



IES INDOOR REPORT

PHOTOMETRIC FILENAME : DIG-S24-L50-840-WPR-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM BALLABS TEST NO. 19230.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 29-OCT-2020
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 2x4' RECESSED LED LUMINAIRE w/A-SHAPED
 [MORE] CENTER REFL, FROST ACRYLIC INTERNAL LENS & PERF BASKET
 [MORE] w/ACRYLIC OVERLAY MATERIAL
 [LUMCAT] DIG-S24-L50-840-WPR-DIM-UNV
 [LAMPCAT] HLM 80 CRI 4000K CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4065
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	37.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.40
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.91 ft
Luminous Width (90-270)	1.88 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1690	1980	2233
55	1446	1963	2375
65	1238	2162	2955
75	972	1856	1557
85	789	878	950

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : DIG-S24-L50-840-WPR-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	1376.983	1376.983	1376.983	1376.983	1376.983
5	1365.282	1364.750	1365.282	1365.282	1366.346
10	1341.348	1342.412	1346.135	1349.326	1351.454
15	1305.182	1307.309	1315.287	1322.733	1327.520
20	1239.231	1245.082	1260.506	1276.993	1285.503
25	1142.965	1151.475	1174.345	1197.215	1208.915
30	1051.485	1045.635	1132.328	1201.469	1198.278
35	967.451	986.067	1035.529	1085.524	1107.862
40	877.567	907.351	973.834	1041.380	1069.568
45	813.744	856.293	953.623	1040.316	1075.419
50	690.353	745.134	858.952	955.751	994.044
55	564.834	633.444	766.941	879.695	927.562
60	447.293	530.263	673.333	805.766	862.675
65	356.346	455.271	622.275	784.492	850.443
70	259.015	361.132	529.732	615.361	586.640
75	171.259	261.675	327.093	268.589	274.439
80	104.244	161.153	143.070	154.771	158.494
85	46.804	46.272	52.122	55.313	56.377
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : DIG-S24-L50-840-WPR-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	500.01	N.A.	12.30
0-30	1046.67	N.A.	25.70
0-40	1700.47	N.A.	41.80
0-60	3098.31	N.A.	76.20
0-80	3996.65	N.A.	98.30
0-90	4064.75	N.A.	100.00
10-90	3934.97	N.A.	96.80
20-40	1200.46	N.A.	29.50
20-50	1920.03	N.A.	47.20
40-70	1987.79	N.A.	48.90
60-80	898.34	N.A.	22.10
70-80	308.39	N.A.	7.60
80-90	68.10	N.A.	1.70
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	4064.75	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	129.78
10-20	370.23
20-30	546.66
30-40	653.80
40-50	719.57
50-60	678.28
60-70	589.94
70-80	308.39
80-90	68.10
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 : DIG-S24-L50-840-WPR-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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	61	55	50	48
5	75	61	52	45	73	60	52	45	58	51	45	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

