H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PXF-46-03-08-P9-835-G-POE_.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] 8-JUL-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-P9-835-G-PoE
[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	3418
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	38.1
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	2939	2635	31562
55	2679	2998	27499
65	2072	2638	20422
75	1323	1815	9044
85	365	731	2193

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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	4308.189	4308.189	4308.189	4308.189	4308.189	4308.189	4308.189	4308.189	4308.189
5	2173.189	2270.483	2891.524	3604.403	4295.459	4886.494	5149.277	5071.079	4952.872
10	977.481	1063.863	1565.788	2896.070	4190.891	5024.705	4594.614	3864.458	3478.012
15	482.830	590.126	882.006	2035.888	4068.138	4827.390	3492.561	2570.547	2209.561
20	290.062	295.517	551.026	1381.203	3879.007	4238.174	2405.966	1334.829	938.381
25	268.239	275.513	293.699	970.206	3694.422	3473.466	1424.848	660.140	586.488
30	249.144	252.781	269.148	632.862	3445.278	2676.024	735.611	517.383	491.923
35	234.595	235.505	246.416	439.184	3177.039	2020.430	541.024	441.912	348.256
40	239.142	232.777	225.503	262.783	2886.068	1352.106	444.640	277.332	244.597
45	237.323	237.323	212.773	230.958	2548.724	789.259	341.891	209.135	186.403
50	210.045	217.319	208.226	203.680	2187.738	476.465	217.319	160.034	146.395
55	175.492	182.766	196.405	175.492	1801.292	363.714	162.762	125.481	117.298
60	136.393	144.576	166.399	150.032	1393.933	285.515	120.935	98.203	93.656
65	100.021	105.477	127.300	136.393	985.664	159.125	89.110	73.652	69.106
70	66.378	73.652	85.473	111.842	610.130	95.475	61.831	54.557	48.192
75	39.099	41.827	53.648	71.833	267.330	57.285	39.099	32.734	28.188
80	18.186	21.823	23.641	34.553	75.471	27.279	19.095	14.549	11.821
85	3.637	7.274	7.274	9.093	21.823	7.274	3.637	3.637	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	1045.52	N.A.	30.60
0-30	1703.6	N.A.	49.80
0-40	2281.2	N.A.	66.70
0-60	3099.95	N.A.	90.70
0-80	3405.65	N.A.	99.60
0-90	3417.72	N.A.	100.00
10-90	3063.2	N.A.	89.60
20-40	1235.68	N.A.	36.20
20-50	1701.45	N.A.	49.80
40-70	1039.62	N.A.	30.40
60-80	305.69	N.A.	8.90
70-80	84.82	N.A.	2.50
80-90	12.08	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	3417.72	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	354.52
10-20	691.00
20-30	658.07
30-40	577.61
40-50	465.77
50-60	352.98
60-70	220.87
70-80	84.82
80-90	12.08
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	222	222	222	222	217	217	217	217	207	207	207	198	198	198	190	190	190	186
1	208	201	195	190	203	197	192	187	189	185	181	182	179	176	176	173	170	167
2	194	182	172	164	189	179	170	162	172	165	158	167	160	155	161	156	152	148
3	181	165	153	144	177	163	152	143	157	148	140	153	145	138	148	142	136	132
4	169	151	138	128	165	149	137	127	145	134	126	141	131	124	137	129	123	119
5	158	139	125	115	155	137	124	115	133	122	114	130	120	113	127	118	112	108
6	149	128	115	105	146	127	114	105	124	112	104	121	111	103	118	109	102	99
7	140	119	106	96	137	118	105	96	115	104	96	113	103	95	111	101	94	91
8	132	111	98	89	130	110	98	89	108	97	88	106	96	88	104	95	88	85
9	125	104	92	83	123	103	91	83	102	90	82	100	89	82	98	89	82	79
10	119	98	86	78	117	97	85	77	96	85	77	94	84	77	93	83	77	74

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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	9.4	10.8	9.8	11.1	11.4	17.2	18.5	17.5	18.8	19.1
	3H	10.6	11.8	11.0	12.2	12.5	20.0	21.2	20.4	21.6	21.9
	4H	10.9	12.1	11.3	12.4	12.8	20.6	21.7	21.0	22.1	22.5
	6H	11.1	12.1	11.5	12.5	12.9	20.8	21.8	21.2	22.2	22.6
	8H	11.1	12.1	11.5	12.5	12.9	20.8	21.8	21.2	22.2	22.6
	12H	11.1	12.0	11.5	12.4	12.8	20.8	21.7	21.2	22.1	22.5
4H	2H	10.1	11.3	10.5	11.6	12.0	17.0	18.1	17.4	18.5	18.9
	3H	11.5	12.4	11.9	12.8	13.2	19.9	20.8	20.3	21.2	21.6
	4H	11.9	12.7	12.3	13.1	13.5	20.5	21.3	20.9	21.7	22.2
	6H	12.1	12.8	12.5	13.2	13.7	20.7	21.4	21.2	21.9	22.3
	8H	12.1	12.8	12.6	13.2	13.7	20.7	21.4	21.2	21.8	22.3
	12H	12.1	12.7	12.6	13.2	13.6	20.7	21.3	21.2	21.8	22.3
8H	4H	12.1	12.8	12.6	13.2	13.7	20.4	21.0	20.8	21.5	22.0
	6H	12.4	12.9	12.9	13.4	13.9	20.6	21.1	21.1	21.6	22.1
	8H	12.4	12.9	13.0	13.4	13.9	20.6	21.1	21.1	21.6	22.1
	12H	12.5	12.9	13.0	13.4	14.0	20.6	21.1	21.1	21.5	22.1
12H	4H	12.1	12.7	12.6	13.2	13.7	20.3	20.9	20.8	21.4	21.9
	6H	12.4	12.9	12.9	13.4	13.9	20.6	21.0	21.1	21.5	22.1
	8H	12.5	12.9	13.0	13.4	14.0	20.6	21.0	21.1	21.5	22.1

