



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 12326812.29
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 04/14/2021
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 6PR-TL-L15-935-DIM-UNV-LW-OF-WH
 [LUMINAIRE] Black formed aluminum housing, white reflector, clear glas
 [MORE] s patterned lens enclosure
 [LAMP] One white LED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1390
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	84
Total Luminaire Watts	16.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.26
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	32299	32299	32299
55	15947	15947	15947
65	10803	10803	10803
75	8034	8034	8034
85	5563	5563	5563

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

CANDELA TABULATION

	<u>0</u>
0.0	735.919
0.5	735.290
1.0	734.660
1.5	734.031
2.0	732.772
2.5	731.513
3.0	729.624
3.5	728.365
4.0	726.476
4.5	724.588
5.0	722.699
5.5	720.811
6.0	718.922
6.5	717.033
7.0	715.145
7.5	712.627
8.0	710.738
8.5	708.850
9.0	706.331
9.5	703.813
10.0	701.925
10.5	699.407
11.0	696.888
11.5	695.000
12.0	692.482
12.5	689.964
13.0	687.446
13.5	684.927
14.0	682.409
14.5	679.891
15.0	676.744
15.5	674.225
16.0	671.707
16.5	669.189
17.0	666.042
17.5	663.523
18.0	661.635
18.5	659.117
19.0	656.599
19.5	654.081
20.0	651.562
20.5	649.674
21.0	647.156
21.5	644.638
22.0	641.490
22.5	638.342
23.0	635.824
23.5	632.047
24.0	629.088
24.5	625.752
25.0	622.352
25.5	618.953
26.0	615.553
26.5	612.028

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

CANDELA TABULATION - (Cont.)

27.0	608.566
27.5	605.103
28.0	601.641
28.5	598.241
29.0	594.968
29.5	591.631
30.0	588.043
30.5	584.455
31.0	580.677
31.5	576.774
32.0	572.494
32.5	567.961
33.0	563.302
33.5	558.266
34.0	552.852
34.5	547.061
35.0	541.017
35.5	534.470
36.0	527.671
36.5	520.494
37.0	512.877
37.5	505.071
38.0	496.887
38.5	488.200
39.0	479.197
39.5	469.754
40.0	460.123
40.5	450.050
41.0	440.167
41.5	429.842
42.0	419.329
42.5	408.375
43.0	397.233
43.5	385.712
44.0	374.066
44.5	362.105
45.0	349.892
45.5	337.302
46.0	324.333
46.5	311.239
47.0	298.019
47.5	284.925
48.0	271.894
48.5	258.988
49.0	246.586
49.5	234.311
50.0	222.853
50.5	211.711
51.0	201.386
51.5	191.692
52.0	182.626
52.5	174.191
53.0	166.259
53.5	158.893
54.0	152.220
54.5	145.925

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

CANDELA TABULATION - (Cont.)

55.0	140.133
55.5	134.782
56.0	129.809
56.5	125.150
57.0	120.618
57.5	116.400
58.0	112.434
58.5	108.594
59.0	105.068
59.5	101.669
60.0	98.269
60.5	95.059
61.0	91.911
61.5	88.889
62.0	85.931
62.5	83.098
63.0	80.328
63.5	77.621
64.0	74.977
64.5	72.459
65.0	69.941
65.5	67.548
66.0	65.156
66.5	62.827
67.0	60.561
67.5	58.420
68.0	56.217
68.5	54.202
69.0	52.125
69.5	50.173
70.0	48.222
70.5	46.396
71.0	44.634
71.5	42.871
72.0	41.171
72.5	39.597
73.0	37.961
73.5	36.387
74.0	34.876
74.5	33.365
75.0	31.854
75.5	30.469
76.0	29.021
76.5	27.699
77.0	26.314
77.5	24.992
78.0	23.670
78.5	22.411
79.0	21.152
79.5	19.893
80.0	18.697
80.5	17.501
81.0	16.305
81.5	15.109
82.0	13.976
82.5	12.842

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

CANDELA TABULATION - (Cont.)

