

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : ALXXX16LEDGV-15L35KEX-AL16XX16FO90.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002

[TESTLAB] Photopia 2015.1.1 see: www.ltioptics.com/ies

[ISSUEDATE]

[TESTDATE] Wed Jun 29 2016

[UPDATE] Mon Sep 18 2017

[TEST] SP-00392\_33\_M-15L-Gen3

[MANUFAC] Spectrum Lighting

[LUMCAT] ALxxx16LEDGV-15L-35K-EX-AL16-xx16-FO90

[LUMINAIRE] 16" Diam. LED Low Bay: ALDDH and ALEXT Series, Spun Aluminum Reflector

[OTHER] Flat Lens, White Optical Acrylic

[OTHER] 68.4 Deg. Beam Angle

[LAMP] N/A

[LAMPCAT] N/A, Gen3

[OTHER] Total Luminaire Watts is approximate

[OTHER] CCT Output Multipliers: 50K x 1.06, 40K X 1.03, 30K X 0.985, 27K X 0.971

[OTHER] This report prepared by Spectrum Lighting, scaled from Gen2 60L

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1052
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	10
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.06
Spacing Criterion (90-270)	1.06
Spacing Criterion (Diagonal)	1.02
Basic Luminous Shape	Circular
Luminous Length (0-180)	1.33 ft (Diameter)
Luminous Width (90-270)	1.33 ft (Diameter)
Luminous Height	0.00 ft

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : ALXXX16LEDGV-15L35KEX-AL16XX16FO90.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1903	1912	1923
55	1495	1462	1489
65	1032	1056	1040
75	644	643	643
85	468	490	449

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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>
<b>0.0</b>	699.549	699.549	699.549	699.549	699.549	699.549	699.549	699.549	699.549	699.549
<b>2.5</b>	701.013	694.169	697.888	699.543	703.059	699.543	697.888	694.169	701.013	694.169
<b>5.0</b>	702.477	688.788	696.226	699.536	706.569	699.536	696.226	688.788	702.477	688.788
<b>7.5</b>	702.691	697.072	699.318	700.322	704.659	700.322	699.318	697.072	702.691	697.072
<b>10.0</b>	702.905	705.356	702.410	701.108	702.749	701.108	702.410	705.356	702.905	705.356
<b>12.5</b>	691.211	695.582	692.331	688.537	697.235	688.537	692.331	695.582	691.211	695.582
<b>15.0</b>	679.516	685.808	682.252	675.965	691.721	675.965	682.252	685.808	679.516	685.808
<b>17.5</b>	657.119	660.897	660.476	657.247	661.763	657.247	660.476	660.897	657.119	660.897
<b>20.0</b>	634.721	635.985	638.700	638.528	631.805	638.528	638.700	635.985	634.721	635.985
<b>22.5</b>	596.144	599.220	600.534	600.765	596.576	600.765	600.534	599.220	596.144	599.220
<b>25.0</b>	557.567	562.454	562.367	563.001	561.347	563.001	562.367	562.454	557.567	562.454
<b>27.5</b>	505.609	509.818	510.645	512.870	512.026	512.870	510.645	509.818	505.609	509.818
<b>30.0</b>	453.651	457.182	458.923	462.738	462.705	462.738	458.923	457.182	453.651	457.182
<b>32.5</b>	396.710	399.659	398.565	402.223	401.581	402.223	398.565	399.659	396.710	399.659
<b>35.0</b>	339.768	342.135	338.207	341.707	340.456	341.707	338.207	342.135	339.768	342.135
<b>37.5</b>	288.012	290.362	288.795	290.276	289.382	290.276	288.795	290.362	288.012	290.362
<b>40.0</b>	236.255	238.588	239.383	238.844	238.308	238.844	239.383	238.588	236.255	238.588
<b>42.5</b>	205.504	205.751	207.475	206.069	207.435	206.069	207.475	205.751	205.504	205.751
<b>45.0</b>	174.752	172.914	175.567	173.293	176.562	173.293	175.567	172.914	174.752	172.914
<b>47.5</b>	156.349	155.867	156.887	155.504	157.653	155.504	156.887	155.867	156.349	155.867
<b>50.0</b>	137.946	138.820	138.207	137.715	138.743	137.715	138.207	138.820	137.946	138.820
<b>52.5</b>	124.656	124.118	123.557	123.625	124.829	123.625	123.557	124.118	124.656	124.118
<b>55.0</b>	111.365	109.416	108.906	109.534	110.914	109.534	108.906	109.416	111.365	109.416
<b>57.5</b>	97.265	96.350	95.716	96.059	96.841	96.059	95.716	96.350	97.265	96.350
<b>60.0</b>	83.166	83.284	82.527	82.584	82.768	82.584	82.527	83.284	83.166	83.284
<b>62.5</b>	69.891	70.133	70.231	70.344	69.922	70.344	70.231	70.133	69.891	70.133
<b>65.0</b>	56.616	56.982	57.934	58.103	57.075	58.103	57.934	56.982	56.616	56.982
<b>67.5</b>	46.970	46.689	47.514	47.761	46.977	47.761	47.514	46.689	46.970	46.689
<b>70.0</b>	37.324	36.396	37.093	37.419	36.878	37.419	37.093	36.396	37.324	36.396
<b>72.5</b>	29.486	29.079	29.342	29.604	29.245	29.604	29.342	29.079	29.486	29.079
<b>75.0</b>	21.648	21.761	21.591	21.789	21.612	21.789	21.591	21.761	21.648	21.761
<b>77.5</b>	16.506	16.855	16.766	16.664	16.837	16.664	16.766	16.855	16.506	16.855
<b>80.0</b>	11.364	11.948	11.941	11.538	12.061	11.538	11.941	11.948	11.364	11.948
<b>82.5</b>	8.331	8.636	8.744	8.414	8.572	8.414	8.744	8.636	8.331	8.636
<b>85.0</b>	5.297	5.323	5.546	5.290	5.082	5.290	5.546	5.323	5.297	5.323
<b>87.5</b>	3.459	3.471	3.636	3.423	3.410	3.423	3.636	3.471	3.459	3.471
<b>90.0</b>	1.620	1.618	1.726	1.556	1.738	1.556	1.726	1.618	1.620	1.618

