



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12326812.04

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 10/25/2022

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6DR-TL-L30-940-DIM-UNV-OM-OF-CS

[LUMINAIRE] Black formed aluminum housing, specular reflector, no lens

[MORE] 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	2522
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	94
Total Luminaire Watts	26.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.58
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	0.68
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	4551	4551	4551
55	1676	1676	1676
65	659	659	659
75	296	296	296
85	240	240	240

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.IES

CANDELA TABULATION

	<u>0</u>
0.0	5103.774
0.5	5111.405
1.0	5126.666
1.5	5135.569
2.0	5157.190
2.5	5166.092
3.0	5181.354
3.5	5185.170
4.0	5173.723
4.5	5112.676
5.0	5051.630
5.5	4986.767
6.0	4882.479
6.5	4778.190
7.0	4667.543
7.5	4542.906
8.0	4397.919
8.5	4249.117
9.0	4095.228
9.5	3945.155
10.0	3806.527
10.5	3684.434
11.0	3578.873
11.5	3488.575
12.0	3399.548
12.5	3311.793
13.0	3227.854
13.5	3149.002
14.0	3077.780
14.5	3014.190
15.0	2956.958
15.5	2902.271
16.0	2848.855
16.5	2792.895
17.0	2735.663
17.5	2678.432
18.0	2626.288
18.5	2580.503
19.0	2533.446
19.5	2485.117
20.0	2431.701
20.5	2374.469
21.0	2315.966
21.5	2256.191
22.0	2192.601
22.5	2131.554
23.0	2066.691
23.5	2000.557
24.0	1931.879
24.5	1863.202
25.0	1795.796
25.5	1728.390
26.0	1666.071
26.5	1606.296

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.IES

CANDELA TABULATION - (Cont.)

27.0	1550.336
27.5	1496.920
28.0	1448.592
28.5	1405.350
29.0	1364.652
29.5	1325.226
30.0	1275.625
30.5	1213.561
31.0	1142.340
31.5	1063.996
32.0	984.508
32.5	904.511
33.0	824.514
33.5	740.575
34.0	655.364
34.5	577.656
35.0	503.001
35.5	432.543
36.0	364.755
36.5	304.090
37.0	254.362
37.5	219.387
38.0	200.564
38.5	187.846
39.0	175.128
39.5	161.647
40.0	147.276
40.5	132.014
41.0	117.388
41.5	103.780
42.0	92.206
42.5	83.049
43.0	75.927
43.5	70.458
44.0	65.880
44.5	62.192
45.0	58.758
45.5	55.832
46.0	53.034
46.5	50.491
47.0	47.947
47.5	45.531
48.0	43.114
48.5	40.698
49.0	38.281
49.5	36.119
50.0	34.085
50.5	32.050
51.0	30.142
51.5	28.234
52.0	26.326
52.5	24.673
53.0	23.020
53.5	21.494
54.0	20.095
54.5	18.823

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.IES

CANDELA TABULATION - (Cont.)

55.0	17.551
55.5	16.534
56.0	15.389
56.5	14.499
57.0	13.608
57.5	12.718
58.0	11.955
58.5	11.192
59.0	10.556
59.5	9.920
60.0	9.284
60.5	8.648
61.0	8.140
61.5	7.631
62.0	7.249
62.5	6.868
63.0	6.359
63.5	6.105
64.0	5.723
64.5	5.342
65.0	5.087
65.5	4.706
66.0	4.451
66.5	4.197
67.0	3.943
67.5	3.688
68.0	3.561
68.5	3.307
69.0	3.052
69.5	2.925
70.0	2.798
70.5	2.544
71.0	2.416
71.5	2.289
72.0	2.162
72.5	2.035
73.0	1.908
73.5	1.781
74.0	1.653
74.5	1.526
75.0	1.399
75.5	1.399
76.0	1.272
76.5	1.145
77.0	1.145
77.5	1.017
78.0	1.017
78.5	0.890
79.0	0.890
79.5	0.763
80.0	0.763
80.5	0.636
81.0	0.636
81.5	0.636
82.0	0.509
82.5	0.509

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.IES

CANDELA TABULATION - (Cont.)

83.0	0.509
83.5	0.382
84.0	0.382
84.5	0.382
85.0	0.382
85.5	0.254
86.0	0.254
86.5	0.254
87.0	0.254
87.5	0.254
88.0	0.127
88.5	0.127
89.0	0.127
89.5	0.127
90.0	0.127
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 : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.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 : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.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 : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.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 : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1272.78	N.A.	50.50
0-30	2097.24	N.A.	83.20
0-40	2446.12	N.A.	97.00
0-60	2514.68	N.A.	99.70
0-80	2521.58	N.A.	100.00
0-90	2521.97	N.A.	100.00
10-90	2082.22	N.A.	82.60
20-40	1173.33	N.A.	46.50
20-50	1225.05	N.A.	48.60
40-70	73.83	N.A.	2.90
60-80	6.90	N.A.	0.30
70-80	1.63	N.A.	0.10
80-90	0.39	N.A.	0.00
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	2521.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	439.75
10-20	833.03
20-30	824.46
30-40	348.88
40-50	51.72
50-60	16.84
60-70	5.27
70-80	1.63
80-90	0.39
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.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	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89
3	104	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84
4	100	93	88	84	98	92	88	84	90	86	83	88	85	82	86	83	81	80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	75	73	72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	75	72	69	68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65
9	81	72	67	63	80	72	67	63	71	66	63	70	66	63	69	65	63	62
10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	63	60	59

