



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6PR-TL-L20-935-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-L20-935-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	1810
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	22.7
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	42059	42059	42059
55	20766	20766	20766
65	14067	14067	14067
75	10461	10461	10461
85	7244	7244	7244

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6PR-TL-L20-935-DIM-UNV-LW-OF-WH\_.IES

CANDELA TABULATION

	<u>0</u>
0.0	958.284
0.5	957.464
1.0	956.644
1.5	955.824
2.0	954.185
2.5	952.545
3.0	950.086
3.5	948.447
4.0	945.987
4.5	943.528
5.0	941.069
5.5	938.610
6.0	936.150
6.5	933.691
7.0	931.232
7.5	927.953
8.0	925.494
8.5	923.034
9.0	919.755
9.5	916.476
10.0	914.017
10.5	910.738
11.0	907.459
11.5	905.000
12.0	901.721
12.5	898.442
13.0	895.163
13.5	891.884
14.0	888.605
14.5	885.326
15.0	881.227
15.5	877.948
16.0	874.669
16.5	871.390
17.0	867.292
17.5	864.013
18.0	861.553
18.5	858.274
19.0	854.995
19.5	851.716
20.0	848.437
20.5	845.978
21.0	842.699
21.5	839.420
22.0	835.322
22.5	831.223
23.0	827.944
23.5	823.025
24.0	819.173
24.5	814.828
25.0	810.401
25.5	805.975
26.0	801.548
26.5	796.957

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6PR-TL-L20-935-DIM-UNV-LW-OF-WH\_.IES**

**CANDELA TABULATION - (Cont.)**

27.0	792.449
27.5	787.940
28.0	783.432
28.5	779.005
29.0	774.742
29.5	770.398
30.0	765.725
30.5	761.053
31.0	756.134
31.5	751.052
32.0	745.477
32.5	739.575
33.0	733.509
33.5	726.951
34.0	719.901
34.5	712.360
35.0	704.490
35.5	695.965
36.0	687.111
36.5	677.766
37.0	667.847
37.5	657.683
38.0	647.026
38.5	635.713
39.0	623.991
39.5	611.695
40.0	599.153
40.5	586.037
41.0	573.167
41.5	559.723
42.0	546.033
42.5	531.769
43.0	517.260
43.5	502.259
44.0	487.093
44.5	471.518
45.0	455.615
45.5	439.220
46.0	422.333
46.5	405.283
47.0	388.068
47.5	371.017
48.0	354.048
48.5	337.244
49.0	321.095
49.5	305.110
50.0	290.190
50.5	275.681
51.0	262.237
51.5	249.613
52.0	237.808
52.5	226.824
53.0	216.495
53.5	206.904
54.0	198.215
54.5	190.017

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6PR-TL-L20-935-DIM-UNV-LW-OF-WH\_.IES**

**CANDELA TABULATION - (Cont.)**

55.0	182.476
55.5	175.508
56.0	169.032
56.5	162.966
57.0	157.063
57.5	151.571
58.0	146.407
58.5	141.406
59.0	136.816
59.5	132.389
60.0	127.962
60.5	123.782
61.0	119.683
61.5	115.748
62.0	111.895
62.5	108.207
63.0	104.600
63.5	101.075
64.0	97.632
64.5	94.353
65.0	91.074
65.5	87.959
66.0	84.844
66.5	81.811
67.0	78.860
67.5	76.072
68.0	73.203
68.5	70.580
69.0	67.875
69.5	65.334
70.0	62.793
70.5	60.415
71.0	58.120
71.5	55.825
72.0	53.611
72.5	51.562
73.0	49.431
73.5	47.381
74.0	45.414
74.5	43.447
75.0	41.479
75.5	39.676
76.0	37.790
76.5	36.069
77.0	34.265
77.5	32.544
78.0	30.822
78.5	29.183
79.0	27.543
79.5	25.904
80.0	24.346
80.5	22.789
81.0	21.231
81.5	19.674
82.0	18.198
82.5	16.723

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6PR-TL-L20-935-DIM-UNV-LW-OF-WH\_.IES

CANDELA TABULATION - (Cont.)

83.0	15.247
83.5	13.854
84.0	12.378
84.5	11.067
85.0	9.673
85.5	8.361
86.0	7.050
86.5	5.820
87.0	4.673
87.5	3.689
88.0	2.869
88.5	2.131
89.0	1.558
89.5	1.066
90.0	0.656
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-L20-935-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-L20-935-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-L20-935-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-L20-935-DIM-UNV-LW-OF-WH\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	337.80	N.A.	18.70
0-30	711.25	N.A.	39.30
0-40	1146.89	N.A.	63.40
0-60	1662.87	N.A.	91.90
0-80	1798.74	N.A.	99.40
0-90	1810.19	N.A.	100.00
10-90	1721.23	N.A.	95.10
20-40	809.09	N.A.	44.70
20-50	1154.76	N.A.	63.80
40-70	607.36	N.A.	33.60
60-80	135.87	N.A.	7.50
70-80	44.49	N.A.	2.50
80-90	11.45	N.A.	0.60
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	1810.21	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	88.97
10-20	248.84
20-30	373.45
30-40	435.64
40-50	345.67
50-60	170.31
60-70	91.38
70-80	44.49
80-90	11.45
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

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6PR-TL-L20-935-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-L20-935-DIM-UNV-LW-OF-WH\_.IES**