83.0	11.709
83.5	10.639
84.0	9.506
84.5	8.499
85.0	7.428
85.5	6.421
86.0	5.414
86.5	4.470
87.0	3.588
87.5	2.833
88.0	2.203
88.5	1.637
89.0	1.196
89.5	0.818
90.0	0.504
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

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
119.5	0.000
120.0	0.000
120.5	0.000
121.0	0.000
121.5	0.000
122.0	0.000
122.5	0.000
123.0	0.000
123.5	0.000
124.0	0.000
124.5	0.000
125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
130.0	0.000
130.5	0.000
131.0	0.000
131.5	0.000
132.0	0.000
132.5	0.000
133.0	0.000
133.5	0.000
134.0	0.000
134.5	0.000
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

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
145.0	0.000
145.5	0.000
146.0	0.000
146.5	0.000
147.0	0.000
147.5	0.000
148.0	0.000
148.5	0.000
149.0	0.000
149.5	0.000
150.0	0.000
150.5	0.000
151.0	0.000
151.5	0.000
152.0	0.000
152.5	0.000
153.0	0.000
153.5	0.000
154.0	0.000
154.5	0.000
155.0	0.000
155.5	0.000
156.0	0.000
156.5	0.000
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	259.42	N.A.	18.70
0-30	546.21	N.A.	39.30
0-40	880.76	N.A.	63.40
0-60	1277.01	N.A.	91.90
0-80	1381.35	N.A.	99.40
0-90	1390.15	N.A.	100.00
10-90	1321.82	N.A.	95.10
20-40	621.34	N.A.	44.70
20-50	886.81	N.A.	63.80
40-70	466.43	N.A.	33.60
60-80	104.34	N.A.	7.50
70-80	34.17	N.A.	2.50
80-90	8.79	N.A.	0.60
90-110	0.01	N.A.	0.00
90-120	0.01	N.A.	0.00
90-130	0.01	N.A.	0.00
90-150	0.01	N.A.	0.00
90-180	0.01	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1390.16	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	68.32
10-20	191.09
20-30	286.79
30-40	334.55
40-50	265.46
50-60	130.79
60-70	70.17
70-80	34.17
80-90	8.79
90-100	0.01
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

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	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78
3	96	87	80	75	93	85	79	74	83	77	73	80	75	72	78	74	70	69
4	89	79	71	66	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	46	44
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6PR-TL-L15-935-DIM-UNV-LW-OF-WH_.IES

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	18.5	19.9	18.9	20.2	20.5	18.5	19.9	18.9	20.2	20.5
	3H	19.6	20.8	20.0	21.1	21.5	19.6	20.8	20.0	21.1	21.5
	4H	20.0	21.1	20.4	21.5	21.8	20.0	21.1	20.4	21.5	21.8
	6H	20.2	21.3	20.7	21.7	22.1	20.2	21.3	20.7	21.7	22.1
	8H	20.3	21.3	20.7	21.7	22.1	20.3	21.3	20.7	21.7	22.1
	12H	20.4	21.3	20.8	21.7	22.1	20.4	21.3	20.8	21.7	22.1

