

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4PS-L10-935-DIM-UNV-LW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]GEN FROM BALLABS TEST NO. 20339.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUE DATE] 2/21/2025

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 4"TALL HEATSINK 4"SQ FORMED HOUSING DOWNLIGHT

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

[LUMCAT] 4PS-L10-935-DIM-UNV-LW-OF-WH

[_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	838
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	74
Total Luminaire Watts	11.3
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	18624	28705	17982
55	13150	14768	12633
65	9718	9577	9484
75	6713	6637	6637
85	2945	2718	2265

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : 4PS-L10-935-DIM-UNV-LW-OF-WH_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	471.528	471.528	471.528	471.528	471.528
5	471.324	469.695	468.881	468.677	468.677
10	465.827	463.180	462.773	461.144	460.533
15	454.426	451.372	452.186	450.761	450.761
20	442.821	439.767	438.138	439.563	440.377
25	424.904	424.293	425.922	423.886	420.425
30	381.538	391.922	402.712	389.071	370.748
35	301.932	332.065	359.143	327.585	293.381
40	212.350	236.782	291.549	241.261	199.524
45	135.798	153.918	209.296	155.140	131.116
50	99.965	106.888	133.355	107.906	97.319
55	77.774	79.606	87.343	81.235	74.720
60	57.007	58.636	60.264	58.636	57.210
65	42.348	41.534	41.737	42.959	41.330
70	28.911	28.911	27.689	29.114	28.300
75	17.916	18.120	17.713	17.509	17.713
80	9.569	9.569	9.365	8.755	9.365
85	2.647	2.036	2.443	2.036	2.036
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4PS-L10-935-DIM-UNV-LW-OF-WH_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	172.29	N.A.	20.60
0-30	365.94	N.A.	43.70
0-40	567.42	N.A.	67.70
0-60	772.48	N.A.	92.20
0-80	834.20	N.A.	99.60
0-90	837.93	N.A.	100.00
10-90	793.34	N.A.	94.70
20-40	395.13	N.A.	47.20
20-50	525.96	N.A.	62.80
40-70	247.41	N.A.	29.50
60-80	61.72	N.A.	7.40
70-80	19.37	N.A.	2.30
80-90	3.73	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	837.93	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	44.58
10-20	127.71
20-30	193.65
30-40	201.49
40-50	130.83
50-60	74.23
60-70	42.35
70-80	19.37
80-90	3.73
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-L10-935-DIM-UNV-LW-OF-WH_.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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	61	58	56
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	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	48	42	37	47	41	37	47	41	37	46	40	37	35

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4PS-L10-935-DIM-UNV-LW-OF-WH_.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	18.9	20.2	19.2	20.5	20.8	UGR Viewed Endwise			
	3H	20.0	21.2	20.3	21.5	21.9	18.9	20.2	19.3	20.5
	4H	20.3	21.4	20.7	21.8	22.2	20.0	21.2	20.4	21.5
	6H	20.5	21.6	20.9	21.9	22.3	20.3	21.4	20.7	21.8
	8H	20.6	21.5	21.0	21.9	22.3	20.5	21.5	20.9	21.9
	12H	20.6	21.5	21.0	21.9	22.3	20.5	21.5	21.0	21.9

