IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L40-8TW-DIM-UNV-SW-OF-WH_2700K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from UL #12316380.11
[TESTLAB] UL Verification Services Inc.
[ISSUEDATE] 2026-10-14
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 4DR-TL-L40-8TW-DIM-UNV-SW-OF-WH_2700K_
[LUMINAIRE] Black formed aluminum housing, white reflector, frosted plastic
[MORE] lens enclosure
[LAMP] One LED
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Corridor, Hotel, Office, Downlight
[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1938
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	56
Total Luminaire Watts	34.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.35 ft (Diameter)
Luminous Width (90-270)	0.35 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	69988	69988	69988
55	59737	59737	59737
65	50954	50954	50954
75	42135	42135	42135
85	26076	26076	26076

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CANDELA TABULATION

	0
0.0	815.988
0.5	815.843
1.0	815.406
1.5	814.970
2.0	814.097
2.5	813.224
3.0	812.061
3.5	810.897
4.0	809.734
4.5	808.570
5.0	807.552
5.5	806.388
6.0	805.225
6.5	804.061
7.0	802.752
7.5	801.297
8.0	799.843
8.5	798.388
9.0	796.788
9.5	795.188
10.0	793.443
10.5	791.697
11.0	789.807
11.5	787.770
12.0	785.734
12.5	783.552
13.0	781.225
13.5	778.752
14.0	776.134
14.5	773.370
15.0	770.461
15.5	767.552
16.0	764.498
16.5	761.589
17.0	758.389
17.5	755.189
18.0	751.989
18.5	748.789
19.0	745.589
19.5	742.389
20.0	739.189
20.5	735.989
21.0	732.644
21.5	729.153
22.0	725.517
22.5	721.444
23.0	717.371
23.5	712.862
24.0	708.353
24.5	703.553
25.0	698.608
25.5	693.663
26.0	688.426
26.5	683.190

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CANDELA TABULATION - (Cont.)

27.0	677.808
27.5	672.281
28.0	666.754
28.5	661.372
29.0	655.990
29.5	650.463
30.0	645.081
30.5	639.409
31.0	633.591
31.5	627.918
32.0	622.100
32.5	616.282
33.0	610.318
33.5	604.209
34.0	598.246
34.5	592.137
35.0	586.028
35.5	579.773
36.0	573.519
36.5	567.119
37.0	560.719
37.5	554.319
38.0	547.774
38.5	541.083
39.0	534.683
39.5	527.992
40.0	521.301
40.5	514.756
41.0	507.920
41.5	501.374
42.0	494.538
42.5	487.847
43.0	481.011
43.5	474.029
44.0	467.048
44.5	460.066
45.0	452.939
45.5	445.957
46.0	438.830
46.5	431.703
47.0	424.576
47.5	417.303
48.0	410.176
48.5	402.903
49.0	395.776
49.5	388.649
50.0	381.522
50.5	374.540
51.0	367.558
51.5	360.577
52.0	353.740
52.5	346.904
53.0	340.213
53.5	333.522
54.0	326.832
54.5	320.286

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CANDELA TABULATION - (Cont.)

55.0	313.595
55.5	307.050
56.0	301.086
56.5	294.687
57.0	288.578
57.5	282.469
58.0	276.360
58.5	270.251
59.0	264.432
59.5	258.614
60.0	252.796
60.5	247.269
61.0	241.596
61.5	235.778
62.0	230.106
62.5	224.433
63.0	218.906
63.5	213.379
64.0	207.851
64.5	202.470
65.0	197.088
65.5	191.706
66.0	186.325
66.5	181.088
67.0	175.997
67.5	170.907
68.0	165.816
68.5	160.870
69.0	155.925
69.5	150.980
70.0	146.034
70.5	141.234
71.0	136.463
71.5	131.722
72.0	127.038
72.5	122.427
73.0	117.831
73.5	113.278
74.0	108.769
74.5	104.260
75.0	99.809
75.5	95.417
76.0	91.024
76.5	86.675
77.0	82.384
77.5	78.108
78.0	73.890
78.5	69.744
79.0	65.628
79.5	61.555
80.0	57.585
80.5	53.672
81.0	49.803
81.5	45.963
82.0	42.196
82.5	38.487

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CANDELA TABULATION - (Cont.)

