H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-14-L61-850-RA-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19323.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-06-23
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 1x4'RECESSED LED LUMINAIRE
[MORE] WHITE REFLECTOR w/WHITE RIBBED ACRYLIC LENS
[MORE] 0-10V LED DRIVER
[LUMCAT] PT-14-L61-850-RA-DIM-UNV
[LAMPCAT] 22" LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Architectural, Office, Direct
[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6552
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	144
Total Luminaire Watts	45.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 ft
Luminous Width (90-270)	0.94 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6132	6405	6498
55	5412	5947	6199
65	4710	5581	5726
75	3422	4794	4997
85	1559	2565	3018

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2387.669	2387.669	2387.669	2387.669	2387.669
5	2441.593	2423.618	2414.631	2392.162	2378.681
10	2399.652	2386.171	2381.677	2357.710	2345.727
15	2333.744	2321.761	2327.752	2299.292	2299.292
20	2239.375	2234.882	2245.367	2218.405	2227.392
25	2134.522	2124.036	2145.007	2125.534	2119.543
30	2011.693	1992.220	2022.179	2011.693	2008.697
35	1857.408	1842.429	1881.375	1873.885	1882.873
40	1677.659	1674.663	1716.605	1722.597	1715.107
45	1481.433	1485.927	1547.341	1560.822	1569.810
50	1273.224	1295.692	1360.102	1393.056	1393.056
55	1060.520	1102.462	1165.374	1229.784	1214.805
60	868.788	904.738	979.633	1032.060	1024.570
65	680.051	711.507	805.876	843.323	826.846
70	485.323	543.741	621.633	639.608	632.118
75	302.578	380.469	423.909	441.883	441.883
80	154.285	226.184	242.661	256.143	245.657
85	46.435	88.377	76.393	83.883	89.875
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	881.71	N.A.	13.50
0-30	1863.21	N.A.	28.40
0-40	3029.53	N.A.	46.20
0-60	5244.69	N.A.	80.00
0-80	6445.85	N.A.	98.40
0-90	6551.89	N.A.	100.00
10-90	6323.37	N.A.	96.50
20-40	2147.82	N.A.	32.80
20-50	3327.36	N.A.	50.80
40-70	2985.96	N.A.	45.60
60-80	1201.16	N.A.	18.30
70-80	430.36	N.A.	6.60
80-90	106.04	N.A.	1.60
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	6551.89	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	228.52
10-20	653.19
20-30	981.50
30-40	1166.32
40-50	1179.54
50-60	1035.62
60-70	770.80
70-80	430.36
80-90	106.04
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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	78	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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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	17.8	19.4	18.1	19.7	20.0	18.6	20.2	19.0	20.6	20.9
	3H	19.3	20.8	19.7	21.1	21.5	20.4	21.9	20.8	22.2	22.6
	4H	19.8	21.2	20.2	21.6	21.9	21.1	22.4	21.5	22.8	23.2
	6H	20.1	21.4	20.6	21.8	22.2	21.5	22.8	21.9	23.1	23.5
	8H	20.2	21.4	20.6	21.8	22.2	21.6	22.8	22.0	23.2	23.6
	12H	20.2	21.4	20.7	21.8	22.2	21.7	22.9	22.1	23.2	23.7
4H	2H	18.5	19.9	18.9	20.2	20.6	19.2	20.6	19.6	20.9	21.3
	3H	20.3	21.5	20.7	21.9	22.3	21.2	22.4	21.6	22.8	23.2
	4H	21.0	22.0	21.4	22.4	22.9	22.0	23.0	22.4	23.5	23.9
	6H	21.4	22.3	21.9	22.8	23.2	22.6	23.5	23.0	23.9	24.4
	8H	21.5	22.4	22.0	22.8	23.3	22.7	23.6	23.2	24.0	24.5
	12H	21.6	22.4	22.1	22.8	23.3	22.8	23.6	23.3	24.1	24.6
8H	4H	21.4	22.2	21.8	22.7	23.1	22.3	23.1	22.7	23.6	24.0
	6H	22.0	22.7	22.4	23.1	23.6	23.0	23.7	23.5	24.2	24.6
	8H	22.1	22.8	22.6	23.3	23.8	23.2	23.8	23.7	24.3	24.8
	12H	22.3	22.8	22.8	23.3	23.9	23.3	23.9	23.8	24.4	25.0
12H	4H	21.4	22.2	21.9	22.7	23.1	22.3	23.1	22.8	23.5	24.0
	6H	22.0	22.7	22.5	23.1	23.7	23.0	23.6	23.5	24.1	24.6
	8H	22.3	22.8	22.8	23.3	23.9	23.3	23.8	23.8	24.3	24.9