**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>
<b>0.0</b>	699.549	699.549	699.549	699.549	699.549	699.549	699.549
<b>2.5</b>	697.888	699.543	703.059	699.543	697.888	694.169	701.013
<b>5.0</b>	696.226	699.536	706.569	699.536	696.226	688.788	702.477
<b>7.5</b>	699.318	700.322	704.659	700.322	699.318	697.072	702.691
<b>10.0</b>	702.410	701.108	702.749	701.108	702.410	705.356	702.905
<b>12.5</b>	692.331	688.537	697.235	688.537	692.331	695.582	691.211
<b>15.0</b>	682.252	675.965	691.721	675.965	682.252	685.808	679.516
<b>17.5</b>	660.476	657.247	661.763	657.247	660.476	660.897	657.119
<b>20.0</b>	638.700	638.528	631.805	638.528	638.700	635.985	634.721
<b>22.5</b>	600.534	600.765	596.576	600.765	600.534	599.220	596.144
<b>25.0</b>	562.367	563.001	561.347	563.001	562.367	562.454	557.567
<b>27.5</b>	510.645	512.870	512.026	512.870	510.645	509.818	505.609
<b>30.0</b>	458.923	462.738	462.705	462.738	458.923	457.182	453.651

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<b>32.5</b>	398.565	402.223	401.581	402.223	398.565	399.659	396.710
<b>35.0</b>	338.207	341.707	340.456	341.707	338.207	342.135	339.768
<b>37.5</b>	288.795	290.276	289.382	290.276	288.795	290.362	288.012
<b>40.0</b>	239.383	238.844	238.308	238.844	239.383	238.588	236.255
<b>42.5</b>	207.475	206.069	207.435	206.069	207.475	205.751	205.504
<b>45.0</b>	175.567	173.293	176.562	173.293	175.567	172.914	174.752
<b>47.5</b>	156.887	155.504	157.653	155.504	156.887	155.867	156.349
<b>50.0</b>	138.207	137.715	138.743	137.715	138.207	138.820	137.946
<b>52.5</b>	123.557	123.625	124.829	123.625	123.557	124.118	124.656
<b>55.0</b>	108.906	109.534	110.914	109.534	108.906	109.416	111.365
<b>57.5</b>	95.716	96.059	96.841	96.059	95.716	96.350	97.265
<b>60.0</b>	82.527	82.584	82.768	82.584	82.527	83.284	83.166
<b>62.5</b>	70.231	70.344	69.922	70.344	70.231	70.133	69.891
<b>65.0</b>	57.934	58.103	57.075	58.103	57.934	56.982	56.616
<b>67.5</b>	47.514	47.761	46.977	47.761	47.514	46.689	46.970
<b>70.0</b>	37.093	37.419	36.878	37.419	37.093	36.396	37.324
<b>72.5</b>	29.342	29.604	29.245	29.604	29.342	29.079	29.486
<b>75.0</b>	21.591	21.789	21.612	21.789	21.591	21.761	21.648
<b>77.5</b>	16.766	16.664	16.837	16.664	16.766	16.855	16.506
<b>80.0</b>	11.941	11.538	12.061	11.538	11.941	11.948	11.364
<b>82.5</b>	8.744	8.414	8.572	8.414	8.744	8.636	8.331
<b>85.0</b>	5.546	5.290	5.082	5.290	5.546	5.323	5.297
<b>87.5</b>	3.636	3.423	3.410	3.423	3.636	3.471	3.459
<b>90.0</b>	1.726	1.556	1.738	1.556	1.726	1.618	1.620