83.0	34.821
83.5	31.200
84.0	27.665
84.5	24.189
85.0	20.800
85.5	17.556
86.0	14.531
86.5	11.883
87.0	9.469
87.5	7.302
88.0	5.440
88.5	3.971
89.0	2.764
89.5	1.789
90.0	1.105
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
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
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123.5	0.000
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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

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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
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

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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	293.80	N.A.	15.20
0-30	614.74	N.A.	31.70
0-40	980.64	N.A.	50.60
0-60	1610.81	N.A.	83.10
0-80	1912.43	N.A.	98.70
0-90	1938.14	N.A.	100.00
10-90	1861.49	N.A.	96.00
20-40	686.84	N.A.	35.40
20-50	1035.65	N.A.	53.40
40-70	825.89	N.A.	42.60
60-80	301.62	N.A.	15.60
70-80	105.91	N.A.	5.50
80-90	25.71	N.A.	1.30
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	1938.17	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	76.65
10-20	217.15
20-30	320.94
30-40	365.90
40-50	348.81
50-60	281.36
60-70	195.71
70-80	105.91
80-90	25.71
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

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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	53
5	78	66	57	51	76	65	56	50	62	55	50	60	54	49	59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37
8	63	50	41	36	61	49	41	35	48	40	35	46	40	35	45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

