



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4PS-L7-9DW-DIM-UNV-LW-OF-WH 3000K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]GEN from BALLABS TEST NO. 20339.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 13-DEC-2019

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] GEN7 V18 LED 4" TALL HEATSINK 4" SQ FORMED HOUSING DOWNLIGHT

[MORE] 4" CAST SHALLOW WHITE FLUSH TRIM w/SOLITE LENS

[LUMCAT] 4PS-L7-9DW-DIM-UNV-LW-OF-WH 3000k

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Office, Direct, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	753
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	54
Total Luminaire Watts	14
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.24
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.33 ft
Luminous Width (90-270)	0.33 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	16735	25793	16158
55	11816	13270	11352
65	8732	8606	8522
75	6032	5964	5964
85	2646	2442	2035

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4PS-L7-9DW-DIM-UNV-LW-OF-WH 3000K_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	423.700	423.700	423.700	423.700	423.700
5	423.517	422.053	421.321	421.138	421.138
10	418.577	416.199	415.833	414.370	413.821
15	408.332	405.588	406.320	405.039	405.039
20	397.904	395.160	393.697	394.977	395.709
25	381.805	381.257	382.720	380.891	377.781
30	342.838	352.168	361.864	349.607	333.142
35	271.307	298.383	322.714	294.358	263.623
40	190.811	212.765	261.977	216.789	179.286
45	122.024	138.306	188.067	139.404	117.816
50	89.826	96.046	119.829	96.961	87.448
55	69.885	71.531	78.483	72.995	67.141
60	51.224	52.688	54.152	52.688	51.407
65	38.052	37.321	37.504	38.601	37.138
70	25.978	25.978	24.880	26.161	25.429
75	16.099	16.282	15.916	15.733	15.916
80	8.598	8.598	8.415	7.867	8.415
85	2.378	1.829	2.195	1.829	1.829
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4PS-L7-9DW-DIM-UNV-LW-OF-WH 3000K_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	154.82	N.A.	20.60
0-30	328.82	N.A.	43.70
0-40	509.87	N.A.	67.70
0-60	694.13	N.A.	92.20
0-80	749.58	N.A.	99.60
0-90	752.93	N.A.	100.00
10-90	712.87	N.A.	94.70
20-40	355.05	N.A.	47.20
20-50	472.61	N.A.	62.80
40-70	222.31	N.A.	29.50
60-80	55.46	N.A.	7.40
70-80	17.40	N.A.	2.30
80-90	3.35	N.A.	0.40
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	752.93	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	40.06
10-20	114.75
20-30	174.00
30-40	181.05
40-50	117.56
50-60	66.70
60-70	38.05
70-80	17.40
80-90	3.35
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 : 4PS-L7-9DW-DIM-UNV-LW-OF-WH 3000K_.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	46	46	46	46	45	45	45	45	43	43	43	41	41	41	39	39	39	39
1	43	41	40	39	42	41	39	38	39	38	37	38	37	36	36	36	35	34
2	40	37	35	34	39	37	35	33	35	34	32	34	33	32	33	32	31	30
3	37	34	31	29	36	33	31	29	32	30	29	31	29	28	30	29	28	27
4	35	31	28	26	34	30	28	26	29	27	25	29	27	25	28	26	25	24
5	32	28	25	23	31	28	25	23	27	24	23	26	24	22	26	24	22	22
6	30	26	23	21	29	25	23	21	25	22	20	24	22	20	24	22	20	19
7	28	24	21	19	28	23	21	19	23	20	18	22	20	18	22	20	18	18
8	26	22	19	17	26	22	19	17	21	19	17	21	18	17	20	18	17	16
9	25	20	17	16	24	20	17	16	20	17	15	19	17	15	19	17	15	15
10	23	19	16	14	23	19	16	14	18	16	14	18	16	14	18	16	14	14

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4PS-L7-9DW-DIM-UNV-LW-OF-WH 3000K_.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	21.8	23.1	22.1	23.4	23.7	21.8	23.1	22.2	23.4	23.8
	3H	22.9	24.1	23.2	24.4	24.8	22.9	24.1	23.3	24.4	24.8
	4H	23.2	24.3	23.6	24.7	25.1	23.2	24.3	23.6	24.7	25.1
	6H	23.4	24.5	23.8	24.8	25.2	23.4	24.4	23.8	24.8	25.2
	8H	23.5	24.4	23.9	24.8	25.2	23.4	24.4	23.9	24.8	25.2
	12H	23.5	24.4	23.9	24.8	25.2	23.5	24.4	23.9	24.7	25.2

