H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PXF-46-03-08-L10-8TW-G-DIM-UNV 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-L10-8TW-G-xxxx-xxxx-DIM-UNV
[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	3145
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	87
Total Luminaire Watts	36
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	2704	2424	29041
55	2465	2759	25303
65	1907	2427	18791
75	1217	1670	8322
85	336	672	2017

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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	3964.088	3964.088	3964.088	3964.088	3964.088	3964.088	3964.088	3964.088	3964.088
5	1999.614	2089.137	2660.574	3316.515	3952.375	4496.203	4737.998	4666.045	4557.279
10	899.408	978.891	1440.726	2664.758	3856.159	4623.375	4227.636	3555.799	3200.219
15	444.266	542.991	811.559	1873.279	3743.211	4441.820	3213.606	2365.234	2033.080
20	266.894	271.914	507.015	1270.884	3569.186	3899.666	2213.799	1228.215	863.432
25	246.814	253.508	270.241	892.715	3399.344	3196.036	1311.044	607.414	539.645
30	229.244	232.591	247.651	582.314	3170.099	2462.286	676.857	476.059	452.632
35	215.858	216.695	226.734	404.106	2923.285	1859.055	497.812	406.616	320.440
40	220.041	214.185	207.491	241.794	2655.554	1244.111	409.126	255.181	225.061
45	218.368	218.368	195.778	212.511	2345.154	726.220	314.584	192.431	171.515
50	193.268	199.961	191.595	187.412	2013.001	438.409	199.961	147.252	134.702
55	161.475	168.168	180.718	161.475	1657.421	334.663	149.762	115.459	107.929
60	125.499	133.029	153.109	138.049	1282.598	262.711	111.276	90.359	86.176
65	92.032	97.052	117.132	125.499	906.938	146.415	81.993	67.769	63.586
70	61.076	67.769	78.646	102.909	561.398	87.849	56.893	50.200	44.343
75	35.976	38.486	49.363	66.096	245.978	52.709	35.976	30.120	25.936
80	16.733	20.080	21.753	31.793	69.443	25.100	17.570	13.387	10.877
85	3.347	6.693	6.693	8.367	20.080	6.693	3.347	3.347	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	962.01	N.A.	30.60
0-30	1567.53	N.A.	49.80
0-40	2099.00	N.A.	66.70
0-60	2852.35	N.A.	90.70
0-80	3133.63	N.A.	99.60
0-90	3144.74	N.A.	100.00
10-90	2818.54	N.A.	89.60
20-40	1136.99	N.A.	36.20
20-50	1565.55	N.A.	49.80
40-70	956.58	N.A.	30.40
60-80	281.28	N.A.	8.90
70-80	78.05	N.A.	2.50
80-90	11.11	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	3144.74	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	326.20
10-20	635.81
20-30	605.51
30-40	531.47
40-50	428.56
50-60	324.79
60-70	203.23
70-80	78.05
80-90	11.11
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	11.2	12.6	11.6	12.9	13.2	19.0	20.3	19.3	20.6	20.9
	3H	12.4	13.6	12.8	14.0	14.3	21.8	23.0	22.2	23.4	23.7
	4H	12.7	13.9	13.1	14.2	14.6	22.4	23.5	22.8	23.9	24.3
	6H	12.9	13.9	13.3	14.3	14.7	22.6	23.6	23.0	24.0	24.4
	8H	12.9	13.9	13.3	14.3	14.7	22.6	23.6	23.0	24.0	24.4
	12H	12.9	13.8	13.3	14.2	14.6	22.6	23.5	23.0	23.9	24.3
4H	2H	11.9	13.1	12.3	13.4	13.8	18.8	19.9	19.2	20.3	20.7
	3H	13.3	14.2	13.7	14.6	15.0	21.7	22.6	22.1	23.0	23.4
	4H	13.7	14.5	14.1	14.9	15.3	22.3	23.1	22.7	23.5	24.0
	6H	13.9	14.6	14.3	15.0	15.5	22.5	23.2	23.0	23.7	24.1
	8H	13.9	14.6	14.4	15.0	15.5	22.5	23.2	23.0	23.6	24.1
	12H	13.9	14.5	14.4	14.9	15.4	22.5	23.1	23.0	23.6	24.1
8H	4H	13.9	14.6	14.4	15.0	15.5	22.2	22.8	22.6	23.3	23.8
	6H	14.2	14.7	14.7	15.2	15.7	22.4	22.9	22.9	23.4	23.9
	8H	14.2	14.7	14.8	15.2	15.7	22.4	22.9	22.9	23.4	23.9
	12H	14.3	14.7	14.8	15.2	15.8	22.4	22.9	22.9	23.3	23.9
12H	4H	13.9	14.5	14.4	15.0	15.5	22.1	22.7	22.6	23.2	23.7
	6H	14.2	14.7	14.7	15.2	15.7	22.4	22.8	22.9	23.3	23.8
	8H	14.3	14.7	14.8	15.2	15.8	22.4	22.8	22.9	23.3	23.9

