H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 75-4-L30-940-R1172-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TESTLAB] GEN FROM Photopia 2020.0.0 see: www.ltioptics.com/ies
[ISSUEDATE] DECEMBER 2020
[TESTDATE] Tue Dec 08 08:49:30 2020
[TEST] 75 R1172 REFL
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 75-4-L30-940-R1172-DIM-UNV
[LUMINAIRE] LED STRIP LUMINAIRE WITH WHITE REFL
[LAMP] LED 22.6W 22" 56 LED linear LED module 4000K
[LAMPCAT] HLM 90 CRI 4000K CCT
[OTHER]

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2695
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	135
Total Luminaire Watts	20
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.32
Spacing Criterion (Diagonal)	1.44
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.72 ft
Luminous Width (90-270)	0.43 ft
Luminous Height	0.24 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5559	4123	3765
55	5425	3655	3340
65	5568	3096	2747
75	5142	2008	84
85	3315	74	35

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	861.052	861.052	861.052	861.052	861.052
5	868.354	866.020	867.999	870.516	856.167
10	881.155	860.916	860.444	848.215	840.045
15	833.949	830.617	839.620	846.106	864.987
20	836.093	825.525	822.683	844.216	846.236
25	789.294	795.420	832.519	859.717	873.700
30	761.984	764.004	826.653	798.356	780.976
35	720.661	734.431	778.808	705.780	697.988
40	670.689	713.105	699.606	657.504	668.208
45	615.153	674.878	619.264	627.488	612.276
50	564.673	625.473	560.574	573.700	575.685
55	499.596	542.916	504.074	514.206	508.783
60	444.214	470.957	441.331	441.077	446.122
65	393.858	388.323	375.835	366.767	377.264
70	327.204	303.763	298.771	297.531	296.142
75	242.816	228.082	203.277	62.596	9.948
80	157.275	139.694	28.456	8.395	7.254
85	73.850	28.456	5.736	4.118	3.314
90	9.564	2.097	1.140	0.744	0.520

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	321.15	N.A.	11.90
0-30	700.59	N.A.	26.00
0-40	1161.16	N.A.	43.10
0-60	2113.32	N.A.	78.40
0-80	2666.02	N.A.	98.90
0-90	2694.7	N.A.	100.00
10-90	2612.37	N.A.	96.90
20-40	840.01	N.A.	31.20
20-50	1329.96	N.A.	49.40
40-70	1326.33	N.A.	49.20
60-80	552.70	N.A.	20.50
70-80	178.53	N.A.	6.60
80-90	28.69	N.A.	1.10
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	2694.7	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	82.34
10-20	238.81
20-30	379.44
30-40	460.57
40-50	489.95
50-60	462.21
60-70	374.17
70-80	178.53
80-90	28.69
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	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	41	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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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	16.7	18.4	17.1	18.7	19.0	17.5	19.1	17.8	19.5	19.8
	3H	18.4	19.9	18.8	20.2	20.6	19.4	21.0	19.8	21.3	21.6
	4H	19.0	20.4	19.4	20.8	21.2	19.5	20.9	19.9	21.2	21.6
	6H	19.4	20.7	19.8	21.1	21.5	19.4	20.7	19.8	21.1	21.5
	8H	19.5	20.8	20.0	21.2	21.6	19.4	20.6	19.8	21.0	21.4
	12H	19.6	20.8	20.0	21.2	21.6	19.4	20.6	19.8	20.9	21.4
4H	2H	17.4	18.8	17.8	19.1	19.5	18.0	19.4	18.4	19.7	20.1
	3H	19.2	20.4	19.6	20.8	21.2	20.0	21.2	20.5	21.6	22.0
	4H	19.9	21.0	20.4	21.4	21.9	20.1	21.2	20.5	21.6	22.0
	6H	20.4	21.4	20.9	21.8	22.3	20.0	21.0	20.5	21.4	21.9
	8H	20.6	21.4	21.0	21.9	22.3	20.0	20.9	20.5	21.3	21.8
	12H	20.6	21.4	21.1	21.9	22.4	20.0	20.8	20.5	21.2	21.7
8H	4H	20.1	21.0	20.6	21.4	21.9	20.2	21.1	20.7	21.5	22.0
	6H	20.6	21.4	21.1	21.9	22.3	20.2	20.9	20.7	21.4	21.9
	8H	20.8	21.5	21.3	22.0	22.4	20.1	20.8	20.7	21.3	21.8
	12H	20.9	21.5	21.4	22.0	22.5	20.1	20.7	20.6	21.2	21.7
12H	4H	20.1	20.9	20.6	21.3	21.8	20.2	21.0	20.7	21.5	22.0
	6H	20.6	21.3	21.2	21.7	22.3	20.2	20.8	20.7	21.3	21.8
	8H	20.8	21.4	21.3	21.9	22.4	20.2	20.7	20.7	21.2	21.8

