



IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L10-840-DIM-UNV-LW-OF-CS_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]GEN FROM 12326812.07
[TESTLAB] UL Verification Services Inc.
[ISSUEDATE] 01-11-2024
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 6DR-TL-L10-840-DIM-UNV-LW-OF-CS
[LUMINAIRE] Black formed aluminum housing, CS 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	782
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	8.7
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	12996	12996	12996
55	10819	10819	10819
65	8220	8220	8220
75	5961	5961	5961
85	3885	3885	3885

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L10-840-DIM-UNV-LW-OF-CS_.IES

CANDELA TABULATION

	<u>0</u>
0.0	497.286
0.5	497.186
1.0	496.785
1.5	496.185
2.0	495.434
2.5	494.432
3.0	493.431
3.5	492.280
4.0	491.228
4.5	490.177
5.0	489.426
5.5	488.725
6.0	488.074
6.5	487.423
7.0	486.722
7.5	486.072
8.0	485.421
8.5	484.820
9.0	484.219
9.5	483.719
10.0	483.218
10.5	482.817
11.0	482.467
11.5	482.267
12.0	481.916
12.5	481.566
13.0	481.065
13.5	480.414
14.0	479.613
14.5	478.712
15.0	477.761
15.5	476.559
16.0	475.258
16.5	473.956
17.0	472.654
17.5	471.303
18.0	469.851
18.5	468.199
19.0	466.346
19.5	464.294
20.0	461.941
20.5	459.387
21.0	456.233
21.5	452.479
22.0	448.223
22.5	443.417
23.0	438.160
23.5	432.453
24.0	426.145
24.5	419.336
25.0	411.977
25.5	404.317
26.0	396.157
26.5	387.646

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L10-840-DIM-UNV-LW-OF-CS_.IES

CANDELA TABULATION - (Cont.)

27.0	378.584
27.5	369.272
28.0	359.460
28.5	349.096
29.0	338.333
29.5	327.018
30.0	315.403
30.5	303.438
31.0	291.473
31.5	279.407
32.0	267.692
32.5	256.478
33.0	245.714
33.5	235.651
34.0	226.390
34.5	217.979
35.0	210.469
35.5	203.560
36.0	197.503
36.5	191.945
37.0	186.989
37.5	182.533
38.0	178.478
38.5	174.774
39.0	171.269
39.5	168.115
40.0	165.061
40.5	162.207
41.0	159.554
41.5	156.951
42.0	154.448
42.5	152.145
43.0	149.792
43.5	147.489
44.0	145.236
44.5	143.033
45.0	140.780
45.5	138.627
46.0	136.424
46.5	134.222
47.0	131.969
47.5	129.766
48.0	127.513
48.5	125.260
49.0	123.007
49.5	120.654
50.0	118.401
50.5	116.098
51.0	113.796
51.5	111.443
52.0	109.089
52.5	106.736
53.0	104.383
53.5	102.030
54.0	99.778
54.5	97.475

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L10-840-DIM-UNV-LW-OF-CS_.IES

CANDELA TABULATION - (Cont.)

55.0	95.072
55.5	92.719
56.0	90.366
56.5	88.163
57.0	85.960
57.5	83.657
58.0	81.354
58.5	79.101
59.0	76.898
59.5	74.696
60.0	72.593
60.5	70.490
61.0	68.438
61.5	66.385
62.0	64.432
62.5	62.480
63.0	60.577
63.5	58.675
64.0	56.823
64.5	55.020
65.0	53.218
65.5	51.466
66.0	49.719
66.5	48.001
67.0	46.304
67.5	44.642
68.0	43.010
68.5	41.373
69.0	39.786
69.5	38.214
70.0	36.687
70.5	35.210
71.0	33.763
71.5	32.361
72.0	31.010
72.5	29.698
73.0	28.421
73.5	27.170
74.0	25.968
74.5	24.792
75.0	23.635
75.5	22.519
76.0	21.422
76.5	20.346
77.0	19.300
77.5	18.273
78.0	17.277
78.5	16.301
79.0	15.345
79.5	14.423
80.0	13.507
80.5	12.621
81.0	11.745
81.5	10.874
82.0	10.023
82.5	9.177

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L10-840-DIM-UNV-LW-OF-CS_.IES

CANDELA TABULATION - (Cont.)

