



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : RD300-50-MP-WHT.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-1995  
[TEST] RD-7.IES  
[DATE] 1/31/00  
[MANUFAC] LSI INDUSTRIES  
[LUMCAT] RD300-50-MP-WHT  
[LUMINAIRE] RLM STANDARD DOME SERIES  
[LAMPCAT] SYLVANIA MP50/U/MED  
[LAMP] 1- 50W CLEAR MH BU (114)

**CHARACTERISTICS**

Lumens Per Lamp	3450 (1 lamp)
Total Lamp Lumens	3450
Luminaire Lumens	2506
Total Luminaire Efficiency	73 %
Luminaire Efficacy Rating (LER)	36
Total Luminaire Watts	69
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.48
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.52
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	1.50 ft (Diameter)
Luminous Height	0.00 ft

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6576	5739	5511
55	7354	6330	5925
65	4097	3382	2796
75	2222	2001	1952
85	1711	1529	1606

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**CANDELA TABULATION**

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
<b>0</b>	844.8	844.8	844.8	844.8	844.8	844.8	844.8	844.8	844.8	844.8
<b>5</b>	880.5	837.4	832.0	829.9	828.1	824.7	820.5	820.0	817.6	815.0
<b>10</b>	812.7	770.6	769.6	769.1	766.7	768.0	768.6	767.8	766.5	762.5
<b>15</b>	829.4	779.0	775.1	770.9	765.9	760.5	755.2	747.4	744.3	737.2
<b>20</b>	818.4	773.8	768.0	763.9	759.9	756.8	750.5	742.2	733.3	724.4
<b>25</b>	805.3	757.3	749.0	742.5	736.2	731.5	727.6	722.1	716.4	708.3
<b>30</b>	810.6	769.9	757.1	751.3	748.7	742.5	734.9	725.0	718.7	707.2
<b>35</b>	810.0	767.2	755.8	748.5	745.1	742.7	732.0	725.0	720.0	707.0
<b>40</b>	796.0	752.9	740.1	732.0	727.1	725.8	719.0	707.2	703.3	694.7
<b>45</b>	764.1	723.4	712.7	707.2	704.1	705.1	697.8	685.8	680.1	666.8
<b>50</b>	734.4	697.3	687.4	679.6	675.4	674.3	667.6	659.5	650.1	639.1
<b>55</b>	693.1	657.6	648.0	640.2	635.5	632.8	625.8	615.4	608.3	596.6
<b>60</b>	629.5	596.1	588.5	580.1	573.3	569.7	561.6	551.2	542.3	530.3
<b>65</b>	284.5	270.1	261.2	259.7	261.8	253.7	248.7	246.9	237.0	234.9
<b>70</b>	125.8	121.1	120.0	119.8	120.0	119.3	118.0	116.9	117.4	116.4
<b>75</b>	94.5	89.5	90.0	89.8	89.3	88.2	89.0	88.2	87.4	85.1
<b>80</b>	62.1	59.2	59.0	59.0	58.7	57.7	58.5	57.7	57.2	56.6
<b>85</b>	24.5	23.7	22.7	23.0	23.0	23.5	23.0	22.2	22.7	21.9
<b>90</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>95</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>100</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>105</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>110</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>115</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>120</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>125</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>130</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>135</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>140</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>145</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>150</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>155</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>160</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>165</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>170</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>175</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>180</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Vert. Angles**      **Horizontal Angles**

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>	<u>95</u>
<b>0</b>	844.8	844.8	844.8	844.8	844.8	844.8	844.8	844.8	844.8	844.8
<b>5</b>	813.7	810.6	810.3	808.7	809.8	807.2	817.1	813.4	812.7	813.4
<b>10</b>	759.9	756.8	756.5	755.5	756.0	755.0	761.0	759.7	757.9	759.7
<b>15</b>	733.8	726.8	725.8	725.2	726.5	726.3	727.6	722.4	717.7	722.4
<b>20</b>	717.1	709.6	704.6	700.4	696.8	696.8	698.1	695.0	693.1	695.0
<b>25</b>	701.2	693.4	687.4	679.6	675.4	674.6	682.2	683.5	680.1	683.5
<b>30</b>	702.0	695.5	690.8	681.6	673.3	669.9	675.6	676.4	675.4	676.4
<b>35</b>	697.6	687.9	680.6	676.2	668.9	667.8	675.9	676.4	674.3	676.4
<b>40</b>	685.0	677.2	663.1	656.9	657.1	657.6	663.6	663.4	664.4	663.4
<b>45</b>	657.1	647.7	635.7	628.2	625.8	629.2	633.9	637.5	640.4	637.5
<b>50</b>	629.7	617.5	602.8	594.0	592.1	596.1	601.8	602.8	601.8	602.8
<b>55</b>	586.4	572.8	558.2	548.6	546.5	549.1	557.4	559.8	558.5	559.8
<b>60</b>	519.8	505.5	489.1	476.3	472.9	477.0	484.4	486.4	487.0	486.4

