

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6LDR-L20-930-WH-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.04
[TESTLAB] UL, LLC
[ISSUE DATE] 2025-12-11
[TEST DATE] 11/12/2025
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 6LDR-L20-930-WH-DIM-UNV
[LUMINAIRE] 6" recessed downlight with textured white finish reflector
[MORE] and top diffuser lens
[LAMP] LED
[BALLAST] 0-10V LED DRIVER

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1433
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	84
Total Luminaire Watts	17
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.06
Spacing Criterion (90-270)	1.06
Spacing Criterion (Diagonal)	1.02
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.50 ft (Diameter)
Luminous Width (90-270)	0.50 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	17283	17283	17283
55	12729	12729	12729
65	9565	9565	9565
75	7250	7250	7250
85	5287	5287	5287

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CANDELA TABULATION

	<u>0</u>
0.0	1010.153
0.5	1010.153
1.0	1009.650
1.5	1009.146
2.0	1008.138
2.5	1008.138
3.0	1006.627
3.5	1005.619
4.0	1003.604
4.5	1002.092
5.0	1000.581
5.5	998.566
6.0	996.047
6.5	994.031
7.0	991.512
7.5	988.489
8.0	985.466
8.5	982.444
9.0	979.421
9.5	975.894
10.0	972.367
10.5	968.337
11.0	964.306
11.5	960.276
12.0	956.245
12.5	951.711
13.0	947.176
13.5	942.138
14.0	937.604
14.5	932.062
15.0	927.527
15.5	921.985
16.0	916.443
16.5	911.405
17.0	905.360
17.5	899.818
18.0	893.772
18.5	887.726
19.0	881.680
19.5	875.634
20.0	868.581
20.5	862.535
21.0	855.985
21.5	849.436
22.0	842.382
22.5	835.329
23.0	827.772
23.5	819.711
24.0	811.146
24.5	802.077
25.0	792.504
25.5	782.428
26.0	770.840
26.5	758.749

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CANDELA TABULATION - (Cont.)

27.0	745.649
27.5	732.046
28.0	717.436
28.5	702.321
29.0	686.703
29.5	670.077
30.0	653.451
30.5	637.833
31.0	620.703
31.5	604.077
32.0	586.947
32.5	569.313
33.0	551.680
33.5	534.550
34.0	517.420
34.5	500.290
35.0	483.463
35.5	466.938
36.0	450.765
36.5	434.693
37.0	419.025
37.5	403.507
38.0	388.342
38.5	373.429
39.0	358.768
39.5	344.561
40.0	330.706
40.5	317.254
41.0	304.356
41.5	292.012
42.0	280.223
42.5	269.089
43.0	258.559
43.5	248.684
44.0	239.515
44.5	231.000
45.0	223.141
45.5	215.835
46.0	209.185
46.5	202.938
47.0	197.244
47.5	192.005
48.0	187.017
48.5	182.432
49.0	177.999
49.5	173.767
50.0	169.736
50.5	165.756
51.0	161.876
51.5	158.047
52.0	154.319
52.5	150.742
53.0	147.165
53.5	143.689
54.0	140.212
54.5	136.736

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CANDELA TABULATION - (Cont.)

55.0	133.310
55.5	129.884
56.0	126.408
56.5	123.083
57.0	119.757
57.5	116.483
58.0	113.258
58.5	110.084
59.0	106.960
59.5	103.937
60.0	100.915
60.5	97.992
61.0	95.070
61.5	92.249
62.0	89.478
62.5	86.707
63.0	84.037
63.5	81.417
64.0	78.797
64.5	76.278
65.0	73.809
65.5	71.441
66.0	69.073
66.5	66.756
67.0	64.489
67.5	62.272
68.0	60.105
68.5	58.040
69.0	55.924
69.5	53.908
70.0	51.944
70.5	49.979
71.0	48.115
71.5	46.200
72.0	44.386
72.5	42.623
73.0	40.860
73.5	39.197
74.0	37.534
74.5	35.872
75.0	34.260
75.5	32.698
76.0	31.186
76.5	29.675
77.0	28.214
77.5	26.753
78.0	25.342
78.5	23.931
79.0	22.571
79.5	21.261
80.0	19.951
80.5	18.692
81.0	17.432
81.5	16.223
82.0	15.014
82.5	13.855

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CANDELA TABULATION - (Cont.)