83.0	8.351
83.5	7.540
84.0	6.739
84.5	5.953
85.0	5.187
85.5	4.446
86.0	3.730
86.5	3.039
87.0	2.368
87.5	1.807
88.0	1.382
88.5	1.011
89.0	0.701
89.5	0.441
90.0	0.280
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-L10-840-DIM-UNV-LW-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-L10-840-DIM-UNV-LW-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-L10-840-DIM-UNV-LW-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-L10-840-DIM-UNV-LW-OF-CS_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	181.15	N.A.	23.20
0-30	366.17	N.A.	46.80
0-40	503.36	N.A.	64.40
0-60	697.08	N.A.	89.20
0-80	775.55	N.A.	99.20
0-90	781.75	N.A.	100.00
10-90	735.21	N.A.	94.00
20-40	322.22	N.A.	41.20
20-50	430.93	N.A.	55.10
40-70	246.77	N.A.	31.60
60-80	78.47	N.A.	10.00
70-80	25.42	N.A.	3.30
80-90	6.20	N.A.	0.80
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	781.76	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	46.54
10-20	134.61
20-30	185.02
30-40	137.20
40-50	108.72
50-60	85.00
60-70	53.05
70-80	25.42
80-90	6.20
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 : 6DR-TL-L10-840-DIM-UNV-LW-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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	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	77	74	70	69
4	89	79	71	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	51	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 : 6DR-TL-L10-840-DIM-UNV-LW-OF-CS_.IES

