



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6AR-L15-835-DIM-UNV-AM-OF-WH\_0 DEGREE TILT.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 20410.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 24-JUL-2020

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMINAIRE] GEN7 V13 LED 6"SHORT HEATSINK 6"RND ADJ DOWNLIGHT @ 0 TILT

[MORE] ACRYLIC MED TIR OPTIC & 6"WHITE ASYM TRIM w/ANGLED SOLITE

[MORE] LENS ADVANCE #XI025C070V054DSM5 @ 530mA

[LUMCAT] 6AR-L15-835-DIM-UNV-AM-OF-WH\_0 DEGREE TILT

[LAMPCAT] BXRE-35E2000

[\_SEARCH\_SOURCETYPE] LED

[\_SEARCH\_APPLICATION] Indoor, Classroom, Industrial, Office, Direct, Downlight

[\_SEARCH\_MOUNTING] Recessed

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1340
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	89
Total Luminaire Watts	15.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.56
Spacing Criterion (90-270)	0.54
Spacing Criterion (Diagonal)	0.52
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.50 ft (Diameter)
Luminous Width (90-270)	0.50 ft (Diameter)
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2453	2570	2745
55	1512	1656	1584
65	1564	1466	782
75	1755	1277	479
85	474	0	0

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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>
<b>0</b>	3943.838	3943.838	3943.838	3943.838	3943.838	3943.838	3943.838	3943.838	3943.838
<b>5</b>	3836.004	3839.775	3823.185	3799.809	3728.925	3688.959	3631.649	3546.438	3527.586
<b>10</b>	3320.214	3289.296	3293.821	3267.428	3203.331	3060.810	2925.076	2808.193	2705.639
<b>15</b>	2330.861	2364.794	2354.237	2303.714	2190.602	2037.524	1897.265	1781.891	1714.778
<b>20</b>	1259.313	1321.902	1323.410	1248.002	1164.299	1042.138	997.648	956.173	919.977
<b>25</b>	601.756	630.411	599.494	572.347	541.429	501.463	495.430	483.365	481.103
<b>30</b>	270.715	286.550	271.469	249.600	244.322	251.109	249.600	251.109	253.371
<b>35</b>	130.456	131.964	128.194	119.899	115.374	117.636	125.931	133.472	131.210
<b>40</b>	64.097	67.867	66.359	61.080	61.835	61.835	67.867	70.884	70.884
<b>45</b>	31.671	33.180	33.180	33.180	35.442	36.950	39.212	40.720	40.720
<b>50</b>	18.852	20.360	21.114	23.376	24.131	24.131	24.131	27.147	27.147
<b>55</b>	15.836	16.590	17.344	18.098	16.590	15.836	15.836	16.590	18.098
<b>60</b>	14.328	14.328	15.836	14.328	12.819	10.557	9.049	9.803	9.803
<b>65</b>	12.065	11.311	11.311	9.803	6.033	4.524	4.524	2.262	2.262
<b>70</b>	10.557	11.311	10.557	6.787	4.524	2.262	2.262	1.508	2.262
<b>75</b>	8.295	6.787	6.033	3.770	2.262	0.754	0.000	0.000	0.754
<b>80</b>	3.016	3.016	2.262	0.754	0.000	0.000	0.000	0.000	0.000
<b>85</b>	0.754	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 6AR-L15-835-DIM-UNV-AM-OF-WH\_0 DEGREE TILT.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	914.63	N.A.	68.30
0-30	1193.46	N.A.	89.10
0-40	1281.83	N.A.	95.70
0-60	1328.12	N.A.	99.10
0-80	1339.43	N.A.	100.00
0-90	1339.72	N.A.	100.00
10-90	1003.97	N.A.	74.90
20-40	367.21	N.A.	27.40
20-50	398.04	N.A.	29.70
40-70	54.26	N.A.	4.10
60-80	11.32	N.A.	0.80
70-80	3.34	N.A.	0.20
80-90	0.28	N.A.	0.00
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	1339.72	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	335.75
10-20	578.88
20-30	278.83
30-40	88.37
40-50	30.83
50-60	15.45
60-70	7.98
70-80	3.34
80-90	0.28
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

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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	180	180	180	180	175	175	175	175	168	168	168	160	160	160	154	154	154	151
1	173	169	166	163	169	166	163	160	160	158	156	154	153	151	149	148	147	144
2	166	160	155	150	163	157	153	149	153	149	146	148	145	143	144	142	140	137
3	160	152	146	141	157	150	144	139	146	141	137	142	138	135	139	136	133	131
4	154	144	138	133	151	143	137	132	140	134	130	137	132	129	134	130	127	125
5	148	138	131	126	146	137	130	125	134	128	124	132	127	123	130	125	122	120
6	143	132	125	120	141	131	124	119	129	123	119	127	122	118	125	121	117	115
7	138	127	120	115	136	126	119	114	124	118	114	123	117	113	121	116	113	111
8	133	122	115	110	132	121	114	110	120	114	109	118	113	109	117	112	108	107
9	129	117	110	106	128	117	110	106	116	109	105	114	109	105	113	108	105	103
10	125	113	106	102	124	113	106	102	112	106	101	111	105	101	110	105	101	99

