



IES INDOOR REPORT

PHOTOMETRIC FILENAME : HETG-AR24-L50-840-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-L50-840-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	5221
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	127
Total Luminaire Watts	41.2
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	2448	2619	2726
55	2056	2386	2502
65	1600	2040	1732
75	1138	1325	851
85	567	345	259

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HETG-AR24-L50-840-A-DIM-UNV.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	2079.892	2079.892	2079.892	2079.892	2079.892
5	2068.698	2068.698	2059.743	2057.504	2060.489
10	2035.115	2034.369	2030.638	2028.399	2030.638
15	1982.876	1982.876	1989.592	1982.876	1986.607
20	1908.247	1909.740	1928.397	1918.695	1923.173
25	1808.245	1814.962	1838.843	1834.365	1844.813
30	1692.571	1711.228	1723.169	1742.572	1746.304
35	1558.986	1582.121	1591.077	1626.152	1628.391
40	1395.550	1423.163	1447.044	1476.895	1492.567
45	1201.517	1234.353	1285.847	1309.728	1338.086
50	1005.990	1040.319	1117.933	1150.769	1179.128
55	818.673	853.748	950.019	996.289	996.289
60	640.311	673.148	787.329	823.151	764.941
65	469.412	507.473	598.519	593.295	508.219
70	325.380	359.709	411.202	367.918	294.782
75	204.482	227.616	238.064	188.810	152.988
80	105.226	114.181	103.733	79.106	64.180
85	34.329	28.359	20.896	18.657	15.672
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HETG-AR24-L50-840-A-DIM-UNV.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	755.92	N.A.	14.50
0-30	1598.5	N.A.	30.60
0-40	2595.95	N.A.	49.70
0-60	4407.67	N.A.	84.40
0-80	5182.77	N.A.	99.30
0-90	5221.37	N.A.	100.00
10-90	5025.39	N.A.	96.20
20-40	1840.03	N.A.	35.20
20-50	2824.13	N.A.	54.10
40-70	2356.42	N.A.	45.10
60-80	775.10	N.A.	14.80
70-80	230.40	N.A.	4.40
80-90	38.60	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	5221.37	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	195.99
10-20	559.94
20-30	842.58
30-40	997.45
40-50	984.10
50-60	827.61
60-70	544.70
70-80	230.40
80-90	38.60
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

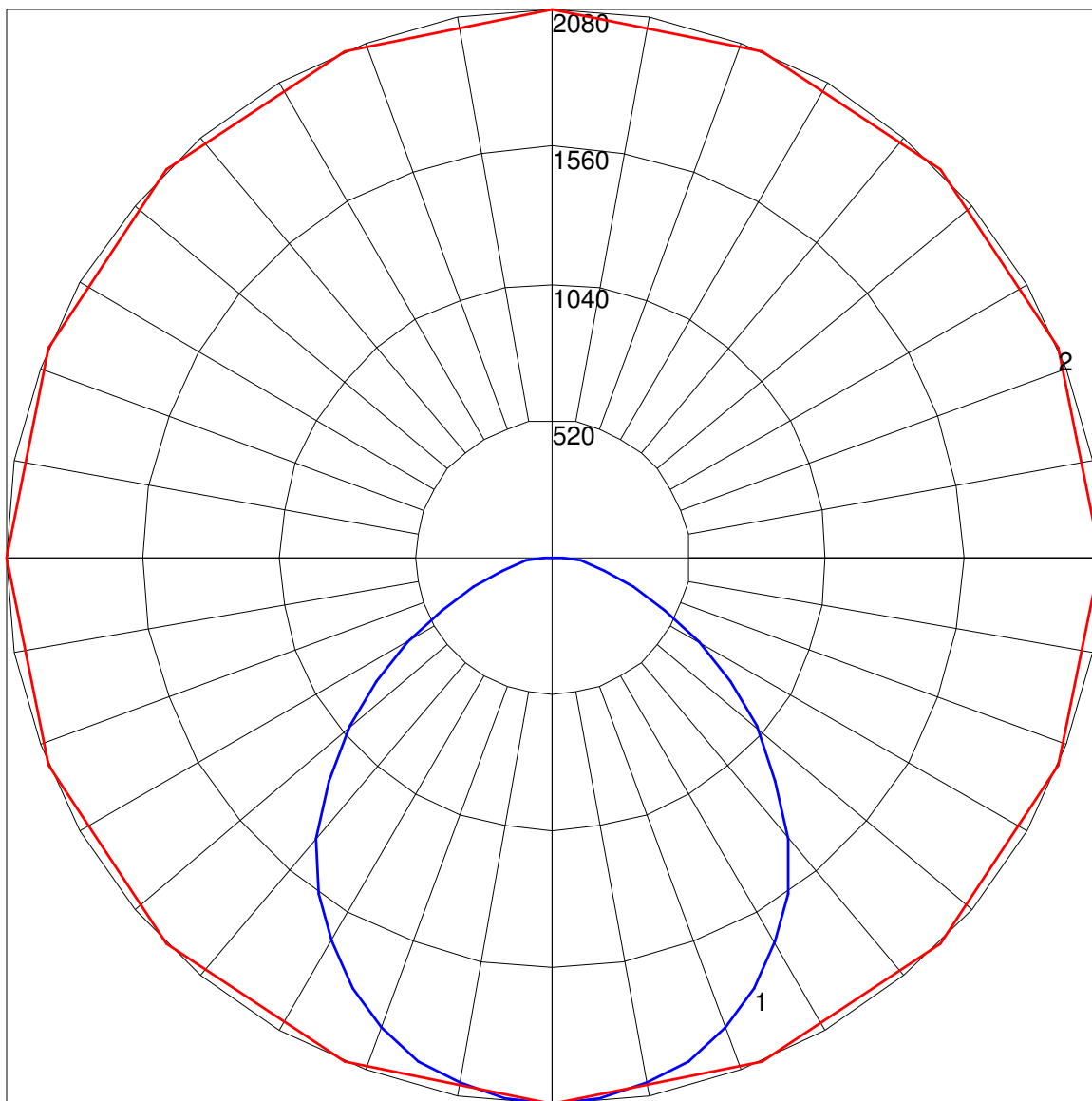
IES INDOOR REPORT
PHOTOMETRIC FILENAME : HETG-AR24-L50-840-A-DIM-UNV.IES

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 = 2079.892 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.)