H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PXF-46-03-08-P9-8TW-G-POE 4000K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]GEN from BALLABS TEST NO. 20586.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 03-20-2020
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO 64836
[LUMINAIRE] PERIMETER LUMINAIRE
[MORE] SPECULAR REFLECTOR w/OPEN BTM
[LUMCAT] PXF-46-03-08-P9-8TW-G-PoE 4000k
[LAMPCAT] HLM 80 CRI, TUNABLE WHITE LED
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor,Perimeter, Corridor, Healthcare, Indirect
[_SEARCH_MOUNTING] Wall, Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3303
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	86
Total Luminaire Watts	38.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.18
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	0.56
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.33 ft
Luminous Width (90-270)	3.69 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2840	2546	30500
55	2589	2898	26574
65	2003	2549	19735
75	1278	1754	8740
85	353	706	2119

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0	4163.238	4163.238	4163.238	4163.238	4163.238	4163.238	4163.238	4163.238	4163.238
5	2100.072	2194.092	2794.238	3483.131	4150.937	4722.086	4976.028	4900.460	4786.230
10	944.593	1028.069	1513.106	2798.631	4049.887	4855.647	4440.026	3734.437	3360.993
15	466.585	570.271	852.330	1967.389	3931.264	4664.971	3375.052	2484.060	2135.219
20	280.302	285.575	532.487	1334.732	3748.496	4095.579	2325.017	1289.919	906.809
25	259.214	266.243	283.817	937.563	3570.122	3356.600	1376.909	637.930	566.756
30	240.761	244.276	260.093	611.569	3329.360	2585.988	710.861	499.975	475.372
35	226.702	227.581	238.125	424.408	3070.147	1952.452	522.821	427.044	336.539
40	231.096	224.945	217.915	253.942	2788.965	1306.614	429.680	268.001	236.368
45	229.338	229.338	205.614	223.188	2462.971	762.704	330.388	202.099	180.132
50	202.978	210.007	201.220	196.827	2114.131	460.434	210.007	154.650	141.469
55	169.587	176.617	189.797	169.587	1740.687	351.476	157.286	121.259	113.351
60	131.804	139.712	160.800	144.984	1347.033	275.909	116.866	94.899	90.505
65	96.656	101.928	123.017	131.804	952.501	153.771	86.112	71.174	66.781
70	64.144	71.174	82.597	108.079	589.602	92.263	59.751	52.721	46.571
75	37.784	40.420	51.843	69.417	258.335	55.358	37.784	31.633	27.239
80	17.574	21.089	22.846	33.390	72.931	26.361	18.453	14.059	11.423
85	3.515	7.030	7.030	8.787	21.089	7.030	3.515	3.515	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1010.34	N.A.	30.60
0-30	1646.28	N.A.	49.80
0-40	2204.45	N.A.	66.70
0-60	2995.65	N.A.	90.70
0-80	3291.06	N.A.	99.60
0-90	3302.73	N.A.	100.00
10-90	2960.14	N.A.	89.60
20-40	1194.11	N.A.	36.20
20-50	1644.2	N.A.	49.80
40-70	1004.64	N.A.	30.40
60-80	295.41	N.A.	8.90
70-80	81.97	N.A.	2.50
80-90	11.67	N.A.	0.40
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	3302.73	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	342.59
10-20	667.75
20-30	635.93
30-40	558.17
40-50	450.09
50-60	341.11
60-70	213.44
70-80	81.97
80-90	11.67
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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	80	76	73	71
4	91	81	74	69	89	80	73	68	78	72	67	75	71	67	73	69	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	53	46	42	63	52	46	42	51	45	41	51	45	41	50	45	41	40

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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	11.4	12.8	11.8	13.1	13.4	19.2	20.5	19.5	20.8	21.1
	3H	12.6	13.8	13.0	14.2	14.5	22.0	23.2	22.4	23.6	23.9
	4H	12.9	14.1	13.3	14.4	14.8	22.6	23.7	23.0	24.1	24.5
	6H	13.1	14.1	13.5	14.5	14.9	22.8	23.8	23.2	24.2	24.6
	8H	13.1	14.1	13.5	14.5	14.9	22.8	23.8	23.2	24.2	24.6
	12H	13.1	14.0	13.5	14.4	14.8	22.8	23.7	23.2	24.1	24.5
4H	2H	12.1	13.3	12.5	13.6	14.0	19.0	20.1	19.4	20.5	20.9
	3H	13.5	14.4	13.9	14.8	15.2	21.9	22.8	22.3	23.2	23.6
	4H	13.9	14.7	14.3	15.1	15.5	22.5	23.3	22.9	23.7	24.2
	6H	14.1	14.8	14.5	15.2	15.7	22.7	23.4	23.2	23.9	24.3
	8H	14.1	14.8	14.6	15.2	15.7	22.7	23.4	23.2	23.8	24.3
	12H	14.1	14.7	14.6	15.1	15.6	22.7	23.3	23.2	23.8	24.3
8H	4H	14.1	14.8	14.6	15.2	15.7	22.4	23.0	22.8	23.5	24.0
	6H	14.4	14.9	14.9	15.4	15.9	22.6	23.1	23.1	23.6	24.1
	8H	14.4	14.9	15.0	15.4	15.9	22.6	23.1	23.1	23.6	24.1
	12H	14.5	14.9	15.0	15.4	16.0	22.6	23.1	23.1	23.5	24.1
12H	4H	14.1	14.7	14.6	15.2	15.7	22.3	22.9	22.8	23.4	23.9
	6H	14.4	14.9	14.9	15.4	15.9	22.6	23.0	23.1	23.5	24.0
	8H	14.5	14.9	15.0	15.4	16.0	22.6	23.0	23.1	23.5	24.1

