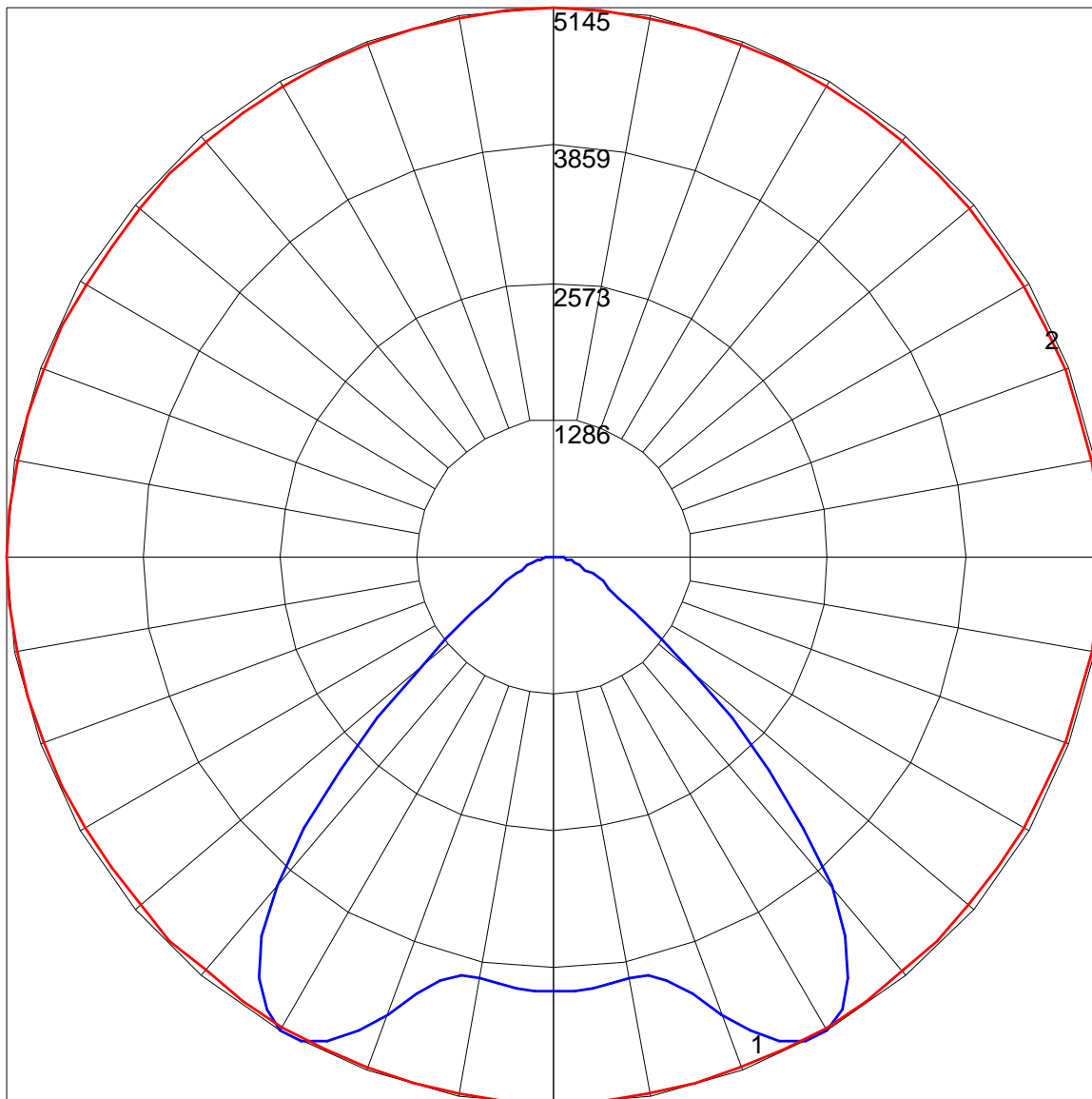
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	75	69	65	73	68	64	71	67	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	43
8	67	55	47	42	65	54	47	42	53	46	41	51	45	41	50	45	41	39
9	62	50	43	38	61	50	42	38	49	42	37	48	42	37	47	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

POLAR GRAPH



Maximum Candela = 5145 Located At Horizontal Angle = 90, Vertical Angle = 30

# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)

# 2 - Horizontal Cone Through Vertical Angle (30) (Through Max. Cd.)