



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 200116 VFLT-SP20-3000K-20D-31-1.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-1995
 [TEST] 190116
 [TESTLAB] QM
 [ISSUEDATE] 2020-01-16 11:45:49
 [MANUFAC]
 [LUMCAT]
 [LUMINAIRE]
 [LAMPCAT]
 [LAMP] ,
 [BALLAST]
 [OTHER] Voltage = 24, Current = 0.117
 [OTHER] Cx = 0.4306, Cy = 0.4071, CCT = 3149, Ra = 93.45
 [OTHER] CRI = 93.45,93.69,95.58,96.13,94.96,93.15,94.59,94.61,84.89,62.27,88.4,95.6,81.4,94.11,97.05

CHARACTERISTICS

Lumens Per Lamp	80.6 (1 lamp)
Total Lamp Lumens	80.6
Luminaire Lumens	91
Total Luminaire Efficiency	113 %
Luminaire Efficacy Rating (LER)	33
Total Luminaire Watts	2.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.30
Spacing Criterion (90-270)	0.26
Spacing Criterion (Diagonal)	0.42
Basic Luminous Shape	Point
Luminous Length (0-180)	0.00 m
Luminous Width (90-270)	0.00 m
Luminous Height	0.00 m

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	0	0	0
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

CANDELA TABULATION

	<u>0</u>	<u>30</u>	<u>60</u>	<u>90</u>	<u>120</u>	<u>150</u>	<u>180</u>	<u>210</u>	<u>240</u>	<u>270</u>
0	401.744	401.744	401.744	401.744	401.744	401.744	401.744	401.744	401.744	401.744
10	172.670	133.620	116.620	132.930	220.090	245.250	228.380	286.950	326.450	332.000
20	29.710	19.220	17.380	23.060	53.670	76.310	61.130	103.640	121.430	119.890
30	5.120	4.790	4.060	3.930	5.620	9.740	7.770	17.790	18.590	16.450
40	2.580	1.910	2.930	2.920	2.120	3.710	3.570	4.340	5.470	4.310
50	1.600	0.760	0.940	0.940	1.150	2.630	2.230	1.140	2.810	1.900
60	0.700	0.030	1.080	0.000	0.400	0.770	1.100	0.000	0.990	0.980
70	0.000	0.000	0.000	0.130	0.420	0.000	0.000	0.000	0.000	0.000
80	0.000	0.080	0.000	0.120	0.000	0.100	0.600	0.000	0.000	0.000
90	0.080	0.350	0.000	0.000	0.200	0.000	0.000	0.360	0.000	0.170
100	0.000	0.320	0.530	0.040	0.000	0.000	0.340	0.000	0.090	0.000
110	0.000	0.190	0.000	0.250	0.000	0.630	0.000	0.000	0.000	0.390
120	0.090	0.000	0.210	0.370	0.000	0.000	0.000	0.000	0.010	0.120
130	0.000	0.000	0.000	0.170	0.320	0.000	1.310	0.000	0.000	0.010
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Angles Horizontal Angles

	<u>300</u>	<u>330</u>	<u>360</u>
0	401.744	401.744	401.744
10	223.510	147.680	172.670
20	48.420	20.040	29.710
30	6.400	4.670	5.120
40	2.330	3.410	2.580
50	1.370	0.940	1.600
60	0.150	0.690	0.700
70	0.320	0.450	0.000
80	0.000	0.000	0.000
90	0.000	0.470	0.080
100	0.140	0.000	0.000
110	0.550	0.000	0.000
120	0.000	0.360	0.090
130	0.290	0.000	0.000
180	0.000	0.000	0.000

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	67.89	84.20	74.50
0-30	83.29	103.30	91.30
0-40	87.07	108.00	95.50
0-60	89.89	111.50	98.60
0-80	90.33	112.10	99.10
0-90	90.45	112.20	99.20
10-90	61.06	75.80	67.00
20-40	19.19	23.80	21.00
20-50	21.06	26.10	23.10
40-70	3.16	3.90	3.50
60-80	0.44	0.50	0.50
70-80	0.10	0.10	0.10
80-90	0.12	0.10	0.10
90-110	0.29	0.40	0.30
90-120	0.42	0.50	0.50
90-130	0.55	0.70	0.60
90-150	0.55	0.70	0.60
90-180	0.74	0.90	0.80
110-180	0.45	0.60	0.50
0-180	91.19	113.10	100.00

