



IES INDOOR REPORT

PHOTOMETRIC FILENAME : HETG-S24-L50-940-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
 [ISSUEDATE] 30-OCT-2020
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] DUAL APERATURE 2x4' RECESSED LED LUMINAIRE
 [MORE] WHITE REFLECTOR w/FROSTED ACRYLIC RIBBED LENSES
 [LUMCAT] HETG-S24-L50-940-A-DIM-UNV
 [LAMPCAT] HLM 90 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	4398
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	37.7
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	2062	2206	2296
55	1732	2010	2108
65	1348	1718	1459
75	959	1116	717
85	478	291	218

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : HETG-S24-L50-940-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	1752.033	1752.033	1752.033	1752.033	1752.033
5	1742.604	1742.604	1735.060	1733.174	1735.689
10	1714.315	1713.686	1710.543	1708.657	1710.543
15	1670.309	1670.309	1675.967	1670.309	1673.453
20	1607.445	1608.702	1624.418	1616.246	1620.018
25	1523.207	1528.864	1548.981	1545.209	1554.010
30	1425.767	1441.483	1451.541	1467.886	1471.029
35	1313.239	1332.727	1340.271	1369.817	1371.703
40	1175.566	1198.826	1218.942	1244.088	1257.290
45	1012.118	1039.779	1083.155	1103.272	1127.160
50	847.413	876.331	941.710	969.370	993.259
55	689.623	719.170	800.265	839.241	839.241
60	539.377	567.038	663.220	693.395	644.361
65	395.418	427.479	504.173	499.773	428.107
70	274.089	303.007	346.383	309.922	248.315
75	172.249	191.737	200.538	159.047	128.872
80	88.639	96.183	87.382	66.636	54.063
85	28.918	23.889	17.602	15.716	13.202
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HETG-S24-L50-940-A-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	636.76	N.A.	14.50
0-30	1346.52	N.A.	30.60
0-40	2186.74	N.A.	49.70
0-60	3712.87	N.A.	84.40
0-80	4365.79	N.A.	99.30
0-90	4398.31	N.A.	100.00
10-90	4233.22	N.A.	96.20
20-40	1549.98	N.A.	35.20
20-50	2378.96	N.A.	54.10
40-70	1984.97	N.A.	45.10
60-80	652.92	N.A.	14.80
70-80	194.08	N.A.	4.40
80-90	32.52	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	4398.31	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	165.09
10-20	471.67
20-30	709.76
30-40	840.22
40-50	828.98
50-60	697.15
60-70	458.84
70-80	194.08
80-90	32.52
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-S24-L50-940-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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HETG-S24-L50-940-A-DIM-UNV_.IES

