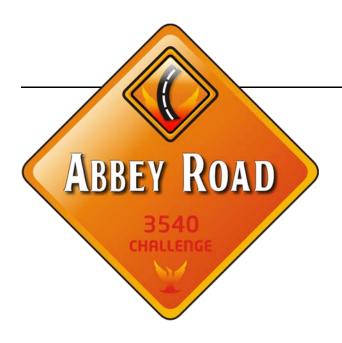




### CHALLENGE SERIES



### ABBEY ROAD 3540

Like the goal of the famous album, this pattern is designed more like the way things used to be; back to the basics. Players should try different lines across the Abbey Road and watch out for traffic to find their best way to the scoring side.

For some it may be on the corner while for others towards the middle, but like the last line the Beatles ever sang... "in the end the score you take is equal to the score you make."

#### **Latitude Ratio Coordinates**

22' 3.5 to 1 38' 3.1 to 1

### **Longitude Ratio Coordinates**

Outside Taper 5.1 to 1 Inside Taper 4.0 to 1

### **Pattern Distance**

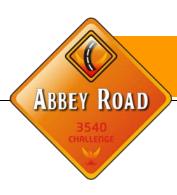
40 Feet

#### **Pattern Volume**

Forward 16.60 mL Reverse 7.60 mL Total 24.20 mL



### **CHALLENGE SERIES**



### ABBEY ROAD 3540

#### **Latitude Ratio Coordinates**

22' 3.5 to 1 38' 3.1 to 1

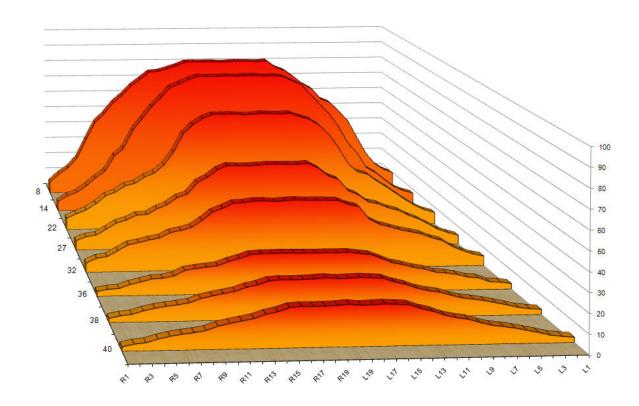
The 2D chart below was generated by Lane Monitor showing select tapes and ratios at key distances throughout the pattern. USBC Sport Bowling ratios are calculated at 22' and 2' before the end of the pattern. All Latitude Ratio Coordinates are calculated from these two distances.

Latitude ratios in the last half of the pattern can be an indicator of the difficulty of a pattern. Generally, the lower the ratios down lane, the more difficult the pattern.

### **Longitude Ratio Coordinates**

Outside Taper 5.1 to 1 Inside Taper 4.0 to 1

The 2D chart also gives a visual of how the conditioner tapers off from the front to the end of the pattern. Because of the drop brush feature used in this pattern, there is a greater amount of taper at the end of the pattern.

