



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L15-840-DIM1-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] 02-20-2023
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 6DR-TL-L15-840-DIM1-UNV-LW-OF-CS
 [LUMINAIRE] Black formed aluminum housing, specular 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	1189
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	86
Total Luminaire Watts	13.8
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	19772	19772	19772
55	16461	16461	16461
65	12506	12506	12506
75	9069	9069	9069
85	5910	5910	5910

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CANDELA TABULATION

	<u>0</u>
0.0	756.600
0.5	756.447
1.0	755.838
1.5	754.924
2.0	753.781
2.5	752.258
3.0	750.734
3.5	748.983
4.0	747.383
4.5	745.783
5.0	744.641
5.5	743.574
6.0	742.584
6.5	741.594
7.0	740.528
7.5	739.537
8.0	738.547
8.5	737.633
9.0	736.719
9.5	735.957
10.0	735.196
10.5	734.586
11.0	734.053
11.5	733.749
12.0	733.215
12.5	732.682
13.0	731.920
13.5	730.930
14.0	729.711
14.5	728.340
15.0	726.893
15.5	725.065
16.0	723.085
16.5	721.104
17.0	719.124
17.5	717.067
18.0	714.858
18.5	712.345
19.0	709.526
19.5	706.403
20.0	702.823
20.5	698.939
21.0	694.140
21.5	688.427
22.0	681.953
22.5	674.640
23.0	666.642
23.5	657.959
24.0	648.362
24.5	638.002
25.0	626.805
25.5	615.151
26.0	602.736
26.5	589.787

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CANDELA TABULATION - (Cont.)

27.0	576.000
27.5	561.832
28.0	546.903
28.5	531.136
29.0	514.759
29.5	497.544
30.0	479.873
30.5	461.668
31.0	443.464
31.5	425.106
32.0	407.283
32.5	390.220
33.0	373.844
33.5	358.534
34.0	344.442
34.5	331.645
35.0	320.220
35.5	309.708
36.0	300.492
36.5	292.037
37.0	284.496
37.5	277.717
38.0	271.547
38.5	265.911
39.0	260.579
39.5	255.780
40.0	251.133
40.5	246.792
41.0	242.755
41.5	238.794
42.0	234.985
42.5	231.482
43.0	227.902
43.5	224.398
44.0	220.970
44.5	217.619
45.0	214.191
45.5	210.916
46.0	207.564
46.5	204.213
47.0	200.785
47.5	197.433
48.0	194.006
48.5	190.578
49.0	187.150
49.5	183.570
50.0	180.143
50.5	176.639
51.0	173.135
51.5	169.555
52.0	165.975
52.5	162.395
53.0	158.815
53.5	155.235
54.0	151.807
54.5	148.304

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CANDELA TABULATION - (Cont.)

55.0	144.647
55.5	141.067
56.0	137.487
56.5	134.136
57.0	130.784
57.5	127.281
58.0	123.777
58.5	120.349
59.0	116.998
59.5	113.646
60.0	110.447
60.5	107.248
61.0	104.125
61.5	101.002
62.0	98.031
62.5	95.061
63.0	92.166
63.5	89.272
64.0	86.453
64.5	83.711
65.0	80.969
65.5	78.303
66.0	75.645
66.5	73.032
67.0	70.450
67.5	67.921
68.0	65.438
68.5	62.947
69.0	60.533
69.5	58.141
70.0	55.818
70.5	53.571
71.0	51.369
71.5	49.236
72.0	47.180
72.5	45.184
73.0	43.242
73.5	41.338
74.0	39.510
74.5	37.720
75.0	35.960
75.5	34.261
76.0	32.593
76.5	30.956
77.0	29.364
77.5	27.802
78.0	26.286
78.5	24.801
79.0	23.346
79.5	21.945
80.0	20.551
80.5	19.203
81.0	17.870
81.5	16.544
82.0	15.249
82.5	13.962

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CANDELA TABULATION - (Cont.)

83.0	12.705
83.5	11.471
84.0	10.253
84.5	9.057
85.0	7.891
85.5	6.764
86.0	5.675
86.5	4.624
87.0	3.603
87.5	2.750
88.0	2.102
88.5	1.539
89.0	1.066
89.5	0.670
90.0	0.427
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
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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
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161.0	0.000
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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
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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	275.60	N.A.	23.20
0-30	557.11	N.A.	46.80
0-40	765.85	N.A.	64.40
0-60	1060.58	N.A.	89.20
0-80	1179.96	N.A.	99.20
0-90	1189.4	N.A.	100.00
10-90	1118.6	N.A.	94.00
20-40	490.24	N.A.	41.20
20-50	655.65	N.A.	55.10
40-70	375.44	N.A.	31.60
60-80	119.38	N.A.	10.00
70-80	38.67	N.A.	3.30
80-90	9.43	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	1189.41	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	70.80
10-20	204.80
20-30	281.50
30-40	208.74
40-50	165.41
50-60	129.33
60-70	80.71
70-80	38.67
80-90	9.43
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

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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	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	80	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	58	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	65	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