UGR TABLE - CORRECTED

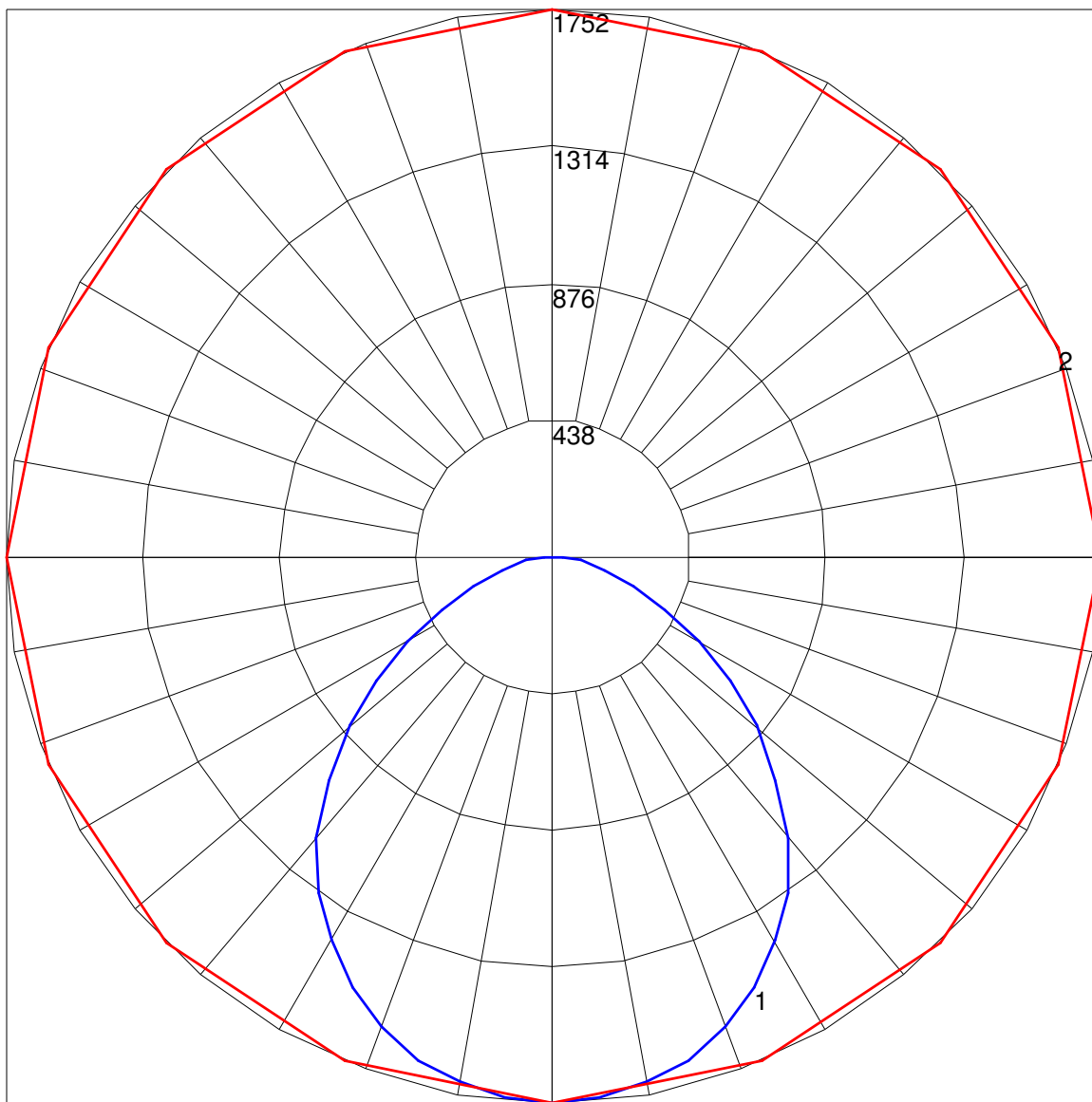
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	13.6	15.2	14.0	15.5	15.8	14.9	16.4	15.2	16.7	17.1
	3H	14.9	16.3	15.3	16.6	17.0	15.8	17.2	16.2	17.6	17.9
	4H	15.3	16.6	15.7	17.0	17.4	16.0	17.3	16.4	17.7	18.1
	6H	15.5	16.8	16.0	17.1	17.5	16.1	17.3	16.5	17.7	18.0
	8H	15.6	16.7	16.0	17.1	17.5	16.0	17.2	16.5	17.6	18.0
	12H	15.6	16.7	16.0	17.1	17.5	16.0	17.1	16.5	17.5	18.0
4H	2H	14.4	15.7	14.8	16.0	16.4	15.3	16.7	15.7	17.0	17.4
	3H	15.8	16.9	16.2	17.3	17.7	16.5	17.6	16.9	18.0	18.4
	4H	16.3	17.3	16.8	17.7	18.2	16.8	17.8	17.2	18.2	18.6
	6H	16.6	17.5	17.1	17.9	18.4	16.9	17.7	17.3	18.2	18.6
	8H	16.7	17.5	17.2	17.9	18.4	16.9	17.7	17.3	18.1	18.6
	12H	16.7	17.4	17.2	17.9	18.4	16.9	17.6	17.4	18.1	18.5
8H	4H	16.5	17.3	17.0	17.8	18.2	16.9	17.7	17.4	18.2	18.6
	6H	16.9	17.5	17.4	18.0	18.5	17.1	17.7	17.6	18.2	18.7
	8H	17.0	17.6	17.5	18.1	18.6	17.1	17.7	17.6	18.2	18.7
	12H	17.1	17.6	17.6	18.1	18.6	17.1	17.6	17.6	18.1	18.7
12H	4H	16.5	17.2	17.0	17.7	18.2	16.9	17.6	17.4	18.1	18.6
	6H	16.9	17.5	17.4	17.9	18.5	17.1	17.7	17.6	18.1	18.7
	8H	17.0	17.5	17.5	18.0	18.6	17.1	17.6	17.6	18.1	18.7

Maximum UGR = 18.7

POLAR GRAPH



Maximum Candela = 1752.033 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.)