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UGR TABLE - CORRECTED

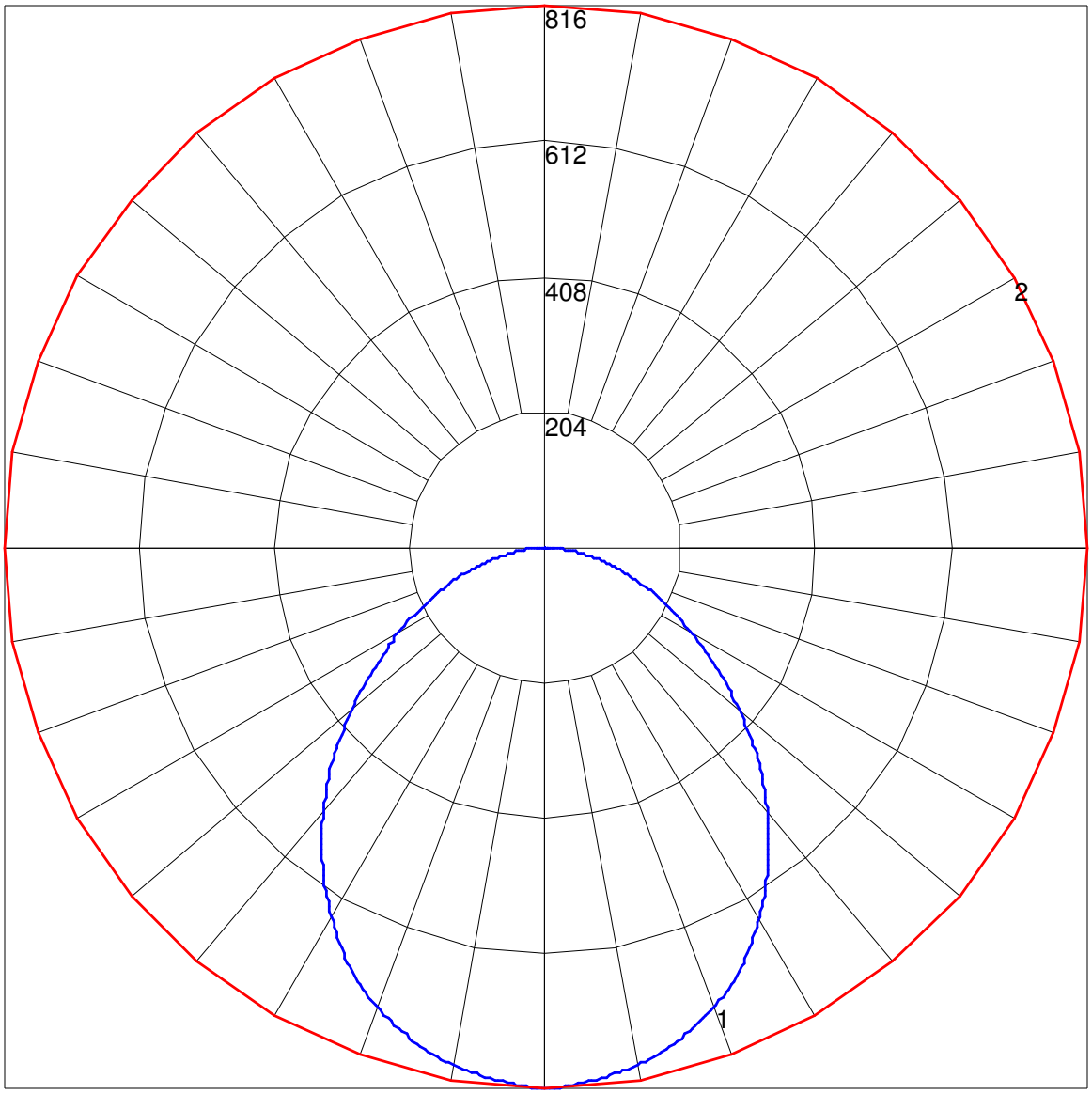
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	25.0	26.6	25.4	26.9	27.2	25.0	26.6	25.4	26.9	27.2
	3H	26.6	28.0	27.0	28.4	28.7	26.6	28.0	27.0	28.4	28.7
	4H	27.2	28.5	27.6	28.9	29.2	27.2	28.5	27.6	28.9	29.2
	6H	27.6	28.8	28.0	29.2	29.6	27.6	28.8	28.0	29.2	29.6
	8H	27.7	28.9	28.1	29.3	29.7	27.7	28.9	28.1	29.3	29.7
	12H	27.8	28.9	28.2	29.3	29.7	27.8	28.9	28.2	29.3	29.7
4H	2H	25.6	26.9	26.0	27.3	27.6	25.6	26.9	26.0	27.3	27.6
	3H	27.4	28.5	27.8	28.9	29.3	27.4	28.5	27.8	28.9	29.3
	4H	28.1	29.1	28.5	29.5	29.9	28.1	29.1	28.5	29.5	29.9
	6H	28.6	29.5	29.1	29.9	30.4	28.6	29.5	29.1	29.9	30.4
	8H	28.7	29.6	29.2	30.0	30.5	28.7	29.6	29.2	30.0	30.5
	12H	28.8	29.6	29.3	30.0	30.5	28.8	29.6	29.3	30.0	30.5
8H	4H	28.3	29.1	28.8	29.6	30.1	28.3	29.1	28.8	29.6	30.1
	6H	28.9	29.6	29.4	30.1	30.6	28.9	29.6	29.4	30.1	30.6
	8H	29.2	29.8	29.7	30.3	30.8	29.2	29.8	29.7	30.3	30.8
	12H	29.3	29.8	29.8	30.3	30.9	29.3	29.8	29.8	30.3	30.9
12H	4H	28.4	29.1	28.8	29.6	30.0	28.4	29.1	28.8	29.6	30.0
	6H	29.0	29.6	29.5	30.1	30.6	29.0	29.6	29.5	30.1	30.6
	8H	29.2	29.8	29.8	30.3	30.8	29.2	29.8	29.8	30.3	30.8

Maximum UGR = 30.9

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POLAR GRAPH



Maximum Candela = 815.988 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.)

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