

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : HM6DR-TL-L30-835-DIM-UNV-LW-OF-WH\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12326812.07

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 6-16-2023

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.

[LUMCAT] HM6DR-TL-L30-835-DIM-UNV-LW-OF-WH

[LUMINAIRE] Black formed aluminum housing, white reflector, clear glas

[MORE] s patterned lens enclosure

[LAMP] One white LED

[\_SEARCH\_SOURCETYPE] LED

[\_SEARCH\_APPLICATION] Indoor, Architectural, Classroom, Commercial, Healthcare, Office, Downlight

[\_SEARCH\_MOUNTING] Recessed

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3079
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	82
Total Luminaire Watts	37.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.08
Spacing Criterion (90-270)	1.08
Spacing Criterion (Diagonal)	0.98
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	51185	51185	51185
55	42613	42613	42613
65	32374	32374	32374
75	23477	23477	23477
85	15299	15299	15299

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : HM6DR-TL-L30-835-DIM-UNV-LW-OF-WH\_.IES

CANDELA TABULATION

	<u>0</u>
0.0	1958.620
0.5	1958.225
1.0	1956.648
1.5	1954.282
2.0	1951.324
2.5	1947.380
3.0	1943.437
3.5	1938.901
4.0	1934.761
4.5	1930.620
5.0	1927.662
5.5	1924.901
6.0	1922.338
6.5	1919.775
7.0	1917.014
7.5	1914.451
8.0	1911.887
8.5	1909.521
9.0	1907.155
9.5	1905.183
10.0	1903.211
10.5	1901.634
11.0	1900.254
11.5	1899.465
12.0	1898.084
12.5	1896.704
13.0	1894.732
13.5	1892.169
14.0	1889.014
14.5	1885.465
15.0	1881.718
15.5	1876.986
16.0	1871.859
16.5	1866.732
17.0	1861.606
17.5	1856.282
18.0	1850.563
18.5	1844.056
19.0	1836.761
19.5	1828.676
20.0	1819.408
20.5	1809.352
21.0	1796.930
21.5	1782.141
22.0	1765.380
22.5	1746.451
23.0	1725.746
23.5	1703.268
24.0	1678.423
24.5	1651.606
25.0	1622.620
25.5	1592.451
26.0	1560.310
26.5	1526.789

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HM6DR-TL-L30-835-DIM-UNV-LW-OF-WH\_.IES**

**CANDELA TABULATION - (Cont.)**

<b>27.0</b>	1491.099
<b>27.5</b>	1454.423
<b>28.0</b>	1415.775
<b>28.5</b>	1374.958
<b>29.0</b>	1332.563
<b>29.5</b>	1288.000
<b>30.0</b>	1242.254
<b>30.5</b>	1195.127
<b>31.0</b>	1148.000
<b>31.5</b>	1100.479
<b>32.0</b>	1054.338
<b>32.5</b>	1010.169
<b>33.0</b>	967.775
<b>33.5</b>	928.141
<b>34.0</b>	891.662
<b>34.5</b>	858.535
<b>35.0</b>	828.958
<b>35.5</b>	801.746
<b>36.0</b>	777.887
<b>36.5</b>	756.000
<b>37.0</b>	736.479
<b>37.5</b>	718.930
<b>38.0</b>	702.958
<b>38.5</b>	688.366
<b>39.0</b>	674.563
<b>39.5</b>	662.141
<b>40.0</b>	650.113
<b>40.5</b>	638.873
<b>41.0</b>	628.423
<b>41.5</b>	618.169
<b>42.0</b>	608.310
<b>42.5</b>	599.239
<b>43.0</b>	589.972
<b>43.5</b>	580.901
<b>44.0</b>	572.028
<b>44.5</b>	563.352
<b>45.0</b>	554.479
<b>45.5</b>	546.000
<b>46.0</b>	537.324
<b>46.5</b>	528.648
<b>47.0</b>	519.775
<b>47.5</b>	511.099
<b>48.0</b>	502.225
<b>48.5</b>	493.352
<b>49.0</b>	484.479
<b>49.5</b>	475.211
<b>50.0</b>	466.338
<b>50.5</b>	457.268
<b>51.0</b>	448.197
<b>51.5</b>	438.930
<b>52.0</b>	429.662
<b>52.5</b>	420.394
<b>53.0</b>	411.127
<b>53.5</b>	401.859
<b>54.0</b>	392.986
<b>54.5</b>	383.915

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : HM6DR-TL-L30-835-DIM-UNV-LW-OF-WH\_.IES

CANDELA TABULATION - (Cont.)

