



**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : 200810 VFLT-SM02 30K-24V-BK-36D-1.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-1995  
 [TEST] 200810  
 [TESTLAB] QM  
 [ISSUE DATE] 2020-08-10 11:04:25  
 [MANUFAC]  
 [LUMCAT]  
 [LUMINAIRE]  
 [LAMPCAT]  
 [LAMP] ,  
 [BALLAST]  
 [OTHER] Voltage = 24, Current = 0.08  
 [OTHER] Cx = 0.4285, Cy = 0.4013, CCT = 3140, Ra = 93.85  
 [OTHER] CRI = 93.85,94.41,97.23,97.97,94.02,93.75,95.84,93.18,84.38,63.45,91.69,94.6,79.67,95.38,98.07

**CHARACTERISTICS**

Lumens Per Lamp	88.5 (1 lamp)
Total Lamp Lumens	88.5
Luminaire Lumens	95
Total Luminaire Efficiency	107 %
Luminaire Efficacy Rating (LER)	49
Total Luminaire Watts	1.92
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.54
Spacing Criterion (90-270)	0.44
Spacing Criterion (Diagonal)	0.58
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>
<b>0</b>	222.045	222.045	222.045	222.045	222.045	222.045	222.045	222.045	222.045	222.045
<b>10</b>	169.050	232.530	147.150	139.580	136.970	143.240	166.430	81.440	186.990	195.200
<b>20</b>	73.810	155.440	58.800	54.210	52.050	57.070	72.860	29.040	87.580	96.050
<b>30</b>	21.710	63.380	18.140	16.640	16.630	18.420	24.910	10.890	30.580	32.600
<b>40</b>	7.180	18.960	5.910	4.910	5.290	6.540	9.170	0.640	11.610	12.260
<b>50</b>	0.240	7.110	0.660	0.210	0.230	0.420	1.030	0.750	1.910	2.660
<b>60</b>	0.440	0.000	0.260	0.510	0.190	0.490	0.460	0.100	0.000	0.150
<b>70</b>	0.000	0.000	0.110	0.000	0.000	0.450	0.000	0.310	0.000	0.370
<b>80</b>	0.110	0.000	1.060	0.050	0.370	0.000	0.000	0.000	0.330	0.000
<b>90</b>	0.000	0.090	0.000	0.000	0.560	0.640	0.300	0.000	0.800	0.510
<b>100</b>	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.160	0.640
<b>110</b>	0.000	0.000	0.040	0.000	0.260	0.000	0.170	0.320	0.160	0.310
<b>120</b>	0.160	0.380	0.050	0.070	0.400	0.000	0.000	0.150	0.160	0.050
<b>130</b>	0.720	0.000	0.230	0.460	0.210	0.620	0.000	0.790	0.090	0.000
<b>180</b>	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>
<b>0</b>	222.045	222.045	222.045
<b>10</b>	199.110	192.820	169.050
<b>20</b>	100.810	93.820	73.810
<b>30</b>	34.270	32.290	21.710
<b>40</b>	12.090	10.280	7.180
<b>50</b>	2.320	1.990	0.240
<b>60</b>	0.560	0.440	0.440
<b>70</b>	0.230	0.200	0.000
<b>80</b>	0.000	0.500	0.110
<b>90</b>	0.320	0.000	0.000
<b>100</b>	0.000	0.000	0.420
<b>110</b>	0.000	0.100	0.000
<b>120</b>	0.000	0.000	0.160
<b>130</b>	0.000	0.030	0.720
<b>180</b>	0.000	0.000	0.000

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	53.03	59.90	56.00
0-30	77.17	87.20	81.50
0-40	88.31	99.80	93.20
0-60	93.18	105.30	98.40
0-80	93.58	105.70	98.80
0-90	93.84	106.00	99.10
10-90	75.32	85.10	79.50
20-40	35.28	39.90	37.20
20-50	39.29	44.40	41.50
40-70	5.10	5.80	5.40
60-80	0.40	0.50	0.40
70-80	0.18	0.20	0.20
80-90	0.26	0.30	0.30
90-110	0.32	0.40	0.30
90-120	0.43	0.50	0.50
90-130	0.60	0.70	0.60
90-150	0.60	0.70	0.60
90-180	0.90	1.00	1.00
110-180	0.58	0.70	0.60
0-180	94.73	107.00	100.00

