H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L200-835-SCHA118-(L180)-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] 12-DEC-2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 6-42 LED 22"ARRAYS 4'SUSPENDED DIRECT LUMINAIRE
[MORE] WHITE REFLECTOR w/.118"THK CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] GL-4-L200-835-SCHA118-(L180)-DRV-UNV
[LAMPCAT] HLM 80 CRI 3500K CCT
[_SEARCH_SOURCETYPE] LED
[_SEARCH_CRI] 80
[_SEARCH_COLORTEMP] 3500
[_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	16430
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	139
Total Luminaire Watts	118.3
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	17623	17262	13176
55	16720	12257	12418
65	14018	10871	10629
75	9101	6125	4522
85	1813	1851	1549

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	6157.069	6157.069	6157.069	6157.069	6157.069
5	6225.716	6154.722	6110.131	6087.249	6093.116
10	6171.150	6100.157	6062.607	6037.378	6045.592
15	6064.953	6013.909	5975.772	5934.114	5949.369
20	5931.181	5857.840	5827.331	5790.367	5813.249
25	5752.230	5658.355	5650.727	5633.712	5637.233
30	5509.327	5423.079	5427.773	5401.957	5417.212
35	5198.364	5096.274	5147.319	5134.998	5138.518
40	4850.437	4736.026	4760.082	4822.275	4812.887
45	4441.492	4334.708	4350.549	4020.811	3320.851
50	3952.165	3889.972	3898.186	2872.008	2899.584
55	3418.247	3384.804	2505.893	2540.510	2538.750
60	2824.484	2795.734	2094.600	2135.084	2135.084
65	2111.615	2145.645	1637.543	1693.869	1601.166
70	1439.818	1140.589	1168.165	1074.876	849.575
75	839.600	659.476	565.014	518.076	417.160
80	333.845	290.428	212.394	173.670	161.349
85	56.325	50.458	57.499	58.086	48.111
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2272.97	N.A.	13.80
0-30	4881.96	N.A.	29.70
0-40	8093.64	N.A.	49.30
0-60	13891.91	N.A.	84.60
0-80	16337.41	N.A.	99.40
0-90	16429.95	N.A.	100.00
10-90	15846.48	N.A.	96.40
20-40	5820.67	N.A.	35.40
20-50	9024.43	N.A.	54.90
40-70	7572.52	N.A.	46.10
60-80	2445.5	N.A.	14.90
70-80	671.25	N.A.	4.10
80-90	92.54	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	16429.95	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	583.47
10-20	1689.49
20-30	2609.00
30-40	3211.67
40-50	3203.76
50-60	2594.51
60-70	1774.25
70-80	671.25
80-90	92.54
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	22.4	23.9	22.7	24.2	24.6	20.4	22.0	20.8	22.3	22.6
	3H	23.6	25.0	23.9	25.3	25.7	21.6	23.0	22.0	23.4	23.7
	4H	23.9	25.2	24.3	25.6	26.0	21.8	23.2	22.2	23.5	23.9
	6H	24.1	25.3	24.5	25.6	26.0	21.9	23.1	22.3	23.5	23.9
	8H	24.1	25.2	24.5	25.6	26.0	21.9	23.0	22.3	23.4	23.8
	12H	24.1	25.2	24.5	25.5	26.0	21.9	23.0	22.3	23.4	23.8
4H	2H	22.6	23.9	23.0	24.3	24.7	21.0	22.3	21.4	22.6	23.0
	3H	24.0	25.1	24.4	25.5	25.9	22.4	23.5	22.8	23.9	24.3
	4H	24.4	25.4	24.8	25.8	26.2	22.7	23.6	23.1	24.1	24.5
	6H	24.6	25.4	25.1	25.9	26.4	22.8	23.6	23.2	24.0	24.5
	8H	24.6	25.4	25.1	25.9	26.3	22.7	23.5	23.2	24.0	24.4
	12H	24.6	25.3	25.1	25.8	26.3	22.7	23.4	23.2	23.9	24.4
8H	4H	24.4	25.2	24.9	25.7	26.1	22.8	23.6	23.3	24.0	24.5
	6H	24.7	25.3	25.2	25.8	26.3	22.9	23.6	23.4	24.0	24.5
	8H	24.7	25.3	25.2	25.8	26.3	22.9	23.5	23.4	24.0	24.5
	12H	24.7	25.2	25.2	25.7	26.3	22.9	23.4	23.4	23.9	24.5
12H	4H	24.4	25.1	24.9	25.6	26.1	22.8	23.5	23.3	24.0	24.4
	6H	24.6	25.2	25.2	25.7	26.2	22.9	23.5	23.4	23.9	24.5
	8H	24.7	25.2	25.2	25.7	26.3	22.9	23.4	23.4	23.9	24.5