83.0	12.696
83.5	11.588
84.0	10.479
84.5	9.421
85.0	8.414
85.5	7.406
86.0	6.398
86.5	5.441
87.0	4.484
87.5	3.577
88.0	2.670
88.5	1.814
89.0	1.058
89.5	0.554
90.0	0.000
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
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117.5	0.000
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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

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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
145.0	0.000
145.5	0.000
146.0	0.000
146.5	0.000
147.0	0.000
147.5	0.000
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152.0	0.000
152.5	0.000
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153.5	0.000
154.0	0.000
154.5	0.000
155.0	0.000
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156.0	0.000
156.5	0.000
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158.0	0.000
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159.0	0.000
159.5	0.000
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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	355.24	N.A.	24.80
0-30	713.85	N.A.	49.80
0-40	1015.46	N.A.	70.80
0-60	1313.29	N.A.	91.60
0-80	1423.84	N.A.	99.30
0-90	1433.48	N.A.	100.00
10-90	1338.88	N.A.	93.40
20-40	660.22	N.A.	46.10
20-50	838.59	N.A.	58.50
40-70	371.67	N.A.	25.90
60-80	110.55	N.A.	7.70
70-80	36.72	N.A.	2.60
80-90	9.64	N.A.	0.70
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	1433.48	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	94.60
10-20	260.64
20-30	358.60
30-40	301.61
40-50	178.38
50-60	119.46
60-70	73.83
70-80	36.72
80-90	9.64
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	77	72	67	75	70	66	73	69	66	64
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58
6	79	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38

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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	17.9	19.2	18.2	19.5	19.8	UGR Viewed Endwise			
	3H	19.1	20.3	19.5	20.6	21.0	17.9	19.2	18.2	19.5
	4H	19.5	20.6	19.9	21.0	21.3	19.1	20.3	19.5	20.6
	6H	19.8	20.8	20.2	21.2	21.6	19.5	20.6	19.9	21.0
	8H	19.9	20.8	20.3	21.2	21.6	19.8	20.8	20.2	21.2
	12H	20.0	20.9	20.4	21.2	21.7	19.9	20.8	20.3	21.2

