



IES INDOOR REPORT

PHOTOMETRIC FILENAME : VTLED18-4A-40K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] RKS190429020-10
[ISSUEDATE] 2019-4-11 16:42
[MANUFAC] Lamar LED
[LUMCAT] Direct Linear Ambient Luminaires
[LUMINAIRE] VTLED-4A-44PS-8CSA 18W/4000K
[_VOLTAGE] 120.0 V
[_CURRENT] 0.149 A
[_POWERFACTOR] 0.995
[TESTLAB] Baci
[_TESTINST] GPM-3000
[_TESTDIST] 14.073 m
[_TESTTEMPERATURE] 28.3 'C
[_TESTHUMIDITY] 48
[_TESTOPERATOR] KOBE

CHARACTERISTICS

Lumens Per Lamp	2383.7 (1 lamp)
Total Lamp Lumens	2383.7
Luminaire Lumens	2384
Total Luminaire Efficiency	100 %
Luminaire Efficacy Rating (LER)	131
Total Luminaire Watts	18.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.93 ft
Luminous Width (90-270)	0.29 ft
Luminous Height	0.25 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5922	3947	3706
55	5376	3255	3132
65	4684	2585	2588
75	3609	1909	2046
85	1661	1229	1528

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VTLED18-4A-40K.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0	777.1	777.1	777.1	777.1	777.1	777.1	777.1	777.1	777.1	777.1
5	772.2	773.6	773.9	771.8	773.1	772.1	772.8	772.7	773.3	772.6
10	759.9	759.9	760.5	760.5	761.7	760.6	759.4	759.5	757.9	758.9
15	738.6	738.7	739.1	740.3	742.6	741.0	738.4	737.2	734.5	737.3
20	708.3	709.3	711.0	713.0	717.6	714.9	710.6	708.1	703.8	707.5
25	671.8	672.7	675.8	679.7	685.0	682.6	676.2	671.0	664.4	670.5
30	628.4	630.3	635.0	640.6	647.8	644.7	636.7	628.0	620.7	627.9
35	579.6	582.5	589.4	596.6	607.0	602.6	592.8	579.7	572.1	577.8
40	527.4	530.8	539.0	551.0	562.7	557.2	544.2	528.1	518.5	524.9
45	472.0	477.2	489.4	502.8	517.2	510.8	494.2	473.8	461.8	470.7
50	414.6	420.9	436.6	455.8	471.7	462.9	442.3	418.8	403.8	414.9
55	356.5	364.1	382.8	407.4	424.8	415.9	390.8	363.5	345.7	358.3
60	297.4	306.2	330.9	359.0	377.0	366.8	340.6	307.4	286.9	301.3
65	238.4	249.6	278.3	311.6	330.2	319.8	289.8	253.1	228.4	244.4
70	179.3	194.5	228.2	263.5	282.7	273.0	241.3	199.6	169.4	187.3
75	122.5	140.6	180.3	217.4	236.7	226.1	193.5	148.2	113.1	134.5
80	69.8	91.6	135.8	174.2	193.2	181.6	149.6	102.2	61.9	86.3
85	26.5	50.7	96.3	134.7	153.2	141.9	109.9	62.3	21.1	46.1
90	4.8	25.0	67.5	102.8	120.7	109.4	79.3	35.9	3.1	21.8
95	2.5	14.6	49.1	80.6	96.0	86.7	59.9	23.1	0.0	12.0
100	1.1	7.6	35.8	63.2	76.1	68.6	44.6	14.2	0.0	6.0
105	0.0	2.8	25.0	48.4	59.4	52.8	32.5	7.8	0.0	1.7
110	0.0	0.0	16.5	35.9	44.5	39.4	22.5	2.8	0.0	0.0
115	0.0	0.0	9.2	25.1	32.8	28.4	14.2	0.7	0.0	0.0
120	0.0	0.0	4.5	16.3	22.8	19.5	7.7	0.0	0.0	0.0
125	0.0	0.0	1.2	9.7	14.3	11.4	3.1	0.0	0.0	0.0
130	0.0	0.0	0.0	4.4	8.1	5.3	0.9	0.0	0.0	0.0
135	0.0	0.0	0.0	0.8	3.5	1.9	0.8	0.0	0.0	0.0
140	0.0	0.0	0.0	1.4	1.2	1.3	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	1.3	0.9	0.8	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	1.1	1.1	1.4	0.0	0.0	0.0	0.0
155	0.0	0.0	1.1	1.0	1.5	1.0	0.0	0.7	0.0	0.0
160	0.0	0.0	1.0	1.2	1.2	0.8	0.0	0.0	0.0	0.0
165	0.0	0.9	1.0	1.1	1.4	1.0	0.7	1.0	0.0	0.0
170	0.0	0.8	1.0	0.9	1.1	1.1	0.9	1.2	0.0	0.0
175	1.0	0.0	1.4	1.4	1.8	1.5	0.9	1.3	0.0	0.7
180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Vert. Horizontal Angles
Angles