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**CANDELA TABULATION - (Cont.)**

<b>65</b>	225.2	218.4	209.6	203.6	198.6	199.6	196.5	193.6	194.2	193.6
<b>70</b>	115.3	114.3	114.0	113.0	112.5	113.0	113.5	112.7	111.7	112.7
<b>75</b>	86.1	85.9	85.6	84.6	83.8	84.0	85.1	84.3	83.0	84.3
<b>80</b>	56.4	55.6	55.3	55.3	55.1	55.1	55.1	55.3	55.3	55.3
<b>85</b>	21.7	22.4	21.7	21.7	21.1	21.7	21.4	21.1	23.0	21.1
<b>90</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>95</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>100</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>105</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>110</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>115</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>120</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>125</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>130</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>135</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>140</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>145</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>150</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>155</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>160</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>165</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>170</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>175</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>180</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Vert. Horizontal Angles**

	<b>100</b>	<b>105</b>	<b>110</b>	<b>115</b>	<b>120</b>	<b>125</b>	<b>130</b>	<b>135</b>	<b>140</b>	<b>145</b>
<b>0</b>	844.8	844.8	844.8	844.8	844.8	844.8	844.8	844.8	844.8	844.8
<b>5</b>	817.1	807.2	809.8	808.7	810.3	810.6	813.7	815.0	817.6	820.0
<b>10</b>	761.0	755.0	756.0	755.5	756.5	756.8	759.9	762.5	766.5	767.8
<b>15</b>	727.6	726.3	726.5	725.2	725.8	726.8	733.8	737.2	744.3	747.4
<b>20</b>	698.1	696.8	696.8	700.4	704.6	709.6	717.1	724.4	733.3	742.2
<b>25</b>	682.2	674.6	675.4	679.6	687.4	693.4	701.2	708.3	716.4	722.1
<b>30</b>	675.6	669.9	673.3	681.6	690.8	695.5	702.0	707.2	718.7	725.0
<b>35</b>	675.9	667.8	668.9	676.2	680.6	687.9	697.6	707.0	720.0	725.0
<b>40</b>	663.6	657.6	657.1	656.9	663.1	677.2	685.0	694.7	703.3	707.2
<b>45</b>	633.9	629.2	625.8	628.2	635.7	647.7	657.1	666.8	680.1	685.8
<b>50</b>	601.8	596.1	592.1	594.0	602.8	617.5	629.7	639.1	650.1	659.5
<b>55</b>	557.4	549.1	546.5	548.6	558.2	572.8	586.4	596.6	608.3	615.4
<b>60</b>	484.4	477.0	472.9	476.3	489.1	505.5	519.8	530.3	542.3	551.2
<b>65</b>	196.5	199.6	198.6	203.6	209.6	218.4	225.2	234.9	237.0	246.9
<b>70</b>	113.5	113.0	112.5	113.0	114.0	114.3	115.3	116.4	117.4	116.9
<b>75</b>	85.1	84.0	83.8	84.6	85.6	85.9	86.1	85.1	87.4	88.2
<b>80</b>	55.1	55.1	55.1	55.3	55.3	55.6	56.4	56.6	57.2	57.7
<b>85</b>	21.4	21.7	21.1	21.7	21.7	22.4	21.7	21.9	22.7	22.2
<b>90</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>95</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>100</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>105</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>110</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>115</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>120</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>125</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>130</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>135</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**CANDELA TABULATION - (Cont.)**