55.0	374.451
55.5	365.183
56.0	355.915
56.5	347.239
57.0	338.563
57.5	329.493
58.0	320.423
58.5	311.549
59.0	302.873
59.5	294.197
60.0	285.915
60.5	277.634
61.0	269.549
61.5	261.465
62.0	253.775
62.5	246.085
63.0	238.592
63.5	231.099
64.0	223.803
64.5	216.704
65.0	209.606
65.5	202.704
66.0	195.823
66.5	189.059
67.0	182.375
67.5	175.828
68.0	169.400
68.5	162.952
69.0	156.701
69.5	150.510
70.0	144.496
70.5	138.679
71.0	132.980
71.5	127.459
72.0	122.135
72.5	116.969
73.0	111.941
73.5	107.011
74.0	102.279
74.5	97.645
75.0	93.090
75.5	88.693
76.0	84.375
76.5	80.135
77.0	76.014
77.5	71.972
78.0	68.048
78.5	64.203
79.0	60.437
79.5	56.808
80.0	53.200
80.5	49.710
81.0	46.259
81.5	42.828
82.0	39.476
82.5	36.144

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : HM6DR-TL-L30-835-DIM-UNV-LW-OF-WH\_.IES

CANDELA TABULATION - (Cont.)

83.0	32.890
83.5	29.696
84.0	26.541
84.5	23.445
85.0	20.428
85.5	17.510
86.0	14.690
86.5	11.969
87.0	9.327
87.5	7.118
88.0	5.442
88.5	3.983
89.0	2.761
89.5	1.735
90.0	1.104
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 : HM6DR-TL-L30-835-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 : HM6DR-TL-L30-835-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 : HM6DR-TL-L30-835-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 : HM6DR-TL-L30-835-DIM-UNV-LW-OF-WH\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	713.46	N.A.	23.20
0-30	1442.2	N.A.	46.80
0-40	1982.56	N.A.	64.40
0-60	2745.54	N.A.	89.20
0-80	3054.59	N.A.	99.20
0-90	3079.01	N.A.	100.00
10-90	2895.72	N.A.	94.00
20-40	1269.1	N.A.	41.20
20-50	1697.28	N.A.	55.10
40-70	971.92	N.A.	31.60
60-80	309.05	N.A.	10.00
70-80	100.11	N.A.	3.30
80-90	24.42	N.A.	0.80
90-110	0.03	N.A.	0.00
90-120	0.03	N.A.	0.00
90-130	0.03	N.A.	0.00
90-150	0.03	N.A.	0.00
90-180	0.03	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3079.04	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	183.29
10-20	530.18
20-30	728.73
30-40	540.36
40-50	428.19
50-60	334.80
60-70	208.93
70-80	100.11
80-90	24.42
90-100	0.03
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 : HM6DR-TL-L30-835-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	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	96	87	80	75	93	85	79	74	83	77	73	80	75	72	78	74	70	69
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38
10	61	49	42	37	60	49	42	37	48	42	37	47	41	37	46	41	37	35

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HM6DR-TL-L30-835-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	22.9	24.3	23.3	24.6	24.9	22.9	24.3	23.3	24.6	24.9
	3H	24.1	25.4	24.5	25.7	26.0	24.1	25.4	24.5	25.7	26.0
	4H	24.5	25.7	24.9	26.0	26.4	24.5	25.7	24.9	26.0	26.4
	6H	24.8	25.8	25.2	26.2	26.6	24.8	25.8	25.2	26.2	26.6
	8H	24.8	25.9	25.3	26.3	26.7	24.8	25.9	25.3	26.3	26.7
	12H	24.9	25.9	25.3	26.2	26.7	24.9	25.9	25.3	26.2	26.7