Maximum UGR = 26.4

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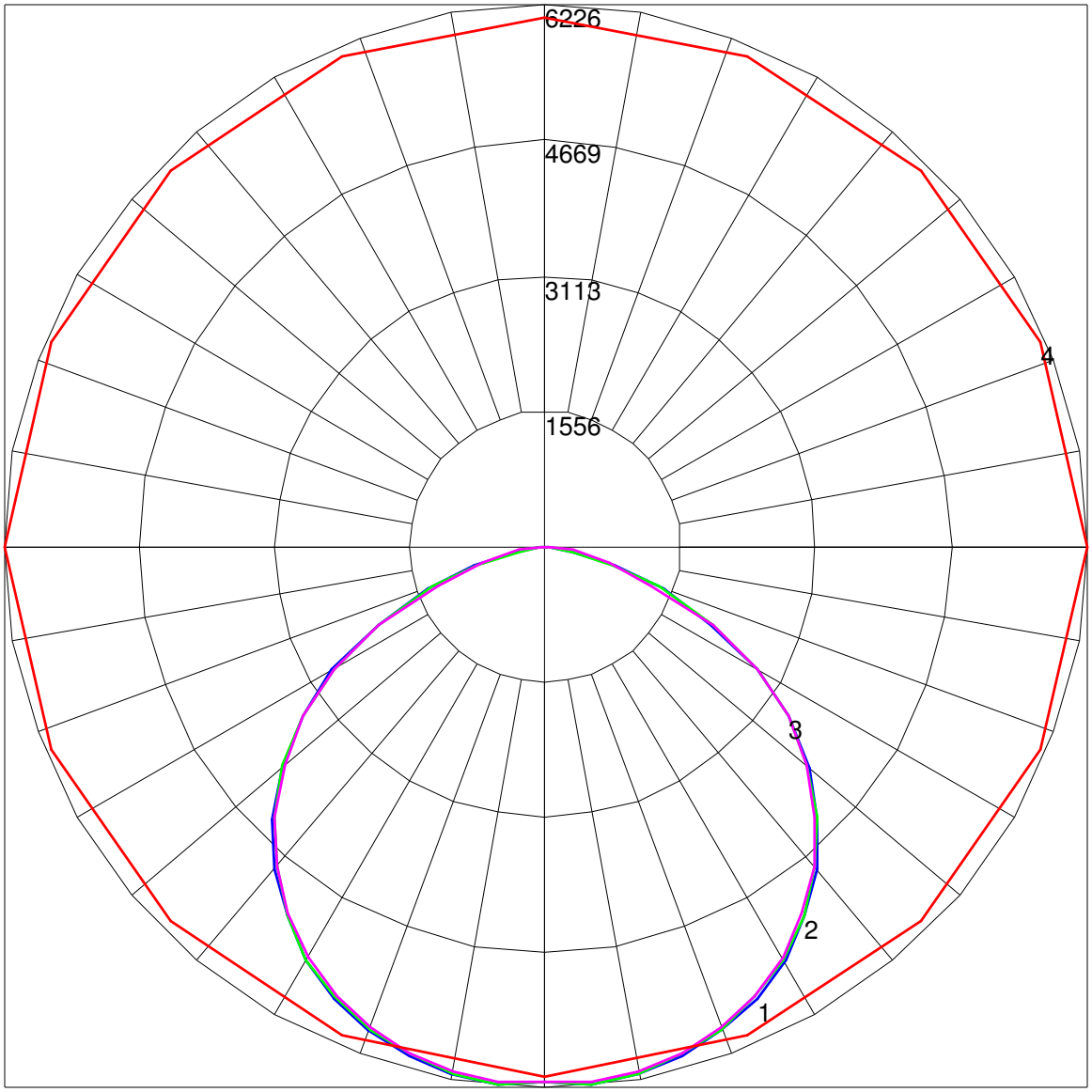
POLAR GRAPH



Maximum Candela = 6225.716 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Vertical Plane Through Horizontal Angles (5 - 185)
3 - Vertical Plane Through Horizontal Angles (10 - 190)
4 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

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