<b>140</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>145</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>150</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>155</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>160</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>165</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>170</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>175</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>180</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Vert. Horizontal Angles**  
**Angles**

	<b><u>150</u></b>	<b><u>155</u></b>	<b><u>160</u></b>	<b><u>165</u></b>	<b><u>170</u></b>	<b><u>175</u></b>	<b><u>180</u></b>
<b>0</b>	844.8	844.8	844.8	844.8	844.8	844.8	844.8
<b>5</b>	820.5	824.7	828.1	829.9	832.0	837.4	880.5
<b>10</b>	768.6	768.0	766.7	769.1	769.6	770.6	812.7
<b>15</b>	755.2	760.5	765.9	770.9	775.1	779.0	829.4
<b>20</b>	750.5	756.8	759.9	763.9	768.0	773.8	818.4
<b>25</b>	727.6	731.5	736.2	742.5	749.0	757.3	805.3
<b>30</b>	734.9	742.5	748.7	751.3	757.1	769.9	810.6
<b>35</b>	732.0	742.7	745.1	748.5	755.8	767.2	810.0
<b>40</b>	719.0	725.8	727.1	732.0	740.1	752.9	796.0
<b>45</b>	697.8	705.1	704.1	707.2	712.7	723.4	764.1
<b>50</b>	667.6	674.3	675.4	679.6	687.4	697.3	734.4
<b>55</b>	625.8	632.8	635.5	640.2	648.0	657.6	693.1
<b>60</b>	561.6	569.7	573.3	580.1	588.5	596.1	629.5
<b>65</b>	248.7	253.7	261.8	259.7	261.2	270.1	284.5
<b>70</b>	118.0	119.3	120.0	119.8	120.0	121.1	125.8
<b>75</b>	89.0	88.2	89.3	89.8	90.0	89.5	94.5
<b>80</b>	58.5	57.7	58.7	59.0	59.0	59.2	62.1
<b>85</b>	23.0	23.5	23.0	23.0	22.7	23.7	24.5
<b>90</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>95</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>100</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>105</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>110</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>115</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>120</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>125</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>130</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>135</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>140</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>145</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>150</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>155</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>160</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>165</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>170</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>175</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>180</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	287.80	8.30	11.50
0-30	619.56	18.00	24.70
0-40	1064.83	30.90	42.50
0-60	2113.77	61.30	84.30
0-80	2478.72	71.80	98.90
0-90	2506.4	72.60	100.00
10-90	2429.82	70.40	96.90
20-40	777.03	22.50	31.00
20-50	1295.56	37.60	51.70
40-70	1322.24	38.30	52.80
60-80	364.95	10.60	14.60
70-80	91.66	2.70	3.70
80-90	27.67	0.80	1.10
90-110	0.00	0.00	0.00
90-120	0.00	0.00	0.00
90-130	0.00	0.00	0.00
90-150	0.00	0.00	0.00
90-180	0.00	0.00	0.00
110-180	0.00	0.00	0.00
0-180	2506.4	72.60	100.00

Total Luminaire Efficiency = 72.60%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	76.58
10-20	211.22
20-30	331.76
30-40	445.27
40-50	518.53
50-60	530.41
60-70	273.29
70-80	91.66
80-90	27.67
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