UGR Viewed Endwise

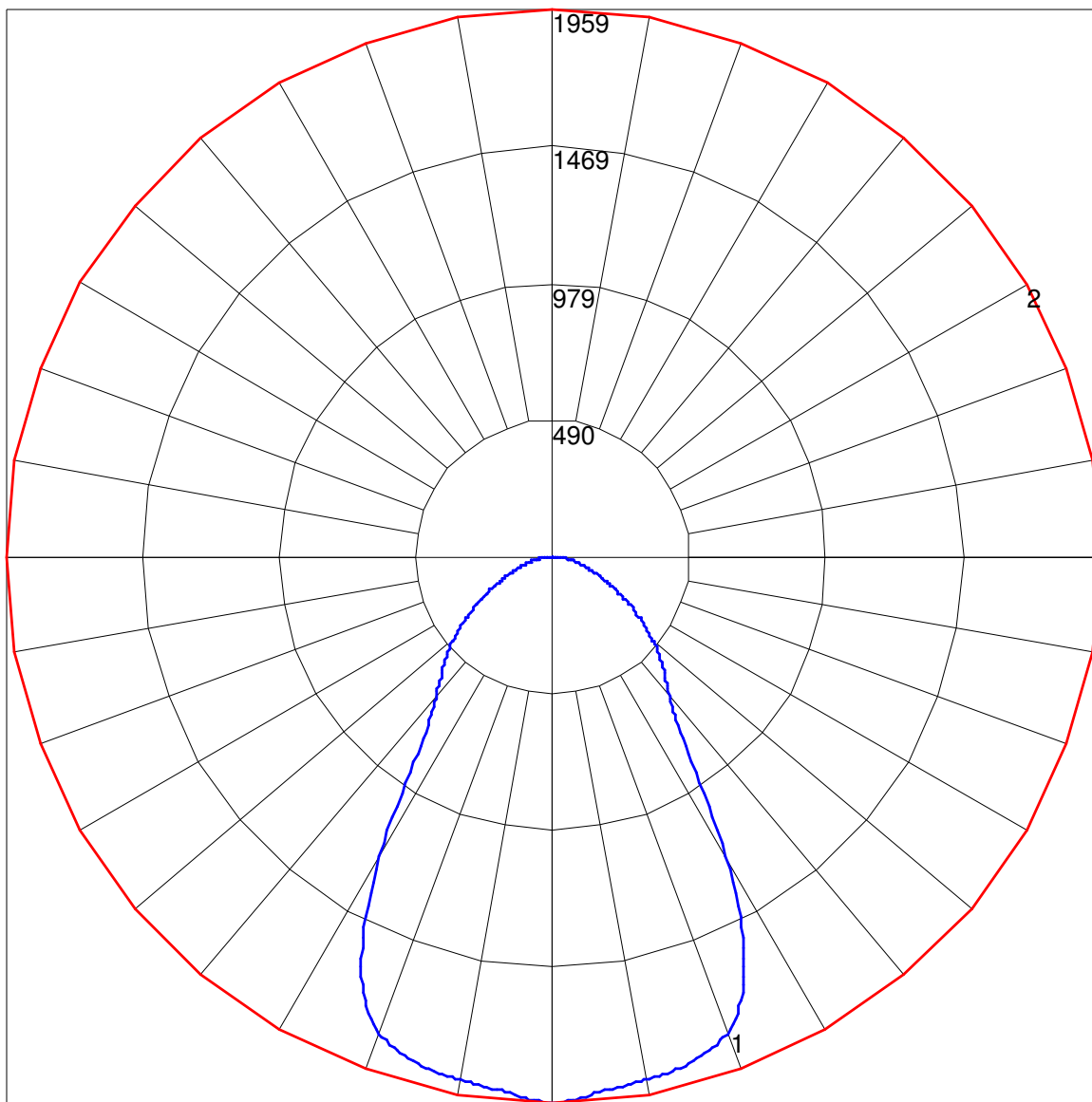
4H	2H	23.3	24.5	23.7	24.8	25.2	23.3	24.5	23.7	24.8	25.2
	3H	24.7	25.7	25.1	26.1	26.5	24.7	25.7	25.1	26.1	26.5
	4H	25.2	26.1	25.6	26.5	26.9	25.2	26.1	25.6	26.5	26.9
	6H	25.6	26.3	26.1	26.8	27.2	25.6	26.3	26.1	26.8	27.2
	8H	25.7	26.4	26.1	26.8	27.3	25.7	26.4	26.1	26.8	27.3
	12H	25.8	26.4	26.2	26.9	27.3	25.8	26.4	26.2	26.9	27.3

8H	4H	25.4	26.1	25.8	26.5	27.0	25.4	26.1	25.8	26.5	27.0
	6H	25.8	26.4	26.3	26.9	27.4	25.8	26.4	26.3	26.9	27.4
	8H	26.0	26.5	26.5	27.0	27.5	26.0	26.5	26.5	27.0	27.5
	12H	26.1	26.6	26.6	27.1	27.6	26.1	26.6	26.6	27.1	27.6

12H	4H	25.4	26.0	25.8	26.5	26.9	25.4	26.0	25.8	26.5	26.9
	6H	25.9	26.4	26.4	26.8	27.4	25.9	26.4	26.4	26.8	27.4
	8H	26.1	26.5	26.6	27.0	27.6	26.1	26.5	26.6	27.0	27.6

Maximum UGR = 27.6

POLAR GRAPH



Maximum Candela = 1958.62 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.)