H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : PXF-46-03-08-P5-835-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-P5-835-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	1834
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	1577	1414	16935
55	1438	1609	14755
65	1112	1415	10958
75	710	974	4853
85	196	392	1176

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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	2311.670	2311.670	2311.670	2311.670	2311.670	2311.670	2311.670	2311.670	2311.670
5	1166.081	1218.286	1551.522	1934.036	2304.840	2621.975	2762.978	2721.018	2657.591
10	524.492	570.843	840.164	1553.961	2248.731	2696.135	2465.359	2073.575	1866.217
15	259.075	316.647	473.263	1092.408	2182.865	2590.261	1874.024	1379.293	1185.597
20	155.640	158.567	295.667	741.120	2081.381	2274.102	1290.983	716.237	503.513
25	143.930	147.834	157.592	520.589	1982.338	1863.778	764.539	354.215	314.695
30	133.685	135.636	144.418	339.578	1848.653	1435.890	394.711	277.615	263.954
35	125.878	126.366	132.221	235.656	1704.723	1084.114	290.300	237.119	186.866
40	128.318	124.902	120.999	141.003	1548.595	725.507	238.583	148.809	131.245
45	127.342	127.342	114.169	123.927	1367.584	423.497	183.450	112.217	100.019
50	112.705	116.608	111.729	109.290	1173.887	255.660	116.608	85.870	78.552
55	94.165	98.068	105.386	94.165	966.530	195.160	87.334	67.330	62.939
60	73.185	77.576	89.286	80.503	747.951	153.201	64.891	52.693	50.254
65	53.669	56.596	68.306	73.185	528.884	85.382	47.814	39.520	37.080
70	35.617	39.520	45.863	60.012	327.381	51.229	33.177	29.274	25.859
75	20.980	22.443	28.786	38.544	143.443	30.738	20.980	17.564	15.125
80	9.758	11.710	12.685	18.540	40.496	14.637	10.246	7.806	6.343
85	1.952	3.903	3.903	4.879	11.710	3.903	1.952	1.952	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	561.00	N.A.	30.60
0-30	914.11	N.A.	49.80
0-40	1224.04	N.A.	66.70
0-60	1663.36	N.A.	90.70
0-80	1827.39	N.A.	99.60
0-90	1833.87	N.A.	100.00
10-90	1643.64	N.A.	89.60
20-40	663.04	N.A.	36.20
20-50	912.96	N.A.	49.80
40-70	557.83	N.A.	30.40
60-80	164.03	N.A.	8.90
70-80	45.51	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	1833.87	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	190.23
10-20	370.77
20-30	353.11
30-40	309.93
40-50	249.92
50-60	189.40
60-70	118.51
70-80	45.51
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	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	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	73	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	55	49	44	54	48	44	53	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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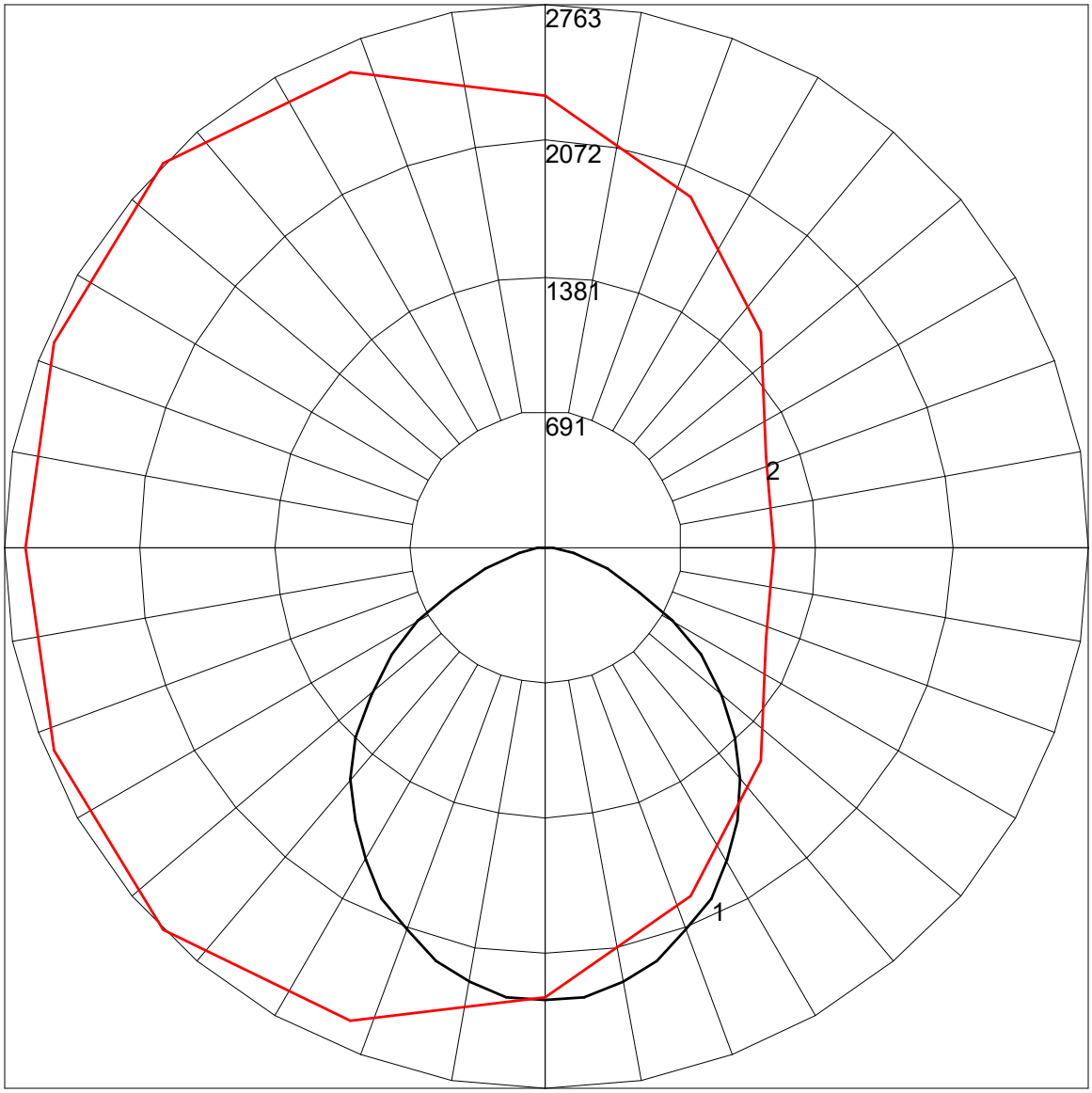
POLAR GRAPH



Maximum Candela = 2762.978 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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