H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L200-850-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-L200-850-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	19145
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	144
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	20535	20115	15354
55	19483	14283	14470
65	16335	12668	12386
75	10605	7137	5269
85	2113	2157	1805

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	7174.696	7174.696	7174.696	7174.696	7174.696
5	7254.688	7171.961	7120.000	7093.336	7100.173
10	7191.104	7108.377	7064.621	7035.222	7044.793
15	7067.355	7007.874	6963.434	6914.891	6932.667
20	6911.473	6826.011	6790.459	6747.386	6774.050
25	6702.946	6593.555	6584.667	6564.840	6568.942
30	6419.896	6319.393	6324.863	6294.780	6312.556
35	6057.538	5938.575	5998.056	5983.699	5987.801
40	5652.107	5518.786	5546.818	5619.289	5608.350
45	5175.571	5051.139	5069.599	4685.362	3869.714
50	4605.370	4532.898	4542.470	3346.687	3378.821
55	3983.207	3944.237	2920.061	2960.399	2958.348
60	3291.308	3257.807	2440.791	2487.966	2487.966
65	2460.618	2500.273	1908.193	1973.828	1865.804
70	1677.788	1329.103	1361.237	1252.529	989.990
75	978.368	768.473	658.398	603.703	486.107
80	389.022	338.429	247.498	202.374	188.016
85	65.635	58.798	67.002	67.686	56.063
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2648.64	N.A.	13.80
0-30	5688.84	N.A.	29.70
0-40	9431.34	N.A.	49.30
0-60	16187.93	N.A.	84.60
0-80	19037.62	N.A.	99.40
0-90	19145.46	N.A.	100.00
10-90	18465.54	N.A.	96.40
20-40	6782.7	N.A.	35.40
20-50	10515.97	N.A.	54.90
40-70	8824.08	N.A.	46.10
60-80	2849.69	N.A.	14.90
70-80	782.20	N.A.	4.10
80-90	107.84	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	19145.46	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	679.91
10-20	1968.73
20-30	3040.21
30-40	3742.49
40-50	3733.27
50-60	3023.33
60-70	2067.49
70-80	782.20
80-90	107.84
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	23.0	24.5	23.3	24.8	25.2	21.0	22.6	21.4	22.9	23.2
	3H	24.2	25.6	24.5	25.9	26.3	22.2	23.6	22.6	24.0	24.3
	4H	24.5	25.8	24.9	26.2	26.6	22.4	23.8	22.8	24.1	24.5
	6H	24.7	25.9	25.1	26.2	26.6	22.5	23.7	22.9	24.1	24.5
	8H	24.7	25.8	25.1	26.2	26.6	22.5	23.6	22.9	24.0	24.4
	12H	24.7	25.8	25.1	26.1	26.6	22.5	23.6	22.9	24.0	24.4
4H	2H	23.2	24.5	23.6	24.9	25.3	21.6	22.9	22.0	23.2	23.6
	3H	24.6	25.7	25.0	26.1	26.5	23.0	24.1	23.4	24.5	24.9
	4H	25.0	26.0	25.4	26.4	26.8	23.3	24.2	23.7	24.7	25.1
	6H	25.2	26.0	25.7	26.5	27.0	23.4	24.2	23.8	24.6	25.1
	8H	25.2	26.0	25.7	26.5	26.9	23.3	24.1	23.8	24.6	25.0
	12H	25.2	25.9	25.7	26.4	26.9	23.3	24.0	23.8	24.5	25.0
8H	4H	25.0	25.8	25.5	26.3	26.7	23.4	24.2	23.9	24.6	25.1
	6H	25.3	25.9	25.8	26.4	26.9	23.5	24.2	24.0	24.6	25.1
	8H	25.3	25.9	25.8	26.4	26.9	23.5	24.1	24.0	24.6	25.1
	12H	25.3	25.8	25.8	26.3	26.9	23.5	24.0	24.0	24.5	25.1
12H	4H	25.0	25.7	25.5	26.2	26.7	23.4	24.1	23.9	24.6	25.0
	6H	25.2	25.8	25.8	26.3	26.8	23.5	24.1	24.0	24.5	25.1
	8H	25.3	25.8	25.8	26.3	26.9	23.5	24.0	24.0	24.5	25.1

