H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PXF-46-03-08-L13-835-G-DIM-UNV_.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-L13-835-G-DIM-UNV
[LAMPCAT] HLM 80 CRI, 3500K CCT
[_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	4085
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	51.3
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	3512	3149	37721
55	3202	3584	32866
65	2477	3152	24408
75	1581	2169	10809
85	437	873	2620

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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	5148.903	5148.903	5148.903	5148.903	5148.903	5148.903	5148.903	5148.903	5148.903
5	2597.273	2713.552	3455.785	4307.778	5133.689	5840.060	6154.124	6060.665	5919.391
10	1168.229	1271.468	1871.340	3461.219	5008.716	6005.242	5491.221	4618.581	4156.723
15	577.051	705.285	1054.123	2433.177	4862.008	5769.423	4174.111	3072.172	2640.742
20	346.665	353.186	658.555	1650.735	4635.969	5065.225	2875.474	1595.312	1121.500
25	320.584	329.278	351.012	1159.536	4415.364	4151.289	1702.898	788.962	700.938
30	297.763	302.110	321.671	756.361	4117.601	3198.232	879.161	618.347	587.918
35	280.375	281.462	294.502	524.888	3797.017	2414.703	646.601	528.148	416.216
40	285.809	278.202	269.508	314.064	3449.265	1615.960	531.409	331.451	292.329
45	283.635	283.635	254.294	276.028	3046.090	943.277	408.609	249.947	222.779
50	251.033	259.727	248.860	243.426	2614.660	569.444	259.727	191.264	174.963
55	209.738	218.432	234.733	209.738	2152.802	434.690	194.524	149.968	140.188
60	163.009	172.789	198.871	179.310	1665.949	341.232	144.534	117.366	111.933
65	119.540	126.060	152.141	163.009	1178.010	190.177	106.499	88.025	82.591
70	79.331	88.025	102.152	133.667	729.192	114.106	73.897	65.203	57.596
75	46.729	49.989	64.117	85.851	319.497	68.464	46.729	39.122	33.688
80	21.734	26.081	28.255	41.296	90.198	32.602	22.821	17.388	14.127
85	4.347	8.694	8.694	10.867	26.081	8.694	4.347	4.347	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	1249.55	N.A.	30.60
0-30	2036.04	N.A.	49.80
0-40	2726.37	N.A.	66.70
0-60	3704.89	N.A.	90.70
0-80	4070.23	N.A.	99.60
0-90	4084.67	N.A.	100.00
10-90	3660.97	N.A.	89.60
20-40	1476.82	N.A.	36.20
20-50	2033.48	N.A.	49.80
40-70	1242.49	N.A.	30.40
60-80	365.35	N.A.	8.90
70-80	101.37	N.A.	2.50
80-90	14.43	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	4084.67	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	423.70
10-20	825.84
20-30	786.49
30-40	690.33
40-50	556.66
50-60	421.87
60-70	263.97
70-80	101.37
80-90	14.43
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	387	387	387	387	378	378	378	378	361	361	361	345	345	345	331	331	331	325
1	362	351	340	331	354	343	334	325	330	322	315	318	312	306	306	301	297	291
2	338	317	300	286	330	311	296	282	300	287	276	290	279	270	281	272	264	258
3	315	288	267	251	308	283	264	249	274	258	245	266	252	241	258	247	237	231
4	294	263	241	223	288	259	238	222	252	234	219	245	229	216	238	225	214	208
5	276	242	219	201	270	239	217	200	232	213	198	227	210	196	221	206	194	189
6	259	224	200	183	254	221	199	182	216	196	181	211	193	180	206	190	178	173
7	244	208	184	168	239	206	183	168	201	181	166	197	179	165	193	177	164	159
8	231	194	171	155	226	192	170	155	188	168	154	185	167	153	181	165	153	147
9	219	182	160	144	215	180	159	144	177	157	144	174	156	143	171	154	142	137
10	208	171	150	135	204	170	149	135	167	148	134	164	146	134	161	145	133	129

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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	8.1	9.5	8.5	9.8	10.1	15.9	17.2	16.2	17.5	17.8
	3H	9.3	10.5	9.7	10.9	11.2	18.7	19.9	19.1	20.3	20.6
	4H	9.6	10.8	10.0	11.1	11.5	19.3	20.4	19.7	20.8	21.2
	6H	9.8	10.8	10.2	11.2	11.6	19.5	20.5	19.9	20.9	21.3
	8H	9.8	10.8	10.2	11.2	11.6	19.5	20.5	19.9	20.9	21.3
	12H	9.8	10.7	10.2	11.1	11.5	19.5	20.4	19.9	20.8	21.2
4H	2H	8.8	10.0	9.2	10.3	10.7	15.7	16.8	16.1	17.2	17.6
	3H	10.2	11.1	10.6	11.5	11.9	18.6	19.5	19.0	19.9	20.3
	4H	10.6	11.4	11.0	11.8	12.2	19.2	20.0	19.6	20.4	20.9
	6H	10.8	11.5	11.2	11.9	12.4	19.4	20.1	19.9	20.6	21.0
	8H	10.8	11.4	11.2	11.9	12.4	19.4	20.1	19.9	20.5	21.0
	12H	10.8	11.4	11.3	11.8	12.3	19.4	20.0	19.9	20.5	21.0
8H	4H	10.8	11.5	11.3	11.9	12.4	19.1	19.7	19.5	20.2	20.7
	6H	11.1	11.6	11.6	12.1	12.6	19.3	19.8	19.8	20.3	20.8
	8H	11.1	11.6	11.7	12.1	12.6	19.3	19.8	19.8	20.3	20.8
	12H	11.2	11.6	11.7	12.1	12.7	19.3	19.8	19.8	20.2	20.8
12H	4H	10.8	11.4	11.3	11.9	12.4	19.0	19.6	19.5	20.1	20.6
	6H	11.1	11.6	11.6	12.1	12.6	19.2	19.7	19.8	20.2	20.7
	8H	11.2	11.6	11.7	12.1	12.7	19.3	19.7	19.8	20.2	20.8

