H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 1SF-2-L12-840-AF12125-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TESTLAB] GEN FROM Photopia 2014.0.1 see: www.ltioptics.com/ies
[ISSUEDATE]
[TESTDATE] 03-31-2023
[TEST]
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 1SF-2-L12-840-AF12125-DIM-UNV
[LUMINAIRE] 2' LED UNDER CABINET LUMINAIRE
[LAMP] 22" 32 LED
[LAMPCAT] HLM 80 CRI 4000K CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1322
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	116
Total Luminaire Watts	11.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.32
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	2.00 ft
Luminous Width (90-270)	0.41 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4715	5903	7190
55	3277	4285	5837
65	2341	2840	4013
75	1970	2118	2605
85	2757	2809	2479

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	584.472	584.472	584.472	584.472	584.472
10	567.076	569.779	569.275	572.963	575.346
20	560.198	562.679	565.814	568.241	569.183
30	474.642	487.776	506.374	524.469	529.576
40	319.698	338.767	385.491	427.562	444.454
50	184.575	198.873	245.933	302.269	324.632
60	99.756	103.775	125.883	165.224	181.792
70	49.881	50.872	55.660	67.770	74.778
80	27.264	27.589	27.248	26.457	27.204
90	9.083	9.835	9.787	6.613	5.481

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	216.17	N.A.	16.40
0-30	463.93	N.A.	35.10
0-40	743.05	N.A.	56.20
0-60	1160.92	N.A.	87.80
0-80	1302.38	N.A.	98.50
0-90	1321.76	N.A.	100.00
10-90	1266.62	N.A.	95.80
20-40	526.88	N.A.	39.90
20-50	772.34	N.A.	58.40
40-70	513.69	N.A.	38.90
60-80	141.47	N.A.	10.70
70-80	45.64	N.A.	3.50
80-90	19.37	N.A.	1.50
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	1321.76	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	55.14
10-20	161.03
20-30	247.76
30-40	279.13
40-50	245.46
50-60	172.40
60-70	95.82
70-80	45.64
80-90	19.37
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	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	31	41	35	31	30

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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	14.4	15.9	14.8	16.2	16.5	17.7	19.2	18.1	19.5	19.8
	3H	15.5	16.8	15.8	17.1	17.5	18.6	19.9	19.0	20.3	20.6
	4H	15.9	17.2	16.3	17.5	17.9	18.9	20.2	19.3	20.5	20.9
	6H	16.4	17.6	16.8	17.9	18.3	19.2	20.3	19.6	20.7	21.1
	8H	16.6	17.7	17.1	18.1	18.5	19.2	20.3	19.6	20.7	21.1
	12H	16.9	17.9	17.3	18.3	18.7	19.3	20.3	19.7	20.7	21.1
4H	2H	15.0	16.2	15.4	16.6	17.0	17.8	19.1	18.2	19.4	19.8
	3H	16.2	17.3	16.6	17.7	18.1	18.9	19.9	19.3	20.3	20.7
	4H	16.8	17.7	17.3	18.2	18.6	19.3	20.3	19.8	20.7	21.1
	6H	17.4	18.2	17.9	18.7	19.1	19.7	20.5	20.1	20.9	21.4
	8H	17.7	18.5	18.2	18.9	19.4	19.8	20.5	20.2	21.0	21.4
	12H	18.1	18.7	18.5	19.2	19.7	19.9	20.6	20.4	21.1	21.5
8H	4H	17.1	17.9	17.6	18.3	18.8	19.4	20.2	19.9	20.6	21.1
	6H	17.9	18.5	18.4	19.0	19.5	19.8	20.4	20.3	20.9	21.4
	8H	18.3	18.8	18.8	19.3	19.8	20.0	20.6	20.5	21.1	21.6
	12H	18.7	19.2	19.3	19.7	20.3	20.2	20.7	20.8	21.2	21.8
12H	4H	17.1	17.8	17.6	18.3	18.8	19.4	20.1	19.9	20.6	21.0
	6H	18.0	18.5	18.5	19.0	19.5	19.9	20.4	20.4	20.9	21.4
	8H	18.4	18.9	18.9	19.4	20.0	20.1	20.6	20.6	21.1	21.6