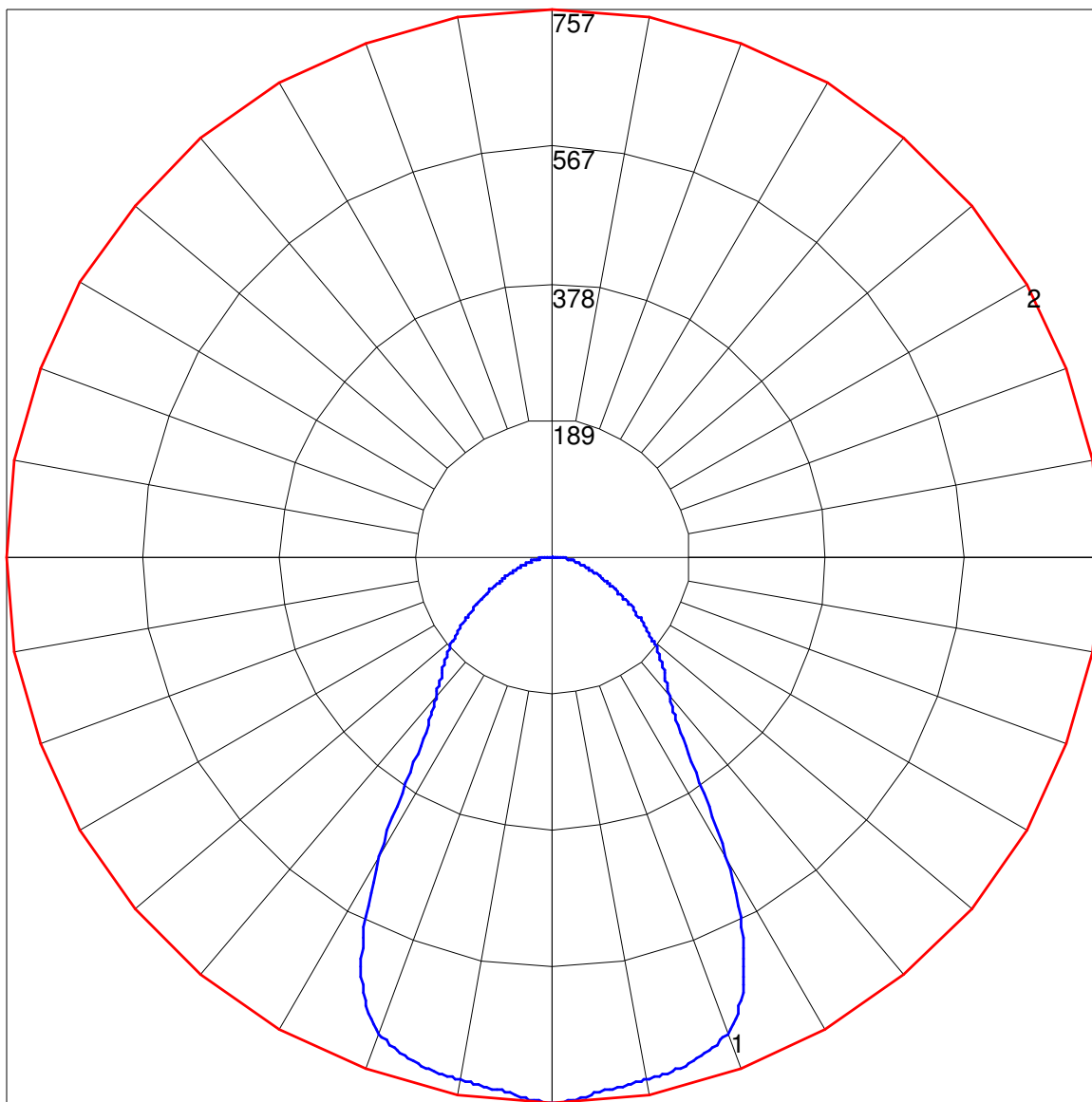
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UGR TABLE - CORRECTED

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					UGR Viewed Endwise				
X=2H	Y=2H	19.6	21.0	20.0	21.3	21.6	19.6	21.0	20.0	21.3	21.6
	3H	20.8	22.1	21.2	22.4	22.7	20.8	22.1	21.2	22.4	22.7
	4H	21.2	22.4	21.6	22.7	23.1	21.2	22.4	21.6	22.7	23.1
	6H	21.5	22.5	21.9	22.9	23.3	21.5	22.5	21.9	22.9	23.3
	8H	21.5	22.6	22.0	23.0	23.4	21.5	22.6	22.0	23.0	23.4
	12H	21.6	22.6	22.0	22.9	23.4	21.6	22.6	22.0	22.9	23.4
4H	2H	20.0	21.2	20.4	21.5	21.9	20.0	21.2	20.4	21.5	21.9
	3H	21.4	22.4	21.8	22.8	23.2	21.4	22.4	21.8	22.8	23.2
	4H	21.9	22.8	22.3	23.2	23.6	21.9	22.8	22.3	23.2	23.6
	6H	22.3	23.0	22.8	23.5	23.9	22.3	23.0	22.8	23.5	23.9
	8H	22.4	23.1	22.8	23.5	24.0	22.4	23.1	22.8	23.5	24.0
	12H	22.5	23.1	22.9	23.6	24.0	22.5	23.1	22.9	23.6	24.0
8H	4H	22.1	22.8	22.5	23.2	23.7	22.1	22.8	22.5	23.2	23.7
	6H	22.5	23.1	23.0	23.6	24.1	22.5	23.1	23.0	23.6	24.1
	8H	22.7	23.2	23.2	23.7	24.2	22.7	23.2	23.2	23.7	24.2
	12H	22.8	23.3	23.3	23.8	24.3	22.8	23.3	23.3	23.8	24.3
12H	4H	22.1	22.7	22.5	23.2	23.6	22.1	22.7	22.5	23.2	23.6
	6H	22.6	23.1	23.1	23.5	24.1	22.6	23.1	23.1	23.5	24.1
	8H	22.8	23.2	23.3	23.7	24.3	22.8	23.2	23.3	23.7	24.3

Maximum UGR = 24.3

POLAR GRAPH



Maximum Candela = 756.6 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.)