



IES INDOOR REPORT
PHOTOMETRIC FILENAME : HETG-AR24-L76-840-A-DIM-UNV.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]GEN FROM BALLABS TEST NO. 20210.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUE DATE] 18-MAR-2019
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 4-28 LED 22"ARRAYS DUAL APERATURE 2x4'RECESSED LUMINAIRE
 [MORE] WHITE REFLECTOR w/FROSTED ACRYLIC RIBBED LENSES
 [LUMCAT] HETG-AR24-L76-840-A-DIM-UNV
 [LAMPCAT] HLM 80 CRI 4000K CCT
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] Indoor, Architectural, Classroom, Commercial, Direct
 [_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	8118
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	137
Total Luminaire Watts	59.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 ft
Luminous Width (90-270)	1.91 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3805	4072	4238
55	3196	3709	3890
65	2487	3171	2693
75	1769	2060	1324
85	882	537	403

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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>
0	3233.572	3233.572	3233.572	3233.572	3233.572
5	3216.169	3216.169	3202.246	3198.765	3203.406
10	3163.958	3162.798	3156.997	3153.516	3156.997
15	3082.742	3082.742	3093.184	3082.742	3088.543
20	2966.718	2969.039	2998.045	2982.962	2989.923
25	2811.247	2821.689	2858.817	2851.855	2868.098
30	2631.411	2660.417	2678.980	2709.146	2714.948
35	2423.729	2459.696	2473.619	2528.150	2531.631
40	2169.638	2212.566	2249.694	2296.103	2320.468
45	1867.977	1919.027	1999.083	2036.211	2080.300
50	1563.995	1617.366	1738.030	1789.081	1833.170
55	1272.777	1327.308	1476.978	1548.912	1548.912
60	995.481	1046.531	1224.047	1279.738	1189.240
65	729.787	788.959	930.508	922.386	790.119
70	505.862	559.233	639.289	571.995	458.292
75	317.904	353.871	370.115	293.539	237.848
80	163.593	177.516	161.273	122.985	99.780
85	53.371	44.089	32.487	29.006	24.365
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1175.22	N.A.	14.50
0-30	2485.16	N.A.	30.60
0-40	4035.88	N.A.	49.70
0-60	6852.52	N.A.	84.40
0-80	8057.56	N.A.	99.30
0-90	8117.57	N.A.	100.00
10-90	7812.88	N.A.	96.20
20-40	2860.66	N.A.	35.20
20-50	4390.63	N.A.	54.10
40-70	3663.48	N.A.	45.10
60-80	1205.04	N.A.	14.80
70-80	358.20	N.A.	4.40
80-90	60.01	N.A.	0.70
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	8117.57	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	304.69
10-20	870.52
20-30	1309.94
30-40	1550.72
40-50	1529.97
50-60	1286.67
60-70	846.84
70-80	358.20
80-90	60.01
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

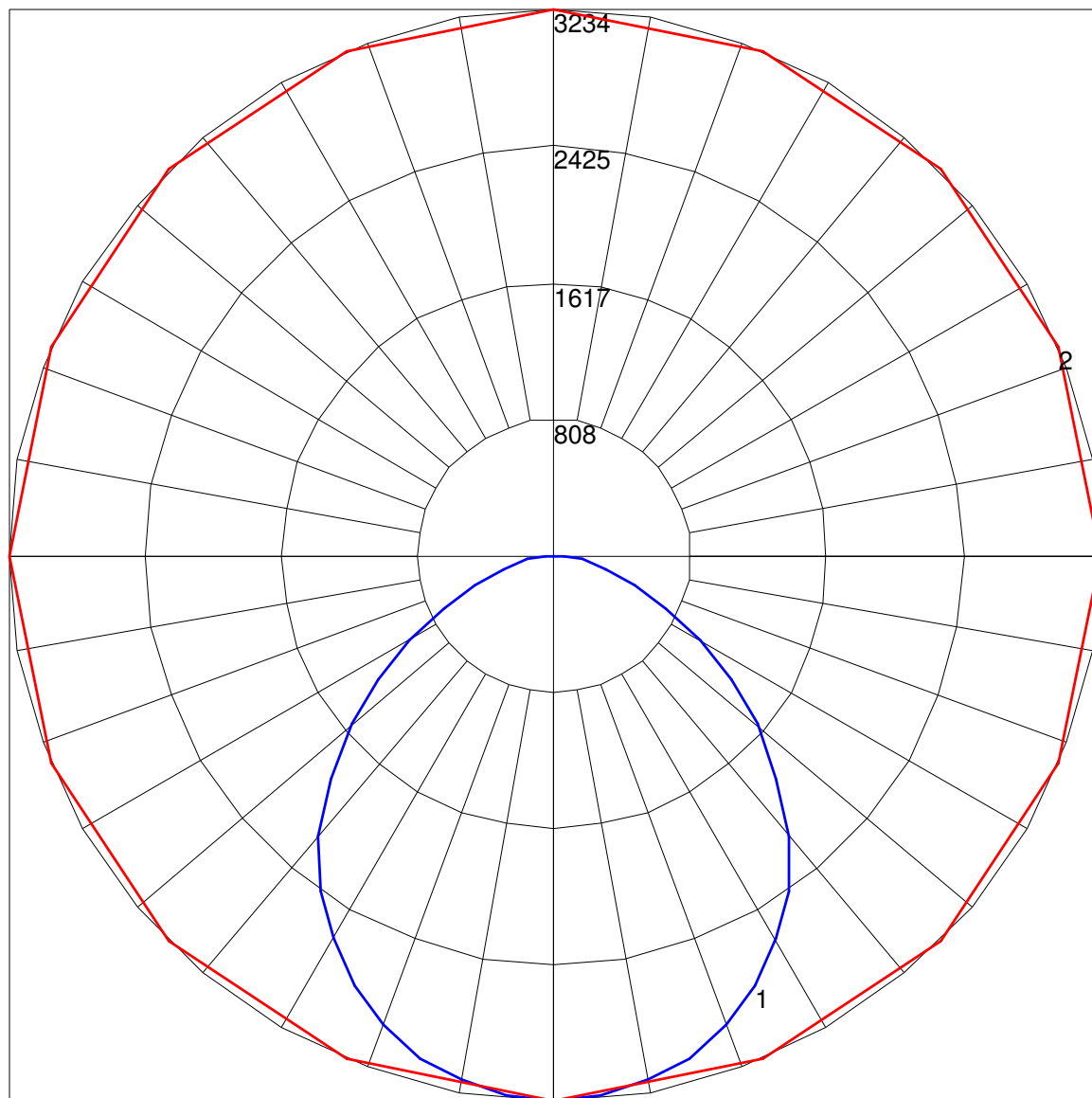
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54
5	78	66	57	51	76	64	56	50	62	55	50	60	54	49	59	53	49	47
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	44	39	49	43	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	43	36	32	42	36	31	41	36	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

POLAR GRAPH



Maximum Candela = 3233.572 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)