H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L200-840-SCHA118-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19725.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-07-17
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 48 INCH LOW PROFILE LED HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/.118"THK CLEAR ACRYLIC LENS
[MORE] 0-10V UNIVERSAL VOLTAGE 122-277V DRIVERS
[LUMCAT] GL-4-L200-840-SCHA118-DIM-UNV_
[LAMPCAT] 22 INCH HLM LINEAR LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, High Bay
[_SEARCH_MOUNTING] Cable, Pendant, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	18588
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	140
Total Luminaire Watts	133
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.34
Spacing Criterion (90-270)	1.32
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.83 ft
Luminous Width (90-270)	1.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	19937	19529	14907
55	18916	13867	14049
65	15859	12299	12026
75	10297	6929	5116
85	2051	2094	1752

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	6965.724	6965.724	6965.724	6965.724	6965.724
5	7043.386	6963.069	6912.621	6886.734	6893.372
10	6981.655	6901.337	6858.855	6830.312	6839.605
15	6861.510	6803.761	6760.615	6713.487	6730.745
20	6710.168	6627.195	6592.679	6550.860	6576.748
25	6507.715	6401.510	6392.880	6373.631	6377.613
30	6232.909	6135.333	6140.643	6111.437	6128.695
35	5881.105	5765.607	5823.356	5809.416	5813.399
40	5487.482	5358.045	5385.260	5455.621	5445.000
45	5024.827	4904.018	4921.940	4548.895	3757.004
50	4471.233	4400.872	4410.165	3249.211	3280.409
55	3867.192	3829.356	2835.011	2874.174	2872.183
60	3195.445	3162.919	2369.700	2415.501	2415.501
65	2388.950	2427.449	1852.614	1916.337	1811.460
70	1628.920	1290.391	1321.589	1216.048	961.156
75	949.871	746.090	639.222	586.119	471.949
80	377.692	328.572	240.289	196.479	182.540
85	63.723	57.085	65.051	65.714	54.430
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2571.49	N.A.	13.80
0-30	5523.15	N.A.	29.70
0-40	9156.64	N.A.	49.30
0-60	15716.44	N.A.	84.60
0-80	18483.13	N.A.	99.40
0-90	18587.82	N.A.	100.00
10-90	17927.71	N.A.	96.40
20-40	6585.15	N.A.	35.40
20-50	10209.68	N.A.	54.90
40-70	8567.07	N.A.	46.10
60-80	2766.69	N.A.	14.90
70-80	759.42	N.A.	4.10
80-90	104.70	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	18587.82	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	660.11
10-20	1911.38
20-30	2951.66
30-40	3633.49
40-50	3624.53
50-60	2935.27
60-70	2007.27
70-80	759.42
80-90	104.70
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	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	53
5	78	65	57	50	76	64	56	50	62	55	50	60	54	49	58	53	49	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

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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					UGR Viewed Endwise				
X=2H	Y=2H	22.9	24.4	23.2	24.7	25.1	20.9	22.5	21.3	22.8	23.1
	3H	24.1	25.5	24.4	25.8	26.2	22.1	23.5	22.5	23.9	24.2
	4H	24.4	25.7	24.8	26.1	26.5	22.3	23.7	22.7	24.0	24.4
	6H	24.6	25.8	25.0	26.1	26.5	22.4	23.6	22.8	24.0	24.4
	8H	24.6	25.7	25.0	26.1	26.5	22.4	23.5	22.8	23.9	24.3
	12H	24.6	25.7	25.0	26.0	26.5	22.4	23.5	22.8	23.9	24.3
4H	2H	23.1	24.4	23.5	24.8	25.2	21.5	22.8	21.9	23.1	23.5
	3H	24.5	25.6	24.9	26.0	26.4	22.9	24.0	23.3	24.4	24.8
	4H	24.9	25.9	25.3	26.3	26.7	23.2	24.1	23.6	24.6	25.0
	6H	25.1	25.9	25.6	26.4	26.9	23.3	24.1	23.7	24.5	25.0
	8H	25.1	25.9	25.6	26.4	26.8	23.2	24.0	23.7	24.5	24.9
	12H	25.1	25.8	25.6	26.3	26.8	23.2	23.9	23.7	24.4	24.9
8H	4H	24.9	25.7	25.4	26.2	26.6	23.3	24.1	23.8	24.5	25.0
	6H	25.2	25.8	25.7	26.3	26.8	23.4	24.1	23.9	24.5	25.0
	8H	25.2	25.8	25.7	26.3	26.8	23.4	24.0	23.9	24.5	25.0
	12H	25.2	25.7	25.7	26.2	26.8	23.4	23.9	23.9	24.4	25.0
12H	4H	24.9	25.6	25.4	26.1	26.6	23.3	24.0	23.8	24.5	24.9
	6H	25.1	25.7	25.7	26.2	26.7	23.4	24.0	23.9	24.4	25.0
	8H	25.2	25.7	25.7	26.2	26.8	23.4	23.9	23.9	24.4	25.0