Maximum UGR = 24.4

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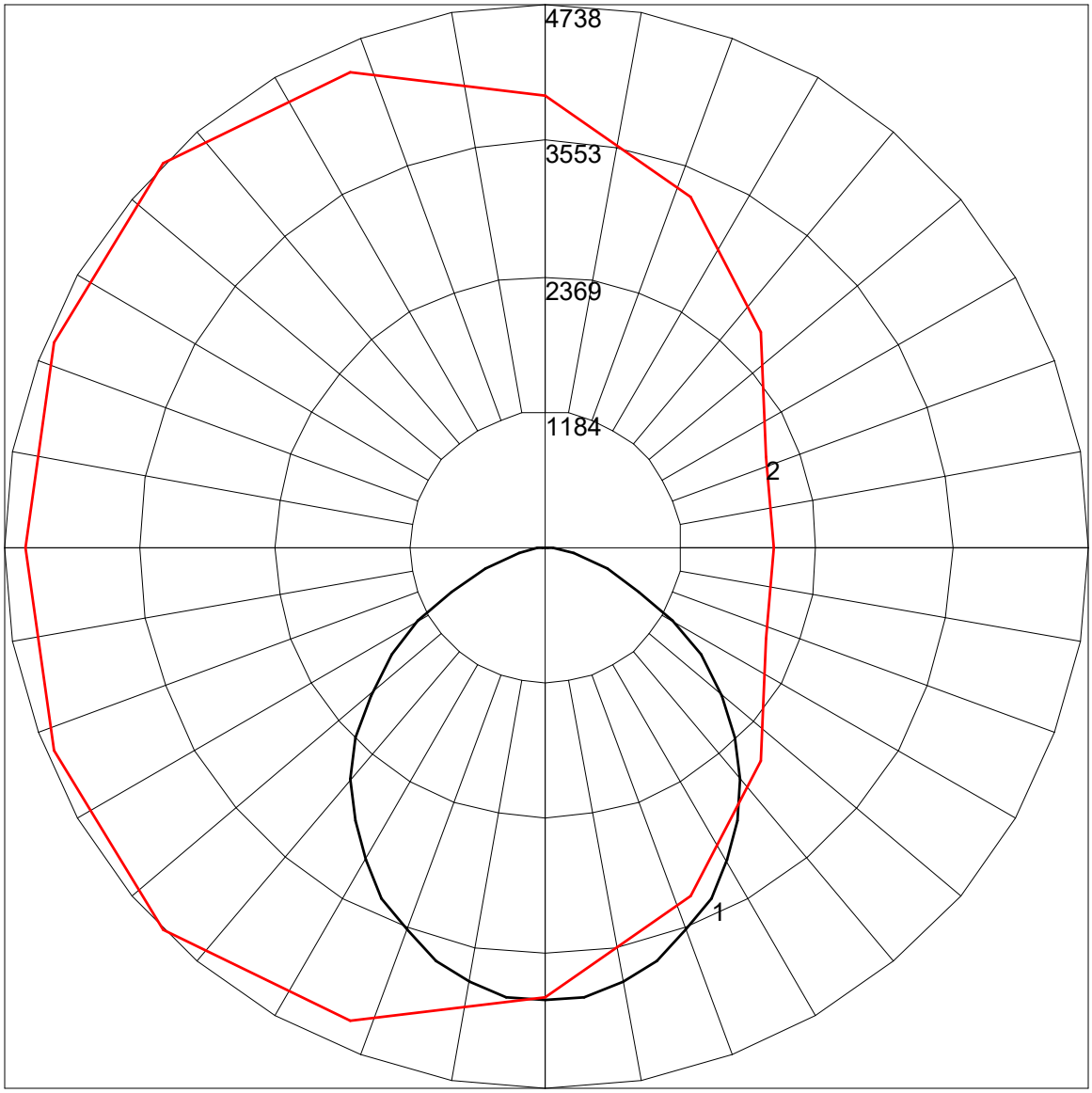
POLAR GRAPH



Maximum Candela = 4737.998 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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