IES INDOOR REPORT
PHOTOMETRIC FILENAME : DIG-S24-L50-840-WPR-DIM-UNV_.IES

UGR TABLE - CORRECTED

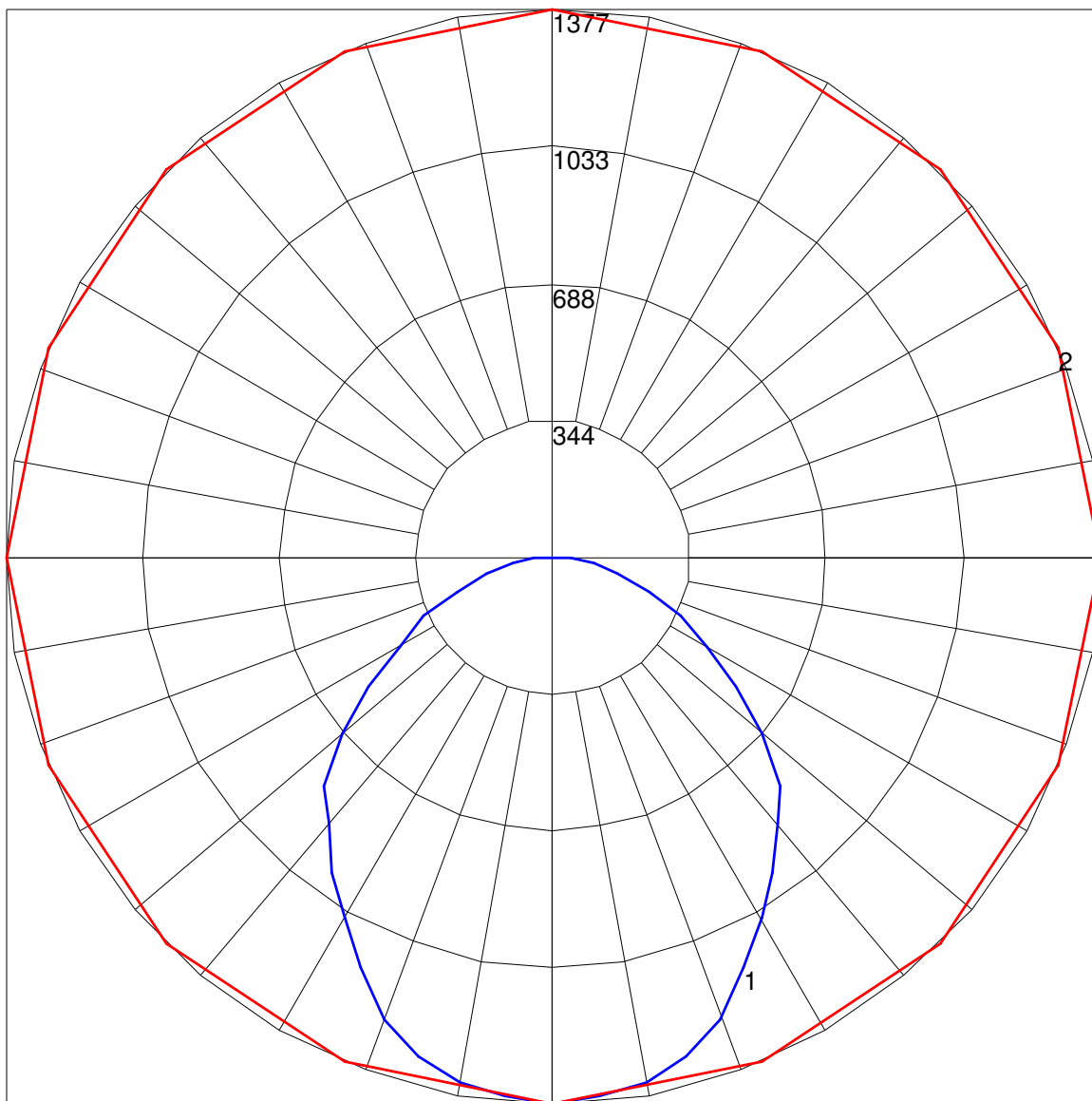
Reflectances

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	13.1	14.8	13.5	15.1	15.4	15.9	17.6	16.3	17.9	18.2
	3H	14.8	16.3	15.2	16.6	17.0	18.5	20.0	18.9	20.3	20.7
	4H	15.3	16.8	15.7	17.1	17.5	18.9	20.4	19.3	20.7	21.1
	6H	15.8	17.1	16.2	17.5	17.8	19.2	20.5	19.6	20.9	21.3
	8H	15.9	17.1	16.3	17.5	17.9	19.2	20.5	19.7	20.9	21.3
	12H	15.9	17.2	16.4	17.6	18.0	19.3	20.5	19.7	20.9	21.3
4H	2H	14.5	15.9	14.9	16.3	16.6	16.5	18.0	16.9	18.3	18.7
	3H	16.4	17.6	16.8	18.0	18.4	19.3	20.5	19.7	20.9	21.3
	4H	17.1	18.2	17.5	18.6	19.0	19.8	20.9	20.2	21.3	21.7
	6H	17.6	18.6	18.1	19.0	19.5	20.1	21.1	20.6	21.5	22.0
	8H	17.8	18.7	18.2	19.1	19.6	20.2	21.1	20.7	21.6	22.0
	12H	17.8	18.7	18.3	19.1	19.6	20.3	21.1	20.8	21.6	22.0
8H	4H	17.7	18.6	18.1	19.0	19.5	20.0	20.9	20.4	21.3	21.8
	6H	18.3	19.0	18.8	19.5	20.0	20.4	21.1	20.9	21.6	22.1
	8H	18.5	19.2	19.0	19.7	20.2	20.5	21.2	21.1	21.7	22.2
	12H	18.7	19.2	19.2	19.7	20.3	20.7	21.2	21.2	21.7	22.3
12H	4H	17.7	18.5	18.2	19.0	19.5	20.0	20.8	20.5	21.3	21.7
	6H	18.4	19.0	18.9	19.5	20.0	20.4	21.1	20.9	21.5	22.1
	8H	18.6	19.2	19.1	19.7	20.3	20.6	21.2	21.1	21.7	22.2

Maximum UGR = 22.3

POLAR GRAPH



Maximum Candela = 1376.983 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.)