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0	777.1	777.1	777.1	777.1	777.1	777.1	777.1
5	773.4	772.9	773.3	773.4	773.6	772.7	772.2
10	761.4	761.9	762.3	761.7	761.4	759.8	759.9
15	740.0	742.4	743.7	743.1	740.8	737.9	738.6
20	713.6	714.6	717.3	717.4	712.9	708.0	708.3
25	676.6	682.3	685.9	684.7	677.3	671.7	671.8
30	636.5	643.6	649.0	645.5	637.3	628.7	628.4
35	589.4	600.3	608.8	605.0	592.7	581.6	579.6
40	540.3	554.8	564.9	558.8	545.6	530.0	527.4
45	489.0	507.0	519.4	513.6	495.8	475.4	472.0
50	436.2	458.5	473.9	467.3	445.8	420.3	414.6
55	383.1	410.0	427.8	419.8	394.1	364.4	356.5
60	330.4	361.8	381.1	372.3	344.0	309.5	297.4

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VTLED18-4A-40K.IES

CANDELA TABULATION - (Cont.)

65	278.0	313.5	334.1	323.6	293.3	255.0	238.4
70	227.2	264.5	286.5	274.4	244.9	201.7	179.3
75	178.9	217.9	240.4	227.5	197.2	150.5	122.5
80	132.8	173.7	196.5	183.4	151.2	104.4	69.8
85	93.2	134.2	156.3	144.6	111.1	64.0	26.5
90	65.5	103.9	123.5	112.6	81.9	38.1	4.8
95	47.6	80.7	97.9	88.5	61.9	25.0	2.5
100	35.1	63.2	77.2	69.7	46.5	15.8	1.1
105	24.5	47.7	59.6	53.8	33.8	8.7	0.0
110	15.3	35.3	45.1	40.3	23.6	3.8	0.0
115	8.2	24.4	32.9	28.9	14.8	0.0	0.0
120	3.2	15.7	22.3	19.6	8.5	0.0	0.0
125	0.0	8.5	14.3	11.7	3.2	0.0	0.0
130	0.0	3.7	7.3	5.4	0.0	0.0	0.0
135	0.0	0.7	2.8	1.8	0.0	0.0	0.0
140	0.0	0.0	1.2	1.3	0.0	0.0	0.0
145	0.0	0.8	0.9	1.1	0.0	0.0	0.0
150	0.0	0.8	1.3	1.4	0.9	0.0	0.0
155	0.0	1.0	1.0	1.4	0.9	0.0	0.0
160	0.0	1.1	0.7	1.7	1.0	0.0	0.0
165	0.7	0.9	1.2	1.4	1.2	0.0	0.0
170	0.7	1.0	1.2	1.4	1.1	1.4	0.0
175	0.7	1.4	1.5	1.6	1.3	1.3	1.0
180	0.0	0.0	0.0	0.0	0.0	0.0	0.0

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VTLED18-4A-40K.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	282.00	11.80	11.80
0-30	593.79	24.90	24.90
0-40	963.66	40.40	40.40
0-60	1690.94	70.90	70.90
0-80	2166.31	90.90	90.90
0-90	2274.94	95.40	95.40
10-90	2201.55	92.40	92.40
20-40	681.66	28.60	28.60
20-50	1061.52	44.50	44.50
40-70	1008.61	42.30	42.30
60-80	475.37	19.90	19.90
70-80	194.04	8.10	8.10
80-90	108.63	4.60	4.60
90-110	88.44	3.70	3.70
90-120	102.53	4.30	4.30
90-130	107.20	4.50	4.50
90-150	108.27	4.50	4.50
90-180	108.82	4.60	4.60
110-180	20.37	0.90	0.90
0-180	2383.76	100.00	100.00

Total Luminaire Efficiency = 100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	73.39
10-20	208.61
20-30	311.80
30-40	369.86
40-50	379.86
50-60	347.42
60-70	281.33
70-80	194.04
80-90	108.63
90-100	57.53
100-110	30.91
110-120	14.08
120-130	4.67
130-140	0.82
140-150	0.25
150-160	0.26
160-170	0.21
170-180	0.08

