H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-14-P33-8TW-SA-POE X_4000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]GEN FROM BALLABS TEST NO. 20790.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 16-MAY-2019
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 2-84 LED 22"ARRAYS w/WHITE REFLECTOR
[MORE] FROST SQUARED RIBBED LENS - 1x4 LUMINAIRE
[LUMCAT] PT-14-P33-8TW-SA-POE x
[LAMPCAT] HLM 80 CRI TUNABLE WHITE CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3335
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	133
Total Luminaire Watts	25
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.16
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 ft
Luminous Width (90-270)	0.98 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2977	2885	2863
55	2679	2695	2754
65	2341	2590	2837
75	1890	2615	3263
85	876	2823	3411

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1298.797	1298.797	1298.797	1298.797	1298.797
5	1305.249	1290.910	1283.740	1265.816	1282.306
10	1280.155	1264.740	1255.420	1253.627	1256.137
15	1237.854	1222.797	1214.552	1211.684	1209.533
20	1181.572	1166.874	1153.251	1146.440	1147.515
25	1111.308	1099.120	1093.384	1075.460	1068.648
30	1029.215	1016.668	1003.762	994.083	988.706
35	943.895	932.423	917.008	903.744	896.216
40	846.028	836.707	820.576	810.179	804.085
45	751.388	740.633	728.086	722.350	722.709
50	651.370	648.144	634.521	637.031	640.257
55	548.484	548.484	551.711	560.314	563.899
60	452.768	454.919	469.617	484.315	493.277
65	353.109	366.015	390.750	416.203	428.033
70	257.393	278.902	314.393	348.449	362.430
75	174.583	196.809	241.620	285.714	301.487
80	91.414	129.414	176.017	222.620	237.318
85	27.245	61.301	87.829	99.659	106.112
90	0.000	1.075	1.434	2.509	1.434

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	464.72	N.A.	13.90
0-30	965.59	N.A.	29.00
0-40	1539.48	N.A.	46.20
0-60	2601.75	N.A.	78.00
0-80	3244.7	N.A.	97.30
0-90	3335.15	N.A.	100.00
10-90	3213.27	N.A.	96.30
20-40	1074.76	N.A.	32.20
20-50	1640.23	N.A.	49.20
40-70	1449.87	N.A.	43.50
60-80	642.95	N.A.	19.30
70-80	255.35	N.A.	7.70
80-90	90.45	N.A.	2.70
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	3335.15	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	121.88
10-20	342.85
20-30	500.87
30-40	573.89
40-50	565.47
50-60	496.80
60-70	387.60
70-80	255.35
80-90	90.45
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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	83	70	62	55	80	69	61	55	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	54	47	60	52	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
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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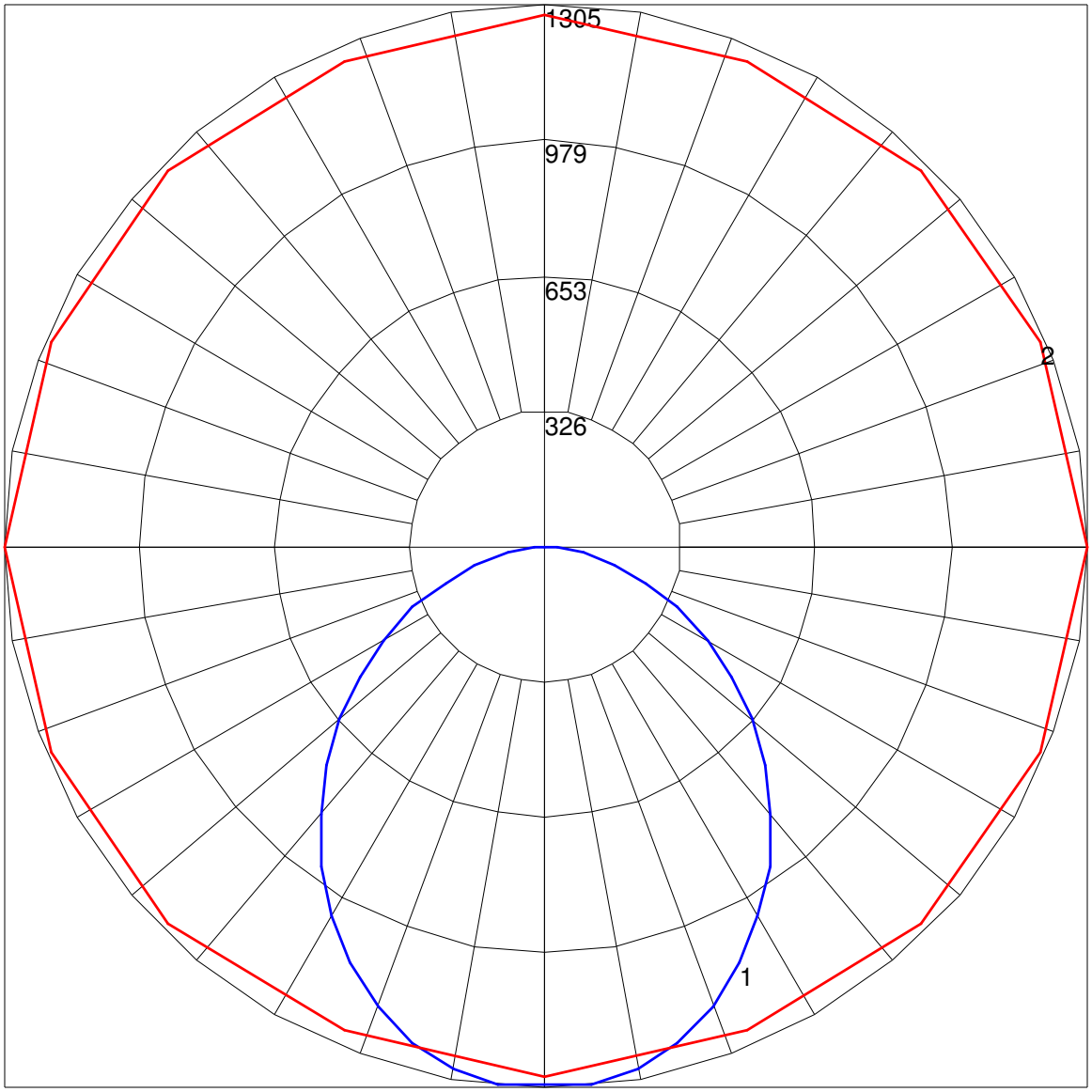
POLAR GRAPH



Maximum Candela = 1305.249 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.)