



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6PR-TL-L30-830-DIM-UNV-LN-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 12326812.32
[TESTLAB] UL Verification Services Inc.
[ISSUEDATE] 04/14/2021
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 6PR-TL-L30-830-DIM-UNV-LN-OF-WH
[LUMINAIRE] Black formed aluminum housing, white reflector, clear plas
[MORE] tic optic, clear glass patterned lens enclosure
[LAMP] One white LED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3160
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	139
Total Luminaire Watts	22.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.44
Spacing Criterion (90-270)	0.44
Spacing Criterion (Diagonal)	0.44
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.46 ft (Diameter)
Luminous Width (90-270)	0.46 ft (Diameter)
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	13806	13806	13806
55	10435	10435	10435
65	7902	7902	7902
75	5676	5676	5676
85	3455	3455	3455

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CANDELA TABULATION

	<u>0</u>
0.0	11668.726
0.5	11657.543
1.0	11623.996
1.5	11565.289
2.0	11482.820
2.5	11376.588
3.0	11247.992
3.5	11098.429
4.0	10932.092
4.5	10748.982
5.0	10549.098
5.5	10331.044
6.0	10093.420
6.5	9839.023
7.0	9572.045
7.5	9291.090
8.0	8998.953
8.5	8697.031
9.0	8385.324
9.5	8066.629
10.0	7740.944
10.5	7412.464
11.0	7076.995
11.5	6742.924
12.0	6411.649
12.5	6081.771
13.0	5757.485
13.5	5434.596
14.0	5120.094
14.5	4815.376
15.0	4521.841
15.5	4238.090
16.0	3968.317
16.5	3709.727
17.0	3465.114
17.5	3231.683
18.0	3012.231
18.5	2806.756
19.0	2613.862
19.5	2433.547
20.0	2264.415
20.5	2105.067
21.0	1955.504
21.5	1818.521
22.0	1689.924
22.5	1569.715
23.0	1455.096
23.5	1350.262
24.0	1251.998
24.5	1161.421
25.0	1077.554
25.5	999.557
26.0	927.851
26.5	861.875

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CANDELA TABULATION - (Cont.)

27.0	800.792
27.5	744.461
28.0	692.743
28.5	645.638
29.0	602.726
29.5	563.448
30.0	526.966
30.5	493.698
31.0	463.366
31.5	435.690
32.0	410.250
32.5	387.187
33.0	365.801
33.5	346.232
34.0	328.340
34.5	311.846
35.0	296.890
35.5	283.052
36.0	270.332
36.5	258.591
37.0	247.828
37.5	237.903
38.0	228.678
38.5	220.291
39.0	212.464
39.5	205.055
40.0	198.346
40.5	192.056
41.0	186.045
41.5	180.594
42.0	175.422
42.5	170.530
43.0	165.917
43.5	161.444
44.0	157.251
44.5	153.337
45.0	149.563
45.5	145.929
46.0	142.434
46.5	139.080
47.0	135.865
47.5	132.650
48.0	129.575
48.5	126.500
49.0	123.564
49.5	120.629
50.0	117.833
50.5	115.038
51.0	112.242
51.5	109.447
52.0	106.931
52.5	104.275
53.0	101.619
53.5	99.103
54.0	96.587
54.5	94.211

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CANDELA TABULATION - (Cont.)

55.0	91.695
55.5	89.319
56.0	87.082
56.5	84.846
57.0	82.609
57.5	80.373
58.0	78.276
58.5	76.179
59.0	74.083
59.5	72.126
60.0	70.029
60.5	68.072
61.0	66.115
61.5	64.158
62.0	62.202
62.5	60.384
63.0	58.567
63.5	56.610
64.0	54.793
64.5	52.976
65.0	51.159
65.5	49.342
66.0	47.665
66.5	45.847
67.0	44.170
67.5	42.633
68.0	40.955
68.5	39.418
69.0	37.880
69.5	36.482
70.0	34.945
70.5	33.687
71.0	32.289
71.5	30.891
72.0	29.493
72.5	28.375
73.0	27.117
73.5	25.859
74.0	24.741
74.5	23.623
75.0	22.504
75.5	21.386
76.0	20.408
76.5	19.289
77.0	18.311
77.5	17.333
78.0	16.354
78.5	15.515
79.0	14.537
79.5	13.698
80.0	12.720
80.5	11.881
81.0	11.043
81.5	10.204
82.0	9.365
82.5	8.527

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CANDELA TABULATION - (Cont.)

83.0	7.688
83.5	6.849
84.0	6.010
84.5	5.172
85.0	4.613
85.5	3.774
86.0	3.075
86.5	2.516
87.0	1.957
87.5	1.677
88.0	1.398
88.5	1.118
89.0	0.839
89.5	0.699
90.0	0.559
90.5	0.000
91.0	0.000
91.5	0.000
92.0	0.000
92.5	0.000
93.0	0.000
93.5	0.000
94.0	0.000
94.5	0.000
95.0	0.000
95.5	0.000
96.0	0.000
96.5	0.000
97.0	0.000
97.5	0.000
98.0	0.000
98.5	0.000
99.0	0.000
99.5	0.000
100.0	0.000
100.5	0.000
101.0	0.000
101.5	0.000
102.0	0.000
102.5	0.000
103.0	0.000
103.5	0.000
104.0	0.000
104.5	0.000
105.0	0.000
105.5	0.000
106.0	0.000
106.5	0.000
107.0	0.000
107.5	0.000
108.0	0.000
108.5	0.000
109.0	0.000
109.5	0.000
110.0	0.000
110.5	0.000

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CANDELA TABULATION - (Cont.)