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	257.49	N.A.	24.50
0-30	511.92	N.A.	48.60
0-40	725.77	N.A.	69.00
0-60	963.53	N.A.	91.60
0-80	1045.78	N.A.	99.40
0-90	1052.34	N.A.	100.00
10-90	985.54	N.A.	93.70
20-40	468.28	N.A.	44.50
20-50	607.69	N.A.	57.70
40-70	295.73	N.A.	28.10
60-80	82.25	N.A.	7.80
70-80	24.28	N.A.	2.30
80-90	6.56	N.A.	0.60
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1052.34	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	66.80
10-20	190.69
20-30	254.43
30-40	213.85
40-50	139.41
50-60	98.35
60-70	57.97
70-80	24.28
80-90	6.56
90-100	0.00
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	0.00

# IES INDOOR REPORT

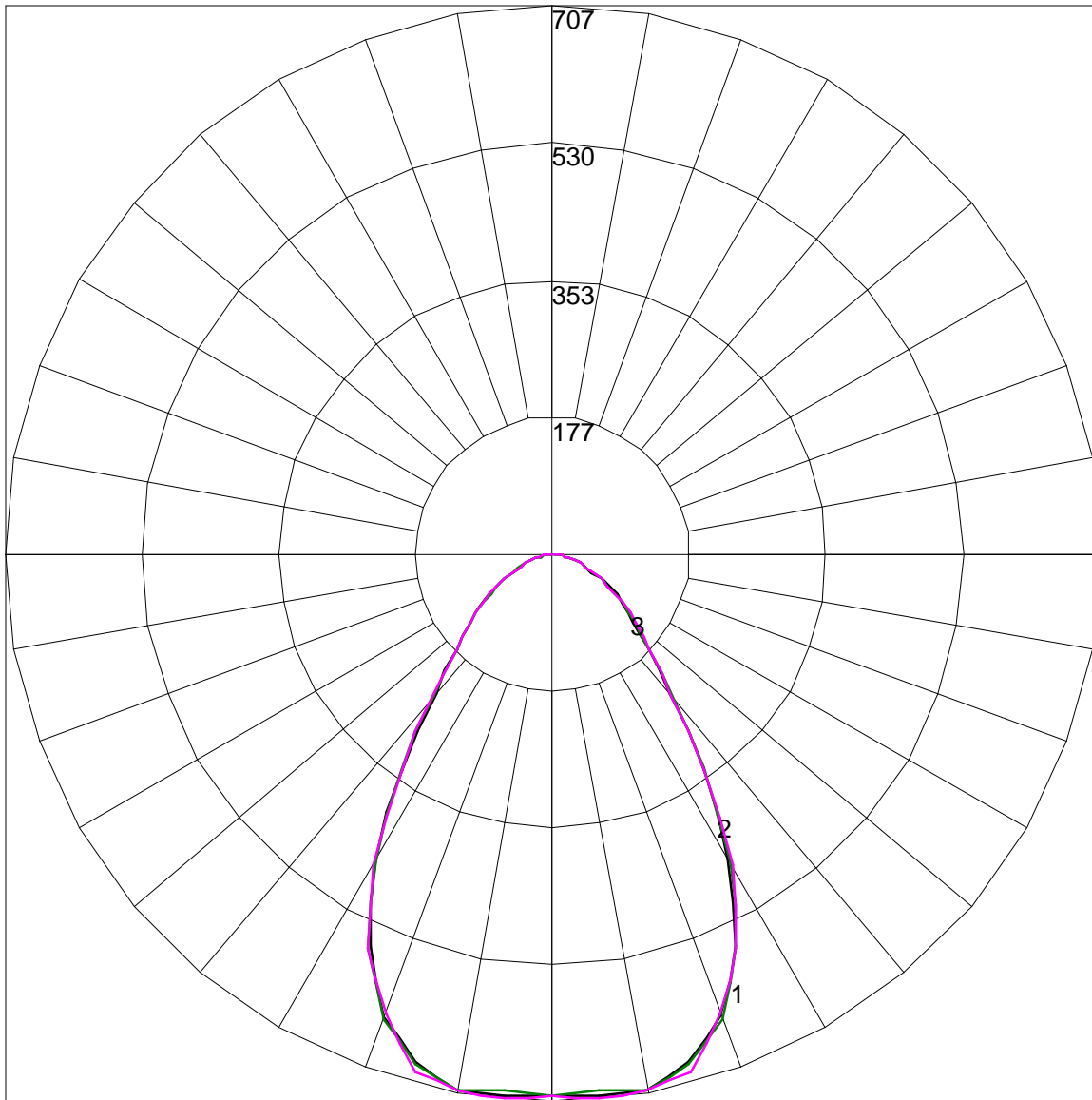
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	77	95	87	81	76	84	79	75	82	77	74	79	76	72	71
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	43	39	37

POLAR GRAPH



Maximum Candela = 706.569 Located At Horizontal Angle = 90, Vertical Angle = 5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)  
# 2 - Vertical Plane Through Horizontal Angles (45 - 225)  
# 3 - Vertical Plane Through Horizontal Angles (90 - 270)