UGR Viewed Endwise

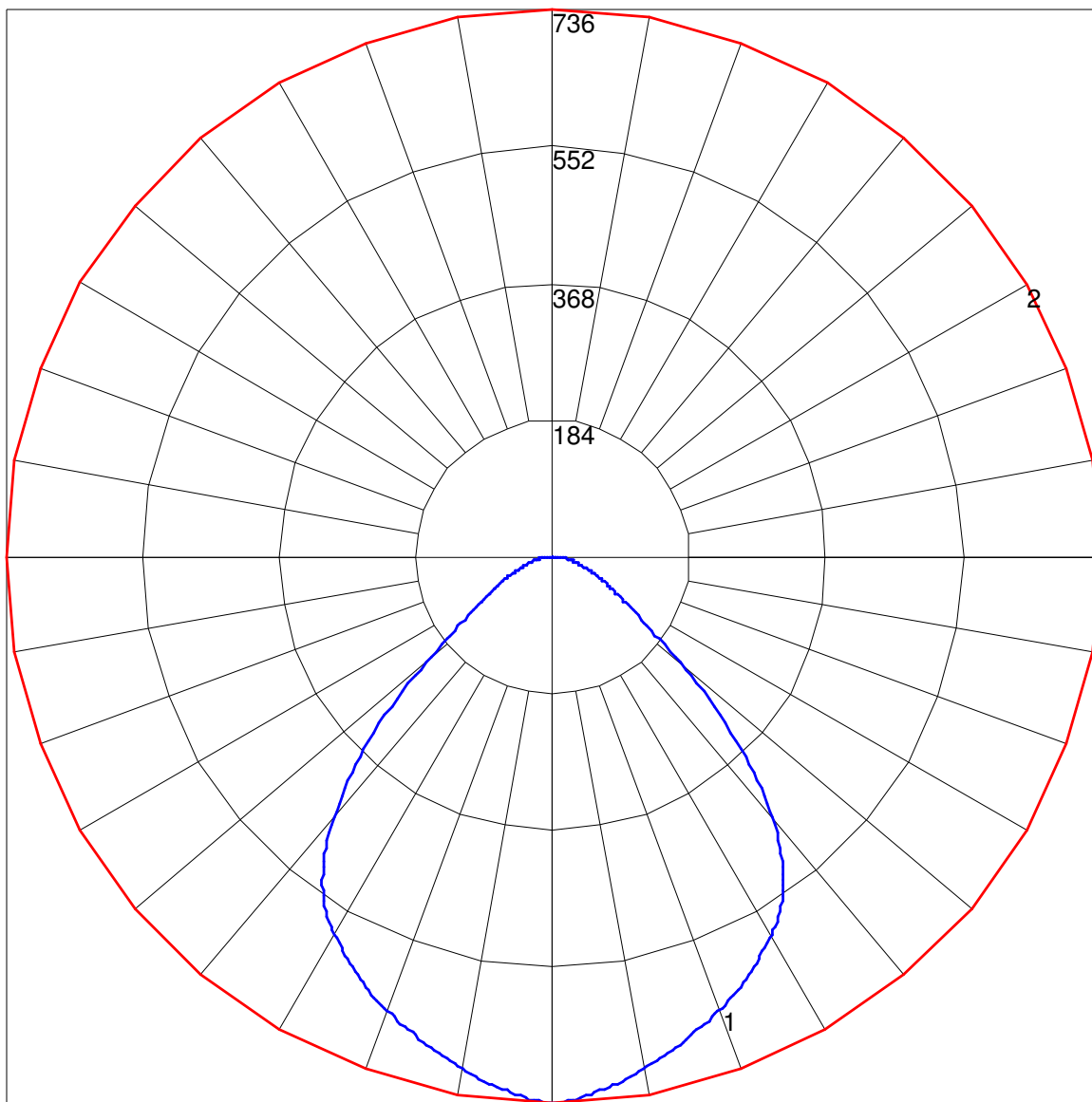
4H	2H	18.9	20.0	19.3	20.4	20.7	18.9	20.0	19.3	20.4	20.7
	3H	20.1	21.1	20.6	21.5	21.9	20.1	21.1	20.6	21.5	21.9
	4H	20.6	21.5	21.1	21.9	22.3	20.6	21.5	21.1	21.9	22.3
	6H	21.0	21.8	21.5	22.2	22.7	21.0	21.8	21.5	22.2	22.7
	8H	21.1	21.8	21.6	22.3	22.7	21.1	21.8	21.6	22.3	22.7
	12H	21.2	21.8	21.7	22.3	22.8	21.2	21.8	21.7	22.3	22.8

8H	4H	20.8	21.5	21.3	21.9	22.4	20.8	21.5	21.3	21.9	22.4
	6H	21.3	21.8	21.8	22.3	22.8	21.3	21.8	21.8	22.3	22.8
	8H	21.4	21.9	22.0	22.5	22.9	21.4	21.9	22.0	22.5	22.9
	12H	21.6	22.0	22.1	22.5	23.1	21.6	22.0	22.1	22.5	23.1

12H	4H	20.8	21.4	21.3	21.9	22.3	20.8	21.4	21.3	21.9	22.3
	6H	21.3	21.8	21.8	22.3	22.8	21.3	21.8	21.8	22.3	22.8
	8H	21.5	21.9	22.0	22.4	23.0	21.5	21.9	22.0	22.4	23.0

Maximum UGR = 23.1

POLAR GRAPH



Maximum Candela = 735.919 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.)