Maximum UGR = 24.6

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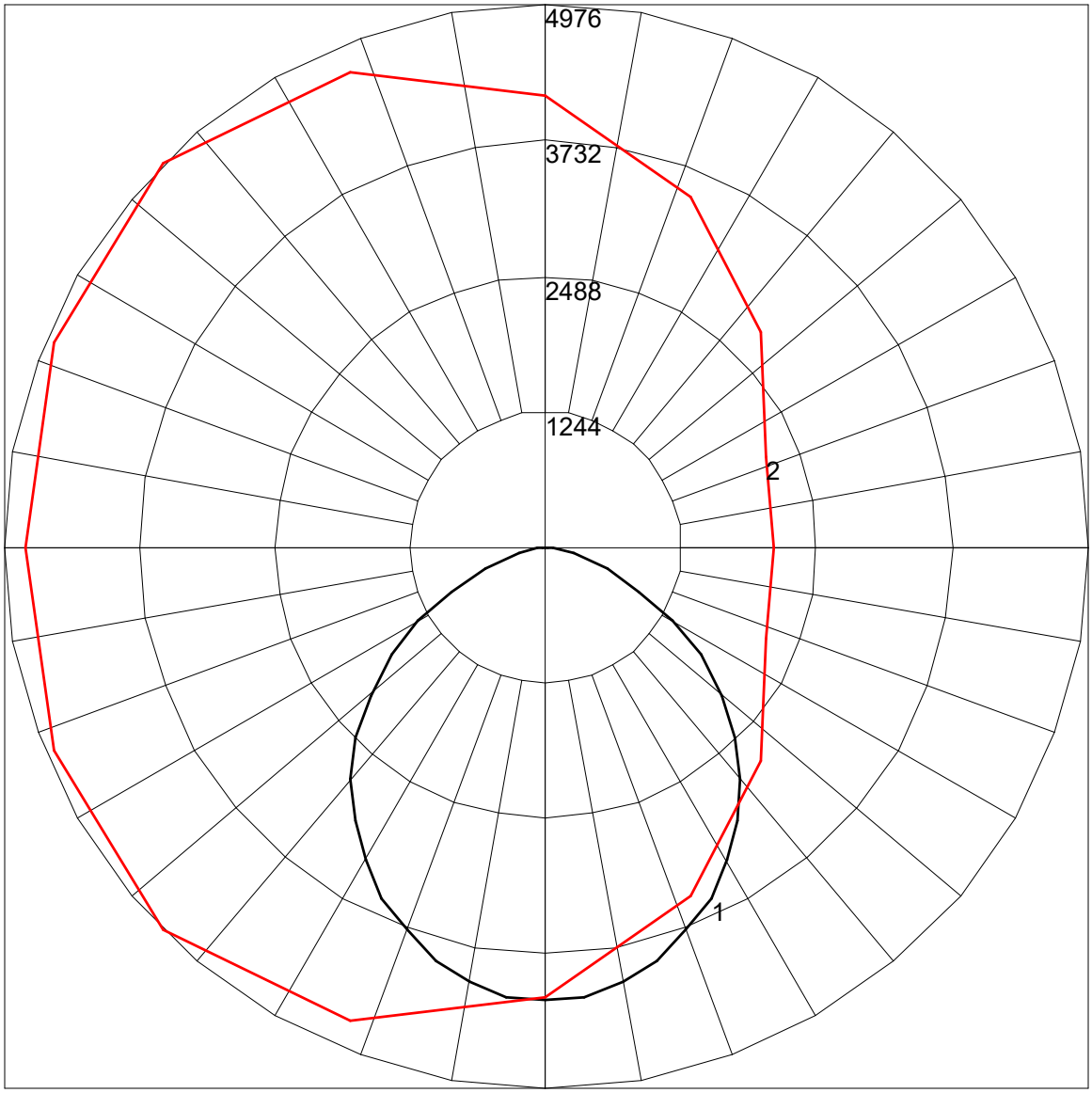
POLAR GRAPH



Maximum Candela = 4976.028 Located At Horizontal Angle = 135, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

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