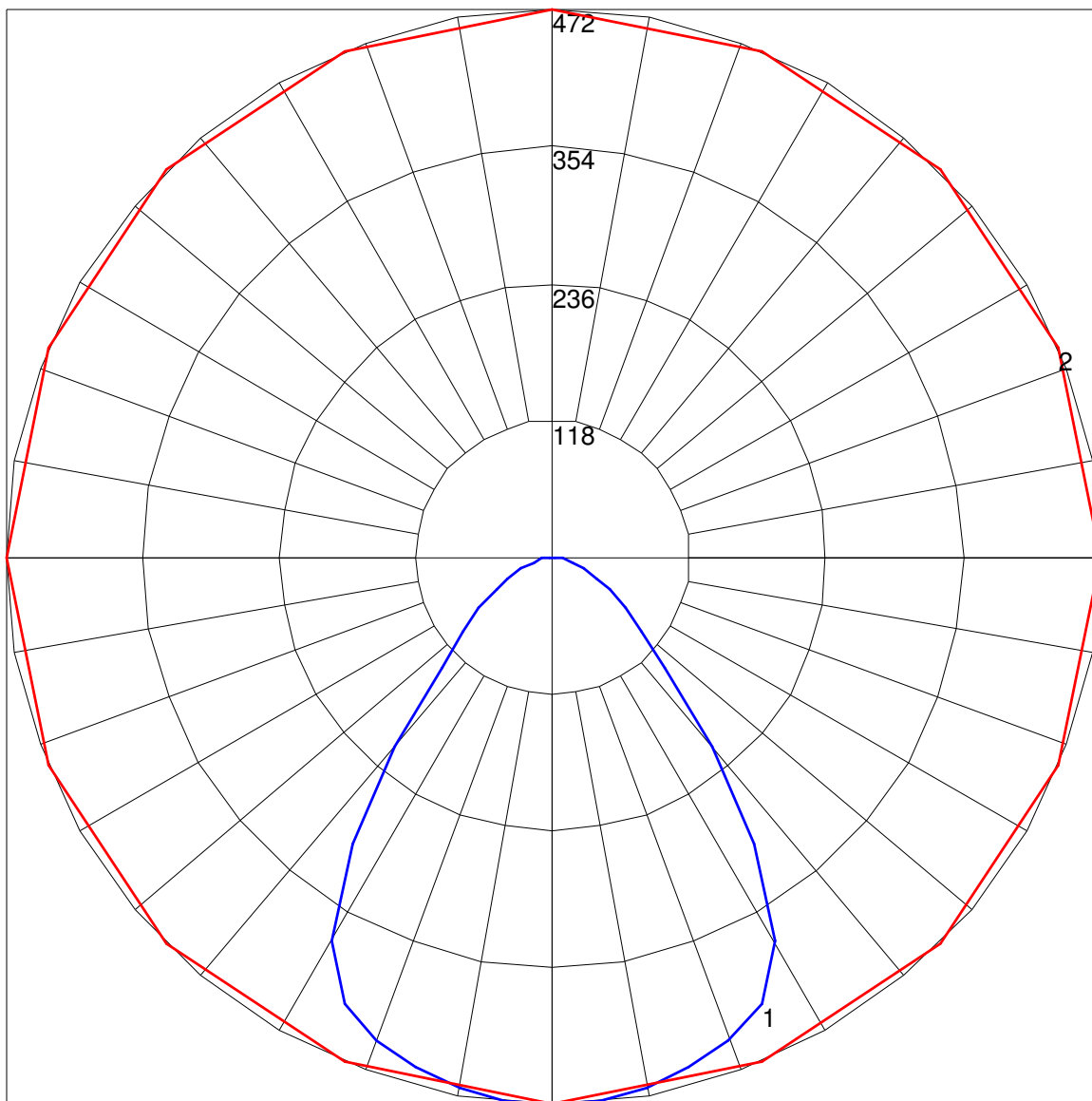
4H	2H	19.2	20.3	19.6	20.7	21.1	19.3	20.4	19.7	20.7
	3H	20.5	21.4	20.9	21.8	22.2	20.5	21.4	20.9	21.8
	4H	21.0	21.8	21.4	22.2	22.6	21.0	21.8	21.4	22.2
	6H	21.3	22.0	21.7	22.4	22.9	21.2	21.9	21.7	22.4
	8H	21.3	22.0	21.8	22.4	22.9	21.3	21.9	21.7	22.4
	12H	21.3	21.9	21.8	22.4	22.9	21.3	21.9	21.8	22.3

8H	4H	21.1	21.7	21.5	22.2	22.7	21.1	21.7	21.5	22.2
	6H	21.5	22.0	22.0	22.5	23.0	21.4	21.9	21.9	22.4
	8H	21.5	22.0	22.1	22.5	23.0	21.5	22.0	22.0	22.5
	12H	21.6	22.0	22.1	22.5	23.1	21.5	21.9	22.0	22.4

12H	4H	21.1	21.6	21.6	22.1	22.6	21.1	21.6	21.6	22.1
	6H	21.4	21.9	22.0	22.4	22.9	21.4	21.9	21.9	22.4
	8H	21.6	22.0	22.1	22.5	23.1	21.5	21.9	22.0	22.4

Maximum UGR = 23.1

POLAR GRAPH



Maximum Candela = 471.528 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.)