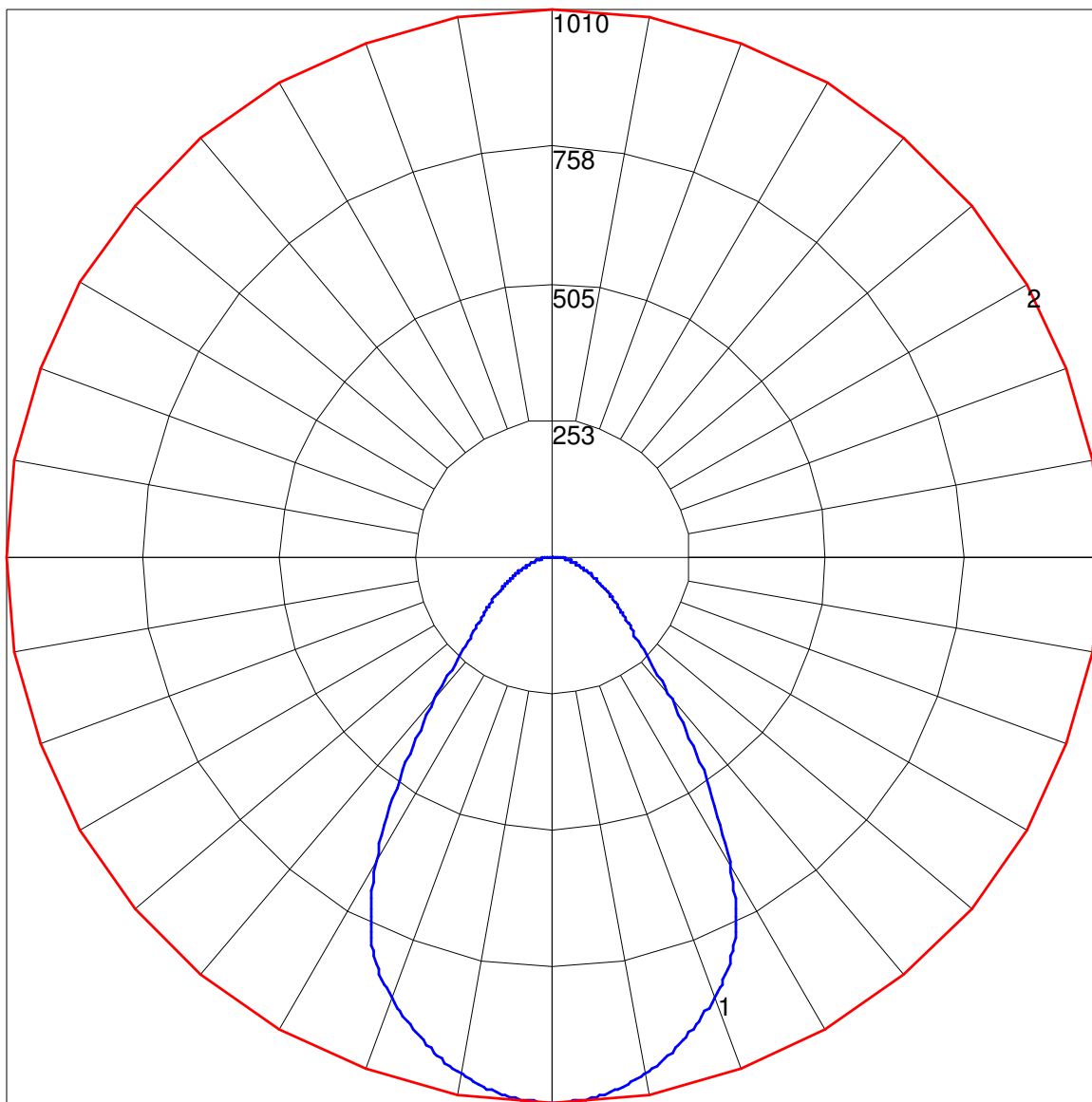
4H	2H	18.3	19.4	18.7	19.7	20.1	17.9	19.2	18.2	19.5
	3H	19.7	20.6	20.1	21.0	21.4	19.1	20.3	19.5	20.6
	4H	20.2	21.0	20.6	21.4	21.9	19.5	20.6	19.9	21.0
	6H	20.6	21.3	21.1	21.8	22.2	19.8	20.8	20.2	21.2
	8H	20.8	21.4	21.2	21.8	22.3	19.9	20.8	20.3	21.2
	12H	20.8	21.4	21.3	21.9	22.4	20.0	20.9	20.4	21.2

8H	4H	20.4	21.0	20.9	21.5	22.0	19.8	20.8	20.2	21.2
	6H	20.9	21.4	21.4	21.9	22.4	19.9	20.8	20.3	21.2
	8H	21.1	21.5	21.6	22.1	22.5	20.0	20.9	20.4	21.2
	12H	21.2	21.6	21.7	22.1	22.7	20.0	20.9	20.4	21.2

12H	4H	20.4	21.0	20.9	21.4	21.9	19.8	20.8	20.2	21.2
	6H	20.9	21.4	21.4	21.9	22.4	19.9	20.8	20.3	21.2
	8H	21.1	21.5	21.6	22.0	22.6	20.0	20.9	20.4	21.2

Maximum UGR = 22.7

POLAR GRAPH



Maximum Candela = 1010.153 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.)