



IES INDOOR REPORT

PHOTOMETRIC FILENAME : LPT-24-L75-840-SAF12095-(L45)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM BALLABS TEST NO. 18561.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 15-JULY-2022
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMINAIRE] 4-56 LED 22"ARRAYS 2x4'RECESSED GRID LUMINAIRE
 [MORE] WHITE INTERNAL REFLECTORS w/.095"PAT12 ACRYLIC LENS
 [MORE] 0-10V DIMMING DRIVER
 [LUMCAT] LPT-24-L75-840-SAF12095-(L45)-DIM-UNV
 [LAMPCAT] HLM 80 CRI 4000K CCT
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] INDOOR, OFFICE, DIRECT, CLASSROOM
 [_SEARCH_MOUNTING] RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4636
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	154
Total Luminaire Watts	30.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.77 ft
Luminous Width (90-270)	1.77 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2591	2560	2520
55	2002	1905	1827
65	1569	1431	1437
75	1296	1228	1389
85	1484	1534	1823

IES INDOOR REPORT**PHOTOMETRIC FILENAME : LPT-24-L75-840-SAF12095-(L45)-DIM-UNV_.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	2080.778	2080.778	2080.778	2080.778	2080.778
5	2062.478	2061.801	2061.123	2059.767	2059.767
10	2038.078	2036.045	2035.367	2035.367	2035.367
15	1972.334	1971.656	1971.656	1972.334	1973.012
20	1895.745	1893.034	1893.034	1894.390	1897.101
25	1746.634	1745.956	1745.956	1751.378	1752.734
30	1607.012	1604.301	1606.334	1611.078	1613.789
35	1478.912	1476.200	1476.200	1478.912	1482.978
40	1294.556	1291.845	1289.812	1285.067	1289.134
45	1133.245	1127.823	1119.689	1104.100	1102.067
50	908.900	906.189	885.856	861.456	855.356
55	710.311	700.822	675.745	651.345	647.956
60	536.800	523.922	499.522	484.611	483.933
65	410.056	394.467	374.133	372.100	375.489
70	296.189	286.022	269.756	286.022	290.089
75	207.400	204.011	196.556	214.856	222.311
80	147.078	143.011	147.078	159.956	169.445
85	79.978	77.944	82.689	97.600	98.278
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LPT-24-L75-840-SAF12095-(L45)-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	752.46	N.A.	16.20
0-30	1559.22	N.A.	33.60
0-40	2475.44	N.A.	53.40
0-60	3937.9	N.A.	84.90
0-80	4547.33	N.A.	98.10
0-90	4636.03	N.A.	100.00
10-90	4439.96	N.A.	95.80
20-40	1722.99	N.A.	37.20
20-50	2573.03	N.A.	55.50
40-70	1847.24	N.A.	39.80
60-80	609.43	N.A.	13.10
70-80	224.65	N.A.	4.80
80-90	88.70	N.A.	1.90
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	4636.03	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	196.07
10-20	556.39
20-30	806.77
30-40	916.22
40-50	850.04
50-60	612.41
60-70	384.78
70-80	224.65
80-90	88.70
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 : LPT-24-L75-840-SAF12095-(L45)-DIM-UNV_.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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	78	72	67	76	71	66	73	69	65	63
4	85	74	66	60	83	73	65	59	70	64	59	68	62	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