Maximum UGR = 22.6

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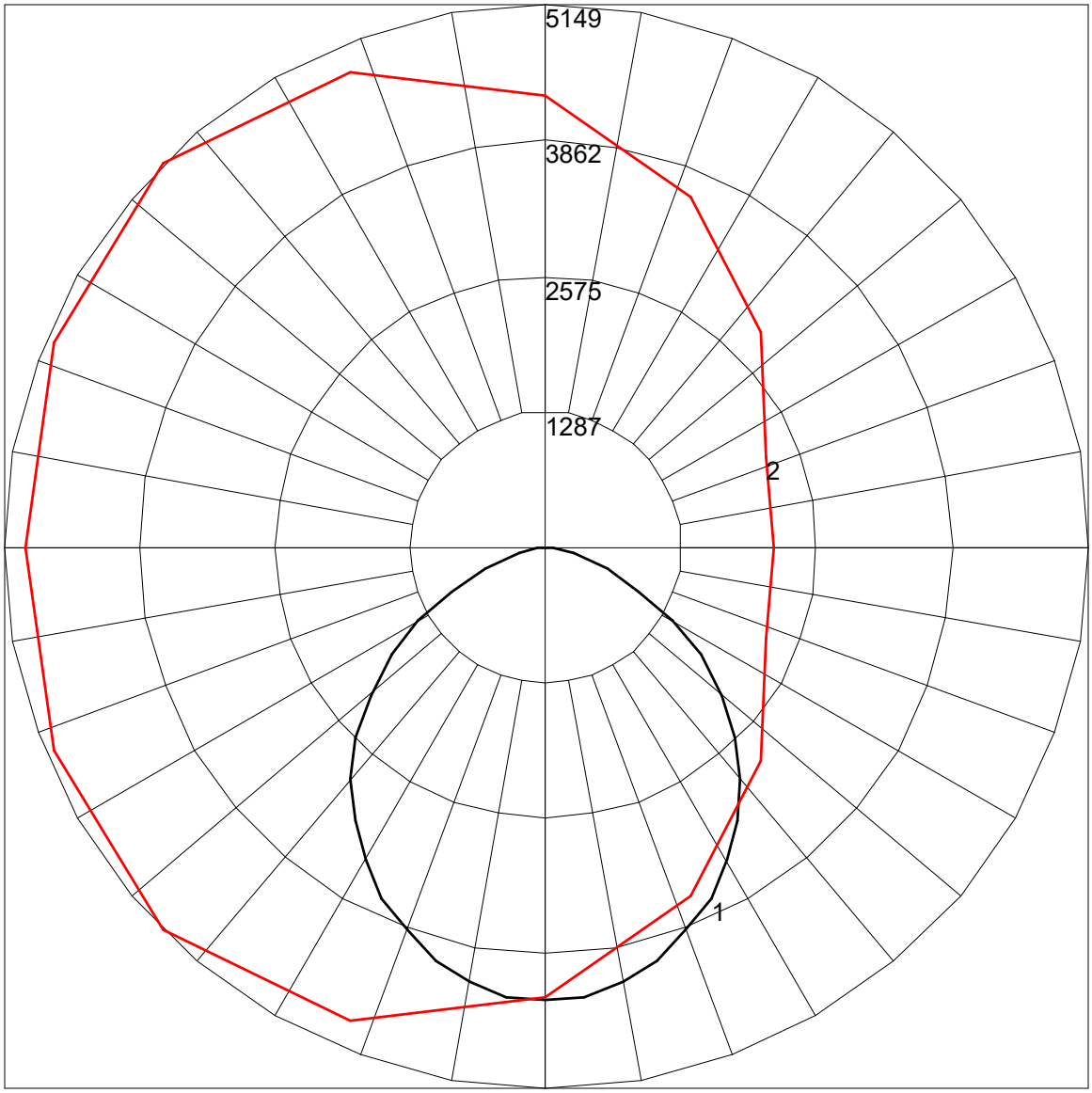
POLAR GRAPH



Maximum Candela = 5149.277 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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