H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PXF-46-03-08-P5-8TW-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-P5-8TW-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	1835
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	96
Total Luminaire Watts	19.1
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	1578	1415	16945
55	1438	1610	14763
65	1113	1416	10964
75	710	974	4856
85	196	392	1177

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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	2312.910	2312.910	2312.910	2312.910	2312.910	2312.910	2312.910	2312.910	2312.910
5	1166.706	1218.940	1552.354	1935.073	2306.076	2623.381	2764.460	2722.478	2659.017
10	524.774	571.149	840.614	1554.795	2249.937	2697.582	2466.681	2074.687	1867.219
15	259.214	316.817	473.517	1092.994	2184.036	2591.651	1875.029	1380.033	1186.233
20	155.724	158.653	295.826	741.518	2082.498	2275.322	1291.676	716.621	503.783
25	144.008	147.913	157.676	520.869	1983.401	1864.778	764.949	354.405	314.864
30	133.756	135.709	144.496	339.761	1849.645	1436.660	394.923	277.764	264.095
35	125.946	126.434	132.292	235.782	1705.637	1084.695	290.456	237.247	186.966
40	128.387	124.969	121.064	141.079	1549.425	725.896	238.711	148.889	131.316
45	127.410	127.410	114.230	123.993	1368.317	423.724	183.549	112.277	100.073
50	112.765	116.671	111.789	109.348	1174.517	255.797	116.671	85.916	78.594
55	94.215	98.121	105.443	94.215	967.048	195.265	87.381	67.366	62.973
60	73.224	77.618	89.334	80.547	748.352	153.283	64.926	52.721	50.281
65	53.698	56.627	68.343	73.224	529.167	85.428	47.840	39.541	37.100
70	35.636	39.541	45.887	60.044	327.557	51.257	33.195	29.290	25.873
75	20.991	22.455	28.802	38.565	143.520	30.754	20.991	17.574	15.133
80	9.763	11.716	12.692	18.550	40.517	14.645	10.251	7.811	6.346
85	1.953	3.905	3.905	4.882	11.716	3.905	1.953	1.953	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	561.30	N.A.	30.60
0-30	914.60	N.A.	49.80
0-40	1224.7	N.A.	66.70
0-60	1664.25	N.A.	90.70
0-80	1828.37	N.A.	99.60
0-90	1834.85	N.A.	100.00
10-90	1644.52	N.A.	89.60
20-40	663.39	N.A.	36.20
20-50	913.45	N.A.	49.80
40-70	558.13	N.A.	30.40
60-80	164.12	N.A.	8.90
70-80	45.54	N.A.	2.50
80-90	6.48	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	1834.85	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	190.33
10-20	370.97
20-30	353.30
30-40	310.10
40-50	250.05
50-60	189.50
60-70	118.58
70-80	45.54
80-90	6.48
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	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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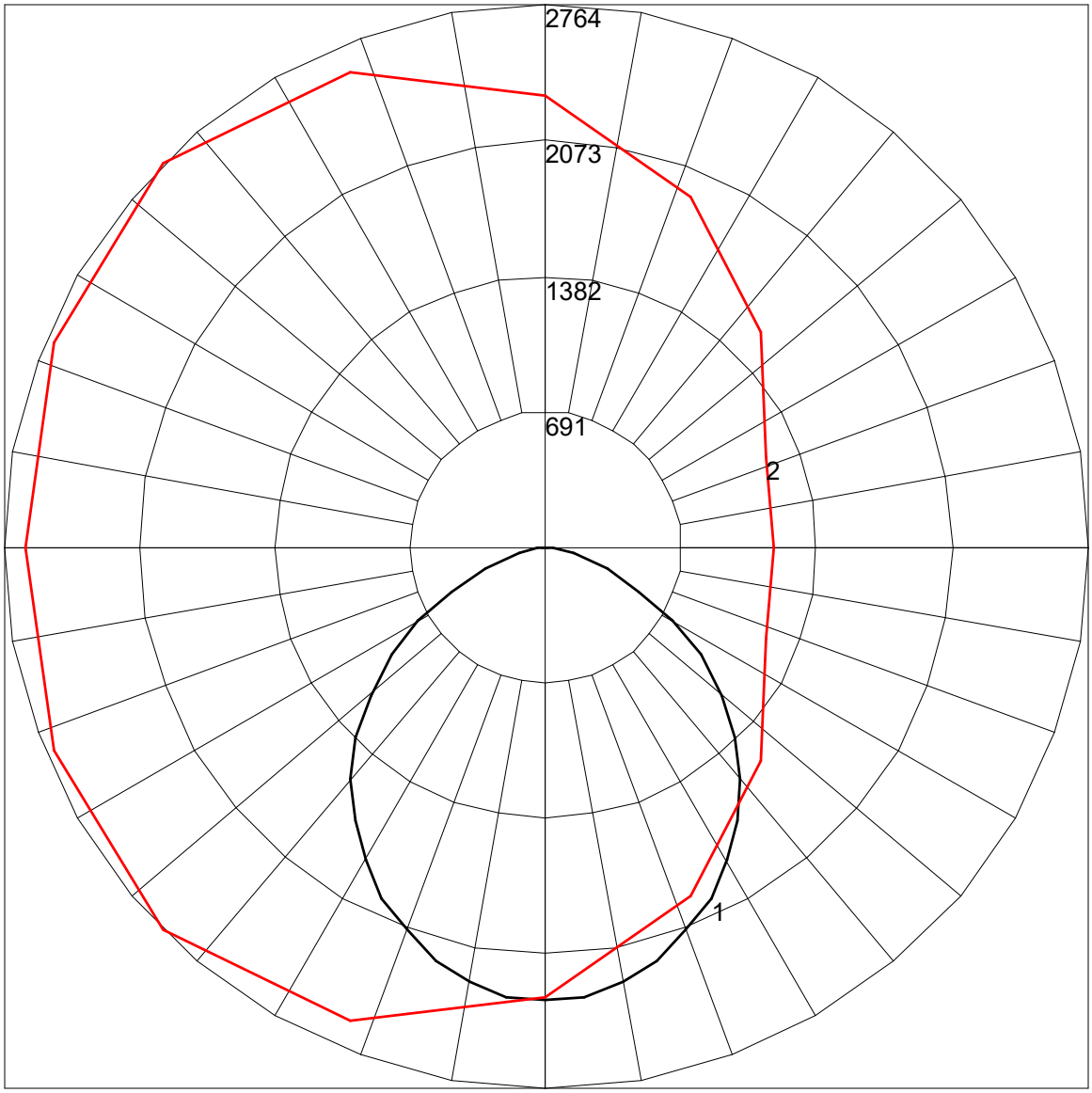
POLAR GRAPH



Maximum Candela = 2764.46 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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