**UGR TABLE - CORRECTED**

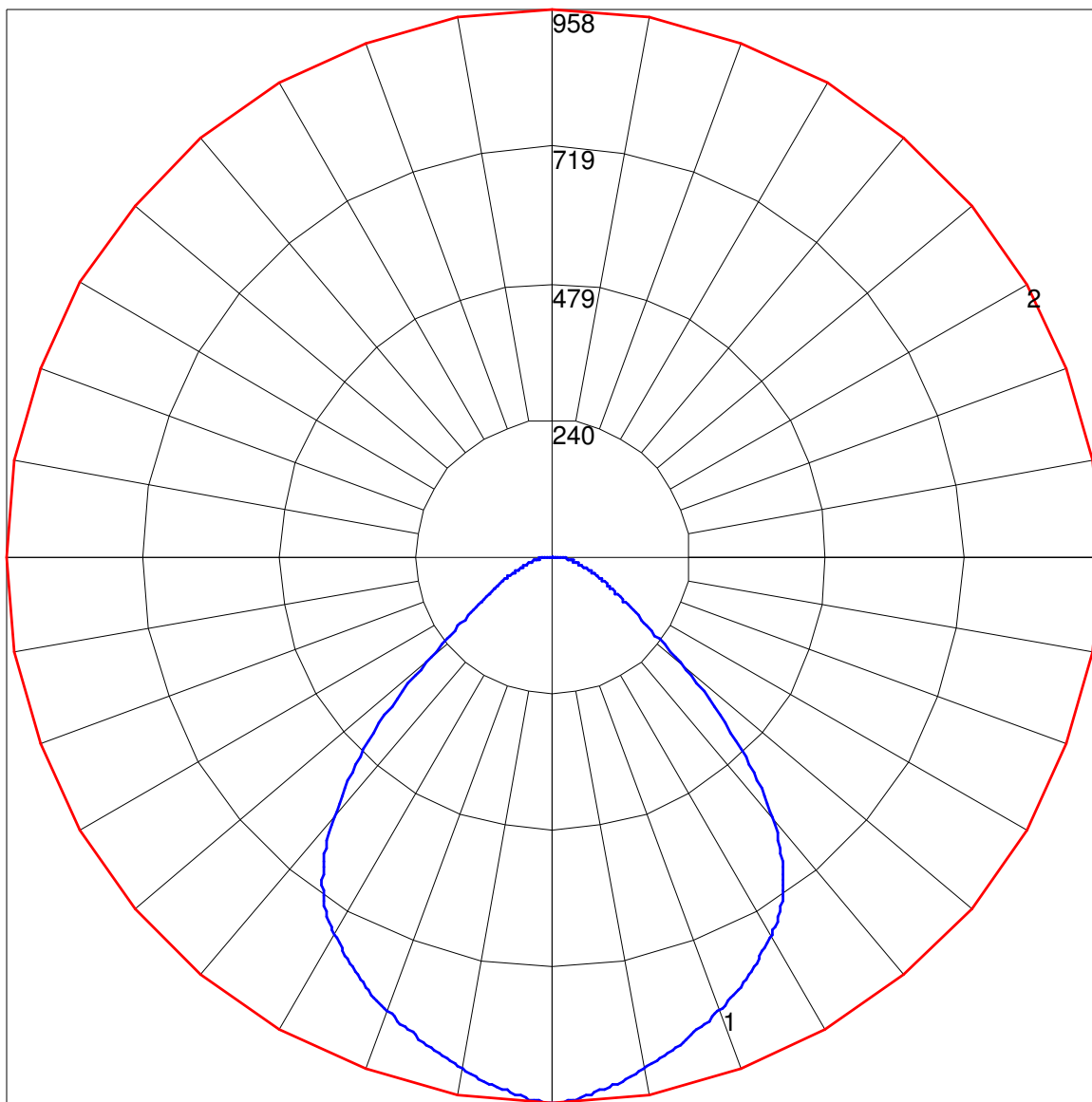
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	19.4	20.8	19.8	21.1	21.4	19.4	20.8	19.8	21.1	21.4
	3H	20.5	21.7	20.9	22.0	22.4	20.5	21.7	20.9	22.0	22.4
	4H	20.9	22.0	21.3	22.4	22.8	20.9	22.0	21.3	22.4	22.8
	6H	21.1	22.2	21.6	22.6	23.0	21.1	22.2	21.6	22.6	23.0
	8H	21.2	22.2	21.6	22.6	23.0	21.2	22.2	21.6	22.6	23.0
	12H	21.3	22.2	21.7	22.6	23.0	21.3	22.2	21.7	22.6	23.0
4H	2H	19.8	20.9	20.2	21.3	21.6	19.8	20.9	20.2	21.3	21.6
	3H	21.0	22.0	21.5	22.4	22.8	21.0	22.0	21.5	22.4	22.8
	4H	21.5	22.4	22.0	22.8	23.2	21.5	22.4	22.0	22.8	23.2
	6H	21.9	22.7	22.4	23.1	23.6	21.9	22.7	22.4	23.1	23.6
	8H	22.0	22.7	22.5	23.2	23.6	22.0	22.7	22.5	23.2	23.6
	12H	22.1	22.7	22.6	23.2	23.7	22.1	22.7	22.6	23.2	23.7
8H	4H	21.7	22.4	22.2	22.8	23.3	21.7	22.4	22.2	22.8	23.3
	6H	22.2	22.7	22.7	23.2	23.7	22.2	22.7	22.7	23.2	23.7
	8H	22.3	22.8	22.9	23.4	23.8	22.3	22.8	22.9	23.4	23.8
	12H	22.5	22.9	23.0	23.4	24.0	22.5	22.9	23.0	23.4	24.0
12H	4H	21.7	22.3	22.2	22.8	23.2	21.7	22.3	22.2	22.8	23.2
	6H	22.2	22.7	22.7	23.2	23.7	22.2	22.7	22.7	23.2	23.7
	8H	22.4	22.8	22.9	23.3	23.9	22.4	22.8	22.9	23.3	23.9

Maximum UGR = 24.0

POLAR GRAPH



Maximum Candela = 958.284 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.)