H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 75S-4-L30-940-WG-75-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19745.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 03-22-2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 4' LED STRIP LUMINAIRE
[MORE] WHITE REFLECTOR w/FROSTED ACRYLIC SQUARE LENS
[LUMCAT] 75S-4-L30-940-WG-75-DIM-UNV
[LAMPCAT] HLM 90 CRI 4000K CCT
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, Utility, Warehouse, Linear
[_SEARCH_MOUNTING] Surface, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2628
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	134
Total Luminaire Watts	19.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.72 ft
Luminous Width (90-270)	0.21 ft
Luminous Height	0.08 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9463	7636	7220
55	8023	6401	6469
65	6300	5470	5877
75	4339	4471	5214
85	1938	3793	4570

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	886.635	886.635	886.635	886.635	886.635
5	894.261	883.023	882.621	880.614	870.179
10	879.009	868.974	869.777	867.369	857.736
15	854.525	844.892	847.300	844.892	836.865
20	813.585	806.360	813.585	809.973	801.544
25	763.012	760.202	766.624	766.223	753.780
30	707.221	708.425	715.650	715.650	700.397
35	638.987	648.620	652.233	653.437	637.783
40	564.733	579.183	575.972	582.394	574.366
45	492.084	504.928	504.126	515.765	513.759
50	417.830	429.470	438.702	458.369	462.383
55	341.569	356.019	376.489	405.789	419.034
60	269.723	287.384	322.303	358.427	375.686
65	200.687	228.783	272.533	313.874	331.535
70	137.671	174.598	221.558	266.512	287.384
75	87.500	122.820	175.802	220.756	241.627
80	47.763	81.880	138.073	179.013	198.279
85	15.252	50.172	104.759	141.284	159.345
90	0.000	32.511	79.873	113.990	126.433
95	0.000	29.702	74.656	104.357	111.582
100	0.000	28.096	69.438	95.126	101.548
105	0.000	25.688	65.023	87.901	94.323
110	0.000	24.082	60.607	82.282	88.704
115	0.000	22.076	55.390	77.064	83.084
120	0.000	18.865	49.770	69.839	77.064
125	0.000	15.654	44.954	63.818	70.240
130	0.000	12.844	38.933	56.995	61.410
135	0.000	11.640	31.307	49.369	53.784
140	0.000	9.633	24.484	41.342	45.757
145	0.000	7.626	18.865	32.110	36.525
150	0.000	5.619	14.449	24.484	28.096
155	0.000	4.415	11.640	17.660	20.470
160	0.000	0.000	8.429	12.844	14.449
165	0.000	0.000	5.619	9.232	10.034
170	0.000	0.000	0.000	5.619	6.021
175	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	321.87	N.A.	12.20
0-30	673.27	N.A.	25.60
0-40	1077.77	N.A.	41.00
0-60	1811.03	N.A.	68.90
0-80	2261.6	N.A.	86.10
0-90	2369.19	N.A.	90.20
10-90	2285.41	N.A.	87.00
20-40	755.90	N.A.	28.80
20-50	1148.24	N.A.	43.70
40-70	1001.28	N.A.	38.10
60-80	450.57	N.A.	17.10
70-80	182.55	N.A.	6.90
80-90	107.59	N.A.	4.10
90-110	132.38	N.A.	5.00
90-120	180.85	N.A.	6.90
90-130	216.55	N.A.	8.20
90-150	251.98	N.A.	9.60
90-180	258.62	N.A.	9.80
110-180	126.24	N.A.	4.80
0-180	2627.81	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	83.77
10-20	238.09
20-30	351.40
30-40	404.50
40-50	392.34
50-60	340.93
60-70	268.02
70-80	182.55
80-90	107.59
90-100	72.43
100-110	59.95
110-120	48.46
120-130	35.70
130-140	23.14
140-150	12.29
150-160	5.14
160-170	1.42
170-180	0.08

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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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	106	101	96	92	102	97	93	89	91	88	85	86	83	81	81	78	76	74
2	96	88	81	75	92	85	78	73	80	74	70	75	71	67	71	67	64	61
3	88	77	69	62	84	75	67	61	70	64	59	66	61	56	62	58	54	52
4	80	68	60	53	77	66	58	52	63	56	50	59	53	48	56	51	47	44
5	74	61	52	46	71	59	51	45	56	49	44	53	47	42	50	45	41	39
6	68	55	46	40	66	54	45	39	51	44	38	48	42	37	46	40	36	34
7	63	50	41	35	61	49	41	35	46	39	34	44	38	33	42	36	32	30
8	59	46	37	32	57	45	37	31	43	35	30	41	34	30	39	33	29	27
9	55	42	34	28	53	41	33	28	39	32	27	37	31	27	36	30	26	24
10	52	39	31	26	50	38	31	26	36	30	25	35	29	24	33	28	24	22