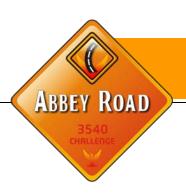




### **CHALLENGE SERIES**

484

24.20



### ABBEY ROAD 3540

### **Kegel Sanction Technology™ Lane Machine Settings**

Oil per Board (Pump Setting): 50 µL

Pattern Distance: 40 feet Reverse Drop Brush: 34 feet

Stream   of Stream   Streams   Cin/sec)   Load (feet)   Load (feet)   per Load   Crossed   Oil (µL)	Forward Settings										
02F         4         4         1         14.00         1.90         3.80         33         33         1650           03F         5         5         1         14.00         3.80         5.70         31         31         1550           04F         6         6         1         14.00         5.70         7.60         29         29         1450           05F         7         7         1         14.00         7.60         9.50         27         27         1350           06F         9         9         2         14.00         9.50         13.40         23.60         19         38         1900           08F         13         13         2         18.00         18.50         23.60         15         30         1500           09F         14         14         1         18.00         23.60         26.10         13         13         650           10F         15         15         1         18.00         26.10         28.60         11         11         1         550           11F         2         2         0         26.00         31.00         40.00         0	Screen #		Right End of Stream		Speed	Distance of	Distance of	Crossed	Boards	Volume of	
O3F         5         5         1         14.00         3.80         5.70         31         31         1550           O4F         6         6         1         14.00         5.70         7.60         29         29         1450           O5F         7         7         1         14.00         7.60         9.50         27         27         1350           O6F         9         9         2         14.00         9.50         13.40         23         46         2300           O7F         11         11         2         18.00         13.40         18.50         19         38         1900           O8F         13         13         2         18.00         18.50         23.60         15         30         1500           O9F         14         14         1         18.00         23.60         26.10         13         13         650           10F         15         15         1         18.00         26.10         28.60         11         11         550           11F         2         2         0         26.00         31.00         40.00         0         0         0 <td>01F</td> <td>2</td> <td>2</td> <td>2</td> <td>14.00</td> <td>0.00</td> <td>1.90</td> <td>37</td> <td>74</td> <td>3700</td>	01F	2	2	2	14.00	0.00	1.90	37	74	3700	
O4F         6         6         1         14.00         5.70         7.60         29         29         1450           O5F         7         7         1         14.00         7.60         9.50         27         27         1350           O6F         9         9         2         14.00         9.50         13.40         23         46         2300           O7F         11         11         2         18.00         13.40         18.50         19         38         1900           O8F         13         13         2         18.00         18.50         23.60         15         30         1500           O9F         14         14         1         18.00         23.60         26.10         13         13         13         650           10F         15         15         1         18.00         26.10         28.60         11         11         15         550           11F         2         2         0         26.00         31.00         40.00         0         0         0           Reverse Settings           Screen #         Right End of Stream         # Loads or Streams <th< td=""><td>02F</td><td>4</td><td>4</td><td>1</td><td>14.00</td><td>1.90</td><td>3.80</td><td>33</td><td>33</td><td>1650</td></th<>	02F	4	4	1	14.00	1.90	3.80	33	33	1650	
O5F         7         7         1         14.00         7.60         9.50         27         27         1350           O6F         9         9         2         14.00         9.50         13.40         23         46         2300           O7F         11         11         2         18.00         13.40         18.50         19         38         1900           O8F         13         13         2         18.00         18.50         23.60         15         30         1500           O9F         14         14         1         18.00         23.60         26.10         13         13         650           10F         15         15         1         18.00         26.10         28.60         11         11         550           11F         2         2         0         18.00         28.60         31.00         0         0         0           12F         2         2         0         26.00         31.00         40.00         0         0         0           Riverse Settings           Screen #         Right End of Stream         # Leat End of Stream         # Leat End of Stream         #	03F	5	5	1	14.00	3.80	5.70	31	31	1550	
