



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4DS-L10-940-DIM-UNV-RM-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]GEN FROM BALLABS TEST NO. 20323.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUE DATE] 02-14-2022
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] GEN7 V13 LED 4"SHORT HEATSINK 4"SQ CAST HOUSING DOWNLIGHT
 [MORE] ACRYLIC MED DIST TIR OPTIC & 4"CAST WHITE REGRESS w/SOLITE
 [MORE] LENS ADVANCE #X1025C070V054DSM1 @ 625MA
 [LUMCAT] 4DS-L10-940-DIM-UNV-RM-OF-WH
 [LAMPCAT] BXRE-35E2000
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] Indoor, Classroom, Office, Downlight
 [_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	933
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	78
Total Luminaire Watts	12
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.56
Spacing Criterion (90-270)	0.56
Spacing Criterion (Diagonal)	0.56
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	3515	4553	3631
55	2415	2487	2273
65	1639	1543	1639
75	630	472	472
85	0	0	0

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : 4DS-L10-940-DIM-UNV-RM-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	2493.402	2493.402	2493.402	2493.402	2493.402
5	2404.742	2385.414	2376.590	2367.345	2363.144
10	2039.598	2047.161	2029.934	2027.833	2006.403
15	1465.199	1447.551	1457.216	1462.678	1427.803
20	818.949	819.369	847.521	867.691	821.470
25	396.238	400.020	423.551	421.870	404.642
30	177.740	187.825	206.733	207.153	195.388
35	78.996	86.559	107.148	102.526	87.820
40	41.179	44.120	58.406	52.524	46.221
45	25.632	26.892	33.195	29.833	26.472
50	18.909	18.909	20.589	19.749	18.488
55	14.286	14.707	14.707	13.866	13.446
60	10.085	10.085	9.244	9.664	9.244
65	7.143	7.143	6.723	7.143	7.143
70	3.362	3.362	2.941	3.362	2.941
75	1.681	1.681	1.261	2.521	1.261
80	0.840	0.840	0.840	1.261	0.840
85	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DS-L10-940-DIM-UNV-RM-OF-WH_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	611.67	N.A.	65.60
0-30	819.80	N.A.	87.90
0-40	886.93	N.A.	95.10
0-60	924.17	N.A.	99.00
0-80	932.83	N.A.	100.00
0-90	933.09	N.A.	100.00
10-90	717.08	N.A.	76.90
20-40	275.25	N.A.	29.50
20-50	299.62	N.A.	32.10
40-70	43.90	N.A.	4.70
60-80	8.66	N.A.	0.90
70-80	2.01	N.A.	0.20
80-90	0.26	N.A.	0.00
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	933.09	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	216.01
10-20	395.66
20-30	208.13
30-40	67.12
40-50	24.36
50-60	12.88
60-70	6.65
70-80	2.01
80-90	0.26
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 : 4DS-L10-940-DIM-UNV-RM-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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	94	92	91
3	105	100	96	93	104	99	95	92	96	93	90	94	91	89	92	89	88	86
4	101	95	90	87	100	94	90	86	92	88	85	90	87	85	88	86	84	82
5	98	91	86	82	96	90	85	82	88	84	81	87	83	81	85	82	80	79
6	94	87	82	78	93	86	81	78	85	80	77	83	80	77	82	79	76	75
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72
8	87	80	75	71	86	79	75	71	78	74	71	77	73	71	76	73	70	69
9	84	77	72	69	84	76	72	68	75	71	68	75	71	68	74	70	68	67
10	82	74	69	66	81	73	69	66	73	69	66	72	68	66	71	68	65	64

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DS-L10-940-DIM-UNV-RM-OF-WH_.IES