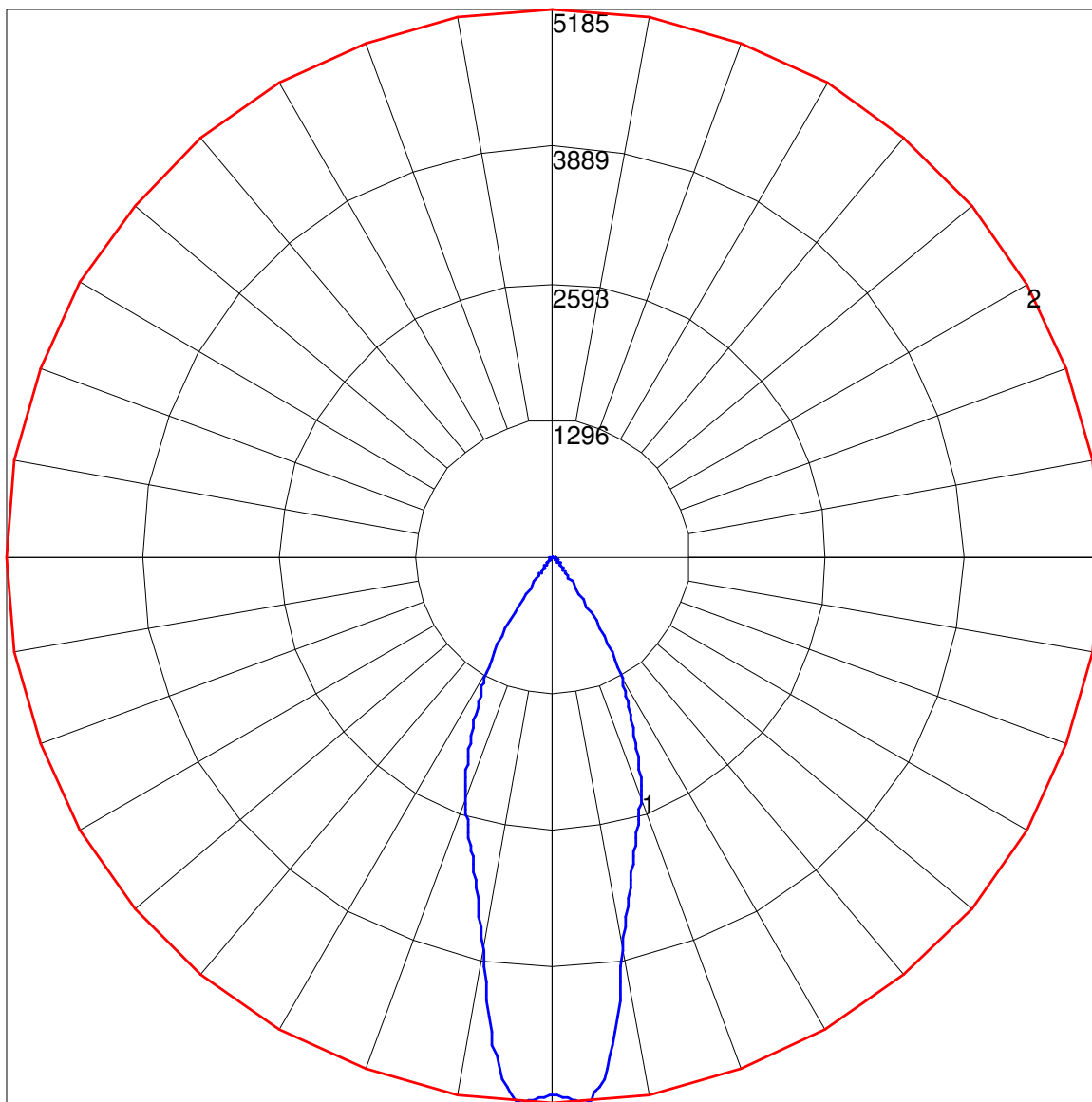
IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L30-940-DIM-UNV-OM-OF-CS_.IES

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	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	3H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	4H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	6H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	8H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	12H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
4H	2H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	3H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	4H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	6H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	8H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	12H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
8H	4H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	6H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	8H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	12H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
12H	4H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	6H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	8H	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3

Maximum UGR = 3.3

POLAR GRAPH



Maximum Candela = 5185.17 Located At Horizontal Angle = 0, Vertical Angle = 3.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (3.5) (Through Max. Cd.)