Maximum UGR = 21.3

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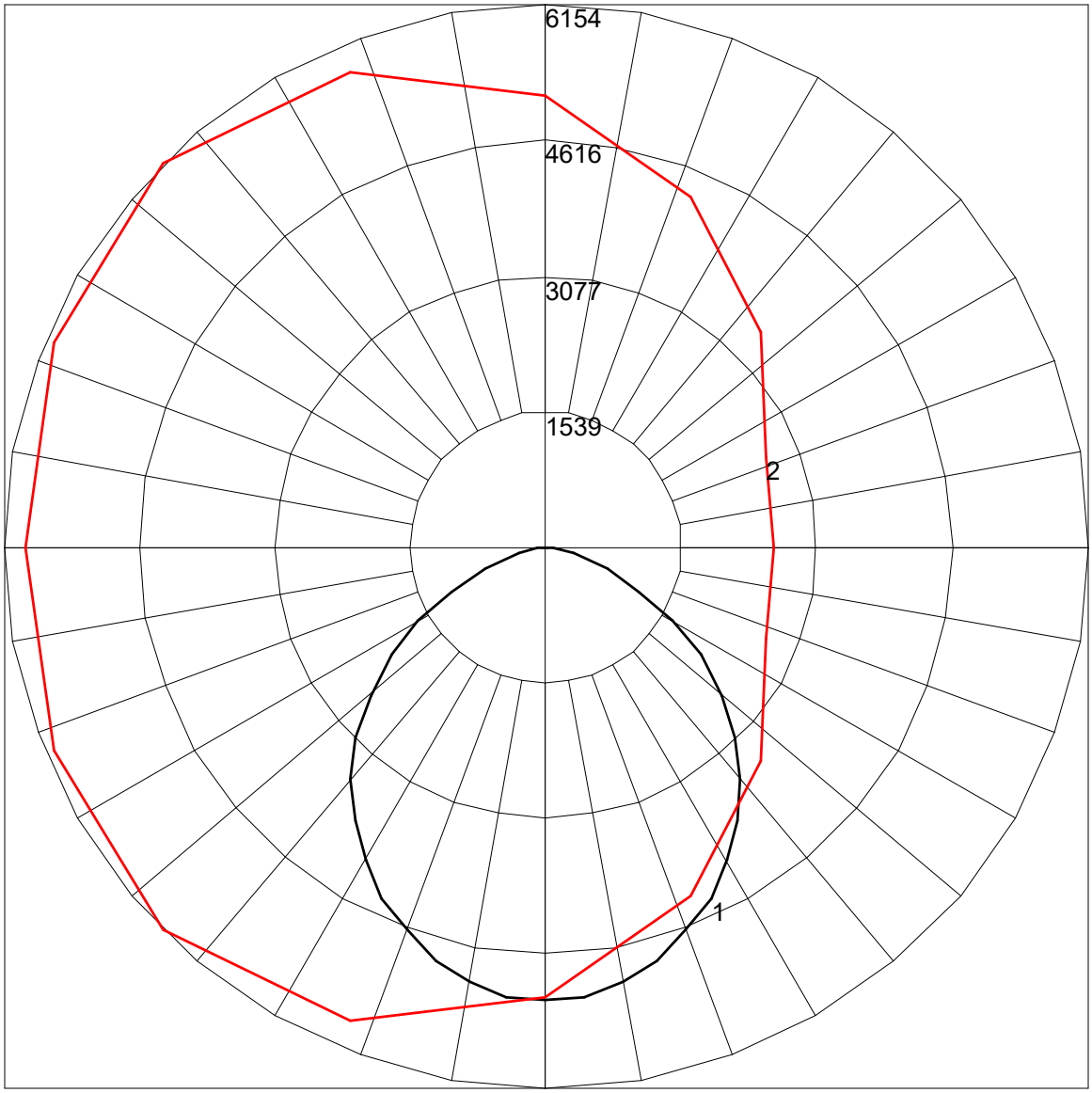
POLAR GRAPH



Maximum Candela = 6154.124 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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