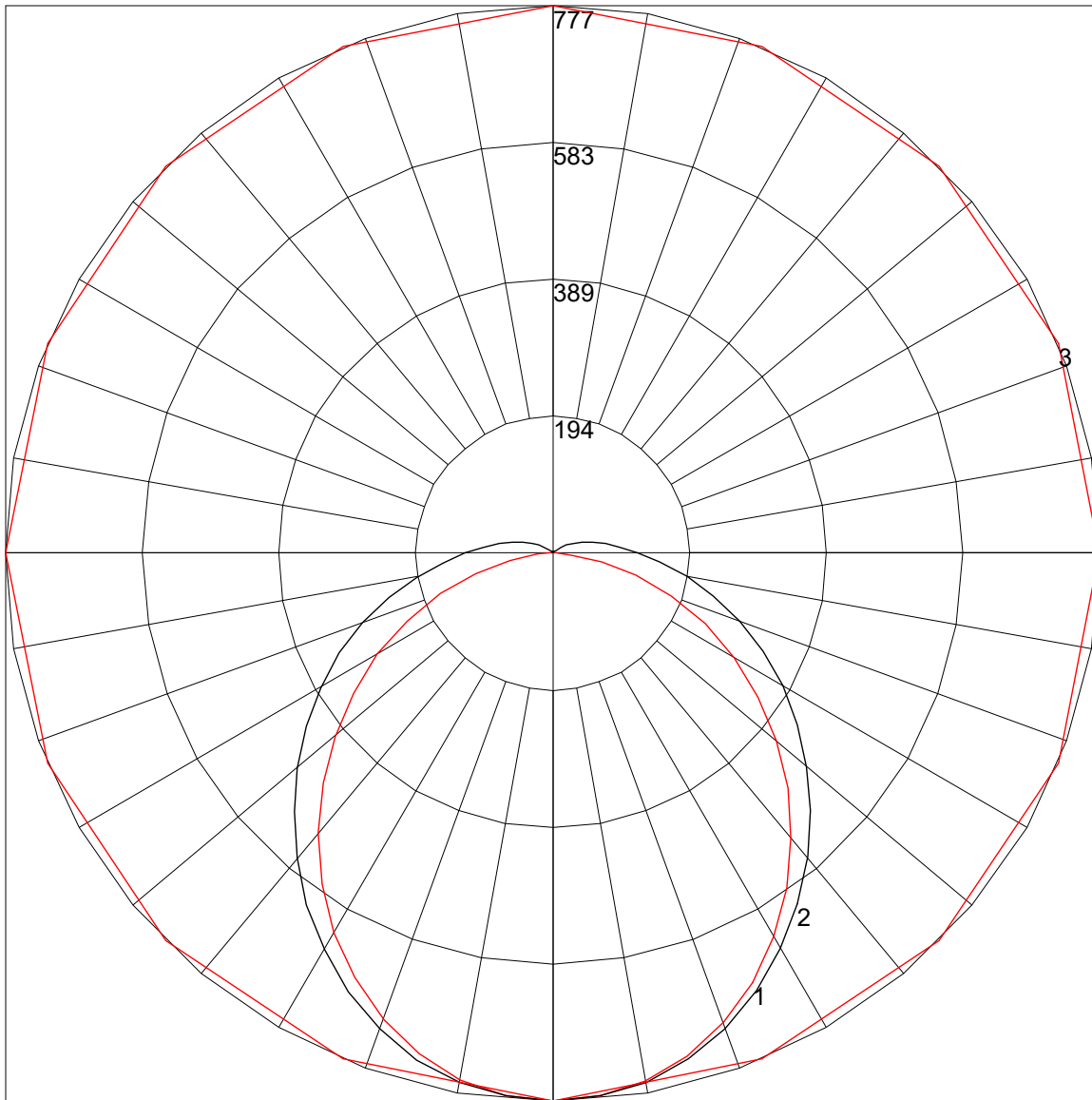
IES INDOOR REPORT
PHOTOMETRIC FILENAME : VTLED18-4A-40K.IES

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	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	95
1	106	101	96	92	103	98	94	90	93	90	86	88	86	83	84	82	80	77
2	96	88	80	74	93	85	79	73	81	75	70	77	72	68	73	69	66	63
3	88	77	68	61	85	75	67	60	71	64	59	68	62	57	64	60	56	53
4	80	68	59	52	77	66	58	51	63	56	50	60	54	49	57	52	48	45
5	74	60	51	44	71	59	50	44	56	49	43	54	47	42	52	46	41	39
6	68	54	45	39	66	53	45	38	51	43	38	49	42	37	47	41	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	38	33	43	37	32	30
8	59	45	36	30	57	44	36	30	42	35	30	41	34	29	39	33	29	27
9	55	41	33	27	53	41	33	27	39	32	27	38	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	34	28	24	22

POLAR GRAPH



Maximum Candela = 777.1 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Vertical Plane Through Horizontal Angles (90 - 270)

3 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)