IES INDOOR REPORT

PHOTOMETRIC FILENAME : LPT-24-L75-840-SAF12095-(L45)-DIM-UNV_.IES

UGR TABLE - CORRECTED

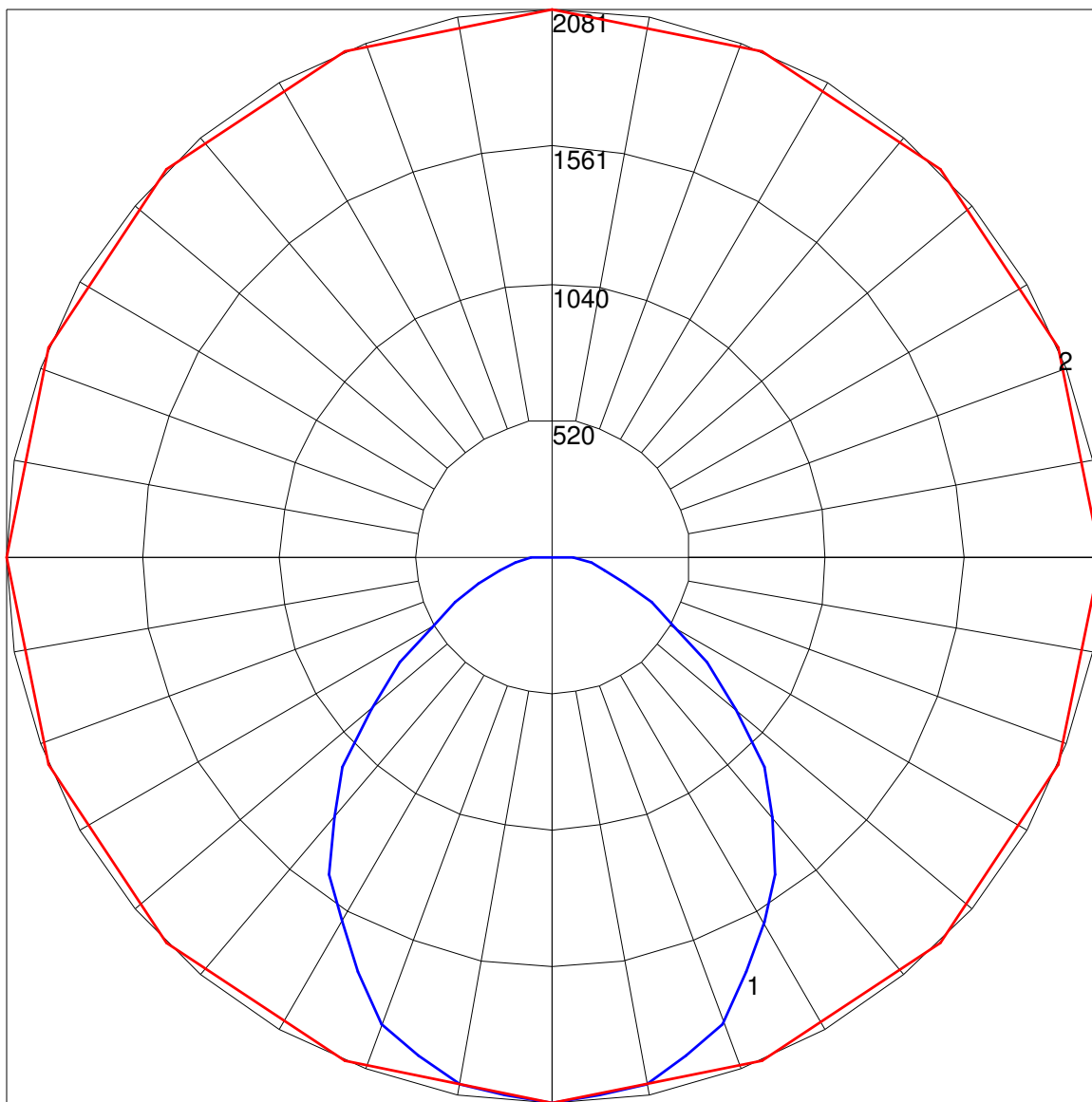
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	13.6	15.2	14.0	15.5	15.8	13.1	14.6	13.4	14.9	15.2
	3H	15.0	16.4	15.4	16.7	17.1	14.6	15.9	14.9	16.3	16.6
	4H	15.5	16.8	15.9	17.2	17.6	15.2	16.5	15.6	16.9	17.3
	6H	16.0	17.2	16.4	17.6	18.0	15.9	17.1	16.3	17.5	17.9
	8H	16.3	17.4	16.7	17.8	18.2	16.2	17.4	16.7	17.8	18.2
	12H	16.4	17.5	16.9	17.9	18.3	16.5	17.6	16.9	18.0	18.4
4H	2H	14.0	15.3	14.4	15.6	16.0	13.6	14.8	14.0	15.2	15.6
	3H	15.6	16.7	16.0	17.1	17.5	15.3	16.3	15.7	16.7	17.1
	4H	16.3	17.3	16.7	17.7	18.1	16.1	17.1	16.5	17.5	17.9
	6H	17.0	17.8	17.4	18.2	18.7	17.0	17.8	17.4	18.3	18.7
	8H	17.2	18.0	17.7	18.5	18.9	17.4	18.2	17.8	18.6	19.1
	12H	17.5	18.2	18.0	18.7	19.2	17.7	18.4	18.2	18.9	19.4
8H	4H	16.5	17.3	17.0	17.8	18.2	16.4	17.2	16.8	17.6	18.1
	6H	17.4	18.0	17.9	18.5	19.0	17.4	18.1	17.9	18.6	19.1
	8H	17.8	18.4	18.3	18.9	19.4	17.9	18.5	18.5	19.0	19.5
	12H	18.1	18.7	18.7	19.2	19.7	18.5	19.0	19.0	19.5	20.0
12H	4H	16.6	17.3	17.1	17.8	18.3	16.4	17.1	16.9	17.6	18.1
	6H	17.5	18.1	18.0	18.5	19.1	17.5	18.1	18.0	18.6	19.1
	8H	17.9	18.5	18.4	18.9	19.5	18.1	18.6	18.6	19.1	19.7

Maximum UGR = 20.0

POLAR GRAPH



Maximum Candela = 2080.778 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.)