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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	16.5	17.9	17.0	18.4	19.0	18.7	20.2	19.3	20.7	21.2
	3H	17.7	18.9	18.2	19.5	20.0	21.1	22.4	21.7	22.9	23.5
	4H	18.0	19.2	18.5	19.7	20.3	22.3	23.5	22.8	24.0	24.6
	6H	18.1	19.3	18.7	19.8	20.4	23.4	24.5	24.0	25.1	25.7
	8H	18.1	19.2	18.7	19.8	20.4	24.0	25.1	24.6	25.6	26.3
	12H	18.1	19.2	18.7	19.7	20.4	24.6	25.6	25.2	26.2	26.9
4H	2H	17.3	18.5	17.8	19.0	19.7	19.1	20.3	19.6	20.8	21.5
	3H	18.7	19.7	19.3	20.3	21.0	21.7	22.7	22.3	23.3	23.9
	4H	19.2	20.1	19.7	20.7	21.3	23.0	23.9	23.6	24.5	25.2
	6H	19.4	20.2	20.0	20.9	21.5	24.3	25.1	24.9	25.7	26.4
	8H	19.5	20.2	20.1	20.9	21.5	25.0	25.8	25.6	26.4	27.1
	12H	19.5	20.2	20.1	20.8	21.5	25.7	26.4	26.3	27.1	27.8
8H	4H	19.8	20.6	20.4	21.2	21.9	23.1	23.9	23.7	24.5	25.2
	6H	20.2	20.9	20.9	21.5	22.2	24.6	25.3	25.3	25.9	26.6
	8H	20.4	20.9	21.0	21.6	22.3	25.4	26.0	26.1	26.7	27.4
	12H	20.4	20.9	21.1	21.6	22.4	26.3	26.8	27.0	27.5	28.3
12H	4H	20.0	20.7	20.6	21.3	22.0	23.1	23.8	23.7	24.5	25.2
	6H	20.5	21.1	21.2	21.7	22.5	24.6	25.2	25.3	25.8	26.6
	8H	20.7	21.2	21.4	21.9	22.7	25.5	26.0	26.1	26.7	27.4

Maximum UGR = 28.3

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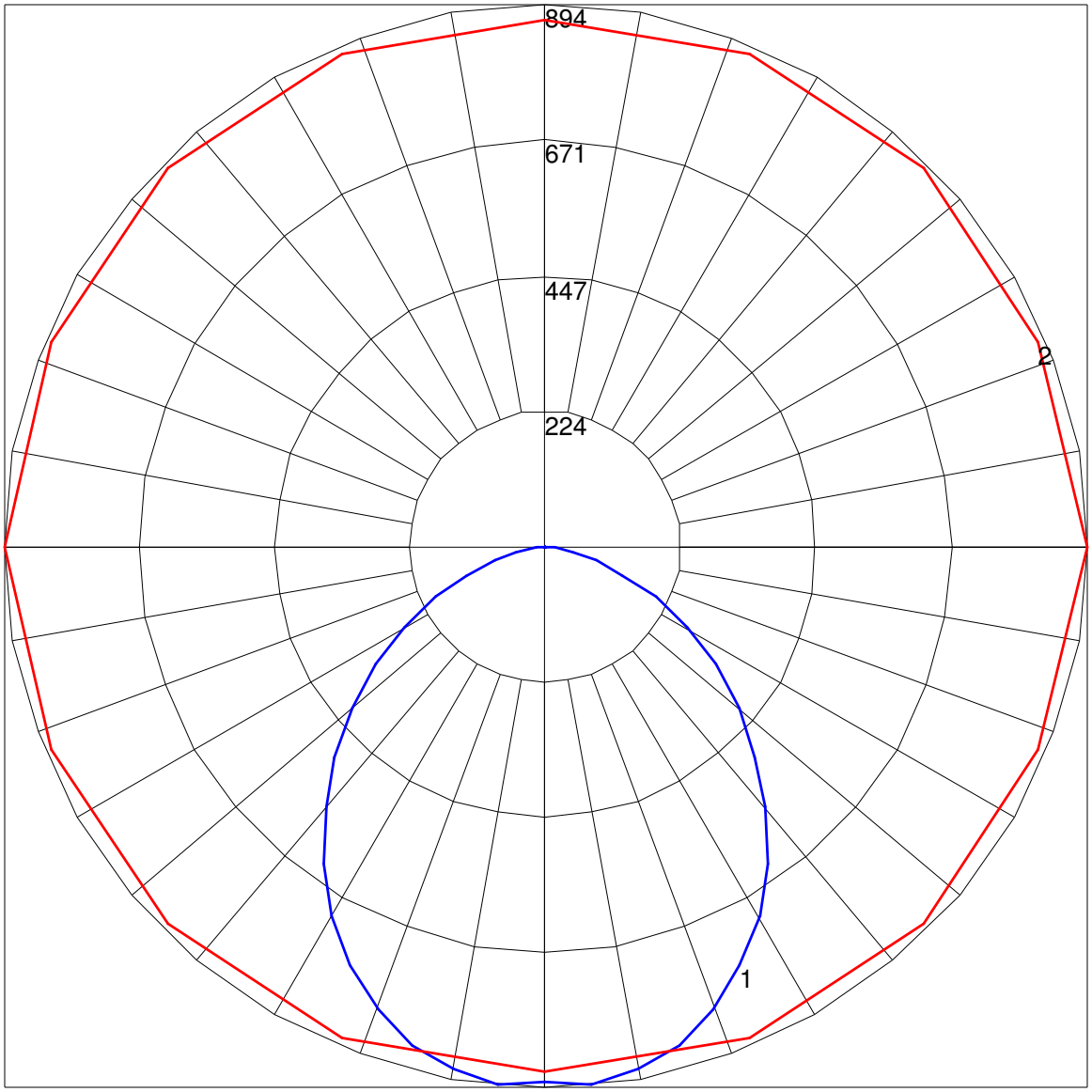
POLAR GRAPH



Maximum Candela = 894.261 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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