Maximum UGR = 22.5

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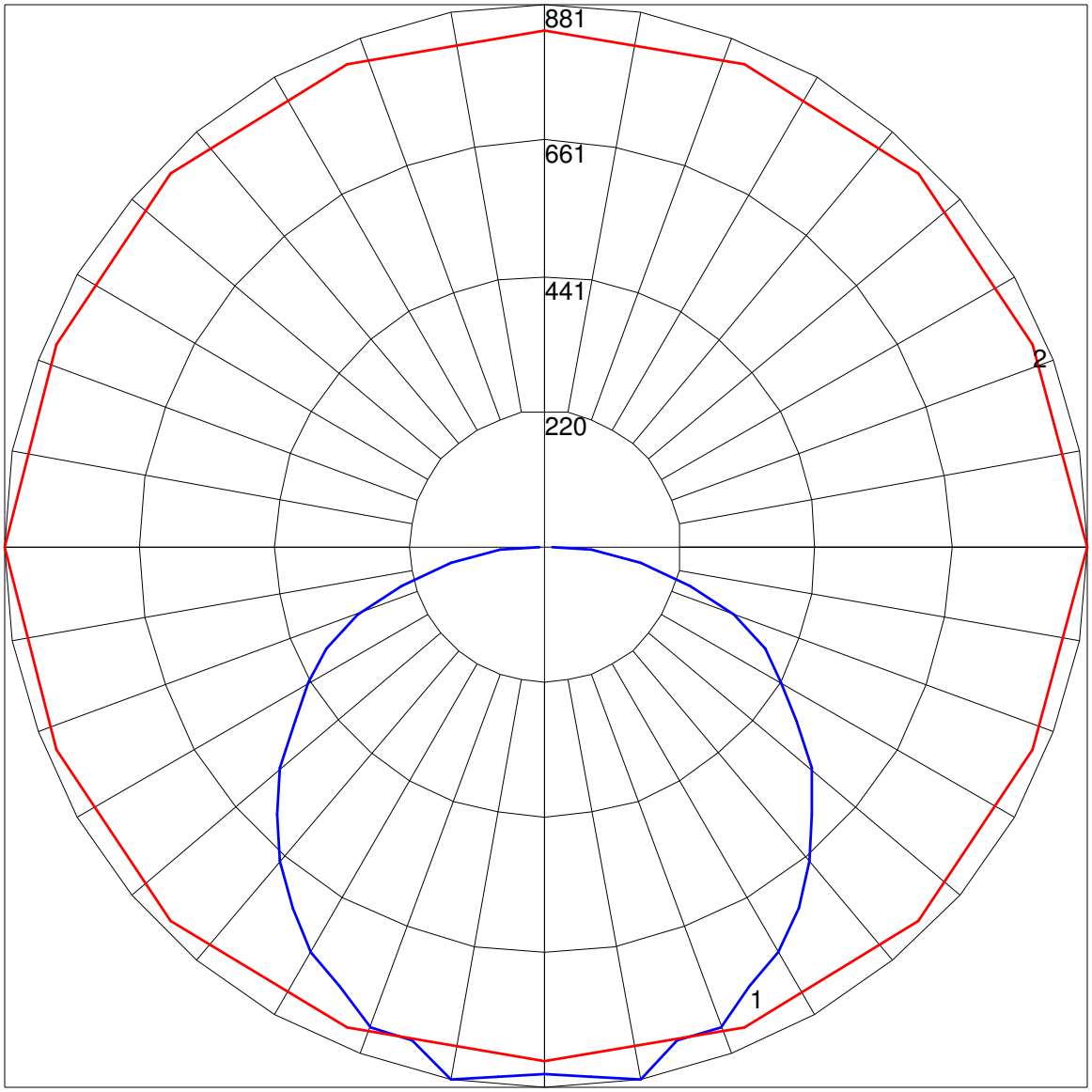
POLAR GRAPH



Maximum Candela = 881.155 Located At Horizontal Angle = 0, Vertical Angle = 10
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (10) (Through Max. Cd.)

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