Total Luminaire Efficiency = 107.00%

### ZONAL LUMEN SUMMARY

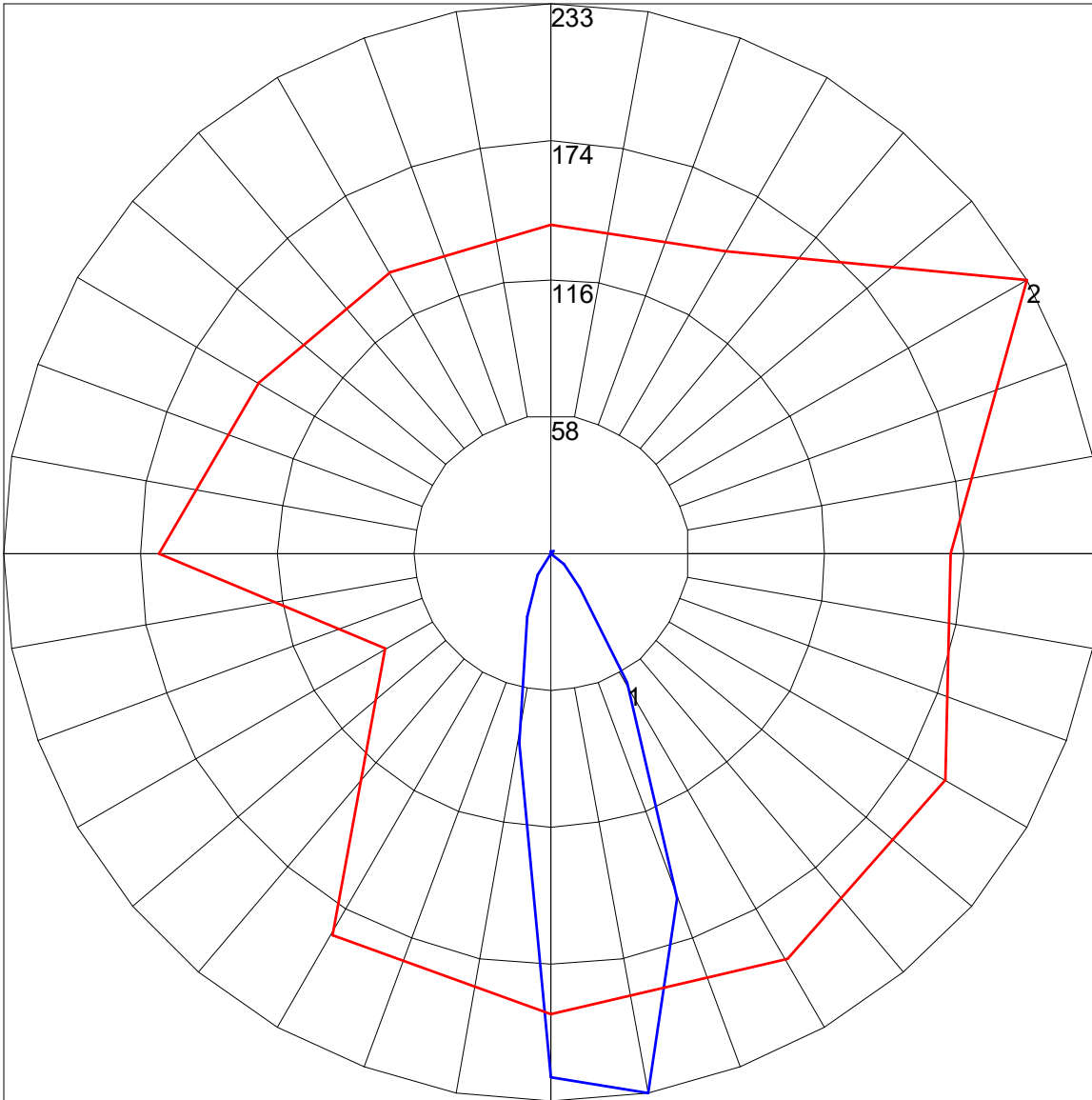
Zone	Lumens
0-10	18.51
10-20	34.51
20-30	24.15
30-40	11.13
40-50	4.01
50-60	0.86
60-70	0.22
70-80	0.18
80-90	0.26
90-100	0.20
100-110	0.11
110-120	0.11
120-130	0.17
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.29

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	127	127	127	127	124	124	124	124	118	118	118	113	113	113	108	108	108	106
1	122	119	117	114	119	117	114	112	112	110	109	108	107	105	104	103	102	100
2	117	112	108	105	114	110	106	103	106	103	101	103	101	99	100	98	96	95
3	112	105	101	97	109	104	99	96	101	97	94	98	95	93	96	93	91	90
4	107	100	94	90	105	98	94	90	96	92	89	94	90	88	92	89	86	85
5	102	94	89	85	101	93	88	84	91	87	84	90	86	83	88	85	82	81
6	98	90	84	80	97	89	84	80	87	83	79	86	82	79	84	81	78	77
7	94	85	80	76	93	85	79	76	83	79	75	82	78	75	81	77	74	73
8	90	82	76	72	89	81	76	72	80	75	72	79	74	71	78	74	71	70
9	87	78	73	69	86	77	72	69	76	72	68	76	71	68	75	71	68	67
10	84	75	69	66	83	74	69	66	73	69	65	73	68	65	72	68	65	64

POLAR GRAPH



Maximum Candela = 232.53 Located At Horizontal Angle = 30, Vertical Angle = 10  
# 1 - Vertical Plane Through Horizontal Angles (30 - 210) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (10) (Through Max. Cd.)