O6F         9         9         2         14.00         9.50         13.40         23         46         2300           O7F         11         11         2         18.00         13.40         18.50         19         38         1900           O8F         13         13         2         18.00         18.50         23.60         15         30         1500           O9F         14         14         1         18.00         23.60         26.10         13         13         650           10F         15         15         1         18.00         26.10         28.60         11         11         550           11F         2         2         0         18.00         28.60         31.00         0         0         0           Forward Buff Screens: 2         Forward # Boards Crossed   Volume mL         332         16.60           Screen #         Left End of Stream         Right End         # Loads or Stream         Travel Speed (In/sec)         Beginning Distance of Load (feet)         # Boards Crossed Portional         Total Boards Crossed Portional         Total Boards Crossed Portional         Total Boards Crossed Portional         # Boards Crossed Portional         Tot	04F	6	6	1	14.00	5.70	7.60	29	29	1450	
O7F         11         11         2         18.00         13.40         18.50         19         38         1900           O8F         13         13         2         18.00         18.50         23.60         15         30         1500           O9F         14         14         1         18.00         23.60         26.10         13         13         650           10F         15         15         1         18.00         26.10         28.60         11         11         550           11F         2         2         0         18.00         28.60         31.00         0         0         0           Forward Buff Screens: 2         Forward # Boards Crossed   Volume mL         332         16.60           Reverse Settings           Screen # Left End of Stream         Right End of Stream         # Loads or Streams         Travel Speed (In/sec)         Beginning Distance of Load (feet)         Ending Distance of Crossed Processed Processe	05F	7	7	1	14.00	7.60	9.50	27	27	1350	
O8F         13         13         2         18.00         18.50         23.60         15         30         1500           O9F         14         14         1         18.00         23.60         26.10         13         13         650           10F         15         15         1         18.00         26.10         28.60         11         11         550           11F         2         2         0         18.00         28.60         31.00         0         0         0           Forward Buff Screens: 2         Forward # Boards Crossed   Volume mL         332         16.60           Reverse Settings           Screen #         Left End of Stream         Right End of Streams         # Loads or Streams         Travel Speed (In/sec)         Beginning Distance of Load (feet)         Ending Distance of Load (rest)         Total Speed Por Load         Total Volume Distance of Load (feet)         Total Speed Por Load         Total Volume Distance of Load (feet)         Total Speed Por Load         Total Speed Por Load (rest)	06F	9	9	2	14.00	9.50	13.40	23	46	2300	
O9F         14         14         1         18.00         23.60         26.10         13         13         650           10F         15         15         1         18.00         26.10         28.60         11         11         550           11F         2         2         0         18.00         28.60         31.00         0         0         0           12F         2         2         0         26.00         31.00         40.00         0         0         0           Forward Buff Screens: 2         Forward # Boards Crossed   Volume mL         332         16.60           Reverse Settings           Screen #         Left End of Stream         Right End of Stream         # Loads or Stream         Travel Beginning Distance of Load (feet)         # Boards Crossed Por Load (feet)         Total Boards	07F	11	11	2	18.00	13.40	18.50	19	38	1900	
10F	08F	13	13	2	18.00	18.50	23.60	15	30	1500	
11F   2   2   0   18.00   28.60   31.00   0   0   0     12F   2   2   0   26.00   31.00   40.00   0   0   0     Forward Buff Screens: 2   Forward # Boards Crossed   Volume mL   332   16.60     Screen #   Left End of Stream   Right End of Streams   # Loads or Streams   Travel Speed (In/Sec)   Distance of Load (feet)   Distance of Load (feet)   Distance of Distance of Load (feet)   Distance of Load (feet	09F	14	14	1	18.00	23.60	26.10	13	13	650	
Total   Property   P	10F	15	15	1	18.00	26.10	28.60	11	11	550	
Forward Buff Screens: 2   Forward # Boards Crossed   Volume mL   332   16.60	11F	2	2	0	18.00	28.60	31.00	0	0	0	
Screen #   Left End of Stream   Right End of Stream   # Loads or Streams   Load (feet)   Distance of Load (feet)   Dista	12F	2	2	0	26.00	31.00	40.00	0	0	0	
Screen #         Left End of Stream         Right End of Stream         # Loads or Streams         Travel Speed (in/sec)         Beginning Distance of Load (feet)         Ending Distance of Load (feet)         # Boards Crossed Per Load Per Load Per Load Per Load Per Load Oil (µL)           01R         2         2         0         30.00         22.00         0         0         0           02R         12         12         1         18.00         22.00         19.50         17         17         850           03R         10         10         1         18.00         19.50         17.00         21         21         1050           04R         8         8         1         18.00         17.00         14.50         25         25         1250           05R         7         7         1         18.00         14.50         12.00         27         27         1350           06R         6         6         1         14.00         10.10         8.20         33         33         1650           08R         2         2         0         14.00         8.20         0.00         0         0         0	Forw	ard Buff Scre	eens: 2	Forward # Boards Crossed   Volume mL					332	16.60	