111.0	0.000
111.5	0.000
112.0	0.000
112.5	0.000
113.0	0.000
113.5	0.000
114.0	0.000
114.5	0.000
115.0	0.000
115.5	0.000
116.0	0.000
116.5	0.000
117.0	0.000
117.5	0.000
118.0	0.000
118.5	0.000
119.0	0.000
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135.0	0.000
135.5	0.000
136.0	0.000
136.5	0.000
137.0	0.000
137.5	0.000
138.0	0.000
138.5	0.000

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CANDELA TABULATION - (Cont.)

139.0	0.000
139.5	0.000
140.0	0.000
140.5	0.000
141.0	0.000
141.5	0.000
142.0	0.000
142.5	0.000
143.0	0.000
143.5	0.000
144.0	0.000
144.5	0.000
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155.5	0.000
156.0	0.000
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157.0	0.000
157.5	0.000
158.0	0.000
158.5	0.000
159.0	0.000
159.5	0.000
160.0	0.000
160.5	0.000
161.0	0.000
161.5	0.000
162.0	0.000
162.5	0.000
163.0	0.000
163.5	0.000
164.0	0.000
164.5	0.000
165.0	0.000
165.5	0.000
166.0	0.000
166.5	0.000

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CANDELA TABULATION - (Cont.)

167.0	0.000
167.5	0.000
168.0	0.000
168.5	0.000
169.0	0.000
169.5	0.000
170.0	0.000
170.5	0.000
171.0	0.000
171.5	0.000
172.0	0.000
172.5	0.000
173.0	0.000
173.5	0.000
174.0	0.000
174.5	0.000
175.0	0.000
175.5	0.000
176.0	0.000
176.5	0.000
177.0	0.000
177.5	0.000
178.0	0.000
178.5	0.000
179.0	0.000
179.5	0.000
180.0	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2159.8	N.A.	68.40
0-30	2683.21	N.A.	84.90
0-40	2879.09	N.A.	91.10
0-60	3078.73	N.A.	97.40
0-80	3153.91	N.A.	99.80
0-90	3159.62	N.A.	100.00
10-90	2244.16	N.A.	71.00
20-40	719.29	N.A.	22.80
20-50	836.38	N.A.	26.50
40-70	250.62	N.A.	7.90
60-80	75.18	N.A.	2.40
70-80	24.20	N.A.	0.80
80-90	5.71	N.A.	0.20
90-110	0.02	N.A.	0.00
90-120	0.02	N.A.	0.00
90-130	0.02	N.A.	0.00
90-150	0.02	N.A.	0.00
90-180	0.02	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3159.63	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	915.46
10-20	1244.34
20-30	523.41
30-40	195.88
40-50	117.09
50-60	82.55
60-70	50.98
70-80	24.20
80-90	5.71
90-100	0.02
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	114	112	109	107	112	110	108	106	105	104	102	102	101	99	98	97	97	95
2	109	105	102	99	107	103	100	98	100	98	95	97	95	93	95	93	91	90
3	105	100	95	92	103	98	94	91	96	92	90	93	91	88	91	89	87	86
4	101	95	90	86	99	94	89	86	92	88	85	90	87	84	88	85	83	82
5	97	90	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	78
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75
7	91	83	78	75	90	83	78	75	81	77	74	80	77	74	79	76	74	72
8	88	80	75	72	87	80	75	72	79	74	72	78	74	71	77	73	71	70
9	85	77	73	69	84	77	72	69	76	72	69	75	72	69	74	71	69	68
10	82	75	70	67	82	74	70	67	74	70	67	73	69	67	72	69	66	65

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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

X=2H	Y=2H	13.6	14.6	13.9	14.9	15.2	13.6	14.6	13.9	14.9	15.2
	3H	14.7	15.6	15.1	15.9	16.3	14.7	15.6	15.1	15.9	16.3
	4H	15.1	15.9	15.5	16.2	16.6	15.1	15.9	15.5	16.2	16.6
	6H	15.3	16.0	15.7	16.4	16.8	15.3	16.0	15.7	16.4	16.8
	8H	15.3	16.0	15.8	16.4	16.8	15.3	16.0	15.8	16.4	16.8
	12H	15.4	16.0	15.8	16.4	16.8	15.4	16.0	15.8	16.4	16.8