Total Luminaire Efficiency = 113.10%

ZONAL LUMEN SUMMARY

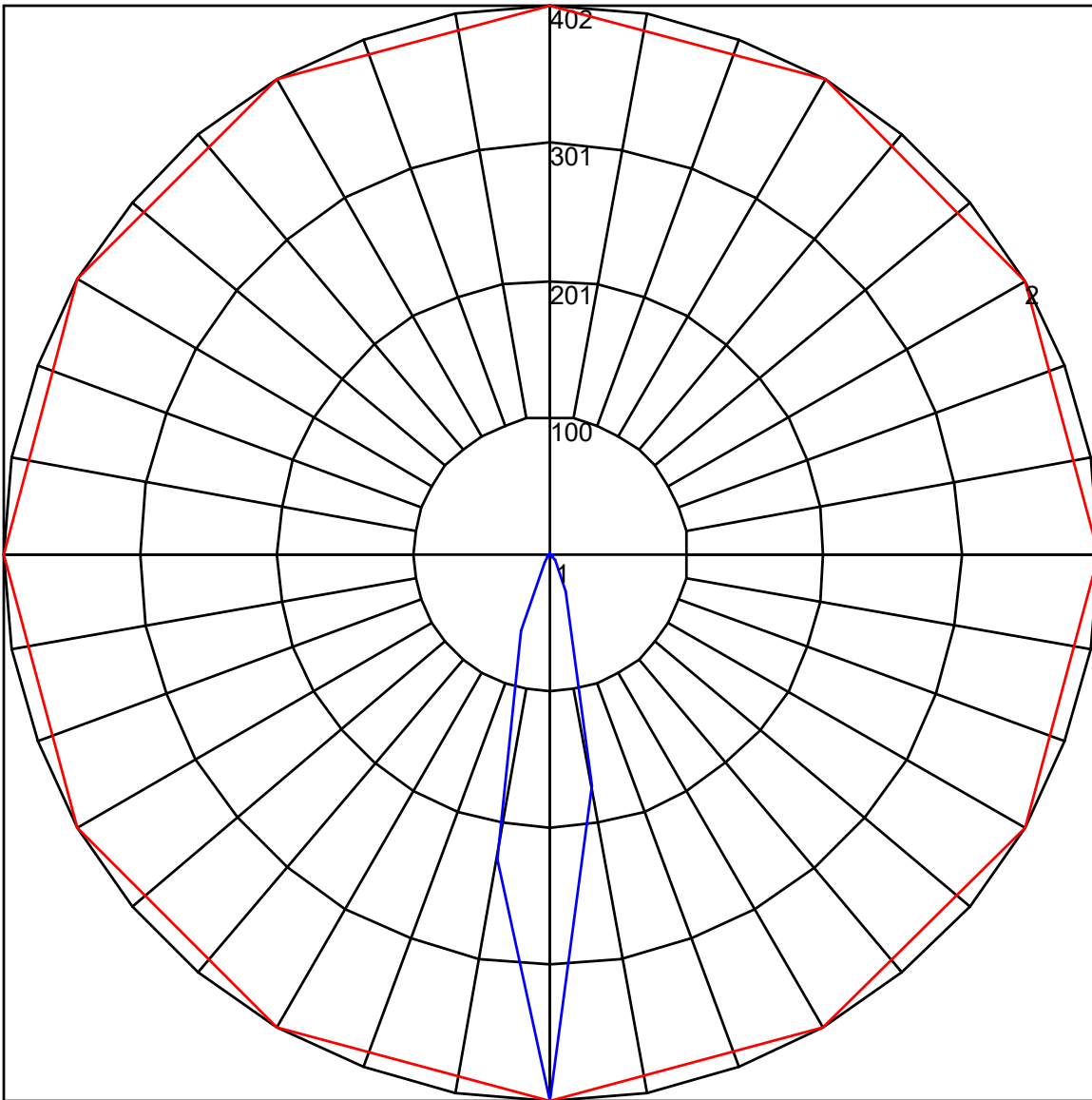
Zone	Lumens
0-10	29.38
10-20	38.50
20-30	15.41
30-40	3.78
40-50	1.87
50-60	0.95
60-70	0.34
70-80	0.10
80-90	0.12
90-100	0.14
100-110	0.15
110-120	0.13
120-130	0.12
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.20

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	134	134	134	134	131	131	131	131	125	125	125	120	120	120	115	115	115	112	0
1	130	127	125	123	127	124	122	121	120	118	117	116	114	113	112	111	110	108	0
2	125	121	117	114	122	119	115	113	115	112	110	112	109	108	108	107	105	104	0
3	121	115	111	107	118	113	109	106	110	107	104	108	105	103	105	103	101	100	0
4	117	110	105	102	115	109	104	101	106	103	100	104	101	99	102	100	97	96	0
5	113	106	101	97	111	105	100	97	103	99	96	101	97	95	99	96	94	93	0
6	109	102	97	93	108	101	96	93	99	95	92	98	94	91	96	93	91	89	0
7	106	98	93	89	104	97	93	89	96	92	89	95	91	88	94	90	88	87	0
8	103	95	90	86	101	94	89	86	93	89	86	92	88	85	91	88	85	84	0
9	100	92	87	84	99	91	87	83	90	86	83	89	86	83	88	85	83	81	0
10	97	89	84	81	96	89	84	81	88	84	81	87	83	80	86	83	80	79	0

POLAR GRAPH



Maximum Candela = 401.744 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.)