Screen #         Left End of Stream         Right End of Streams         # Loads or Streams         Speed (in/sec)         Distance of Load (feet)         Crossed per Load         Boards Crossed Poil (µL)         Volume of Oil (µL)           01R         2         2         0         30.00         22.00         0         0         0         0           02R         12         12         1         18.00         22.00         19.50         17         17         850           03R         10         10         1         18.00         19.50         17.00         21         21         1050           04R         8         8         1         18.00         17.00         14.50         25         25         1250           05R         7         7         1         18.00         14.50         12.00         27         27         1350           06R         6         6         1         14.00         12.00         10.10         29         29         1450           07R         4         4         1         14.00         8.20         0.00         0         0         0	Reverse Settings										
O2R         12         12         1         18.00         22.00         19.50         17         17         850           O3R         10         10         1         18.00         19.50         17.00         21         21         1050           O4R         8         8         1         18.00         17.00         14.50         25         25         1250           O5R         7         7         1         18.00         14.50         12.00         27         27         1350           O6R         6         6         1         14.00         12.00         10.10         29         29         1450           O7R         4         4         1         14.00         10.10         8.20         33         33         1650           O8R         2         2         0         14.00         8.20         0.00         0         0	Screen #				Speed	Distance of	Distance of	Crossed	Boards	Volume of	
O3R         10         10         1         18.00         19.50         17.00         21         21         1050           O4R         8         8         1         18.00         17.00         14.50         25         25         1250           O5R         7         7         1         18.00         14.50         12.00         27         27         1350           O6R         6         6         1         14.00         12.00         10.10         29         29         1450           O7R         4         4         1         14.00         10.10         8.20         33         33         1650           O8R         2         2         0         14.00         8.20         0.00         0         0         0	01R	2	2	0	30.00		22.00	0	0	0	
O4R         8         8         1         18.00         17.00         14.50         25         25         1250           O5R         7         7         1         18.00         14.50         12.00         27         27         1350           O6R         6         6         1         14.00         12.00         10.10         29         29         1450           O7R         4         4         1         14.00         10.10         8.20         33         33         1650           O8R         2         2         0         14.00         8.20         0.00         0         0	02R	12	12	1	18.00	22.00	19.50	17	17	850	
05R         7         7         1         18.00         14.50         12.00         27         27         1350           06R         6         6         1         14.00         12.00         10.10         29         29         1450           07R         4         4         1         14.00         10.10         8.20         33         33         1650           08R         2         2         0         14.00         8.20         0.00         0         0	03R	10	10	1	18.00	19.50	17.00	21	21	1050	
06R         6         6         1         14.00         12.00         10.10         29         29         1450           07R         4         4         1         14.00         10.10         8.20         33         33         1650           08R         2         2         0         14.00         8.20         0.00         0         0         0	04R	8	8	1	18.00	17.00	14.50	25	25	1250	
O7R         4         4         1         14.00         10.10         8.20         33         33         1650           O8R         2         2         0         14.00         8.20         0.00         0         0         0	05R	7	7	1	18.00	14.50	12.00	27	27	1350	
08R 2 2 0 14.00 8.20 0.00 0 0	06R	6	6	1	14.00	12.00	10.10	29	29	1450	
	07R	4	4	1	14.00	10.10	8.20	33	33	1650	
Reverse # Boards Crossed   Volume mL 152 7.60	08R	2	2	0	14.00	8.20	0.00	0	0	0	
	Reverse # Boards Crossed   Volume mL								152	7.60	

Forward plus Reverse Boards Crossed | Volume mL





### **CHALLENGE SERIES**



### ABBEY ROAD 3540

The charts on this page are generated by Kegel's KOSI software from the lane machine program sheet.

The **OVERHEAD CHART** on the right shows where the conditioner is applied on both the forward and reverse screens. The gradient area is a calculation of how the conditioner might bleed off the buffer brush.

The **COMPOSITE GRAPH** below shows the total amount of conditioner applied to every board. A good way to think about this graph is to envision all the conditioner on the lane being pushed back to the foul line. Once all the conditioner is stacked up, this is what it would look like.