UGR Viewed Endwise

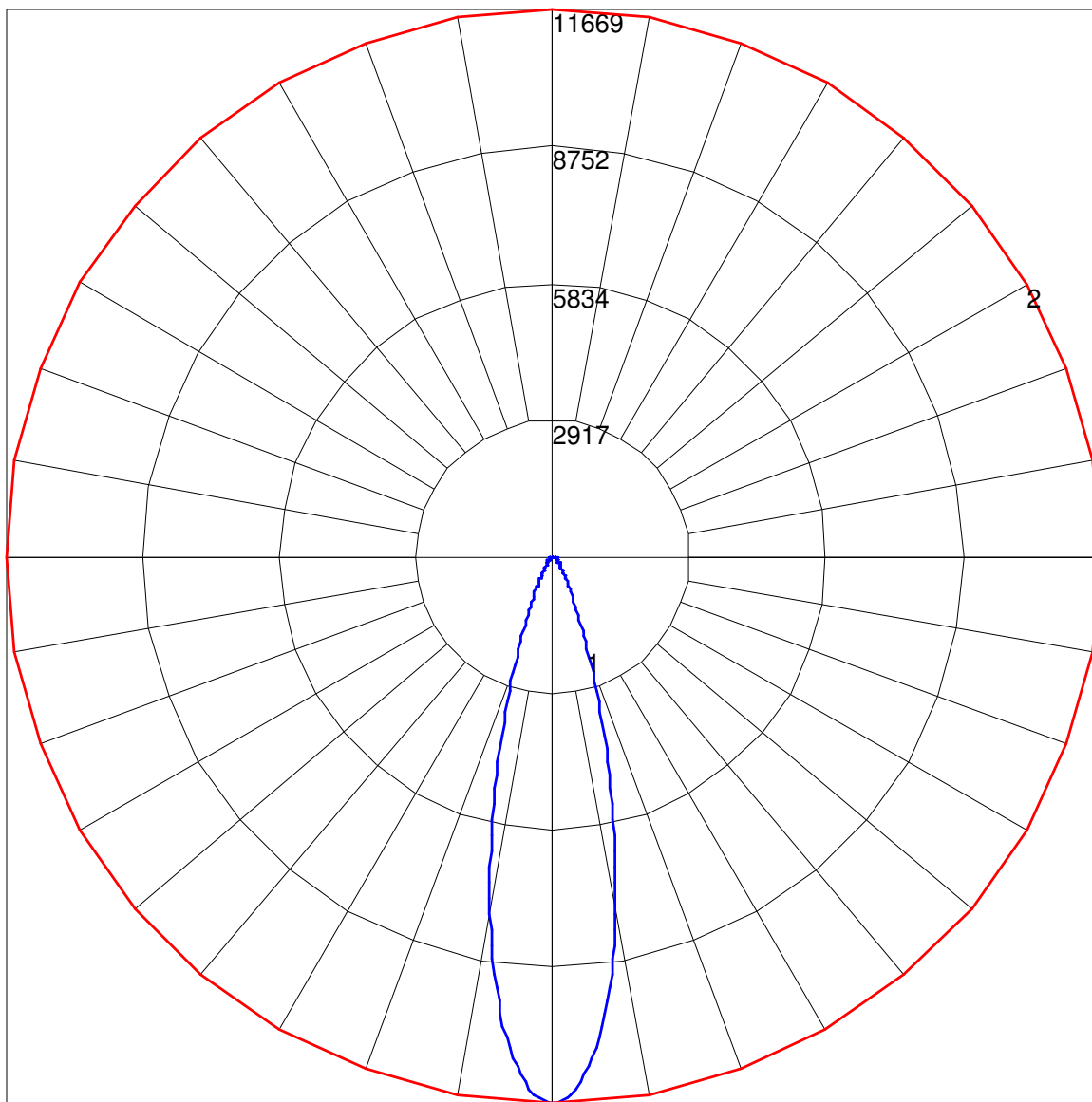
4H	2H	13.9	14.7	14.3	15.1	15.4	13.9	14.7	14.3	15.1	15.4
	3H	15.2	15.9	15.6	16.3	16.7	15.2	15.9	15.6	16.3	16.7
	4H	15.7	16.3	16.1	16.7	17.1	15.7	16.3	16.1	16.7	17.1
	6H	16.0	16.5	16.5	17.0	17.4	16.0	16.5	16.5	17.0	17.4
	8H	16.1	16.5	16.5	17.0	17.5	16.1	16.5	16.5	17.0	17.5
	12H	16.1	16.5	16.6	17.0	17.5	16.1	16.5	16.6	17.0	17.5

8H	4H	15.7	16.2	16.2	16.7	17.2	15.7	16.2	16.2	16.7	17.2
	6H	16.2	16.6	16.7	17.1	17.6	16.2	16.6	16.7	17.1	17.6
	8H	16.3	16.7	16.9	17.2	17.7	16.3	16.7	16.9	17.2	17.7
	12H	16.4	16.7	16.9	17.2	17.8	16.4	16.7	16.9	17.2	17.8

12H	4H	15.7	16.1	16.2	16.6	17.1	15.7	16.1	16.2	16.6	17.1
	6H	16.2	16.5	16.7	17.0	17.5	16.2	16.5	16.7	17.0	17.5
	8H	16.4	16.6	16.9	17.1	17.7	16.4	16.6	16.9	17.1	17.7

Maximum UGR = 17.8

POLAR GRAPH



Maximum Candela = 11668.726 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)