UGR TABLE - CORRECTED

Reflectances

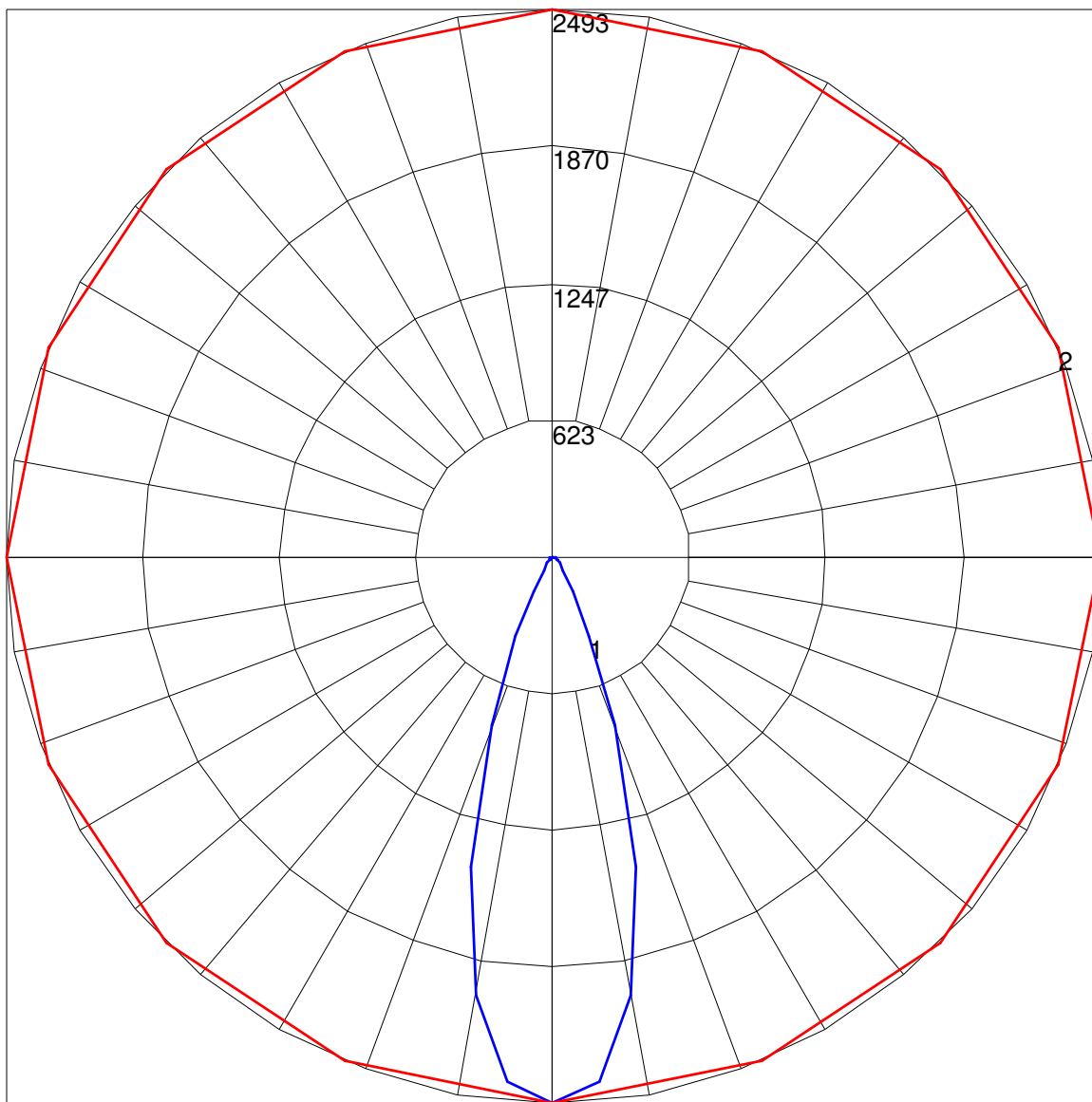
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

X=2H	Y=2H	7.1	8.0	7.4	8.3	8.6	6.7	7.6	7.0	7.9	8.2
	3H	7.6	8.5	8.0	8.8	9.2	7.3	8.1	7.7	8.4	8.8
	4H	7.7	8.5	8.1	8.8	9.2	7.3	8.1	7.7	8.5	8.9
	6H	7.7	8.4	8.1	8.7	9.1	7.4	8.0	7.8	8.4	8.8
	8H	7.6	8.3	8.1	8.7	9.1	7.3	8.0	7.7	8.4	8.8
	12H	7.6	8.2	8.0	8.6	9.0	7.3	7.9	7.7	8.3	8.7
4H	2H	7.2	8.0	7.6	8.3	8.7	6.9	7.7	7.3	8.0	8.4
	3H	7.9	8.5	8.3	8.9	9.3	7.6	8.2	8.0	8.6	9.0
	4H	7.9	8.5	8.4	8.9	9.4	7.7	8.3	8.2	8.7	9.2
	6H	8.0	8.4	8.4	8.9	9.4	7.8	8.3	8.3	8.8	9.2
	8H	7.9	8.3	8.4	8.8	9.3	7.8	8.2	8.3	8.7	9.2
	12H	7.8	8.2	8.3	8.7	9.2	7.7	8.1	8.2	8.6	9.1
8H	4H	7.8	8.3	8.3	8.7	9.2	7.6	8.1	8.1	8.5	9.0
	6H	7.9	8.2	8.4	8.7	9.2	7.8	8.1	8.3	8.6	9.1
	8H	7.8	8.2	8.4	8.7	9.2	7.8	8.1	8.3	8.6	9.1
	12H	7.8	8.1	8.3	8.6	9.1	7.8	8.0	8.3	8.5	9.1
12H	4H	7.8	8.2	8.3	8.7	9.1	7.6	8.0	8.1	8.5	8.9
	6H	7.8	8.1	8.4	8.6	9.2	7.7	8.0	8.3	8.5	9.1
	8H	7.8	8.1	8.4	8.6	9.2	7.8	8.0	8.3	8.5	9.1

Maximum UGR = 9.4

POLAR GRAPH



Maximum Candela = 2493.402 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.)