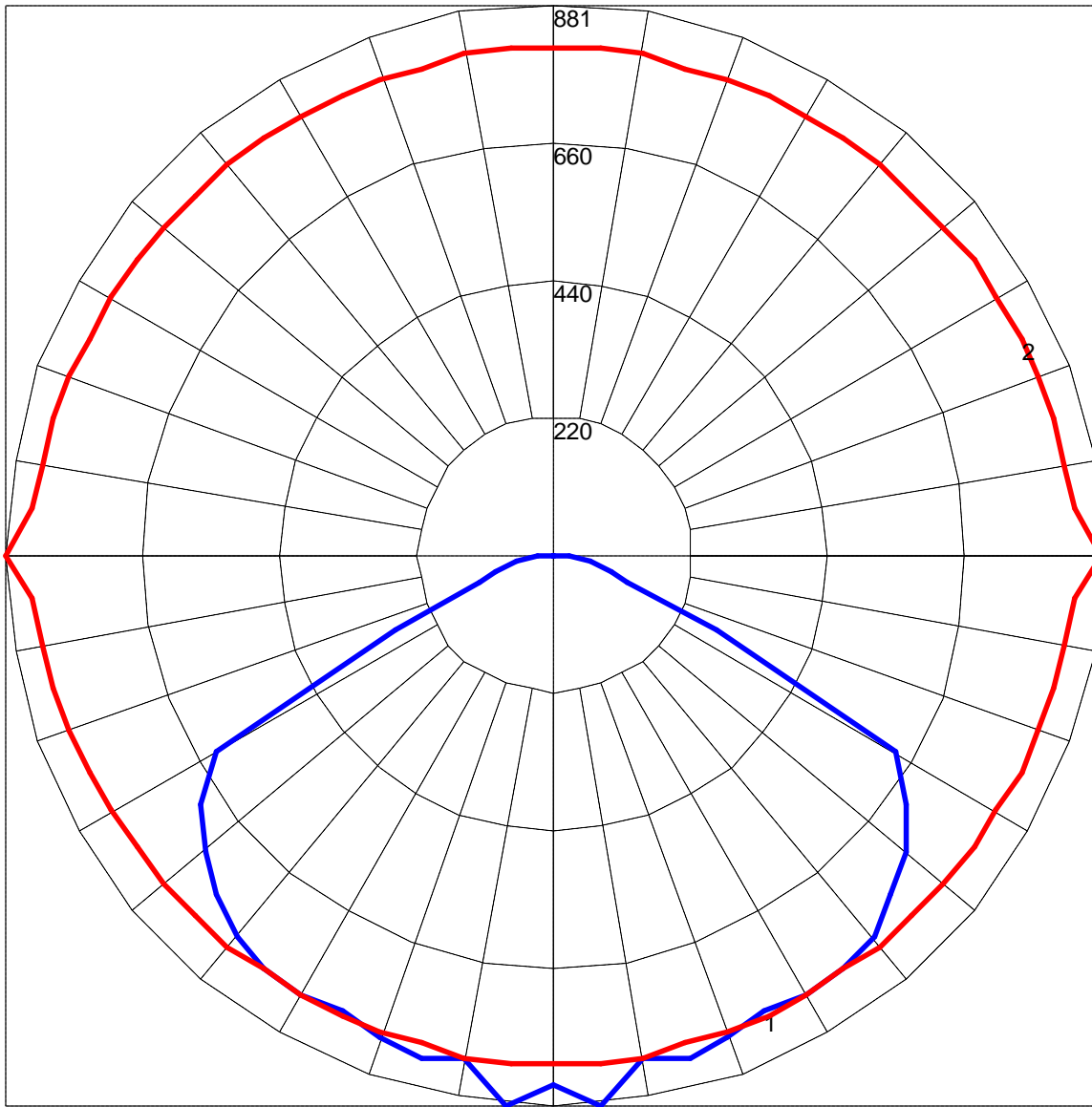
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : RD300-50-MP-WHT.IES**

**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	86	86	86	86	84	84	84	84	81	81	81	77	77	77	74	74	74	73
1	80	76	73	71	78	75	72	70	72	69	67	69	67	65	66	65	63	62
2	72	67	62	58	71	65	61	57	63	59	56	60	57	55	58	56	53	52
3	66	58	53	48	64	57	52	48	55	51	47	53	49	46	51	48	45	44
4	60	52	45	40	59	51	45	40	49	44	40	47	43	39	45	42	38	37
5	55	46	39	34	54	45	39	34	43	38	34	42	37	33	41	36	33	32
6	51	41	34	30	49	40	34	30	39	33	29	38	33	29	37	32	29	27
7	47	37	31	26	46	36	30	26	35	30	26	34	29	26	33	29	25	24
8	44	34	27	23	42	33	27	23	32	27	23	31	26	23	30	26	22	21
9	41	31	25	21	39	30	24	20	29	24	20	29	24	20	28	23	20	19
10	38	28	22	18	37	28	22	18	27	22	18	26	22	18	26	21	18	17

POLAR GRAPH



Maximum Candela = 880.5 Located At Horizontal Angle = 0, Vertical Angle = 5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)