UGR TABLE - CORRECTED

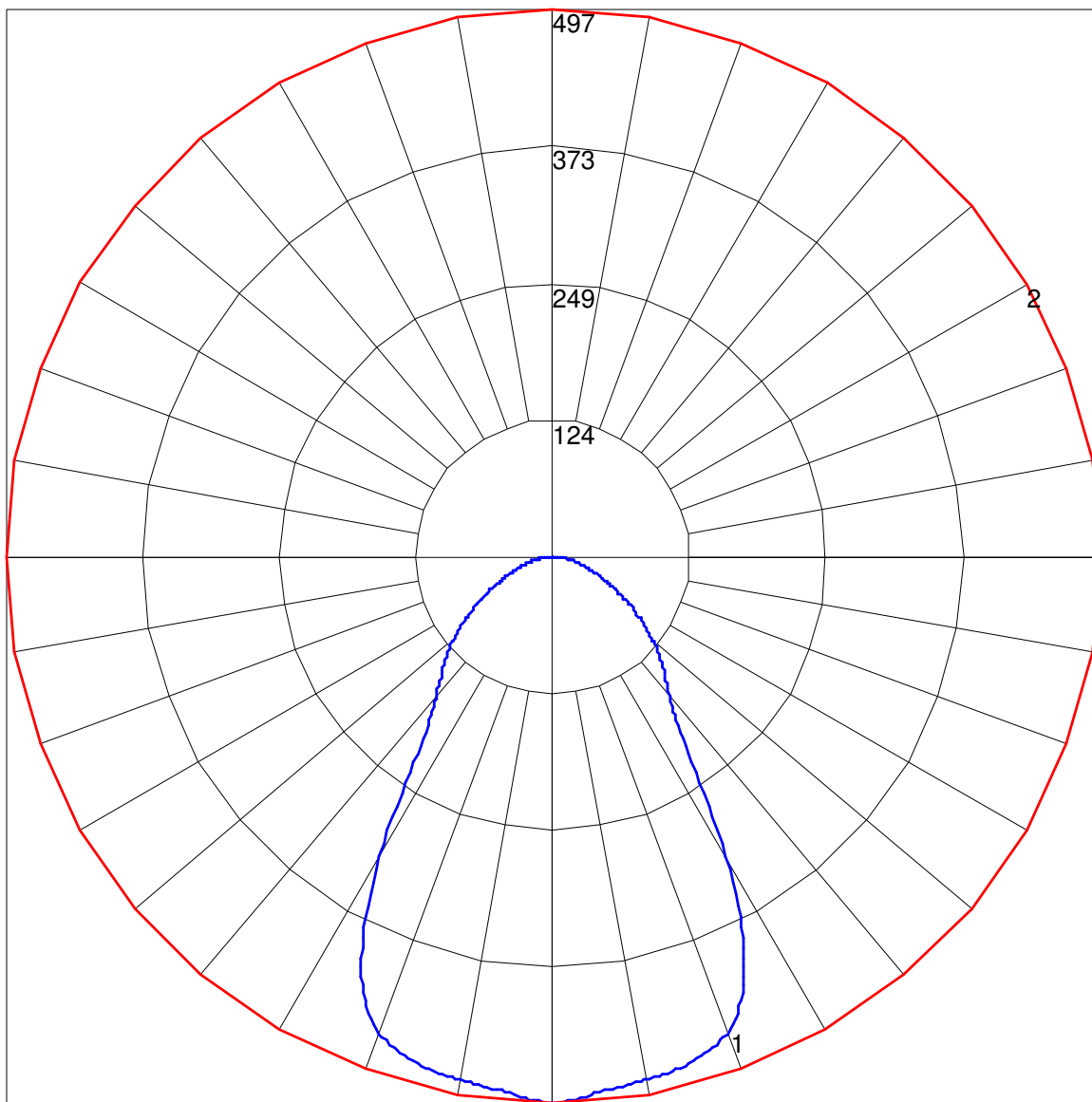
Reflectances

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	18.2	19.6	18.6	19.9	20.2	18.2	19.6	18.6	19.9	20.2
	3H	19.4	20.7	19.8	21.0	21.3	19.4	20.7	19.8	21.0	21.3
	4H	19.8	21.0	20.2	21.3	21.7	19.8	21.0	20.2	21.3	21.7
	6H	20.1	21.1	20.5	21.5	21.9	20.1	21.1	20.5	21.5	21.9
	8H	20.1	21.2	20.6	21.5	22.0	20.1	21.2	20.6	21.5	22.0
	12H	20.2	21.1	20.6	21.5	22.0	20.2	21.1	20.6	21.5	22.0
4H	2H	18.6	19.8	19.0	20.1	20.5	18.6	19.8	19.0	20.1	20.5
	3H	20.0	21.0	20.4	21.4	21.8	20.0	21.0	20.4	21.4	21.8
	4H	20.5	21.4	20.9	21.8	22.2	20.5	21.4	20.9	21.8	22.2
	6H	20.9	21.6	21.3	22.1	22.5	20.9	21.6	21.3	22.1	22.5
	8H	21.0	21.7	21.4	22.1	22.6	21.0	21.7	21.4	22.1	22.6
	12H	21.1	21.7	21.5	22.2	22.6	21.1	21.7	21.5	22.2	22.6
8H	4H	20.7	21.4	21.1	21.8	22.3	20.7	21.4	21.1	21.8	22.3
	6H	21.1	21.7	21.6	22.2	22.7	21.1	21.7	21.6	22.2	22.7
	8H	21.3	21.8	21.8	22.3	22.8	21.3	21.8	21.8	22.3	22.8
	12H	21.4	21.9	21.9	22.4	22.9	21.4	21.9	21.9	22.4	22.9
12H	4H	20.7	21.3	21.1	21.8	22.2	20.7	21.3	21.1	21.8	22.2
	6H	21.2	21.7	21.7	22.1	22.7	21.2	21.7	21.7	22.1	22.7
	8H	21.4	21.8	21.9	22.3	22.9	21.4	21.8	21.9	22.3	22.9

Maximum UGR = 22.9

POLAR GRAPH



Maximum Candela = 497.286 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.)