Maximum UGR = 25.0

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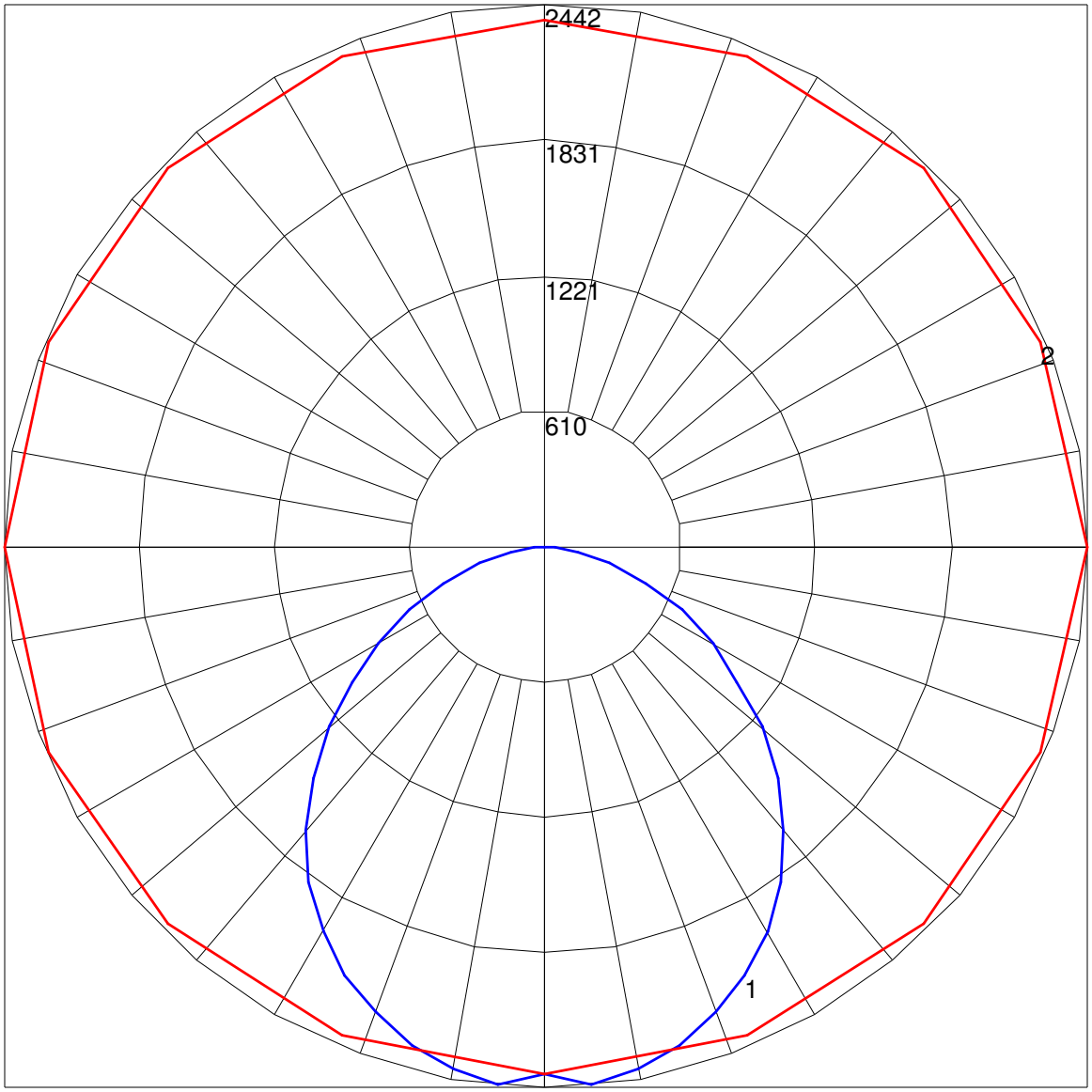
POLAR GRAPH



Maximum Candela = 2441.593 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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