UGR Viewed Endwise

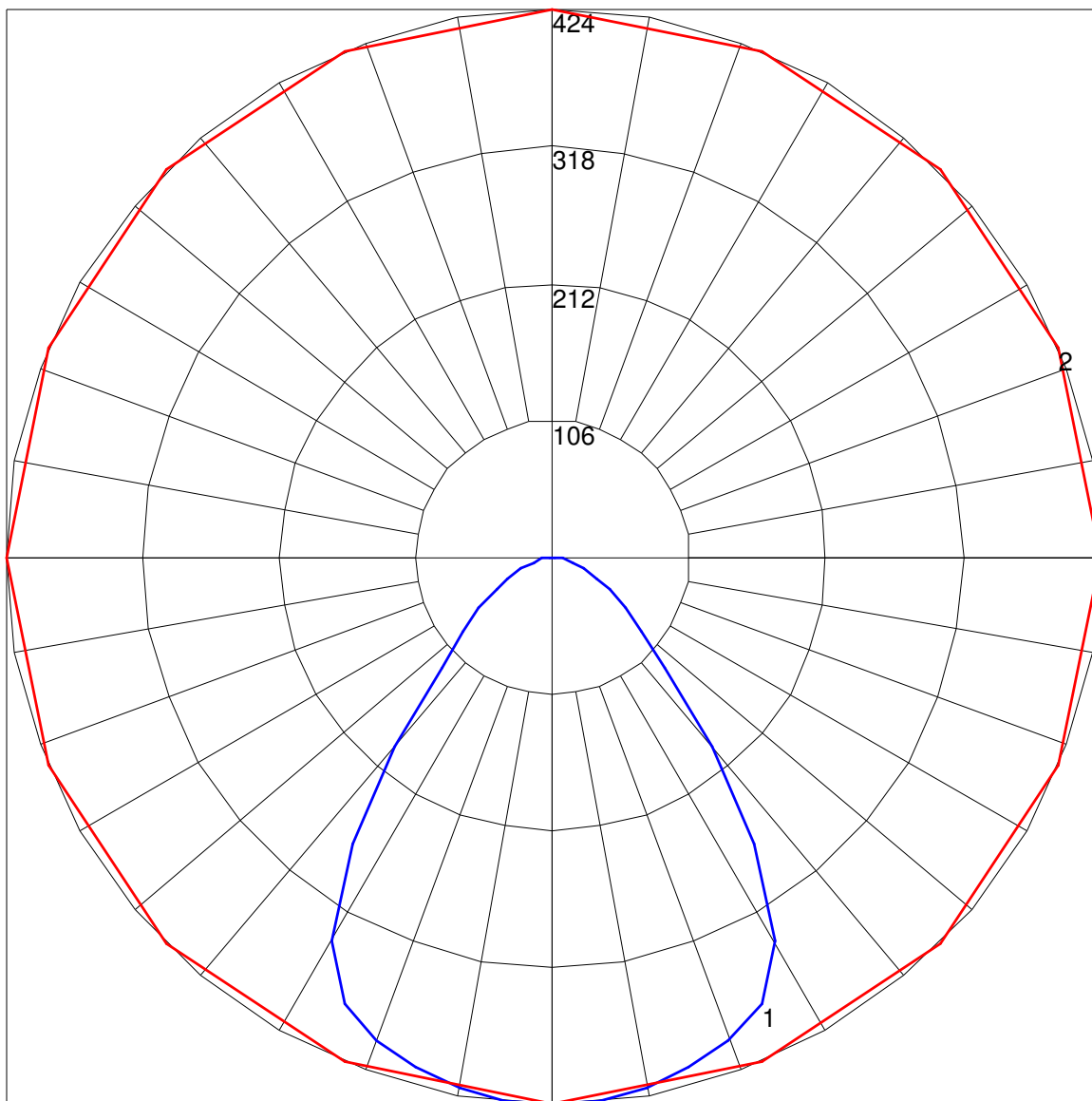
4H	2H	22.1	23.2	22.5	23.6	24.0	22.2	23.3	22.6	23.6	24.0
	3H	23.4	24.3	23.8	24.7	25.1	23.4	24.3	23.9	24.7	25.2
	4H	23.9	24.7	24.3	25.1	25.5	23.9	24.7	24.3	25.1	25.5
	6H	24.2	24.9	24.6	25.3	25.8	24.1	24.8	24.6	25.3	25.7
	8H	24.2	24.9	24.7	25.3	25.8	24.2	24.8	24.6	25.3	25.8
	12H	24.2	24.8	24.7	25.3	25.8	24.2	24.8	24.7	25.2	25.7

8H	4H	24.0	24.6	24.4	25.1	25.6	24.0	24.6	24.4	25.1	25.5
	6H	24.4	24.9	24.9	25.4	25.9	24.3	24.8	24.8	25.3	25.8
	8H	24.4	24.9	25.0	25.4	25.9	24.4	24.9	24.9	25.4	25.9
	12H	24.5	24.9	25.0	25.4	26.0	24.4	24.8	24.9	25.3	25.9

12H	4H	24.0	24.5	24.5	25.0	25.5	24.0	24.5	24.5	25.0	25.5
	6H	24.3	24.8	24.9	25.3	25.8	24.3	24.8	24.8	25.3	25.8
	8H	24.5	24.9	25.0	25.4	26.0	24.4	24.8	24.9	25.3	25.9

Maximum UGR = 26.0

POLAR GRAPH



Maximum Candela = 423.7 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.)