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## UGR TABLE - CORRECTED

### Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

### Room Size UGR Viewed Crosswise

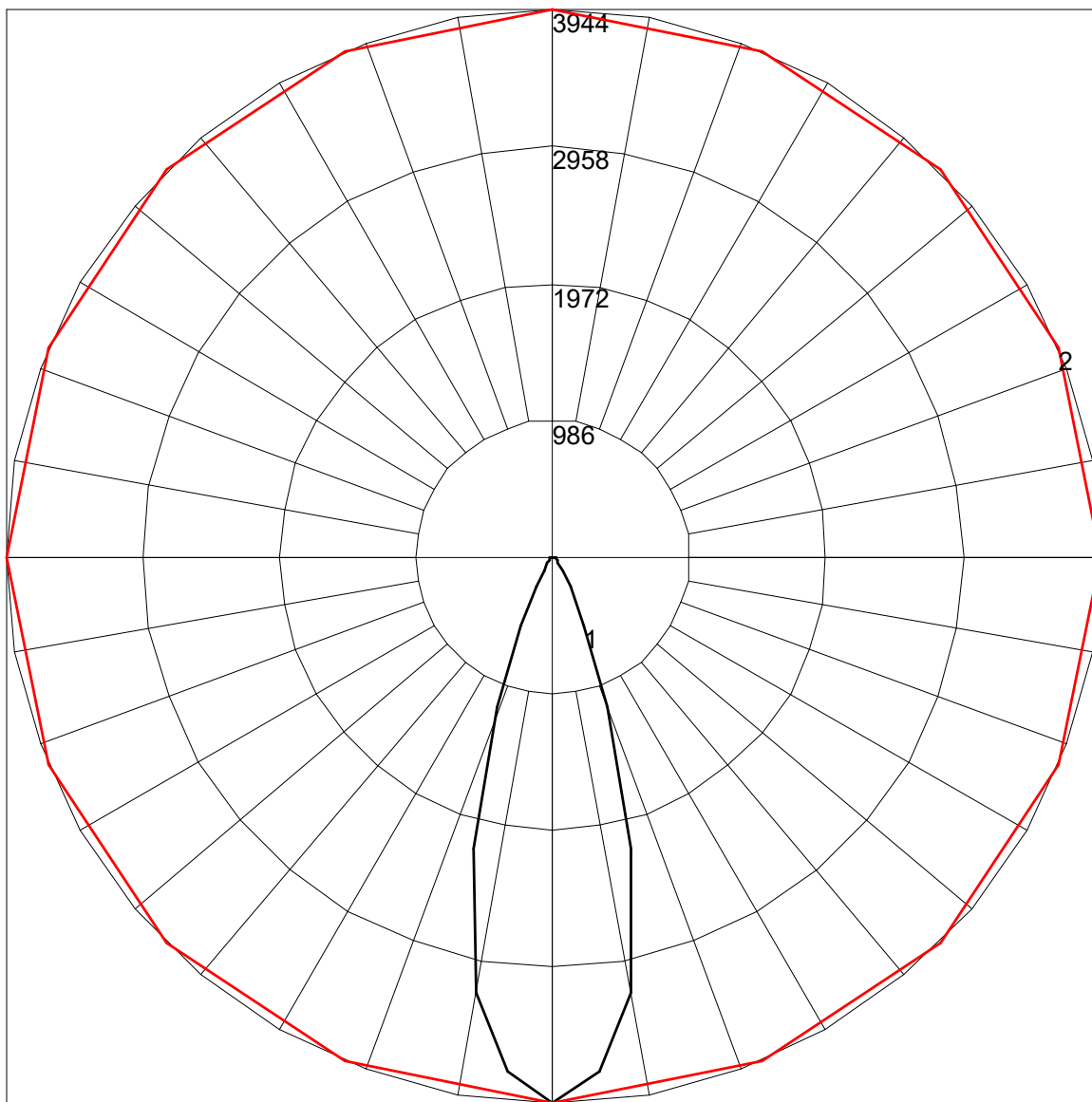
X=2H	Y=2H	3.1	4.1	3.5	4.4	4.7	2.8	3.7	3.1	4.0	4.3
	3H	5.3	6.2	5.7	6.5	6.9	3.3	4.2	3.7	4.5	4.9
	4H	6.2	7.0	6.6	7.3	7.7	3.5	4.2	3.9	4.6	5.0
	6H	6.6	7.3	7.0	7.6	8.0	3.4	4.1	3.8	4.4	4.8
	8H	6.6	7.3	7.1	7.6	8.1	3.3	4.0	3.8	4.4	4.8
	12H	6.6	7.2	7.0	7.6	8.0	3.2	3.9	3.7	4.3	4.7

### UGR Viewed Endwise

4H	2H	3.6	4.4	4.0	4.7	5.1	3.0	3.8	3.4	4.1	4.5
	3H	6.2	6.8	6.6	7.2	7.6	3.8	4.5	4.3	4.9	5.3
	4H	7.0	7.6	7.5	8.0	8.5	4.0	4.5	4.4	5.0	5.4
	6H	7.5	7.9	7.9	8.4	8.9	3.9	4.4	4.4	4.9	5.3
	8H	7.5	7.9	8.0	8.4	8.9	3.9	4.3	4.3	4.8	5.2
	12H	7.5	7.8	8.0	8.3	8.8	3.8	4.2	4.3	4.7	5.1
8H	4H	7.1	7.6	7.6	8.0	8.5	4.2	4.6	4.6	5.1	5.5
	6H	7.6	8.0	8.1	8.5	8.9	4.1	4.5	4.7	5.0	5.5
	8H	7.7	8.0	8.2	8.5	9.0	4.0	4.4	4.6	4.9	5.4
	12H	7.7	7.9	8.2	8.4	9.0	4.0	4.3	4.5	4.8	5.3
12H	4H	7.1	7.4	7.6	7.9	8.4	4.1	4.5	4.6	5.0	5.5
	6H	7.5	7.9	8.1	8.3	8.9	4.1	4.4	4.6	4.9	5.4
	8H	7.6	7.9	8.2	8.4	9.0	4.1	4.3	4.6	4.8	5.4

Maximum UGR = 9.0

POLAR GRAPH



Maximum Candela = 3943.838 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)