Maximum UGR = 27.0

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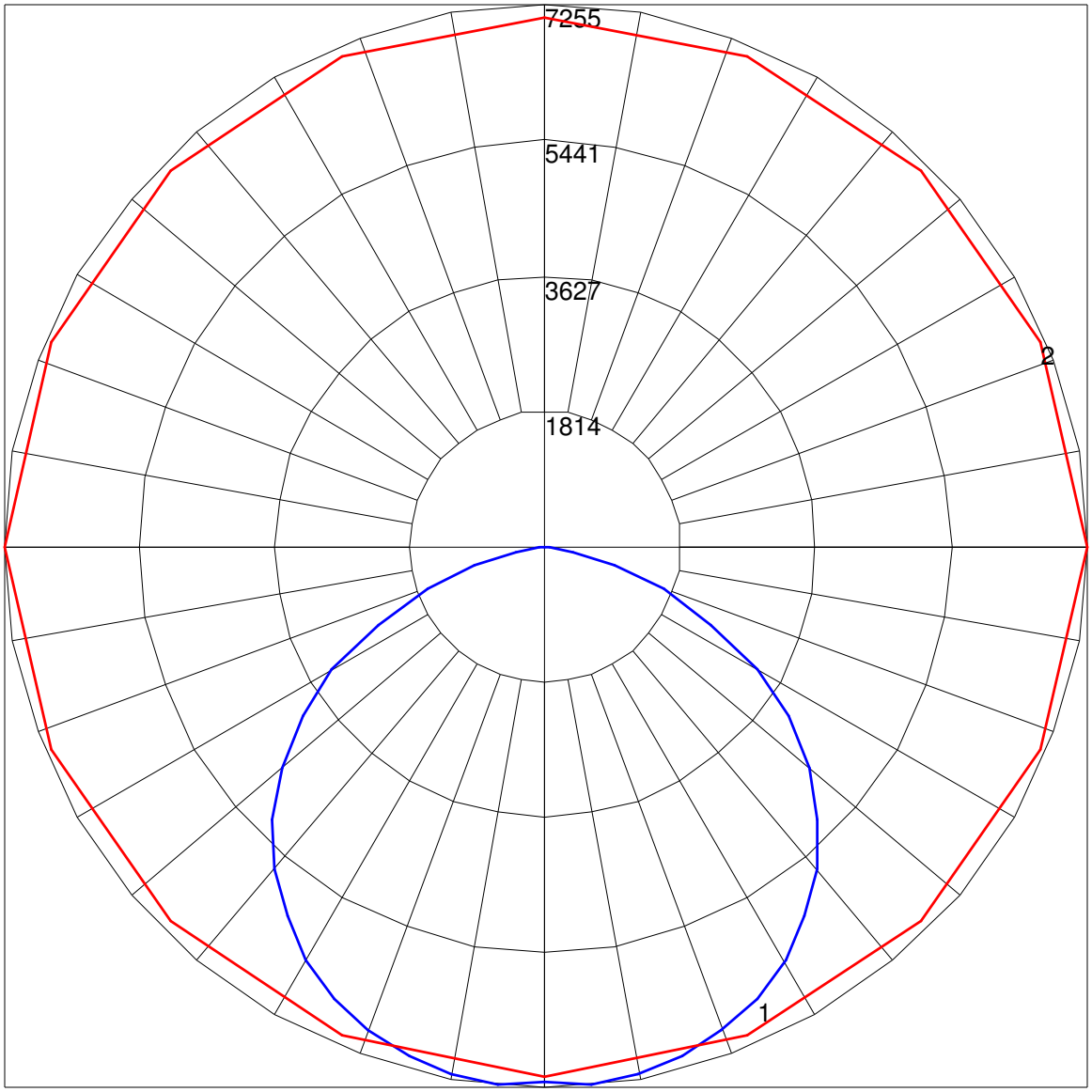
POLAR GRAPH



Maximum Candela = 7254.688 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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