Maximum UGR = 26.9

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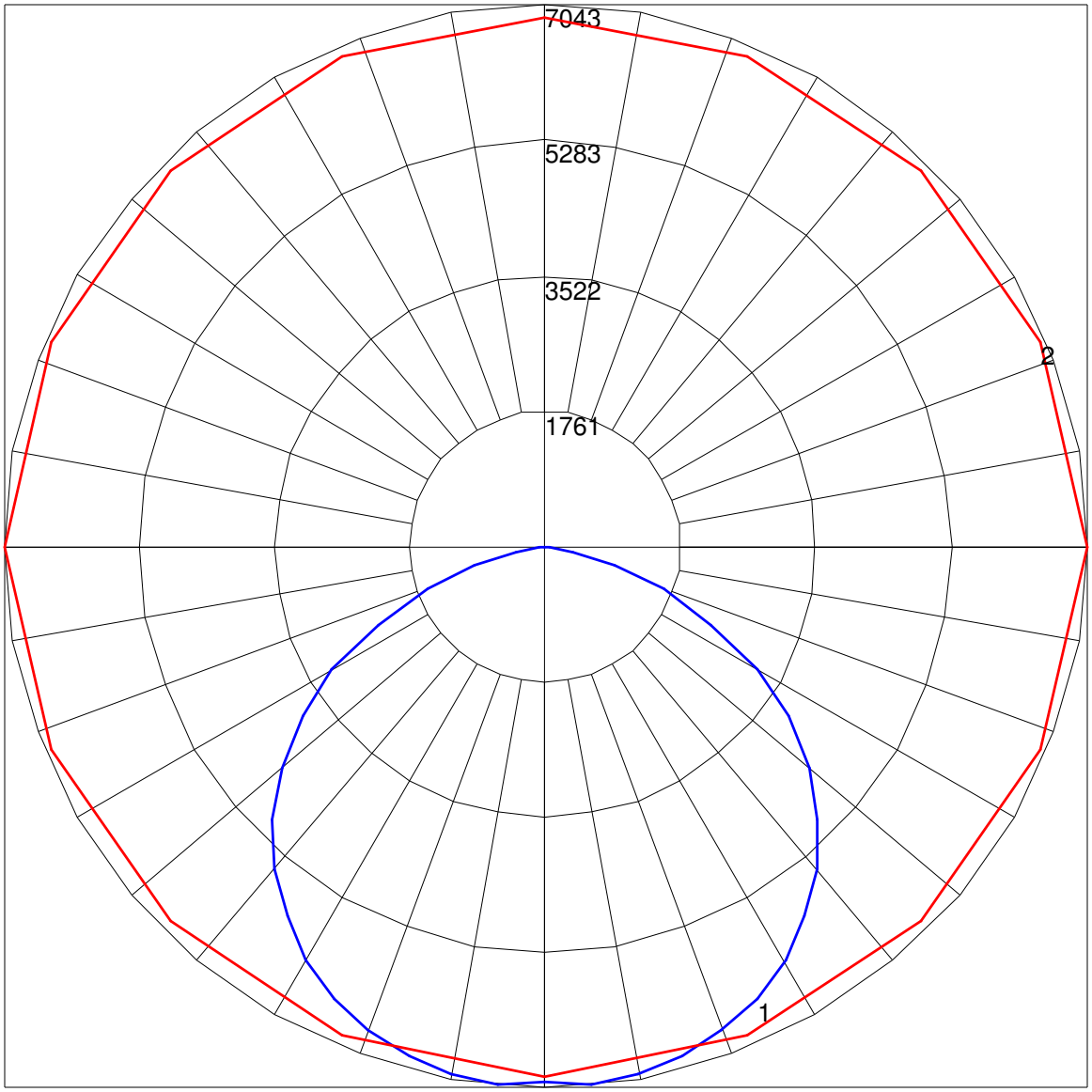
POLAR GRAPH



Maximum Candela = 7043.386 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

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