Maximum UGR = 21.8

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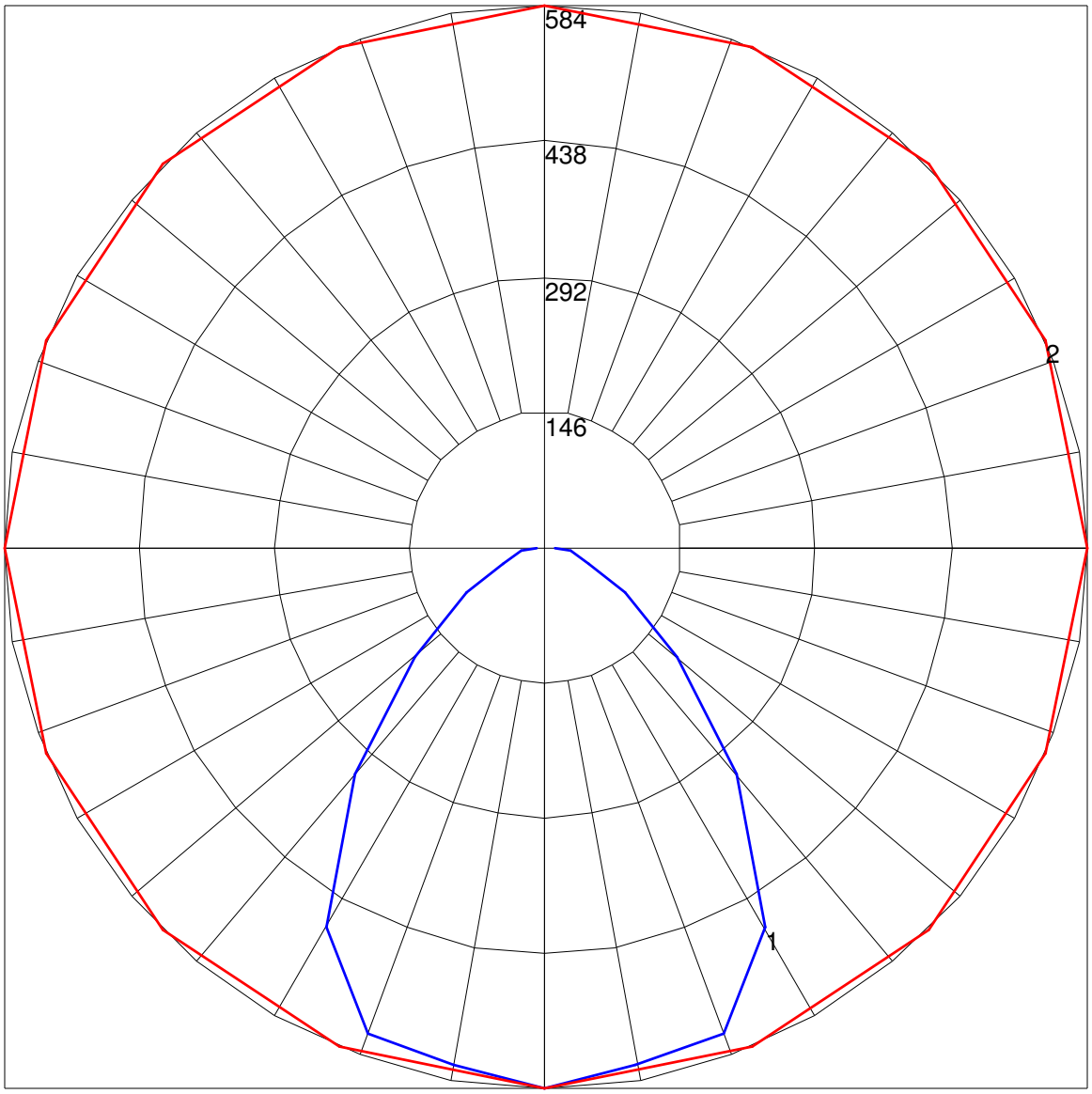
POLAR GRAPH



Maximum Candela = 584.472 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.)

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